Facilitating, Fostering, and Harnessing Innovation to Meet Key Challenges of the 21st Century
Facilitating, Fostering and Harnessing Innovation to Meet Key Challenges of the 21st Century


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Human Resource Management in Nigerian Universities Administration in Osun-State, Nigeria

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Abstract
The purpose of this study is to examine the usefulness of human resource management in the administration of Nigerian University with special reference to Osun State, Nigeria. To guide the investigation, researchers raised research questions and formulated hypotheses in the study. A sample of six universities were selected from a total of eight public and private universities in Osun State, Nigeria. The findings show that there is a significant difference between the performances in HRM practices in public and private universities. It is also revealed that effective HRM leads to improvement in staff and students performance. It concludes that the environment of operation largely determines how much of that potential is utilised and the purpose for which it is used. It was recommended that universities administration should invest more on human capital in order to improve quality of their workforce. It was opined that university personnel should undergo higher academic training in their area of specialities and attend regular workshops, academic conferences and seminars locally and internationally and also utilise the benefits of mentoring.

Keywords: Human Resource Management, Human Capital, Universities Administration
Introduction

The principal resource of an organisation is the people. Managing its people is the most important aspect of managing an organisation. There are whole gamuts of system of administration in private and public institutions. Central to all such systems is Human Capital. People are the most important resource in the enterprise, since people make the decisions concerning other organisational resources. People operate machines, borrow money and come up with the ideas which give the enterprise its purpose. The human factor can be defined as the interface between man and his work environment. That interface is maintenance and operation. It is obvious therefore that human effort cannot be eliminated in any productive activity. Man is the only annual capable of limitless thinking. And as far as thinking is a component of productive enterprise, man will continue to be relevant. Because, as Drucker (1998) wrote, only labour-saving, not thinking-saving, machines have been invented so far.

Human capital is the most productive capital. The Takata plan established that a Country’s physical capital (infrastructure) accounts for 16 percent of its wealth while its natural capital accounts for 20 percent. Human capital however accounts for 64 percent.

In another sense, the importance of human factor can be illustrated by the Marxian theory of surplus value. Man is the only producer of surplus value. This relate to the unlimited capacity of man. The other factors of production (raw materials, capital, and entrepreneurship) have finite capacities and the value of their contribution to output is matched by the returns to them. According to Marx, the surplus value that is appropriated by the owners of the capital is contributed by human labour. Even if one does not agree with these analyses, one can hardly deny the promise of the unlimited capacity for creativity, innovation, ingenuity and continued improvement of the human factors.

The second characteristic of man relates to its nature. The human being (man) is the most endowed and the most complex of all nature’s creation. Man as Marx claimed, is not a “natural being” but a ‘human natural being’ whose being is for himself (Carver, 1983). Marx described man as biological (aggression, jealous and protective of territory), sociological and psychological autonomous self-reflective and creative in his way of acting in society on the one hand, he sees man as capable of ‘unlimited cultivation of the senses, symbolic communication, conceptual thinking and problem solving, autonomous in innovative activity and ability to harmonise relations with other individual in a community’. On the other, man is ‘heteronomous’ and is capable of substituting dominating power for creative power’ and of using communicative means in order to set up barriers rather than bridges to other communities’ (Baltimore, 1991).

Human Capabilities – Managerial, technical, use of information, communication, problem-solving ability etc are certainly not lacking in Nigeria. Why is it that in spite of this rich and diverse mix of human resources, many organisations in the country especially the public ones remain inert? Life in a typical public organisation is sheer drudgery. A keen observer easily notices a staffing attention to routine matters, a narrow vision by the leadership of the organisation’s fundamental unique purpose, its mandate, potentials and objectives and above all, the inability to identify develop and creatively use the human resources available within the organisation. Initiative is most often discouraged due to an environment that neither empowers nor enables the individual to accomplish anything. Effective plan implementation can be impaired by inadequate investment in the human capital; or by any action that destroys or many ways inhibits the capacity of people to realise their optimal potential. Incompetence due to poor training suppression of freedom and the installation of fear in people can be contributory to poor planning and ineffective implementation. Contributory to poor planning and ineffective
implementation, it is plausible to argue that the greatest damage done by the military in Nigeria is not in fact the massive stealing of public money or damage done to physical control. The most damaging legacy of the military was the destruction of people’s psyche, through intimidation, and of the human capital enhancing institutions (the universities and other training and research institutions, the professional associations etc). The result is a loss of skills and an enthronement of sycophancy. (Iyanda, 2001).

Human resource management examines what is, can be, or should be done to make people both more productive and more satisfied with their working lives. In spite of its importance, however, human resource management function has been misunderstood, undermanaged, or mismanaged in many organisations.

The objective of this paper is to make an exposition of human resource management as a critically important function in Nigerian Universities specifically universities located in Osun State. This paper also made an attempt to examine problems and prospects of Human Resource Management in University Administration in Osun State.

**Literature Review**

**The Concept of Human Resource Management (HRM)**

Human resource management is a process of bringing people and organisations together so that the goals of each are met. It tries to secure the best from people by winning the whole hearted cooperation. Human Resource Management may be defined as the art of procuring, developing and maintaining competent workforce to achieve the goals of an organization in an effective and efficient manner. (Rao 2010). Assisted by French (2007) human resource management refers to the philosophy, policies procedures and practices related to the management of people within an organization. Human resources management encompasses a dynamic, organization –wide prospective that is action-oriented and necessarily interrelated with strategic planning of the top executive team of the organisation.

Human resources management consists of the following propositions. That human resource policies should be integrated with strategic business planning and used to reinforce an appropriate (or change an inappropriate) organisational culture, that human resources are valuable and a source of competitive advantage, that they may be tapped most effectively by manually consistent policies that promote commitment and which as a consequence, foster a willingness in employees to act flexibly in the interests of the adaptive organisations’ pursuit of excellence (legge 1989).

Human resource management is the process of acquiring, training, appraising and compensating employees and of attending to their labour relations, health and safety, and fairness concerns. Human resource management deals with the governance of organisations-with the fabric of policies and practices that governs that lives of the people in the organisation.

**Features of Human Resource Management**

The following are features of human resource management

1. **Pervasive Force:** HRM is pervasive in nature. It is present in all enterprises. It permeates all levels of management in an organization.
2. **Action Oriented:** HRM focuses attention on action, rather than on record keeping, written procedures or rules. The problems of employees at work are solved through rational policies.
3. **Individually Oriented:** It tries to help employees develop their potential fully. It encourages them to give their best to the organisation. It motivates employees through a
systematic process of recruitment, selection, training and development coupled with fair wage policies.

4. **People Oriented**: HRM is all about people at work, both as individuals and groups. It tries to put people on assigned jobs in order to produce good results. The resultant gains are used to reward people and motivate them towards further improvements in productivity.

5. **Future Oriented**: Effective HRM helps an organisation meet its goals in the future by providing for competent and well motivated employees.

6. **Comprehensive Function**: HRM is, to some extent, concerned with organizational decision which has an impact on the workforce or the potential workforce. The term ‘workforce’ signifies people working at various levels, including workers, supervisors, middle and top managers.

**Objectives of Human Resources Management**

The principal objectives of human resources management may be listed thus:

a. **To help the organisation reach its goals**: Human resource department, like other departments in an organization, exists to achieve the goals of the organisation first and if it does not meet this purpose, human resources department will wither and die.

b. **To employ the skills and abilities of the workforce efficiently**: The primary purpose of human resources management is to make people’s strengths productive and to benefit customers, stockholders and employees.

c. **To provide the organisation with well-trained and well-motivated employees**: Human resources management requires that employees be motivated to exert their maximum efforts, that their performance be evaluated properly for results and that they be remunerated on the basis of their contributions to the organisation.

d. **To increase to the fullest the employee’s job satisfaction and self–actualisation**: It tries to prompt and stimulate every employee to realise his potential. To this end suitable programmes have to be designed aimed at improving the quality of work life.

e. **To develop and maintain a quality of work life**: It makes employment in the organisation a desirable, personal and social, situation. Without improvement in the quality of work life, it is difficult to improve organisational performance.

f. **To be ethically and socially responsive to the needs of society**: Human resource management must ensure that organisations manage human resource in an ethical and socially responsible manner through ensuring compliance with legal and ethical standards.

**Importance of Human Resources Management**

The following are major importance of human resources management to the organisation.

- To attract and retain talent
- To train people for challenging roles
- To develop skills and competencies
- To promote team spirit
- To develop loyalty and commitment
- To increase productivity and profits
- To improve job satisfaction
- To enhance standard of living
- To generate employment opportunities

**Theories of Human Resources Management**
The categories of human resources management theory listed by Guest (1997) and Boselie et al (2005) are listed below:

Theories of Human Resource Management by Guest (1997)

1. **Strategic Theories:** The implicit but untested hypothesis is that good fit (between human resources practice and the internal/external context) will be associated with superior performance. The hypothesis is that firms that have a fit between strategy, structure and human resources management policy will have superior performance.

2. **Descriptive Theories:** These either list areas of human resources policy and outcomes or adopt a systems approach, describing the relationships between levels.

3. **Normative Theories:** These are normative in the sense that they establish a norm or standard pattern in the form of prescribed best practice. These take a considerable risk in implying ‘one best way’.

Theories of Human Resources Management by Boselie et al (2005)

1. **Contingency Theory:** Human resources management is influenced by organisations’ environment and circumstances (Iegge, 1978)

2. **The resource – based view:** Human resources management delivers added value through the strategic development of the organisation’s rare, hard to imitate and hard to substitute human resources (Barney, 1991, 1995).

3. **AMO theory:** Ability + Motivation + Opportunity to participate provides the basis or developing human resources systems that attend to employees interest, namely their skill requirements, motivations and quality of the job.

**Human Resources Management Model**

The model that provided the focus was developed by the American Society for Training and Development (ASTD). ASTD identified nine human resource areas;

1. **Training and Development**
2. **Organisation and Development**
3. **Organisation/ Job Design**
4. **Human Resources Planning**
5. **Selection and Staffing**
6. **Personnel Research and Information Systems**
7. **Compensation / Benefits**
8. **Employee Assistance**
9. **Union/ Labour Relations**

These nine areas have been termed spokes of the wheel in that each area impacts on the human resource outputs; quality of work life, productivity and readiness for change. Figure 1.1 is a representation of this model, and the focus of each spoke.
Figure 1: HUMAN RESOURCE WHEEL
Major Processes in Human Resources Management

A useful way to describe human resources management as it practiced today is in process-system terminology. The significance of the process-systems view is that it recognises the interdependence of HRM components with all other aspects management and organisation. A process is an identifiable flow of interrelated events moving towards some goals, consequence or end. An example in human resources management is the staffing process, a flow of events that results in the continuous filling of positions within the organisation. The events will normally include such activities as recruiting applicants, making hiring decisions and managing career transitions such as transfer and promotions. These include:

A system, on the other hand, is a particular set of procedures or devices designed to manage a process in a predictable way. The staffing system of an organisation for example, might include application blanks, interviews, reference checks, a six-month probationary period, a procedure for posting job openings within the organisation and procedure for applying for job transfers.

Conducting job analyses determining the nature of each employee’s job

- Planning labour needs and recruiting job candidates
- Selecting job candidates
- Orienting and training new employees
- Managing wages and salaries (compensating employees)
- Providing incentives and benefits
- Appraising performance
- Communicating (interviewing, counselling, disciplining)
- Training and development staff
- Building employee commitment
- Equal opportunity and affirmative action
- Employee health and safety
- Handling grievances and labour relations

There is a great deal at stake in human resources management people’s careers, their physical and emotional health, and the effectiveness and viability of their organisations are directly influenced by the quality of the ‘people practices’ where they work. Changes in terminology reflect the increased significance associated with the management of people in organisations as well as the broader perspective from which the field had a strong functional focus, personnel specialists were primarily concerned with the administration of specific employee related functions such as hiring training, wage setting, and disciplinary action. A more modern view is that all personnel functions are interrelated. Moreover, how well these functions are managed has a tremendous effect on an organisation’s ability to meet its overall objectives.

Individual motivation and teamwork are highly affected by this fabric of HRM policies and practices, matters of fairness and equity are central to HRM. The effective management of human resources in the organisation requires the utilisation of knowledge from many disciplines including social and counselling, psychology, employment law, management theory, medicine, group dynamics, philosophy, ethics, statistics and more. Human resource management is both a science and an art of creating an organisational culture that foster high morale. Human resource management has to do with the integration of technology and the human/social system of organisation.
According to the process-systems view, human resources management is the systematic planning, development, and control of a network of interrelated processes affecting and involving all members of an organisation. These processes include:

Human Resource Planning is the process of assessing the organisation’s human resources needs in the light of organisational goals and changing conditions and making plans to ensure that a competent, motivated workforce is employed. The basic purpose of having a human resource plan in the university is to have an accurate estimate of the number of employees required, with matching skill requirements to meet organisational objectives. It provides information about the manner in which existing personnel are employed, the kind of skills required for different categories of jobs and human resource requirements over a period of time in relation to organisational objectives. It would also give an indication of the lead time that is available to select and train the required number of additional manpower.

More specifically, HR planning is required to meet the following objectives (Overman 1999). Forecast personnel requirements, cope with changes use existing manpower productively and promote employees in a systematic and promote employees in a systematic manner.

Human Resources Planning is highly important and useful as it offers the following benefits reservoir of talent; prepare people for future, expand or contract of manpower, cutting of costs as it facilitate the preparation of appropriate HR budget for each department or division; helps in controlling manpower costs by avoiding shortages/ excesses in manpower supply, technological changes, occupational changes, retraining, shortage of relevant skills and knowledge and mobility (transfer, promotion, resignation, upgrading of technological, substation of product lines and changes in product mix) the physical facilities such as canteen quarters, school medical help etc can be planned in advance, prepares the organisation for succession planning.

The necessities of HRP include changes in environment, organisation, replacement against deficiencies, and employment of surplus manpower and stability of employment.

The functions of HRP include;
- The recruitment of sufficient and suitable staff
- Retention of such staff in the university
- Ensuring optimum utilisation of all staff
- Improving staff capacity and performance
- Disengagement of staff when due.

To plan for the resources in any university, it is the key responsibility of the Vice-Chancellor, Registrar, Bursar and of course the Auditor of Academic Planning.

According to Girle (2007) the three elements of HRP are demand, supply and timing which usually determine the quality and the quantity of available staff. In all universities selected Obafemi Awolowo, Ile Ife, Osun State University, Osogbo (with six campuses), Fountain University Osogbo, Joseph Ayo Babalola University, Ikeji Arakeji, Adeleke University Ede, Redeemers University Ede, the policy of Government (Proprietor) on funding has always determined the number and calibre of staff to be employed at any given time. The university plans for and recruits staff on the basis of the National University Commission (NUC). Parameters Employment are made for (a) Academic staff (b) Administrative and Technical staff (c) Junior staff. The particular guide for this purpose is full time equivalent.
Organisational Structure

The organisation of positions follows the principle of hierarchy, each lower office being subject to the control of a higher one. There is a systematic division of labour, each office has a clearly defined shape of responsibilities (see figure 1.2). The occupant of the offices must be selected on the basis of technical qualifications in the university system. There is need to put the most qualifies staff in the most appropriate office in order to get the best in the fulfilment of their objectives. The university has not fared badly in the past, but in recent terms have been expressed by many that there has been a level of favouritism in certain appointments which in variably affects the graduates being sent out. This fear to a cancer and must be surgically and surgically removed.

**Staffing Procedure**

In the university, Staffing Procedure begins with the management through the appropriate unit informing all budgetary units to forward their estimates in terms of their Full Time
Equivalent (FTE) to the Bursary Department through the Academic Planning Unit. The Vice Chancellor presides over the total budget as recommended to the Governing Council through the Financial and General Purpose Committee. The Registrar prepare and forward staff requirements for advertisement in type with the approved budget.

**Recruitment Procedure**

Recruitment Procedure may be internal or external advertisement. The information officer forwarded the documents to at least two national dailies. A period of six weeks is normally given as closing date from the day of publication. An applications received are forwarded to the Registrar to be processed by the Registry Staff.

**Selection Procedure**

Based on the existing vacant positions to be filled the Registrar forward the publications to the departments and units for possible short listing of candidates. The Registrar and his staff verify that the returns are in consonance with the laid down provisions. Interview panels are constituted by the Registrar and other Registry Staff and forwarded to the Vice-Chancellor who chairs the Panel.

Applicants who are qualified are invited for interview on a set date that is sufficient enough to receive invitation. The advent of the GSM, phone calls are made to fast track certainty that such candidates received invitation on time. Interviews are conducted sometimes with the assistance of external consultant or Professors in that area of need. The best candidates are forwarded to the chairman for vetting. Thereafter, a report is prepared to the respective Appointments and Promotions Committee (A&PC). The Vice Chancellor approves that letters of appointments be issued and A&PC ratifies such approval during its next meeting. The process of selection is a regular feature either because of staff turnover or the need to increase in staff turnover or the need to increase in staff strength as a result of increase in the number of students to be admitted as approved by the NUC or introduction of new courses. High staff turnover in itself is a sign of weakness or problem in the system. Efforts must be made to reduce high labour turnover in the university system.

**Appointment**

After selecting the appropriate staff, an appointment letter is forwarded to the successful candidates, within six weeks he should assume duty or give reason why he could not assume duty. On assumption of duty, a new staff reports to the Registry for assumption formalities/Documentations which includes medical test in the University’s Health Centre. He is deployed to the right office and a job description given to him. The Regulations Governing the conditions of service of Employee are given to him for study and compliance.

A new staff is integrated to the system through induction and orientation. The academic staff report at the College, Faculty and Department. The Dean, HOD and College Secretary put him through the necessary tutelage.

**Challenges Faced By H.R.D Managers**

H.R.D. managers are facing many challenges these days. Some of these are listed below;

1. Enlarging the scope on personnel management
2. Focus on knowledge and skill
3. Structure and size of enterprise
4. Globalisation of business
5. Managerial skills in HRD
6. Number of employees
7. Quality of employees
8. Sustainable competitive advantage
9. Empowerment of employees
10. Government intervention
11. Social orientation
12. Reservation issues
13. Manpower costs
14. Future challenges

**Methodology**

In this study, the researchers apart from using the secondary data also carry out a survey to obtain relevant data from respondents using participatory survey method (PSM). The method provided opportunity to all Registry staff to give Professional view on ways of enhancing effective human resource management in the six selected universities namely; Obafemi Awolowo University Ile-Ife, Osun State University Osogbo, Joseph Ayo Babalola University Ikeji Arakeji, Fountain University Osogbo, Adeleke University Ede and Redeemer University, Ede. A questionnaire titled Effective HRM in Osun State University (EHRMS OSUN) was used to obtain relevant information. The questionnaire has two parts. Part A: background of the respondents, while part B respondents views on strategies of enhancing effective HRM in the selected six universities.

Progressive sampling technique was used to select 160 Registry Staff who were requested to list ten ways by which effective HRM could be enhanced in the six selected universities in Osun State.

Regression analysis was used to test the four hypotheses formulated.

Weights were assigned to various Likert scales of Strongly Agree 5, Agree 4, Undecided 3, Disagree 2 and Strongly Disagree 1.

Decision rule: if the calculated value is greater than 0.6 there is a strong positive relationship and if it is lower than 0.4 – 0.1 there is relationship but a weak one.

In situation of strong relationship, alternative hypothesis is accepted and vice-versa.

\[ r = \frac{n \sum \chi y - \sum \chi \sum y}{\sqrt{[n \sum \chi^2 - (\sum \chi)^2] \cdot [n \sum y^2 - (\sum y)^2]}} \]
Decision rule:
Accept Ho, reject Hi when the table value is greater than the calculated value. Reject Ho and accept Hi if otherwise.

Results and Discussion

<table>
<thead>
<tr>
<th>Responses</th>
<th>No of respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>87</td>
<td>54.37</td>
</tr>
<tr>
<td>Agree</td>
<td>48</td>
<td>30</td>
</tr>
<tr>
<td>Undecided</td>
<td>13</td>
<td>8.13</td>
</tr>
<tr>
<td>Disagree</td>
<td>7</td>
<td>4.37</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>5</td>
<td>3.13</td>
</tr>
<tr>
<td>Total</td>
<td>160</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 1. Source: Administered Questionnaire (2014)

Table 1 shows that 87 (54.37%) strongly agree to the fact that good HRM can lead to improved performance in staffs and students’ performance, 48 (30%) agree, 13 (8.13%) undecided, 7 (4.37%) disagree and 13 (8.12%) strongly disagree.

Hi   Effective HRM leads to Improvement in staffs and students performance.

<table>
<thead>
<tr>
<th>X</th>
<th>Y</th>
<th>XY</th>
<th>X²</th>
<th>Y²</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>87</td>
<td>435</td>
<td>25</td>
<td>7569</td>
</tr>
<tr>
<td>4</td>
<td>48</td>
<td>192</td>
<td>16</td>
<td>2304</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>39</td>
<td>9</td>
<td>169</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>14</td>
<td>4</td>
<td>49</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>15</td>
<td>160</td>
<td>685</td>
<td>55</td>
<td>10116</td>
</tr>
</tbody>
</table>

Table 2

\[
r = \frac{n \sum XY - \sum X \sum Y}{\sqrt{[n \sum X^2 - (\sum X)^2][n \sum Y^2 - (\sum Y)^2]}}
\]

\[
eq \frac{5 \times 685 - 15 \times 160}{\sqrt{[5 \times 55 - (15)^2][5 \times 10116 - (160)^2]}}
\]

\[
eq \frac{3425 - 2400}{\sqrt{(275 - 225)(50580 - 25600)}}
\]

\[
eq \frac{1025}{\sqrt{(50)(24980)}}
\]
\[ r = \sqrt{\frac{1025}{1249000}} = \sqrt{\frac{1025}{1117.59}} \]

\[ r = 0.9171 \text{ or } 91.71\% \]

**Decision Rule**

The alternative hypothesis which states that effective HRM leads to improvement in staff and students' performance is hereby accepted while Ho is rejected. This shows that effective HRM on the part of staff and students leads to improvement performance.

**Test of Hypothesis Two**

Hi: There is a significant difference in the HRM Practices in Public and Private Universities.

<table>
<thead>
<tr>
<th>X</th>
<th>Y</th>
<th>XY</th>
<th>X²</th>
<th>Y²</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>28</td>
<td>140</td>
<td>25</td>
<td>784</td>
</tr>
<tr>
<td>4</td>
<td>94</td>
<td>376</td>
<td>16</td>
<td>8836</td>
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<tr>
<td>3</td>
<td>16</td>
<td>48</td>
<td>9</td>
<td>256</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
<td>24</td>
<td>4</td>
<td>144</td>
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<tr>
<td>1</td>
<td>10</td>
<td>10</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>15</td>
<td>160</td>
<td>598</td>
<td>55</td>
<td>10120</td>
</tr>
</tbody>
</table>

Table 3

\[ r = \sqrt{\frac{n\Sigma XY - \Sigma X \Sigma Y}{\sqrt{[n \Sigma X^2 - (\Sigma X)^2][n \Sigma Y^2 - (\Sigma Y)^2]}}} \]

\[ = \sqrt{\frac{5 (598) - 15 (160)}{(5 (55) - (15)^2) 5 (10120) - (160)^2}}} \]

\[ = \sqrt{\frac{2990 - 2400}{(275 - 225) (50600 - 25600)}} \]

\[ = \sqrt{\frac{590}{(50) (25000)}} \]

\[ = \sqrt{\frac{590}{125000}} \]
\[
= \frac{590}{1118} \\
r = 0.53 \text{ or } 53\%
\]

**Decision Rule**

The alternative hypothesis which states that there is significant difference in the practices HRM in public and private universities is hereby accepted. Ho is rejected.

The suggested strategies were grouped into ten items and ranked on the basis of the number of respondents. The ten items were later presented to the respondents after an interval of four weeks to authenticate using a five point type Likert Scale. This is to enable the researcher to authenticate the suggested strategies and compare the respondents’ level of agreement. The population of the study were all the Registry staff of universities. One hundred and eighty (180) questionnaires were distributed only one hundred and sixty (160) were returned and found useful for the study. 96 (60%) of the respondents are males while 64 (40%) are females. A total of 72 (45%) of the respondents work in public universities, 88(55%) work in private universities.

<table>
<thead>
<tr>
<th>Suggested Strategies</th>
<th>No of Respondents</th>
<th>%</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Improved conditions of services</td>
<td>136</td>
<td>85</td>
<td>1st</td>
</tr>
<tr>
<td>2. Adoption of efficient policies on recruitment, selection that is fair and equitable.</td>
<td>132</td>
<td>82.5</td>
<td>2nd</td>
</tr>
<tr>
<td>3. Career Opportunities</td>
<td>122</td>
<td>76.25</td>
<td>3rd</td>
</tr>
<tr>
<td>4. Training and Development</td>
<td>114</td>
<td>71.25</td>
<td>4th</td>
</tr>
<tr>
<td>5. Rewards and Sanction</td>
<td>107</td>
<td>66.87</td>
<td>5th</td>
</tr>
<tr>
<td>6. Nationwide advertisement about job vacancies and allowing sufficient time for candidate to apply</td>
<td>101</td>
<td>63.12</td>
<td>6th</td>
</tr>
<tr>
<td>7. Reduction of excessive centralisation of power and Bureaucracy</td>
<td>96</td>
<td>60</td>
<td>7th</td>
</tr>
<tr>
<td>8. Prompt and Impartial Sanction of Violators of Condition of service</td>
<td>84</td>
<td>52.5</td>
<td>8th</td>
</tr>
<tr>
<td>9. Empowerment and Job design</td>
<td>79</td>
<td>49.37</td>
<td>9th</td>
</tr>
<tr>
<td>10. Enforcement of Legal instruments code of conduct and rules and regulations promoting effective HRM.</td>
<td>68</td>
<td>42.5</td>
<td>10th</td>
</tr>
</tbody>
</table>

Table 4: Percentage and Rank Analysis of Respondents’ views on Enhancement of Effective HRM in Nigerian Universities.
Table 4 represents data on strategies of enhancing effective HRM in Nigerian Public and Private Universities as view by Registry Personnel. Table 4 shows the rank in order; of the view of respondents improved in conditions of service top the list of suggested strategies. This is followed by adoption of efficient HRM policies on recruitment, staff process and selection and while the least on the ranking table is enforcement of legal instrument code of conduct and rules and regulations promoting effective HRM.

**Conclusion and Recommendations**

Our analysis shows that the importance of HRM in University administration lies in its endowment with immense potentials which can be used for good or evil. The environment of operation largely determines how much of that potential is utilised and the purpose for which it is used. An environment in which perfidiousness, inefficiency, fraud and dishonesty are not punished, but are indeed adulated, reinforces such behaviour and promotes the development of the evil potentials of the human being. Similarly, a social culture that fails to seek, utilise and reward talent or ability discourages the development of such and provided no incentive for good men and women to avail society of their skills, competencies and capabilities.

University Human Resource Managers should place the right person on the right job. It is high time that emphasis are placed on emotional intelligence, merit rather than undue emphasis on certificates.

Emphasis should also be placed on staff training and returning both at home and abroad. A trained staff is an asset as this improves employees and students performance while an untrained staff is a liability. Universities administration should invest more on human capital in order to improve quality of their workforce. This will also improve job performance of each person and gaining the cooperation and developing working relationships, creating and maintaining department morale, protecting employees’ health and physical conditions.

Effective HRM will also help universities to control labour costs, avoid high labour turnover and other wastages as a result of poor hiring and selection process. It is a worthy lesson for Nigerian Universities to learn. If the vision, mission and objectives of the universities are to be realised and policies and plans effectively implemented, administrators in the public and private universities have to be selected and rewarded more on the bases of ability and excellent performance and less on those of politics, race, gender and personalities.

Concerted efforts should be made to ensure that there is equity and fairness in rewarding talents of both staff and students. To get the best out of people (staff and students) the organisation must offer a healthy work climate where they can use their knowledge, skills and abilities fully while realising organisational goals. This is where HR managers play a crucial role that of bridging gaps between employee expectations and organisational requirements by adopting appropriate HR policies, strategies and practices that will make them to have competitive advantage over others.

HR should focus more on quality service, employee involvement, teamwork and productivity. To be effective, HR strategies must fit with overall organisational strategies, the environment in which the firm is operating, unique organisational characteristics and organisational capabilities and competencies.

There is also need to carry out management audit to take a critical and unbiased look at the organisation. People in positions of authority must realise that effectiveness is neither an ability nor a talent. It is a habit, a practices of self-discipline that must be learned by adopting and imbibing strategic planning, leadership, visioning, and communication skills. Managerial
skills should be displayed through proper training, proper management exposure and experience motivation of staff and students so as to bring the best in them.

Administrators in the University should patiently coach, mentor and nurture those under them and they must be adequately committed both morally and financially to constant training and updating himself first and then his staff. Personal reading and research will help the administrators to be well abreast of management trends.

It is imperative that every Chief Executive along with his/her management team should have a fundamental rethinking of the way they plan and manage their resources in an environment that is characterised by uncertainty, change, instability and unpredictability. There must be a collective authorship of the mission statement through a deep collective introspection, critical analysis and vivid expression of the organisation’s vision and values. To remain competitive and avoid absolute waste of time and resources, organisation’s CEO and his team must clearly articulate and communicate the vision, mission and goals with clarity and completeness and carry everybody along.

Leadership skills must be consciously developed and acquired to pursue excellence with vigour and by constantly scanning the environment to identify talents, opportunities and deploy human resources effectively to harness the opportunities identified. University administrator should be able to communicate effectively.

Communication skills include being able to listen emphatically that is being able to see things from the other person’s point of reference and being forthright in dealing with people. Communication is the most important skill in life as argued by Covey (1991) as we spend most of our waking lives communicating. One can easily notice a lot of anger at work, suspicion and distrust are so widespread that being made to work in team is very difficult. The manager of yesterday becomes today’s boss, a decision-maker and a tin god who now demands loyalty, respect and instils fear over the organisation. Today’s manager should be ready to become a mentor, a facilitator, and above all a team player through effective communication.
References
Raising Public School Funds in Saudi Arabia by Applying Strategies Used in the United States

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¹ Concordia University Chicago, IL, USA
² Tennessee State University, Nashville, TN, USA

Abstract
This article aims to scrutinize and compare public school education financing in the United States and Saudi Arabia. It presents a new funding strategy to use in Saudi Arabia based on some successful strategies for raising funds in the United States. Since the United States’ educational system is decentralized, the article will propose a form of public school finance for the centralized education system in Saudi Arabia. The study additionally provides a synthesis of the school funding to expand the understanding of educational practice in public schools. A SWOT analysis-marketing plan is used in the article to investigate the strengths and weaknesses of Saudi Arabia’s school funding strategies. This marketing plan is presented in the paper, which analyzes the new strategy suggested for Saudi Arabia to raise funds for education. The study also provides future research for school marketing to raise funds for underdeveloped public schools. The study concludes with recommendations that may be implemented by stakeholders in both countries for the benefit of schools to foster increased funding and quality of education.

Keywords: School finance, SWOT analysis, strategic planning
Introduction

Within the United States of America, each state has sovereignty in education; therefore, each state has the right to set its own education policies, including policies that address the duration of compulsory education, school regulations, and setting standards that teachers must meet regarding coursework, along with public school fund raising. In the United States, three departments are responsible for sharing the management of education: the federal government, state government, and local government. Thus, the education system in the United States is decentralized, while Saudi Arabia’s educational system is centralized. There are significant differences in education finance for public schools from state to state that can sometimes create gaps in resources that appears to exist in lower income areas when compared to higher income areas. Public school finances depend on three major sources for funding: the federal government (4 percent of school funding), state government (39 percent of school funding), and local government (57 percent of school funding). Therefore, in lower income areas, a huge burden is placed on local and state governments to raise needed school funds, but also the schools within the district. This policy is due to the Tenth Amendment to the United States Constitution because it gives each state the authority to organize its own education policies (Wong, 2008). While the local and state government and school districts within the United States vary regarding their education policies, they have similar cooperative and collaborative aspects of the public school fund raising.

Even though there are numerous differences between the education systems of the United States and Saudi Arabia, there are also similarities between them. For example, both countries require that funds be raised for public schools. In Saudi Arabia, many public schools have difficulty raising needed funds. This may be due to the strict rules surrounding raising education funds in Saudi Arabia when compared to the flexibility found in the United States. In Saudi Arabia, public school administrators have limited authority to raise needed education funds, and school administrators do not have any flexibility regarding creating strategies to raise funds, nor are there any cooperative and collaborative features within limited authority or school administrators of raising public school funds. In the United States, school administrators are given much more freedom to be creative and fundraise for their schools than their counterparts in Saudi Arabia. Thus, the purpose of this study is to assess the public school funding challenges that affect Saudi Arabia and develop successful strategies that can be used to raise funds for Saudi Arabian public schools by applying strategies used in the United States.

Public School Funding in the United States and Saudi Arabia

In many countries, education receives a large portion of national resources. Quality education must equip learners with the skills and knowledge they will need to contribute and effectively compete in the economic, social, and political development of their nations. The investment a country dedicates to education determines the value and quantity of education received by its students. A well-funded school system promotes efficiency and equity aimed at increasing the quality and quantity of education among all members of society. When increased education expenditures translate to optimum educational targets and ideal social development, learners perform well and school funding is balanced. In the United States, public schools are partially funded through taxes collected from local communities. Ideally, public schools provide students with
equal opportunities for educational success, regardless of the socioeconomic status of their communities, but this is not always true in practice. Students from underprivileged communities often attend public schools that are underfunded and severely lacking resources. This is a serious issue that must be addressed to ensure that public schooling in the United States lives up to its promise to leave no child behind.

Saudi Arabia supports public education through national budgets, but the public school funding methods of both the United States and Saudi Arabia lead to inequalities in education. Proponents of equitable funding for public schools describe the close correlation between students’ achievement and school resources. Those who oppose equal financing of public education argue that increased expenditures in education do not automatically translate into higher levels of education attainment (Greenwald & Laine, 1996). Public school funding is a contentious issue in the United States and Saudi Arabia, and it elicits various debates on education equality and the challenges that schools face. Thus, this paper will investigate the challenges that affect educational funding in the Saudi Arabia, and how effective educational funding strategies can be applied to raise funds for Saudi Arabia’s public schools via strategies from the United States.

**Theoretical Framework and Rationale**

Public school funding in any country takes on a social persona that emphasizes teamwork and team spirit from a cooperative and collaborative learning theory perspective. This public school funding activity in-group work is more efficient and effective, according to May and Doob (1937) cooperative and collaborative learning theorists. Since the theory’s conception, there has been a plethora of studies to examine the idea of the cooperative and collaborative learning theory in various ways. Most of the studies’ results have shown that in these environments students or others are able to learn from each other, and apply each other’s skill sets and resources, while sharing experiences that could profit the comprehensive group and alleviate competitive behavior. The results also show possible life-long friendships and interaction; enhanced cognitive and communicative skills. The above theory is utilized in the United States’ public school funding strategies that Saudi Arabia could adopt to be successful.

The education system in Saudi Arabia is centralized; therefore, all students have access to the same curricula and school lunch and nutrition programs at all elementary, middle, and secondary schools (Ministry of Public Education Handbook, 2014). As a result, school finances are the same in both large and small school districts. The education policy in Saudi Arabia has been working towards acknowledging schools’ needs and supporting individual school’s needs by adjusting education policies (Alhaqil, 2010), but public school funding policies are misleading and face several challenges on a daily basis. Public school funding challenges further complicate the shortage of proper education programs for Saudi Arabian students in public schools. Recently, some universities in Saudi Arabia have designed programs for graduate students who wish to become public school funding specialists, but this does not address the current shortage of proper education regarding public school funding policies and supporting students’ needs in Saudi Arabia’s public schools.

Saudi Arabia and the United States both face challenges regarding school funding, even though the two countries have different forms of education funding. In Saudi Arabia, education funding is centralized, while in the United States it is decentralized.
Nevertheless, education funding in the United States is more successful and balanced than in Saudi Arabia, and Saudi Arabia can learn from the United States as the country begins the process of changing how public schools are funded. Currently, efforts are underway in Saudi Arabia to improve students’ educational attainment by increasing public school funding while paying attention to students’ unique needs. Saudi Arabian society and education practices in general differ greatly from American society and education practices. Schools in Saudi Arabia are segregated by gender, and modesty is a countrywide policy that is taken seriously. Teachers are to be treated with the utmost respect, and asking questions inside the classroom is not encouraged. Thus, differences such as these must be taken into account while designing public school funding strategies intended to improve students’ performance. Saudi Arabia’s Ministry of Public Education recognizes the challenges that face its public schools, and it is committed to improving students’ educational achievement. The Ministry of Public Education has recently established a department to assess and improve public school funding, but the department is in need of proven strategies that it can use to instill effective change in Saudi Arabian schools.

Administrative Challenges in Saudi Arabia

In Saudi Arabia, many public school administrators are facing difficulties with their school funds. For example, in some areas, students attend classes in rented buildings, which prevent them from doing certain activities, such as science activities, and some schools are so crowded that multiple classes are held in the same classroom at the same time. Many teachers are overloaded with work and their heavy schedules prevent administrators from giving them additional duties, such as helping struggling students and gathering voluntary contributions of money or other resources by requesting donations from individuals, businesses, charitable foundations, or governmental agencies. The centralized education system in Saudi Arabia also prevents school administrators from acting outside of their assigned roles, and school funds are not allowed to be distributed to gifted or struggling students to help them perform to their abilities.

Challenges for Students in Saudi Arabia

Many students in Saudi Arabia are in need of effective social environments that meet their interests and needs, including challenging their intellect and providing them with hobbies that stimulate their minds. New strategies are desperately needed to increase public schools funds because centralized and limited support from the government is not currently able to meet students’ unique needs. Also, students do not receive awards or extra resources for mastering their current grade level. This means that there is no formal recognition of students’ achievements, and there are no specialized curricula for advanced students or students with disabilities. Thus, in Saudi Arabia, students’ achievements are not encouraged or appreciated (Student Evaluation System, 2011).

Strengths, Weaknesses, Opportunities, and Threats: SWOT Analysis

Funding for Public Education in the United States

Each state in the United States has its own school finance system. The state of Illinois has been chosen in this paper to present and examine the education finance system in the United States and compare it to Saudi Arabia’s, based on several elements: population, diversity, and regulation. Funding for public school education in the state of Illinois
comes from local, state, and federal sources. Public schools in Illinois are run primarily via property taxes collected from local property owners (Wilson, 2014).

![Figure 1: Illinois School District Finance Averages - Revenue Percentages (2014)](image)

**Strengths of the School Funding Formula Used in the State of Illinois**

A crucial strength of the school funding formula used in the state of Illinois is that local communities support local schools, and this means that local individuals have the capacity to improve poor schools. Funding public schools via money collected from local individuals (i.e., taxpayers) means that local communities play an important role in accessing and monitoring the progress of the education that schools provide students. The funding formula used in Illinois makes the local community responsible for the welfare of its schools and it students. Recently, the state of Illinois introduced a bill in which funds collected from wealthier neighborhoods are distributed to poorer areas to promote education equality. In addition, the school funding formula used in Illinois is effective in that communities can devise ways of supporting poor schools with additional funds, even when such schools are located in impoverished communities. Such behavior gives credence to the cooperative and collaborative fund raising process.

**Weaknesses of the School Funding Formula used in the State of Illinois**

The effects of the school funding formula used in Illinois include the stark fact that wealthy communities generate more funds for their public schools than impoverished communities, and this leads to disparities in education. Thus, differences in education are more marked within the states’ schools, school districts within the districts, and among schools within particular zones, e.g., zones of great socioeconomic disparities (Greenwald & Laine, 1996).

Within the state of Illinois, wealthy communities tend to have well-funded schools while impoverished communities are likely to have schools that struggle to obtain adequate funding. The general effects of the unequal funding of public education in the
state of Illinois include disparities in the quality of school facilities, curriculum, teaching aids, teachers’ experience, class sizes, and other variations (Wilson, 2014). Other developed countries rarely experience such disparities in public school funding. One weakness of the school funding formula that is used in Illinois is that poor and minority children face more difficulties than in other countries with a universal funding formula. Children from poor and/or disadvantaged families can only afford to attend poorly funded schools, and doing so increases their handicap. The public school funding formula that is used in Illinois – one that relies heavily on local property taxes – is irrational, unfair, and insensitive to the resources required to properly educate students. The unequal distribution of resources in the state of Illinois is an important example of why the system of education funding used in the United States is imperfect, but the imperfection has some strategies that could be used to aid in Saudi Arabia’s public school fund raises.

**Funding of Education in Saudi Arabia**

The government of the Kingdom of Saudi Arabia funds education in its public schools. Saudi Arabia has a huge budget, which is financed through massive investment and income from oil exploration. The budget funds enormous projects and government duties, such as education, and the government allocates a large portion of its budget to education funding at all levels. In 2014, Saudi Arabia spent around twenty-five percent of its total budgets on education. In 2015, the budget allocations for education and training increased by three percent, and this increase includes SR14 billion for new projects, SR12 billion for the refurbishment of universities and the construction of three new universities, and SR400 million for the refurbishment of school centers. The 2015 budget also allocates SR22 billion for Saudi Arabia’s approximately 207,000 students who are studying abroad (2015 Saudi Arabian Fiscal Budget). Primary and secondary education is the backbone of education in Saudi Arabia, and the government spends freely and committedly on education.

**Strengths of the School Funding Formula Used in Saudi Arabia**

In Saudi Arabia, school funding is a collective task that is undertaken by the national government. The Saudi Arabian government allocates education funds for all levels of public education. The national government pools financial resources from various areas and the resources are then shared equally amongst all of the country’s public schools. This is important as it erodes funding disparities between public schools in wealthy and poor communities. When the state funds all schools, equal standards of education are promoted and this eliminates inequalities in regard to school facilities, personnel, and other training resources.

**Weaknesses of the School Funding Formula Used in Saudi Arabia**

The school funding formula used in Saudi Arabia eliminates community participation in public education because the government provides all funds and monitors the use of school resources. In this case, the funding formula used in Saudi Arabia may adversely affect communal responsibility in the management and running of public schools. When the national government provides funds to all schools in an equal manner, regardless of student attributes, community characteristics, and other important considerations, this formula also breeds inequality. In big cities in Saudi Arabia, public schools typically
have ideal literacy levels and teaching infrastructure and more teaching personnel and teaching aids than schools found in more remote, rural areas. Schools in rural areas generally have a harder time attracting and keeping top teaching talent than city schools, because many teachers prefer to live and work in modern cities versus rural desert communities.

**Comparing the Education Funding Formulas of Illinois and Saudi Arabia**

In the United States, public schools receive funds from taxes collected from local communities, and this perpetuates inequality in public education. Public schools in wealthy communities receive more funds compared to those in poor communities. In this sense, the education funding formula of the state of Illinois promotes education inequality (Klinger, 2013). In contrast, the government of Saudi Arabia allocates approximately twenty-five percent of its yearly budget for education (2015 Saudi Arabian Fiscal Budget). However, inequalities persist in the allocation of resources in Saudi Arabia, and new public school funding strategies are needed to ensure that all Saudi Arabian students have access to high quality, well-funded education (Mohammed, 2013).

Despite the existing disparities in education funding between the state of Illinois and Saudi Arabia, education funding in the state of Illinois, and in the United States in general, is more conscious of disadvantaged students needs’ than education funding in Saudi Arabia (Saudi Arabian Ministry of Education, 2008). This means that local communities in the United States can respond more effectively to bridge educational funding inequalities than the federal government of Saudi Arabia can rectify educational gaps. Local communities understand the needs of students who live in less privileged communities, and such communities are equipped to understand when increased funding is needed to support their schools. Local communities are also able to organize fundraising (cooperative and collaborative effort) drives to increase public school funding, and permission from the state is not needed to raise money for needed resources. On the surface, the education funding provided by the Saudi Arabian government appears to promote equality, but there are serious disparities in its funding formula (Profanter, 2014). For instance, when the government provides funds to all public institutions, this formula is unjust as it gives an equal share of resources to both wealthy and lower income schools. By equally distributing education funds, the Saudi Arabian government fails to meet the needs of the disadvantaged (Reizberg, 2011). Funding of public education via the federal government, such as the education funding found in the United States, is an active strategy that promotes equality in all public institutions (Roy, 1992).

The Saudi Arabian government must place a greater emphasis on erasing the disadvantages in accessing education. Although, public school funding in the state of Illinois is not entirely fair, it has its advantages; and it promotes some level of equality. In Illinois, disadvantaged students can get more support from their government and local communities than disadvantaged students in Saudi Arabia, where the national government provides uniformed funding for all public schools (Hanushek, 1989). The public school funding approaches used in the state of Illinois and Saudi Arabia differ. The state of Illinois uses a devolved approach to fund public schools (Wilson, 2014), while the Saudi Arabian government uses centralized resources to finance public education (Mohammed, 2013).
Public School Marketing and Fundraising

In the United States, state and federal funds for public schools are limited; public schools must raise needed school funds by creating marketing strategies and fundraising campaigns. Therefore, public school administrators must develop suitable strategies based on facts and detailed visions in order to design and implement successful marketing strategies that raise much-needed public school funds. The administrators have to make feasible that all parties involved in the raising of funds, must adhere to the cooperative and collaborative effort to acquire mutual success. Thus, by establishing marketing strategies and fundraising campaigns, public schools are better positioned to raise needed funds, as opposed to when marketing strategies and fundraising campaigns are not utilized (Verstegen, 2011).

Public schools should use SWOT analysis – the most popular and successful analysis model – to analyze the strengths, weaknesses, opportunities, and threats of each marketing strategy that they might decide to employ to raise funds. Using SWOT analysis would allow public school administrators to ensure that marketing strategies and fundraising campaigns are worthwhile and likely to be successful before such strategies and campaigns commence. It is essential that public school fundraising is effectively incorporated within the community environment. Thus, before or during the use of SWOT analysis, public school administrators must present the school in a positive light to members of the local community and students’ needs should be conveyed to the community. Public school fundraising may not require long-lasting SWOT analysis because such fundraising is typically associated with a solid core of school administrators who all have the same goal in mind: increasing their school’s funds. However, if a public school’s fundraising campaign is affected by the withdrawal of a major sponsor, such as the school’s principal, then the entire fundraising team will be affected and the team may not be able to maintain its goals or meet its objectives (Neely, 2015). Successful fundraising campaigns have a cohesive leadership unit whose members are united by the same goals and objectives.

The location of public schools plays a large role in the process of raising school funds. Public schools that are located in low-income areas are likely to experience difficulty raising needed funds because their surrounding communities typically do not have extra funds that can be given to local schools. Students of schools in lower income areas may also have additional needs that are not present as often in higher income areas, such as an increased need for federally supplied school breakfasts and/or lunches. Funding such expenditures requires schools to spend funds, even if schools are eligible for federal supplemental aid. This means that extra funds for necessities, such as music classes or physical education classes, must be raised via fundraisers. This involves school administrators working together with their local communities and accepting funds from community members, parents, and stakeholders, and petitioning the federal government for additional funds. The city of Chicago, Illinois is an example of a successful, city-led marketing strategy that was developed to gain federal approval to provide tutoring programs for students in schools that are not making adequate yearly progress (AYP). A successful strategy to get more state aid support was led by Pennsylvania Governor Edward Rendall. The strategy was designed to increase state funding for school districts that have a higher attentiveness of needs and a lower fiscal base (Wong, 2008).
Administrators in a Colorado school district created a successful marketing strategy that is engaging parents and stakeholders in decision-making and problem-solving processes. The administrators call their strategy “seizing the day” and the program focuses on engaging parents and other stakeholders in complex decision-making processes and making them aware of the needs behind fundraising campaigns, thereby increasing their interest in funding the district’s schools (Poynton & Haddad, 2014). According to Poynton and Haddad, “The program known as Leadership St. Vrain provides citizens with knowledge about school district operations and management (know-how) and relationship-building opportunities with key decision makers (know-how)” (2014).

According to Family Circle magazine, there are numerous methods that public schools can use to raise needed funds and improve their operations. For instance, a school can organize a baked goods fundraiser that includes baking cakes, cookies, or scones and then selling the baked goods, with the proceeds from each sale going to the school. Alternatively, a public school may also employ an intelligent-sponsored approach. Through such an initiative, the school administration may engage merchants or celebrities in different fields and encourage them to make a contribution to the institution with no strings attached. Such donations may be turned into cash and used to improve the school’s operations (Leslie, 2015). Ultimately, the school may also organize child-centric fundraising initiatives by asking students to distribute global-sustainability placards to the community with the hopes of getting donations to improve the school (Leslie, 2015).

A Marketing Plan to Fund Public Schools in Saudi Arabia Based on the SWOT Analysis

According to Rizzo and Kim (2005), SWOT analysis is “a commonly employed framework in the business world for analysing the factors that influence a company’s competitive position in the marketplace with an eye to the future.” A school can be viewed in a similar light as a company, because both schools and companies must raise needed funds in order to operate successfully. Therefore, it will be valuable to use SWOT analysis to develop and employ suitable strategies that can be used to raise funds for public schools in Saudi Arabia. Moreover, the following lists contain suggestions that can be used to develop public school fundraising strategies in Saudi Arabia, including strengths, weaknesses, opportunities, and threats based on the SWOT analysis framework.

Strengths:

- School funding is provided by the national government
- All public schools in Saudi Arabia are funded equally by the government
- Equal standards of education are promoted and this eliminates inequality with regard to school facilities, personnel, and other training resources

Weaknesses:

- School administrators and local communities are severely restricted from participating in school funding activities
- Equality of school funds may lead to inequalities in the quality of education provided by schools

Opportunities:
This study aims to present the opportunities could be gain if the strategies will be apply. The opportunities analysis based on SWOT analysis; which are

- Decrease the government’s school budget, which is currently twenty-five percent of Saudi Arabia’s national budgets
- Gain community support for public school fundraisers
- Build positive partnerships with community members, stakeholders, and all individuals who donate funds to public schools
- Improve schools’ resources
- Become a model of how best to fund public schools in countries that have a centralized education system
- Gain insight and perspectives from students, parents, and community members
- Eliminate school money shortages
- Improve students’ health care and nutrition, and increase the availability of needed school supplies
- Improve students’ academic progress in struggling schools until all schools make adequate yearly progress
- Encourage school leaders to achieve goals and improve students’ academic performance
- Positively impact each school’s local community
- Teach students about responsibilities, creativity, and problem-solving skills

Threats:

- Fears might prevent school leaders from developing school fundraising campaigns
- The time needed to develop marketing strategies and fundraising campaigns in public schools
- In Saudi Arabia’s centralized education system, public school leaders currently do not have the authority to organize school fundraising campaigns
- Poor participation from students, parents, and local communities during fundraising campaigns
- Saudi Arabia does not have strong curricula in place to build professional skills
- Software glitches could stall full implementation of marketing strategies or fundraising campaigns
- Donor partnerships could sour
- Teacher engagement could be difficult to encourage
- Schools in the suburbs are located a great distance away from the Ministry of Education, which may stall any proposed marketing strategies or fundraising campaigns for suburban schools
- The postponement or failure of other units’ projects may negatively impact retention goals in individual schools
- Other schools may become territory leaders, thereby gaining support from the Ministry of Education, while other schools languish

Recommended Strategies to Fund Schools in Saudi Arabia:

- Online school supply fundraisers
- Book fairs
- Direct sales, including door-to-door fundraisers
- Encouraging donors to support schools via monetary gifts with no strings attached
After-school tutoring programs
Selling students’ crafts or artwork to the general public
Media support
Field trips
Selling tickets to sporting events
Allowing school clubs to organize individual fundraisers
Providing nutrition programs for the general public after school hours
Business aids
Selling plants to the local community
Encouraging students to brainstorm creative ideas for raising funds
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Fixed-Route Use by People with Intellectual Disabilities: Personas to identify Learning Needs

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\textsuperscript{3}Université Québec à Montreal, Canada

Abstract
Public Transport supports independence and encourages social, educational and vocational inclusion. It is a sure means to gain access to the city, its services and activities. However, using fixed-route* requires knowledge and know-how that all travelers, such as people with intellectual disabilities, do not master. While for most of us learning to travel is done through personal experience, for people with intellectual disabilities there is a need for travel-training in order to build up travel experience and confidence. Travel-training as an inclusive approach allows people with intellectual disabilities to learn the fixed-route, which may help them to be more autonomous and also gain self-determination skills. Research has identified, however, some constraints related to travel training such as: time cost, cost per trainee, fear related to safety or the understanding of complex concepts, etc. Our project aims to design a serious game for people with intellectual disabilities in order to support their learning of how to use the fixed-route and overcome some of the identified constraints. Therefore, in order to design a thorough product we need, among another, to determine the learning needs of people with intellectual disabilities regarding the use of Public Transport. However, it may be difficult to gather this information from people with intellectual disabilities through conventional methods such as interviews or questionnaires. Accordingly, we used a user-centered design method to withdraw their learning needs: \textit{Persona}.

Keywords: Persona, Intellectual Disabilities, Fixed-Route and Travel-Training, Learning Needs.
Introduction

The use of Public Transport can be challenging for people with intellectual disabilities, therefore learning the use of travelling through training is essential for this clientele. Nowadays we can find a growly number of travel training which offers different training to help people with disabilities to learn how to use the fixed-route. Our work takes place in the continuity of those travel training and aim to propose new pedagogical tools which can reinforce and help the current training for people with intellectual disabilities.

The main goal of this research project is to propose guidelines which will help to build a serious game for people with intellectual disabilities to teach them the use of public transportation. However, in order to develop an efficient game one of our first steps is to determine different needs such as learning needs, teaching needs, didactic needs, etc. The identification of those needs will help to conceive a product that can answer the needs of those who are concern by travel training, which is essential in the design of an efficient product. Nevertheless, when it comes to determine the needs of a clientele with intellectual disabilities it can be challenging to gather information for many reasons (e.g. expertise of the interviewer, familiarity with the interviewee, etc.). This paper discusses about the use our methodology to identify the learning needs of people with intellectual disabilities.

Literature Review

Public transport in a fixed-route

The use of Public Transport on a fixed-route required a lot of skills that can be difficult for people with intellectual disabilities to master. However public transport play a major role in the mobility of individual and its accessibility is vital (in an urban context). It allows access to health, education, employment, therefore being excluded from them can have an impact on individual social life and participation.

People with disabilities often suffer from school, social and / or professional exclusion, which induces a phenomenon of poverty (Venter, Rickert, Bogopane, Venkatesh, Camba, Milikita, Khaul, Stone and Maunder 2002). According to Statistics Canada (2011) 20.5% of people with disabilities live in poverty against 13.2% of people without disabilities. For Aubry (2012), people with disabilities remain the most heavily affected group by poverty. Therefore, it is arguable that the inaccessibility of public transport for people with disabilities will not improve their situation and reinforces social exclusion and the phenomenon of poverty. In "Enhanced Accessibility for People with Disabilities Living in Urban Areas," Venter et al. (2002) illustrate the impact and role of public transport in stopping the vicious circle of poverty and in improving the quality of life of people with disabilities. These authors have shown that public transport plays a major contribution in health access, social participation and human development, social and economic aspect. This leads to underline the importance of the accessibility of public transport in order to promote independence and social participation. Therefore, be deprived of that service does not help to improve the living conditions of people with disabilities, participate to maintain the dependencies and thereby to perpetuate the phenomenon of poverty. According to Davies, Stock, Holloway, and Wehmeyer (2010) the public transport inaccessibility has a negative impact on all aspects of personal and professional lives of individuals (work, leisure, religious activities, running, etc.) and is an obstacle to social integration. Public transport is also a central point between individuals, the city and business; together they allow economic development of a region. (Société de transport de Montréal, Kyoto Report, 2003). For all these reason, researches about Public transport and how to increase their accessibility are essential.
The Challenges of Interviewing

When it comes to collecting data from a clientele who has intellectual disabilities it can be difficult to use traditional techniques, such as questionnaires or interviews. Indeed, people who have intellectual disabilities may have difficulties understanding abstract concepts and they are also seeking approval from others and to satisfy them (D’Eath, McCormack, Blitz, Fay, Kelly, McCarthy, Magliocco, Morris, Swinburne, Tierney & Walls 2005). Therefore, in order to avoid biased data, it is important that the interviewer has perfect control of the interview. He must be flexible, sensitive and also able to adapt his speech, his language to the clientele without impacting the study (Baxter, 2005). Beyond the mastery of managing the interview this may be a help to the interviewer if he is familiar with the interviewee to facilitate their interaction. Regarding questionnaires, the issues are the same with the fact that many people with intellectual disabilities are not readers; therefore the interviewer has to reword questions, which can be a dangerous exercise because it can affect the study due of possible reinterpretation. Consequently, the use of these techniques requires a high degree of expertise that all interviewers do not possess. All these reasons led to use of another methodology to collect our data. Indeed, the literature is quite rich in terms of defining the characteristics of people who have intellectual disabilities; therefore, it is possible to use this type of methodology.

Method

The situation observed was the use of Public Transport on a single journey (home to school) using only one mode of transport, the bus. We did an analysis of the activity for the purpose to report the real activity during a single trip. This analysis has been performed as part of this work in order to understand the use of Public Transport during a single journey, identify the specific skills needed for this scenario and to identify possible difficulties that people with intellectual disabilities could meet in a similar scenario. The data gathered during this analysis focuses on the situation (context and event), behaviors adopted by the individual and the emotional components related to this activity. Due to security constraints and fears of environments, the person under observation during the trip had no intellectual disabilities and also was not familiar to Montreal Transport. However, this person had knowledge of other transport systems; therefore, he seemed able to implement strategies that will help him reach his goal (going to school). It was asked to the person to verbalize everything that happens during his journey even the events that seemed the most ordinary. Once the data was collected we associated the different steps identified by the user with one or many cognitive functions in order to withdraw the skills necessary in that specific scenario. Subsequently we submitted the identified skills to two public transport users in the aim to confirm or refute our data. Below is presented a summary diagram of the analysis of the activity carried out as part of this work.
The results of this activity analysis were then crossed to the characteristics of people with intellectual disabilities in order to create a persona that will identify their possible difficulties and at the same time their needs. We define Personas as “the representation of typical users in order to define functions, needs, expectations that future users could use” (Bornet and Brangier, 2013). They are based on a realistic portrait of the population targeted and they help to understand users and the emergence of the different usages by future users. In this study, the use of persona was to identify the learning needs of people with intellectual disabilities in the use of Public Transport on a simple journey. Finally the persona also helped to withdrawing the skills necessary to use Public Transport and different sources of instability.

**Results**

The analysis of activity gave us three major results. The first one was about the identification of the necessary skills when using Public Transport in this kind of scenario. The second one was about the identification of learning needs of people with intellectual disabilities when using public transportation in fixed-route. The third one was in regard to the result of the interaction Person/Environment.

**Public Transport Specific Skills**

From the analysis different skills emerged when using Public Transport. They were validated by two other public transport users who were asked to identify the different skills they bring into play during their bus ride. Following the discussion, these skills were presented to them to see the alignment and whether they were consistent with what has been identified by the analysis of activity. On the next page are presented the skills that emerged.
<table>
<thead>
<tr>
<th>Personal Characteristics – Skills</th>
<th>Cognitive Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gross Motor Skills</strong></td>
<td><strong>Memory</strong></td>
</tr>
<tr>
<td>• Head Movement</td>
<td>o Research and process comparable events/situation (use of past knowledge)</td>
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<tr>
<td>o Flexibility</td>
<td>o Retrieve and process information from an object or a situation</td>
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<tr>
<td>• Upper and Lower Body Movement</td>
<td>o Assign to an object a specific meaning</td>
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<td>o Muscular Tone</td>
<td>o Problem solving</td>
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<td>o Strength</td>
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<td>o Coordination</td>
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<tr>
<td>• Balance</td>
<td><strong>Selective Attention</strong></td>
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<tr>
<td>o Static Position (the bus is not moving)</td>
<td>o Exploration</td>
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<tr>
<td>o Active Position (the bus is moving)</td>
<td>o Capacity for abstraction/Focussing</td>
</tr>
<tr>
<td></td>
<td>o Processing relevant information at a given time</td>
</tr>
<tr>
<td><strong>Social Skills</strong></td>
<td><strong>Spatial Representation</strong></td>
</tr>
<tr>
<td>• Follow systems rules (Public Transport)</td>
<td>o Knowing how to find the proper direction when leaving your apartment</td>
</tr>
<tr>
<td>o Validate the ticket</td>
<td>o Knowing how to find the proper direction in the neighborhood</td>
</tr>
<tr>
<td>o Follow social rules in the bus</td>
<td>o Knowing how to find the proper bus direction</td>
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<tr>
<td>• Follow sociocultural rules</td>
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<tr>
<td>o To the line while waiting for the bus</td>
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<tr>
<td>o Courtesy</td>
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<tr>
<td>o Knowing the common civilities</td>
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<tr>
<td>o Knowing and Understanding the cardinal points</td>
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<tr>
<td>• Interaction and Communication with others in an acceptable manner</td>
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<tr>
<td>o Provide clear and consistent information</td>
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<tr>
<td>o Provide explanation</td>
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<td>o Ask questions</td>
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<tr>
<td>o Listening</td>
<td></td>
</tr>
<tr>
<td>• Appropriate behaviour according of the context</td>
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<tr>
<td><strong>Emotional</strong></td>
<td></td>
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<tr>
<td>• Self Confidence/Self-esteem</td>
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<tr>
<td>o Develop knowledge and experiences</td>
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<tr>
<td>o Develop attitudes related to a situation</td>
<td></td>
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<tr>
<td>o Weakness and Strength Awareness</td>
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<tr>
<td>o Accepting the gaze of others on oneself</td>
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<tr>
<td>Safety Awareness Skills</td>
<td>Technological Skills (Complementary skills)</td>
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<td>--------------------------------------------------------------------------------------</td>
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<tr>
<td>• Follow systems rules (road safety regulation)</td>
<td>• Using STM application on a smartphone or a computer</td>
</tr>
<tr>
<td>o Identify crossing emplacements</td>
<td>o Know how to enter the application/website</td>
</tr>
<tr>
<td>o Knowing and understanding road signage (e.g. traffic lights)</td>
<td>o Know how to navigate through the different</td>
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<tr>
<td>• Crossing roads safely</td>
<td>o Research/Identify relevant information</td>
</tr>
<tr>
<td>o Recognize potential dangers</td>
<td>o Understanding the information presented in the website</td>
</tr>
<tr>
<td>o Identify relevant information</td>
<td>o Manage the differences between the information presented in the smartphone vs the computer</td>
</tr>
<tr>
<td>• Distinguish road from pavement</td>
<td>• Using the self-service monitor</td>
</tr>
<tr>
<td>o Identify relevant information</td>
<td>o Know how to use touch interface</td>
</tr>
<tr>
<td>o Process information</td>
<td>o Identify relevant category</td>
</tr>
<tr>
<td>• Wait for the bus at the indicate and appropriate location</td>
<td>o Follow instructions</td>
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<tr>
<td></td>
<td>o Know how to pay with debit/credit card</td>
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<tr>
<td></td>
<td>o Know how to pay with cash</td>
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<table>
<thead>
<tr>
<th>Environment Characteristics – Signage</th>
<th></th>
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<tbody>
<tr>
<td>Instability related to signage road information</td>
<td>Bus stops are materialized either by a bus shelter or a road sign. One being more prominent than the other.</td>
</tr>
<tr>
<td>• Some crossings have traffic lights others do not.</td>
<td></td>
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<tr>
<td>• Traffic light durations are different from one crossing to another</td>
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<tr>
<td>• Some crossings are controlled by a timer and others are not.</td>
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<tr>
<td>• Time delay between the appearance of the waiting signage (the hands) and the actual possibility to cross</td>
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<thead>
<tr>
<th>Procedures Instability</th>
<th>Permanence of information</th>
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<tbody>
<tr>
<td>• 2 procedures to call the stop</td>
<td>• At the bus station there is a map of the bus route but there is no recall of this map inside the bus</td>
</tr>
<tr>
<td>o Pull the yellow cord</td>
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<tr>
<td>o Press the stop button (grey and red button)</td>
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<tr>
<td>• 3 procedures to get off the bus</td>
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<tr>
<td>o Pressurize the back doors</td>
<td></td>
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<tr>
<td>o Exercise a movement in front the green lights of the back doors</td>
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<tr>
<td>o Get off the bus from the front doors</td>
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<table>
<thead>
<tr>
<th>Presentation of information</th>
<th>Accessibility</th>
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<tr>
<td>• The spatial representation of the map is different from what individuals live (difference from represented space vs lived space)</td>
<td>• No audio voice to announce the next stop</td>
</tr>
<tr>
<td>• No recall of the individual position on the map (e.g. you are here)</td>
<td>• No visual representation of the different stop in the bus (e.g. a map like we find in the train)</td>
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<tr>
<td>• Poor readability</td>
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<td><strong>Personal Characteristics – Skills</strong></td>
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<tr>
<td>o Knowing how to find the proper bus direction</td>
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<tr>
<td>• Reading (numbers and text)</td>
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<tr>
<td>o Read maps</td>
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<tr>
<td>o Give a meaning to words</td>
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<tr>
<td>o General Understanding (what is the general idea to understand)</td>
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<tr>
<td>o Recognize a series of numbers from 0 to 9</td>
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<tr>
<td>• Anticipation et planning</td>
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<tr>
<td>o Time management</td>
<td></td>
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<tr>
<td>o Plan a trip</td>
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<tr>
<td>o Plan the unexpected</td>
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<tr>
<td><strong>Social Skills</strong></td>
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<tr>
<td>• Follow systems rules (Public Transport)</td>
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<tr>
<td>o Validate the ticket</td>
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<tr>
<td>o Follow social rules in the bus</td>
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<tr>
<td>• Follow sociocultural rules</td>
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<tr>
<td>o To the line while waiting for the bus</td>
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<tr>
<td>o Courtesy</td>
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<tr>
<td>o Knowing the common civilities</td>
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<tr>
<td>o Knowing and Understanding the cardinal points</td>
<td></td>
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<tr>
<td>• Interaction and Communication with others in an acceptable manner</td>
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<tr>
<td>o Provide clear and consistent information</td>
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<tr>
<td>o Provide explanation</td>
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<tr>
<td>o Ask questions</td>
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<tr>
<td>o Listening</td>
<td></td>
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<tr>
<td><strong>Emotional</strong></td>
<td></td>
</tr>
<tr>
<td>• Self Confidence/Self-esteem</td>
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<tr>
<td>o Develop knowledge and experiences</td>
<td></td>
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<tr>
<td>o Develop attitudes related to a situation</td>
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</tr>
<tr>
<td>o Weakness and Strength Awareness</td>
<td></td>
</tr>
<tr>
<td>o Accepting the gaze of others on oneself</td>
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</table>
The analysis of activity helps to provide a detailed description of what it means to use Public Transport. As seen most of these skills are from the cognitive domains or coping behaviors that are areas in which people with intellectual disabilities have an important deficit. Therefore knowing the characteristics of these individuals and what it implies to take Public Transport in a
fixed-route, it’s obvious that providing adjustment and/or implement alternative strategies is necessary to circumvent potential difficulties that people with intellectual disabilities could meet given the complexity of the task. The identification of these skills was essential to better understand the challenges of this type of task. These skills were then used to create the persona to identify the possible learning needs of students with intellectual disabilities. A passage of the persona is presented below. It presents assumptions about the possible difficulties that could meet people with intellectual disabilities in such a journey. We only presented the one, which involve cognitive skills.
Nicolas Desjardins is 15 and has mild intellectual disabilities. He lives in Montreal with his parents and sister. He is invested in different activities and appreciated by many. He never used Public Transport in a fixed-route. His parents are worried at the idea that Nicolas only uses this service. A family friend who works for an association spoke to them about a travel training program that trains people with intellectual disabilities to use Public Transport independently and safely.

Personal characteristics of people with intellectual disabilities/skills associated.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Transition: School / Employment</th>
<th>Activities: Soccer, Swimming</th>
<th>Strengths: uses a smartphone and often connects on Facebook</th>
<th>Weaknesses: little confidence in his abilities,</th>
<th>Why training: to get to its activities and at school with his friends using Public Transport</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Slow developmental delay / Cognitive Skills (Reading, Spatial Representation):</td>
<td>Due to this characteristic, the student may have conflicts between lived space and represented space (Langevin, 2007), which can be observed more when reading information and maps. Indeed, information as shown in plans (subway and / or bus) is different from student reality. There are chances that the student is disrupted in its progress because of this conflict.</td>
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<tr>
<td></td>
<td>Slow and premature discontinuation of development:</td>
<td>o Slave to his own perceptions / Cognitive Skills (Assigning objects a specific meaning): Numerous instabilities present as a result of Public Transport signaling, particularly semantic meaning (e.g. meaning of the arrows, Langevin, 2007), can disrupt students in their understanding of the situation. The same arrow can mean &quot;up&quot; or &quot;straight ahead&quot;. Therefore, such students may experience some difficulty to understand the significance of arrows in a given context.</td>
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<tr>
<td></td>
<td></td>
<td>o Difficulty with anticipation / Cognitive Skills (Anticipation and Planning): The swimming lessons start at 5pm and Nicolas coach accepts no delay. Therefore, the student must anticipate his time of preparation, the time to walk from his house to the bus station, the time when the bus arrives, the time he will spend on the bus and then the walking time between the bus station and the pool. Arriving on time to the lesson requires to ability to anticipate the time needed for these activities. This may result in difficulty to grasp the logical relationships between events and to make anticipatory evidence.</td>
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</table>

Table 2: Persona

Assumptions

The difficulties that Nicolas may face can have an effect on his intention of using Public Transport in a fixed-route and also impacting his affective abilities.

Taking into account the cognitive characteristics (e.g. problems with transfer and generalization, difficulty understanding abstract concepts, etc.) and emotional characteristics (e.g. low self-esteem, fear to fail, etc.) of people with intellectual disabilities, the skills required when using the fixed-route and the different sources of instability in the environment; it’s normal to assume that in such conditions these type of clientele will always fail to take the bus. Therefore, the developments of these skills are essential because of interaction with the environment and the lack of these skills will highly influence the intention of using the fixed-route by people with intellectual disabilities. Also it is likely that the task complexity, dependencies retention, society beliefs and perceptions towards intellectual disabilities may influence the social acceptability by people without disabilities in the use of the fixed-route by this clientele. Consequently in order to propose the best adaptations and answer adequately to universal accessibility principle, it’s
important to consider those aspects while training people with intellectual disabilities to use fixed-route. Below is a graphic synthesis of our results.

In light of these study results, it appears to be essential to withdraw the learning needs of people with intellectual disabilities in order to propose adjustment which may help to overcome their difficulties during their journey and also help to give some guidelines for the serious game design.

Learning Needs

From the finding skills and the characteristics of people with intellectual disabilities we were able to identify three major needs. The first need was related to skills development, the second need it’s about value and semantic aspect while the third need it’s in regard of tools and strategies development. The table 3 presents the details of these requirements.
Fixed-Route Use by People with Intellectual Disabilities

Table 3: People with intellectual disabilities Learning Needs

<table>
<thead>
<tr>
<th>Need related to the development of the necessary skills for the use of public transport</th>
<th>Skills Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Develop literate skills using a standard strategy or an alternative strategy¹</td>
<td></td>
</tr>
<tr>
<td>• Develop social skills using a standard strategy or an alternative strategy</td>
<td></td>
</tr>
<tr>
<td>• Develop cognitive skills using a standard or an alternative strategy</td>
<td></td>
</tr>
<tr>
<td>• Develop emotional skills using a standard strategy or an alternative strategy</td>
<td></td>
</tr>
<tr>
<td>• Develop safety awareness skills using a standard or an alternative strategy</td>
<td></td>
</tr>
<tr>
<td>• Develop technological skills using a standard strategy or an alternative strategy</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Need to give a value to an action, object (value in the sense of meaning)</th>
<th>Value and Semantic</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Knowledge of different value systems (cultural, social, etc.)</td>
<td></td>
</tr>
<tr>
<td>• Understand different value systems</td>
<td></td>
</tr>
<tr>
<td>• Identification of the environmental code (e.g. green = ok, red= not ok,</td>
<td></td>
</tr>
<tr>
<td>ringing sound in the bus means that somebody has requested a stop, etc.)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Need related to tools and strategies development that promotes confidence/self-esteem</th>
<th>Tools and Strategies Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Deal with people reaction</td>
<td></td>
</tr>
<tr>
<td>• Self-awareness</td>
<td></td>
</tr>
<tr>
<td>• Express limits</td>
<td></td>
</tr>
<tr>
<td>• Express Strength</td>
<td></td>
</tr>
<tr>
<td>• Develop strategy to help the process of decision making</td>
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</tbody>
</table>

Identifying these needs are necessary because it will allow adaptation of issues that should be addressed in the serious game so that it best meets our clientele. Finally, the study has identified a general result of the interaction.

Conclusion

The methodology used in this study identified challenges associated with the use of Public Transport in a fixed-route and associated skills. We also helped to identify needs to be considered to adapt the design (in terms of pedagogical approaches and scenario) and of our serious game when working with people with intellectual disabilities. Results obtained in this study can help anyone wanting to design a product or service for people with intellectual disabilities, since it offers a synthetic and simplified representation of the problem. Nevertheless, although it’s an

¹ It is a strategy that is developed for a specific individual taking into accounts his characteristics/abilities because he cannot perform the task using the common strategy that the majority uses.
interesting method, it’s important to specify that it may be demanding in time and that it can fluctuate depending of whom conducts it.

Moreover, the data collection has been made without the intervention of people with intellectual disabilities. Indeed, although we recognize that participation in this type of study by people with intellectual disabilities is extremely important and their involvement in the research process is essential, it was difficult to use directly this clientele for all the reasons mentioned in the section “The challenge of interview.” We recommend in future work to include in the data collection process people with intellectual disabilities and also to vary the scenarios. Indeed our methodology is based solely on a simple bus ride. Therefore it could be possible to find different conclusions if we introduce other variables (complexity of the path, subway, etc.).
References


How the Teaching of Literature (Drama) Can Effectively Change the Psyche of African Leaders

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Department of General Studies
Akwa Ibom State, Nigeria

Abstract
Two plays by Africa’s Nobel Peace Prize Winner in literature, Wole Soyinka, has intrinsically exposed the malaise of African leaders. In A Play of Giants and The Beatification of Area Boy, Soyinka has painstakingly dramatized in solid plots stinking madness in leadership and corruption orchestrated by the different security apparatus of the state. These plays are stage-managed to expose the lack of public faith by African leaders, most unfortunately, through uncanny “ignorance and personality traits.” If Kamini had known that public trust is a thing to cherish, he would not have been so despotic as to bring down Bugara Foreign Embassy to its rubbles in New York among other despicable ambitions as dramatized. However, it was rife that, one day, the African continent would experience change. Wole Soyinka is truly the prophet that Africa needs. In his lifetime, Africa’s most populous nation, Nigeria has experienced civil uprising, change through the ballot box the same way Kamini, Hero of Heroes was swept away by popular uprising in Bugara though through a coup d’état. Goodluck Ebele Jonathan, Nigeria’s immediate past president accepts defeat in a democratic election to show the world that the days of “Kamini” are no more on the African continent. This paper attempts to expose, once again, the psychic of African leaders, most of who meant doom for Africa and to propagate that Africa has a glorious morning now that her leaders change their perception to leadership as shown in the Nigerian example. Most glaring too, those who resist change are the architects of decay and though people fight change, it is the only thing that has brought “progress and positive change” to the entire world.
Introduction

Africa naturally has been seen purely through the prism of war, disease, poverty, starvation and above all, corruption. Many writers of fiction and non-fiction have for decades preoccupied their themes by presenting untoward notions about the continent of Africa; and these have negatively impacted on her development. Chimamanda Adichie, one of the young but impactful novelists of African descent, summed up Africa’s predicament in what she phrased as “The Danger of the Single Story.” The danger in the “single story” simply theorises the vulnerability involved when one is persistently fed with a one-sided story. Without the providence of hearing from all the sides, one is usually forced to believe or assimilate what he has heard over time as the gospel truth. For Adichie, Africa is a victim of this danger because nobody talks about her except in a bad light - stories of disease, war, neo-colonialism, deprivation, corruption etc. In her philosophy, the “single-story” has not helped Africa move forward; it has not ended conflict in the continent, nor has it educated her teeming population. Instead, it has deflected international development efforts in Africa. It is therefore time for African leaders, opinion holders, writers of fiction and non-fiction to have a serious rethink on the damage they have done to the continent of Africa by poor projection and poor leadership traditions respectively. According to her, she is particular about creative writers, those who market fiction and non-fiction, because as a growing child who grew up in the U.S but born to a middle-class family in South-east Nigeria, all the story books she read had only “blue-eyed” white characters. Until she came across the novels of Chinua Achebe and Camara Laye, she never knew round characters could be created with her black “chocolate” pigmentation. The opinion was almost settling in her IQ that characters with “black skin” could only be created for roles such as slaves, brutes, devils, demons, and the like. Again the same opinion has been transferred to the field of politics in Africa. Africa is the bulk room of neo-colonialism. Nobody remembers her except in stories of disease, AIDS, war, deprivation, malpractice and nullification of free and fair elections. Adichie stoutly maintains that opposed to the sentiments expressed in the “single story”, the world needs to hear the other side of the story. “Stories matter. Many stories matter. Stories have been used to dispossess and malign but…stories can break the dignity of a people and stories can also repair that broken dignity.” The example of erstwhile President Goodluck Ebele Jonathan of Nigeria, in conducting free and fair elections and ensuring smooth hand-over from civilian to civilian administration, even to the opposition party, the All Progressive Party (APC), the first of its kind since 1960 shows that truly, Africa has a glorious morning. The stories that were used to malign her should also be used to rebuild her dignity. Nigeria has the largest economy in Africa. Therefore, positive hopes are beaming on the negative perceptions the world had on Africa.

Collaborating Adichie, Marieme Jamme, co-founder of Africa Gathering in Nairobi noted: “Too often, we generalize…Nobody is pretending that Africa’s many serious problems should be played down or ignored, but the rest of the world… needs to hear the good stories as well.” According to her, “Looking to 2011 and beyond, the prospects look bright…Africa also needs credit for the exciting advances being made in terms of progressive leadership, social entrepreneurial innovations and technology, health and arts.” Research has revealed that in the last decade; Africans, particularly those in leadership positions across the continent, have embraced and are becoming ambassadors of positive change in progressive leadership.
Definition of Terms

Effective Teaching: This simply means to give clear and definite information to a class of people to produce a successful result. To ensure effective teaching, the teacher must be good and scientific with deep knowledge of the subject. Teachers inspire in their students love for learning. Therefore, they should never accept that some students are destined to do poorly. According to Shayne O’Neill, the teacher should “believe that every student is capable of achieving success.” For this reason, he should find all ways to make each student successful as well as create positive relationships such as, encouraging student responsibility, monitoring their progress and using a range of pedagogies among others to ensure effective teaching and learning.

Change: Concisely, “change” means to make something or somebody different. Secondly, it also means from “one state into another” as well as “exchange or replacement.”

Positive Change: Marcella Bremer, a change consultant and author defines positive change as “deliberately choosing the positive perspective on things.” Charles Kettering, illustrating the power of change, came up with an axiom that has helped to define positive change -“The world hates change, yet the only thing that has brought progress is positive change.”

Literature: Literature is drawn from Latin “literatura” meaning “writing formed from letters.” One of the simplest and the earliest definitions of literature is “the organization of words to give pleasure.” Oxford Advanced Learner’s Dictionary defines literature simply as “pieces of writing that are valued as works of art, especially novels, plays and poems in contrast to technical books and newspapers, magazines” etc. Allwell Onukaogu and Ezechi Onyerionwu see Literature as “a product of the inspired imagination which provides aesthetic satisfaction… involving writing and reading as means of encoding and decoding a message” (Onukaogu et al, 2009). The major function of literature is to mirror change in society. It is one of the oldest human inventions still in use today. Literature, therefore, is any writing with language features that serves as the gate way to the literary world. Literature is generally said to be imaginary in nature; thus, its major association with fiction. When it pursues real events, it is non-fiction.

Psychic: This is a derivative of the noun “psyche.” It simply means the human spirit, soul or the human mind as the centre of thought and behavior. For instance, a man’s way of doing things and his thought profile are influenced generally by his psychology.

The Place of Literature Politics

Simon Umukoro, a professor of theatre states categorically, “Literature addresses itself to life and it responds to a specific set of political conditions” (Umukoro, 1994). Ngugi wa Thiong’o posits that “literature and politics are reflected in one another” (Ogungbesan, 1979). Dan Jacobson, a South African novelist quoted by Ogungbesan is particular: “It seems obvious that the position of the writer in Africa is going to be one in which politics will be a constant factor (ibid).” For Chinua Achebe, politics is not only a suitable subject for the African writer, “It is a sine qua non.” He states:

It is clear to me that an African writer who tries to avoid the big social and political issues of the contemporary Africa will end up being completely irrelevant like that absurd man in the proverb who leaves his house burning to pursue a rat fleeing from the flames” (Achebe,1975).
For Soyinka, the artist is “the voice of vision in his own time” (Umukoro, 1994). Soyinka, who was quoted by Ogungbesan, says a writer “should be committed to the restoration of the permanent values – justice, freedom, human dignity in his society” (Ogungbesan, 1979). His prison notes, *The Man Died* and other titles such as *Season of Anomy*, *The Trial of Brother Jero*, *Kongi’s Harvest* and *The Interpreters* all reenact political archetypes. Our star texts, *A Play of Giants* and *The Beatification of Area Boy* are political in their appeals. Naturally, Soyinka maintains that creative writers serve as the conscience of their societies and are political revolutionaries. (Umukoro, 1994)

The two play-texts have primarily opened up drama as the genre of literature which we adopt to express the socio-political conditions and the conveyor of change on the African continent which we now celebrate in Nigeria and some other African nations.

**A Play of Giants and the Beatification Area Boys**

These comic plays draw highly from the rich resources of making standard comedy by means of language, plot, characterization, paralinguistic devices, allusions, humor and other features. They all add up to dramatize typical power drunk despots and armed robbers in official uniforms in the name of security operatives.

In its prologue, *A Play of Giants* provides some insights to aid interpretation that makes it clear that "No serious effort is made here to hide the identities of the real life actors who have served as models in this play. In the story, each of these identities is named. This therefore confirms the literary axiom, "No event, no story."

Ordinarily, if anyone reads "A Play of Giants" without background knowledge of the late Life-President (Ex) Field Marshal El-Haji Dr. Idi Amin Dada of Uganda, it would appear somewhat unrealistic, and giving the feel as if we are in the theatre of the absurd. For instance, in real life, it is difficult to imagine that a head of state would sentence some people to death because he dreamt of them plotting to overthrow him. This is stinking madness and far removed from good leadership.

In *A Play of Giants*, Gunema dreams that he sees late El Colonel Aranja plotting to topple him and he wakes up the following morning to arrest and try him. Aranja is found guilty and then publically executed by a firing squad. It happened during Idi Amin Dada’s regime in practically the same circumstances as dramatized in this text. Dada's decision to expel 35,000 Asians out of Uganda within the period of a few months also came to him in a dream. Patrick Keatley confirms, "He expounded the dream the next day to troops at a military post… and the policy came into effect before nightfall." Kamini’s psyche was motivated completely of hysteria. Even with a full-blown coup in Bugara, he daydreams – “How can anybody topple Kamini when he Life-President Kamini is alive and kicking” (Soyinka, 1984). He is ruthless with the Secretary-General of the United Nation, something unheard of in diplomatic ethics.

Kamini: …Unless you do as I say, I begin to lobby one rocket every five minutes to United Nations building. As for you two super-powers, you send urgent message to your governments, you tell them to undo their coup; send International Force to Bugara to crush rebellion, otherwise you don’t get out of here alive. Nobody get out of here alive. I have wired everywhere with bomb. You know I always travel with my suicide squad and they have taken over the embassy. You Mr. civil servant, you
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will write to World Bank to bring Bugara loan here, in cash. Then write the General Assembly to pass motion condemning the coup. Get support of China—China too hate super-power game like me. I want United Nations recognize Kamini as Life president for Life. How can anybody topple Kamini when he Life President Kamini alive and kicking. You send message to General Assembly or else I bring down that building to complete rubble (Soyinka, 1984).

Also, to foreground the recklessness and brutality of most African leaders, one of Africa's finest leaders and Tanzanian President, Julius Nyerere quoted by Keatley describes Dada as "a murderer, a liar and a savage." There are instances to confirm these from the play-text.

Idi Amin Dada, characterized in the play by Kamini, actually operated a killer squad with Kondos without respect for human life. He was himself, a cannibal. Tuboum, one of the characters and heads of state in the play justifies this. Contact with the kondos meant death for anybody who opposed; therefore, they were forced to operate underground.

Tuboum: "...Nobody see it and returns to tell the tale. Yet the tale is there, terrifying...They appear. They complete their task, they vanish-back to their camp at Lake Gwanza...They train in secret, far from the prying eyes of the common herd. Their secrecy is their power, like the hair of Samson; the eyes of any stranger at the mysteries of their self-preparation is a corrosion of that power. They kill such strangers, and they eat them (Soyinka, 1984).

Kasco: Eat them!
Tuboum: Eat them -white, black or yellow (ibid).

Indeed Idi Amin’s murderous stance is stated clearly in the introduction to the play:

Byron Kadadwa to whom this play is dedicated is representative of the many thousands... brutally cut short by Idi Amin. He led his theatre troupe to the Festival of Black and African Arts (FESTAC) in Nigeria, 1977. Shortly after his return to Kampala, he was arrested... and later found murdered. His successor, Dan Kintu met a similar fate, together with playwright John Male (ibid).

Idi Amin was described simply as a “cold-blooded killer”. “Butcher” (ibid). Two hysterical issues to consider among Africa leaders are as unknotted in the exposition of the play in Part One. They do not believe in the transience of power. They believe they are “gifted naturally” in leadership and they should therefore, exist in the “rare space” of power till death. Even though Soyinka describes them as “social misfits,” they are not propelled by “lust for responsibility” but “lust for power”. They are not in power to serve.
Another odd mannerism of most past African leaders is that they usually embark on white elephant projects. For instance, Kamini’s sole ambition to install his statue at the UN secretariat in New York is a bold example of the worthless projects of this type of African leaders. After spending so much time and energy, he was dismayed that the ambition remained an unrealizable dream. The super-powers see him a “cretin”. “They say while my people are starving to death in Bugara, I am trying to impose my statue on the United Nations. Over their dead body, they say” (ibid). Life-President Barra Tuboun, another malicious murderer in the play is on a project to eliminate foreign influences on his people. The best approach which he deems fit is by change of all foreign names including those already in the cemeteries. Most would agree that this is a colossal misuse of public funds and waste of human hours “I have begun a vigorous campaign to eliminate all foreign influences from our people… all names on our cemeteries will be changed (ibid). Also, for Kamini to cajole himself that he is as being as powerful as Patrice Lumumba, one of the best leaders Africa has produced, he breaks into uncontrollable lies because it is in him. "Even our lives are very similar. I too, I kill my first lion at seven years old, with a spear" (ibid). His brother President Kasco retorts; "But my brother, you said you did this at seven year!" The end stop sign deviates from a question marker to exclamation; to show surprise and disbelief.

Equally, he lied to the Secretary-General over the wounds inflicted on the sculptor by members of his Task Force Special.

Secretary General: What on earth happened to him?
Kamini: Oh him? I know he look like something from Chamber of Horrors. (Convulses with laughter). He fall off ladder I think. Not serious accident. We take good care of him. Well Mr. Secretary-General, I expect you to settle everything at the United Nations (Soyinka, 1984).

In another scenario, most African leaders always jump at World Bank loans without considering the economic implications for the country. Fortunately, some of them have sound technocrats like the Chairman of Bugara Central Bank but the irony is that often times, they are misunderstood as in the case between Kamini and his Central Bank Chairman. Because of his desperation, Kamini does not mind to sell “Bugara body and soul” if only he gets the “two hundred million dollars” against the advice of his chief banker.

In The Beatification of Area Boy, the concept of the ‘Area boy’ otherwise known as “hustler” is in most commercial cities of the world. In Nigeria, particularly Lagos, it is a popular code. Lagos, paradoxically named, Centre of Excellence was Nigeria’s former capital before it was moved to Abuja decades ago. It is still currently the nation’s hub. In addition, “beatification of the dead” is a major doctrine of the Roman Catholics where a dead person is declared holy and looked upon to protect anyone who petitions him or her to God.

The play x-rays the Nigerian security system collapse. The security apparatus is a major accomplice in the failure of leadership in Nigeria. Chinua Achebe states categorically that The Trouble with Nigeria “is simply and squarely a failure of leadership” (Achebe, 1984). According to him, “There is nothing basically wrong with the Nigerian land, or climate… The Nigerian problem is the unwillingness or inability of its leaders to rise to the responsibility, to the
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challenge of personal example which is the hallmark of true leadership.” Fortunately, A Play of Giants and Achebe’s The Trouble with Nigeria share the same temporal and spatial settings. The two texts have similar settings- Nigeria. Though Soyinka sets A Play of Giants in Bugara, Umokoro makes it explicitly clear that “Bugara is a faithful reflection of the condition in Nigeria” (Umokoro, 1994). By temporal semblance, the two texts were first published in 1984, when Nigeria and many other African countries suffocated from poor democratic leadership and military incursion into politics through unnecessary coups and counter-coup d’états. Literally, they treat the same theme of poor leadership tradition on the continent of Africa with focus on Nigeria.

Achebe is as prophetic as Soyinka when he stated in The Trouble with Nigeria that “Nigeria is not beyond change.” According to him, “Nigeria can change today if she discovers leaders who have the will, the ability and the vision” (Achebe, 1984). As is palpable, Nigerians were waiting for visionary leaders like Former President Jonathan who, months before the 2015 General elections, had pledged that nobody’s ambition is worth the blood of any Nigerian. He kept to it despite mounting pressures and congratulated his opponent and later, successor once it became clear that he was leading with a wide margin in the announcement of the presidential results.

Anzaa Msonter, a reviewer of The Trouble with Nigeria noted that years after Achebe published his political novel; Nigerians seem not to have found such leaders. Instead, he opined that a group of “democratic” leaders with no ability to position Nigeria on the path of growth had a field day. Furthermore, he maintains that they came with the sole purpose to squander the “national cake”, which none of them cares to bake. Msonter quotes Achebe as saying; “Nigeria is not lacking in those ‘enlighten citizens’” but adds a caveat that it is the duty of the enlightened citizens “to lead the way to their discovery and to create an atmosphere conducive to their emergence” (ibid). Here again, Achebe makes a bold declaration on the failure of leadership in Nigeria.

I think the reason is that some of the enlightened citizens consider politics too “dirty” for them while the majority who subscribe to the if-you-can’t-beat-them-join-them philosophy have unfortunately been transformed into “stakeholders”, “party elders” or any other thing that secures them a place in the voracious chain of sharing oil money and making Nigeria poorer. (Achebe,1984).

‘Area Boyism’ as earlier stated is synonymous with hustling: people who do anything, including abominable things, to keep “body and soul” together. For example, Boyko in the exposition of the play undertakes so many chores to assist MAMAPUT and TRADER at the same time (Soyinka, 2009) with reserved time to rehearse his flute with SANDA. In doing all these, "integrity" is not on his mind. At any opportunity, he can set the cat among the pigeons.

Therefore in Nigeria, to beatify the area boy is to beatify corruption and declare it legal. Corruption is pervasive in Nigeria and Africa as a continent. It has entered deep into the nucleus of the Nigerian psyche including the judicial system supposedly the last hope of the common man. The judicial system in Africa is plagued by so much corruption that the only legal argument is money. The Military Officer states this more clearly below as he castigates the Judge who interferes with military operation in the play.
Military Officer: Typical of their judicial hypocrisy. Goes where he's not known to get thoroughly soused. Maybe that's where he holds his clandestine courts- you know, where the real judgments are dispensed. They're all so corrupt they even hold parallel courts. You know, where the only legal argument is naira (Soyinka, 2009).

Soyinka's omniscience to study the security situation in Nigeria and come forth to beatify the area boy is a rare feat in research. This is because the area boys are true to themselves, work towards one goal and remain faithful and loyal to their superiors, in this case Sanda. This is seen between Boyko and Sanda. The area boys are honest to the extent that they protect those who cooperate with them. If you want to behave or act like the "Big-Man Shopper" and the "Foreigner" they show you that they are fully 'in-charge' irrespective of status and clout. They have so perfected their strategy that the police have no option but to put up with them and the military pays them "protection money." For instance, they disarmed a 50-strong crack regiment of the Nigerian Army and rescued their colleague as well as rough-handled a major, the ADC to the military governor. For being this ruthless and fearless, they deserved to be beatified.

According to Trader and Sanda, the protection racket or area boy, exists in all countries of the world including Europe and America.

Trader: Wetin dis man dey talk about? You no get protection racket for your country? Abi no to your Europe dem place, and America dey come perfect protection and Mafia and wetin else? De Nigerians wey dem kill for America dis last year alone, e pass twelve, all because they refuse pay protection money. Some na simple taxi driver, one wey dem report for paper only last week, 'e just dey push ice-cream bicycle. Den shoot am to death because 'e refuse to pay (ibid).

The above statement is a ploy to legalise corruption. In Nigeria, no one trusts any of the security agencies, the Nigeria Police, the Prisons and Customs officers being the epitome of corruption. Once you co-operate with the area boys, they give you full protection which compared to the police and other security agencies in Nigeria cannot be expected. The only language the police hear in Nigeria and remain steadfastly sincere is the "naira language" even if it is from the "sepulcher." The military has also fallen to the same trap with their peculiar brutality, extortion and unnecessary coup d’états though these are issues of the past in modern Africa except in a few isolated spots. The following dialogue distills the fact.

Sanda: The Army, sir? ...They themselves find it convenient – sometimes - to pay protection money. After all, they understand what it's all about - that's why they keep seizing power. They're past masters of extortion- oh… (ibid).
**Paralinguistic Affective Devices**

These are literary tools and techniques used in stylistics to explore meaning in literature. There are many and they include figures of speech, allusions, artistic vision, malapropism, humor, etc. For this paper, we shall try to apply these devices to analyze *The Beatification of Area Boy*. For instance, allusion is a technique used in a work of literature to make reference to a person, place or thing to enrich creativity. A good allusion is applied in the text to connect with the oil boom era; a very important period in the historical development of Nigeria. The oil boom, which was supposed to be a blessing, eventually became a "doom." Soyinka uses this allusion to further expose the ineptitude of the military that plundered Nigeria’s wealth in addition to poor leadership. The Trader hints of the poor handling of the oil boom, which led to the "doom."

… den oil boom come. Government dash everybody salary increase, salary advance, salary arrears, motor car advance, motor car incentive, motorcycle advance, all kind vehicle allowance, any kind incentive (ibid).

**TRAIDER:** Why not? Wetin you wan' make common Minister make ‘e say when in own Head of State done announce to the world dat-de problem we get for de nation no be money, but how to spend' am. Abi na my memory dey lie? (ibid).

Another primary instrument of comedy is humor. It is used to reduce tension that mounts in the audience or readers of a piece of literary text. It entertains.

A curious scene in the market stalls around the Tinubu square, where the cyclist stuns the characters with his "contraption" is humorous. Everybody is excited over the re-appearance of the bicycle twenty-five years after the oil boom in Lagos. Trader, Barber, Oga Sanda, the Newsvendor all want to have a ride. They are even looking for a cameraman to make headline news.

**TRADER:** "I fit touch am? You no go vex? I just wan'touch am small"(ibid).

Another slice of humor is in the scene of the "missing genitals" intervened by the police and the area boys. Missing genitals was the problem of Nigeria within the 1990s. Ritual killing was the business of the day. For instance, corpses of pregnant women without breasts, pubic hairs and other private parts were common sights on the streets. Therefore, complaints of “missing genitals” were equally ubiquitous – at bus stops, police stations, palaces of traditional fathers, hospitals, courts, etc. Oga Sanda who runs a clandestine court in the play instructs Trader in one of the cases: "Get one of the girls. Pick one with…er…you know. I'm going to luck this one in a room with her and we'll see if the right stimulus doesn't give us result" (ibid). Trader replies in what is no less humorous. "I think I sabbe the very one wey fit defeat any kind juju attack. If she get customer, I go wait make in finish"(ibid). There is also malapropism in the utterance, “I’m going to luck (lock) this one in a room with her…”

**Conclusion**

It is true that literature mirrors society to instill change. From the discontentment of the “single story,” to the promise that the world needs to “hear something good about Africa” as well as the assurance that “Africa is experiencing a glorious morning”, the reality has set on us. Nigeria, the
Giant of Africa, is experiencing steady democratic changes since 1999 but especially, the recent 2015 free and fair general elections and smooth hand-over to an opposition party is historic. Nigeria’s President, Mohammadu Buhari, Jonathan’s successor declares: “We have proven to the world that we are a people who have embraced democracy.”

As part of his hand-over speech, former President Jonathan maintained.

I promised the country a free and fair election. I have kept my word. I have also expanded the space for Nigerians to participate in the democratic process. That is one legacy I will like to see endure… Nobody’s ambition is worth the blood of any Nigerian. The unity, stability and progress of our dear country is more important than anything else. (Premium Times 2015, March 31)

From research, the outcome of the 2015 Nigerian General Elections has reverberated positive signals across the continent of Africa. From South-Africa, where the ANC has held power for 21 years to countries like Angola, Equatorial Guinea, Ethiopia, Rwanda, Sudan, Zimbabwe, where ordinary lip service is paid to opposition politics; change is imminent.

Adekeye Adebayo, the Executive Director, Centre for Conflict Resolution in South Africa said;

It is really an incredible achievement…it is an example to the rest of the continent because Nigeria has the biggest economy and the biggest population. It sends a message that corruption and insecurity are things that can be punished at the ballot box (The Guardian 2015, April 01 print)

Emeka Anyaoku, former Secretary-General of the Commonwealth of Nations applauded Jonathan for demonstrating “Uncommon grace and nobility… He’s done our country proud and I believe has set a worthy example to fellow African countries”(ibid).

Jeffrey Smith, Africa Programmed Officer at Robert F. Kennedy Center for Justice and Human Rights said “A Buhari victory is highly significant and a potential watershed moment, not only for Nigerians but for the entire region”(ibid). According to him, this is the eighth time in the history of sub-Sahara Africa that a “Challenger” has unseated the incumbent by means of elections. It started in Senegal in 2000 but between 2010 and date, seven others have followed.

On its own, the Commonwealth commended Nigeria’s elections saying that “It met the will of the Nigerian people.” Kamalesh Sharma its Secretary – General explained that the organization based its commendation on the report of its Observer Group which was led by Dr. Bakili Muluzi, former President of Malawi. According to the report, “These elections mark an important step forward for democracy in Africa and Africa’s most populous country and a key member of the Commonwealth.”(National Daily2015, Sep.,28-Oct.4 print)

Barack Obama, U.S President also maintained that by the 2015 General Elections in Nigeria and the results; Nigeria has “shown the world the strength” of their commitment to democratic ideals. Tony Blair, former British Prime Minister in addition to applauding Nigeria for “extraordinary sign of strength and resilience” noted, “It gives all of us who care about Nigeria and Africa great optimism and confidence in its future.” (The Guardian 2015, April 01 print)
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Intercultural Musical Learning in the Era of Technology

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Abstract
Foreign students abroad need to feel integrated in the new community, which includes complex learning processes in multicultural environments. The fact that we have experienced these processes ourselves was certainly a motivation for this research, especially knowing that we could contribute to help our fellow Portuguese brass players undergoing the same experience. From the singularity of music performance in the style of playing and communication emerge many cultural aspects, which have been developed through centuries of orchestral practice. As the new students are confronted with the aesthetic musical concepts and both professional and social practices of the country they arrive in, they strive to understand these concepts and adapt themselves to the values promoted by the new music practice. The aim of this on-going research is the study of the integration of brass music students in German universities and in the German society. Notably, through the understanding of intercultural processes experienced by the students, professors can become more aware of the challenges that concern music education. In this research all ten Portuguese brass students enrolled in any German music university in the last five years were interviewed in order to deeply understand this process. With a growing importance of the technological facilities, students are able to gather more information, to prepare themselves for the new concepts they try to embrace and to better deal with a different culture.

Keywords: Musical Education, Interculturality, Classical Music, Technology.
Introduction

The undergoing investigation is sparked with multiple personal experiences, from which we could perceive many culture-based differences on brass playing as we will explain in the next pages. Being aware of the difficulties of getting a professional job as an orchestral musician in Portugal, students wish to move abroad and use their mobility in order to complete further studies, especially inside the European Union. We would like with this study to optimize the learning process for students who are striving for more success, and for that purpose we need to know what the students are undergoing so that we can understand what it takes to study abroad and become a professional musician.

In order to explore the evidences stated about cultural influence, we looked for the existence of Portuguese brass players studying in Germany: these individuals could make us understand their experience of adapting to another culture. We aim to understand and learn from the learning process and getting along with the culture: the difficulties, problems and successes of the students. This will allow us to find logical patterns of success in the way Portuguese students approach their studies.

The current research addresses the Portuguese and German cultures, studying the musical culture and history of each country, as well as their orchestral landscape. Firstly, brass players usually find in the symphony orchestras the best option as a professional career. We must have into account that the ratio of symphony orchestras in Europe is said to be of one per million inhabitants. In Portugal, for reasons we will discuss later, this ratio is lower than the average. On the other hand, we find in Germany approximately one quarter of the total symphony orchestras worldwide, (almost) all being state funded and several of them counting some hundreds of years of existence (DOV, 2013). After researching on the Portuguese orchestra and Classical music culture, we could verify that its peak took place in the sixteenth century (Brito, 1989) and throughout history several unfortunate events did not prevented it from establishing itself in the leading European culture. Furthermore, both the lack of literate musicians during that period – which explains why there are so few manuscripts dated from the 16th century – and the earthquake from 1755, which destroyed not only most of the city of Lisbon but also many documents, are responsible for the thin amount of information available today regarding musical practices at the time (Bettencourt da Câmara, 2009). The orchestral landscape in the twentieth century did not enjoy the desired stability (Cassuto, 1999), however in the last two decades of the twentieth century we did assist to remarkable transformations in the musical education system (Delgado, 2002). We must say that the number of symphony orchestras in Portugal has not changed significantly, making it necessary to the Portuguese brass players to look for more opportunities abroad. The German orchestral landscape in its tradition, impressive magnitude and politically stable funding, seems to be ideal for the high qualified musicians to look for an opportunity, which usually means to move abroad to complete further studies and attend the orchestral auditions.

Symphony orchestras are institutions of tradition and aesthetic cohesion, which means they tend to reflect the surrounding culture. Having this idea in mind, the demand for a way of playing that fits the orchestra/culture is logical. This means we will be dealing in this research with different cultural levels: the students facing a whole new culture (society), the contact with a multicultural student community and the professional learning situation as soon as the students get their probation time in one symphony orchestra.
Theoretical Frame

The cultural influences on brass playing can be perceived in several ways. Firstly, on the dominant master-apprentice model, working on the basis of imitation, the student tries to get the musical product given by the teacher, realizing the differences in the approach during the process. For this topic we must refer to Paul Budde, who in his PhD Thesis (2011) defends the influence of the mother tongue on playing, by the replication of particular consonants and vowels on brass playing. These are perceived differently according to a given language and students may hear and reproduce those models differently due to the influence of their mother tongue. It follows that several authors (Heath & Street, 2008; Hargreaves, Miell & MacDonald, 2002; Miller & Shahriari, 2009) reveal the impact of our early development stages, when our culture is shaped, since the moment we were born.

Another interesting point is the culturally perceived concepts, something we can find in the metaphorical description of music, since adjectives in music are “borrowed” from other sensory perceptions and, therefore, culturally different. Furthermore, metaphor does not represent but it transforms the meaning, opening new insights (Kramer, 2011). Additionally the musical notation (and its symbols) can have different interpretations according to a specific culture. In this topic, we cite Nicholas Cook (1998): “[...] the pattern of what is determined by notation and what isn’t, what is to be taken as given and what is a matter of performance interpretation, is one of the things that defines a musical culture [...]” (p.63) and this implies that it can determine how people imagine music in one given culture, binding members of a musical community together (Cook, 1998). This is of special importance in this research, as we take into account the different approaches to music from different cultures. In this sense, music notation is not meaningful by itself. Meaning should indeed be produced by interpretation (Kramer, 2011). This insight to music brings an implication, exposed by Parncutt and Dorfer (2010), who stated: “[...] a migrant musician may have difficulty demonstrating their musical ability to local musicians, and in rehearsal may misunderstand local unwritten rules of musical interaction. Both in this specific case and more generally, if music can promote self-esteem, it can promote integration” (p.384).

Contrasts in music performance can be well perceived in the intercultural environments of music universities, where different students tend to approach music in different ways, a phenomenon that helps the brass players to realize how different a cultural approach to music can be. We consider that adaption to a new approach takes time, as well as it takes time to know a new culture. Students are also able to recognize the boundaries of their own culture by experiencing other cultures, considering that musicians also have their ‘accents’ (Swanwick, 2002). As musicians, we should try to adapt ourselves to the musical product around us, henceforth on a defined musical culture we adapt to that way of playing, learning from it. As Swanwick (2002) highlights the ‘accents’ found on musicians playing are equally valid, retaining the question of what is better or more valid in a specific social context. As we will explain later, the value of music cannot be universal, but relies on the social and cultural context. We realize that until now different authors described different ways of reaching the same idea, that music can be cultural sensitive and that in order to engage a certain culture we must get to know it better.

Playing music is somehow a reaction to a stimulus: it is the use of unconscious reflexes, both natural and conditioned (Nelson, 2006). What makes reflexes become conditioned is the process of repetition, and with this we mean practice itself. However, this should be done as a response to a specific stimulus, a mental representation of the sound we pretend to achieve.
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(Frederiksen, 1996), being our body responsible to find the suitable way of reaching the objective. Wilfried Gruhn (2005) states that representations need activities (playing and therefore practice) to stimulate the neuronal loop and become learning, based on the cross-modal activity crucial for the learning process. The importance and strength of mental representations – and with this we mean the mental representation of an ‘ideal’ way of playing according to a culture – is enhanced by the fact that mental training can be almost as productive as effective practice (Blakemore & Frith, 2005; Sacks, 2008).

We cannot oversee the aspect of ensemble playing that goes far beyond playing correctly the notes from the score: one must be flexible and work as a part of a group, otherwise we are unemployable (Slatford in AEC, 2001:63). The famous maestro and pedagogue Hans Swarowsky (1979) refers to the replacing of musicians and occasional substitutes in one particular orchestra with the idea that these should come from the same playing tradition and that could fit immediately in the orchestra’s way of playing, so that stability and homogeneity could be achieved1. We could state that in order to fit in a pre-existing orchestra (thus environment), a new musician should try to shape both himself and his (own) way of playing in order to fit in, due to an already existing practice. On his contribution for the study made by the European Association of Conservatories (AEC, 2001), Vapaavuori insists that conservatories must train young students for the professional field but it is the orchestra’s responsibility to maintain tradition and quality, showing students both tradition and experience. This idea makes clear that despite the musical education of students, they will face a set of traditions and expectations while applying and fitting to an orchestra. Taking into account that new musicians are chosen by audition where their playing is the key to get a job, the closer they get to the expectations of the orchestra, the more likely they are to be employed. It means we should approach the orchestra as a community of practice. Lave and Wenger (1991) introduced this concept saying that learning involves the whole person, implying a relation to social communities, being an active participant, thus a member. In addition, the music experience is a product of social interactions in a place and time (Barret & Webster, 2014) meaning that, “The musical and extra-musical aspects of musical styles constitute the elements of a ‘community of practice’ ”(Hewitt, 2009:330). Hewitt (2009) associates the concept of community of practice to the orchestra, where newcomers must accept and adopt the ruling practices if they are to be accepted as a member within that community. Giving value to the work of art may be what this is about. One of the prominent brass pedagogues was Arnold Jacobs who said that the phenomenon of imitation and the sense of sight could reinforce each other in order to accomplish the best learning (in Frederiksen, 1996), which can be applied to the learning of a specific cultural playing. This could be associated with the enculturation process in music (Kelly, 2009; Cutietta et Stauffer, 2005). Enculturation occurs mainly by music knowledge acquired through the process of listening, giving us the understanding of how music acts in peoples’ meanings. The enculturation process and especially learning through music listening, differs from normal language learning in the sense that learning a language is much more effective in young people, a process whose strength vanishes with time, while in music that process is almost equally as effective (Sacks, 2008). Then, for the foreign students enrolled in new cycles of studies at a university, learning within a music culture can indeed work. However, multiple ways of learning can be pointed: living in the culture, from the

1 “Der Ersatz freiwerdender Stellen im Orchester darf ausschließlich aus einem Kreis von Musikern kommen, die dort von Mitgliedern des Orchesters genau in dessen Spielweise eingeführt sind und sich sofort klaglos einfügen können. So kann eine Spieltradition begründet werden, ohne die das Orchester immer wieder den schwersten Niveauschwankungen ausgesetzt sein wird.” (Swarowsky, 1979:84)
teacher-student interaction, reading books or by observation and imitation (Miller & Shahriari, 2009:47). We believe that the most effective can be achieved by the sum of all possibilities together.

Conservatories prepare students for a musical vocation and employment (AEC, 2001), what includes international students (OECD, 2014) as the Portuguese students in this case. For that we should consider that learning music and culture of others is far more than reading a book or listening to a teacher talking (Valerie Peters, 2014), meaning that involvement in the culture might be determinant.

Nowadays the possibilities in Classical music are very different from those existing centuries, if not decades ago. Technology is constantly enabling new possibilities, especially with what concerns music learning. Even if most of the possibilities are related to general music learning, they also apply to the specialized music learning. Riley (2013) describes how new tools, such as the iPad, enable teachers and students to discuss and apply strategies of improvement, making references to the audio and video recording functions, as well as getting feedback for tuning and tempo or simply taking notes. The students’ need for role models of excellence steers them to concert streaming and recordings, bringing a more intense experience through the use of tools like the Internet, a point that Riley (2013) made clear. Tools of online communication are equally as important, as they allow the exchange of experiences with other students engaged in a similar situation. The recording of practice sessions is one of the most effective ways to reach the musical objective, enabling the comparison of the actual product with the role models. The recording of lessons can also optimize the focus of the student due to the possibility of a second analysis from the student himself. Also, when confronted with a whole new culture and habits, students may use technology as an efficient tool to learn more about it and thus feel integrated. On the intercultural subject, technology is indeed important because it allows us to get a wider scope of the differences among cultures and to value them equally. Knowing other cultures can help us to be conscious of the characteristics of our own culture, giving us aside from giving us a better understanding of the cultural environment we are dealing with in the new country.

**Methods of research**

The purpose of qualitative research is not only to generate general social significance but also to reach an understanding of a particular situation (Stake, 2010) and to look for new insights and meanings (Jones, Torres & Arminio, 2006). As mentioned by Denzin and Lincoln (2005), for a case study the most important should be the extensive examining of the case itself. In addition, the case study has its strength in its own complexity and details (Bassey, 1992), as well as an exhaustive gathering of information about the case, so that it could be possible to understand its singularities (Berg, 2001). Furthermore, as mentioned by Denzin and Lincoln (2005), “For a qualitative community, case study concentrates on experiential knowledge of the case and close attention to the influence of its social, political, and other contexts” (p.444). Also Lisa Given (2008) states that: “Case studies focus on one or a few instances, phenomena, or units of analysis, but they are not restricted to one observation. Nevertheless, the boundaries are not fully clear” (p.68). This applies to the observed case in which a deep research on the subject has been undertaken and was strengthened by other tools. So in order to pursue our objective of understanding the complex learning process of the Portuguese brass students, we find on the open-guided interview the most suitable tool to perceive how they face the cultural differences and engage in the process of learning. The open interview gives the opportunity to explore related topics and overcome some misunderstandings and enables the interviewed student to
approach the subject according to his/her will, allowing simultaneously a deeper understanding of the phenomena. Henceforth interviews can report people’s opinions and understand their behaviors in real time (Hicks and Taylor in Cox, Geisen & Green, 2008).

The participants are the only ten Portuguese brass players who are either currently enrolled in a German University or have been in the last five years (so that the experience of encountering a new culture is still present). In addition, they must have done most of their musical studies in Portugal, therefore having a strong influence of the Portuguese musical culture. We did interview students from both genders, with ages varying between twenty and thirty years.

We consider it important to mention that due to the ethics protocol we follow, we were not allowed to identify the students neither strengthen the opinion of more successful ones, which could compromise the anonymity of the interviewees. However, by not revealing their identities, the students made very personal statements and felt free to give very valuable information for the research. We must recognize our privileged position (being a musician as well as a student) gave a better access to the participants, as they trusted a fellow musician and student with their personal statements, allowing us a better understanding of the phenomena.

Findings

Students find the cultural influence determinant and that the more they know about the culture and embrace it, the better they accomplish their objective of playing according to that particular Classical musical approach. Taking into account the progress and the development of musical education in Portugal, the Portuguese students perceive the multiplicity of cultures in the Portuguese music as being heterogeneous.

A big disparity between the two countries emerged from the curricula of university courses in music performance. While in Portugal the program focused on solo playing and was complemented with some occasionally chamber and orchestral music, in Germany the focus was on the orchestral playing and auditioning.

The answers we obtained reflected the perception we had from the revised literature and confirmed our idea that musical playing can be strongly influenced by the surrounding culture. We also believe that adapting ourselves to a new culture can make us excel at the professional level.

Amidst the conclusions we could draw from the data we obtained, we consider of greatest importance the obvious consensus of the answers. Furthermore, we believe that “the universality of the musical language is culture-sensitive”. Different cultures may recognize a musical work but describe and interpret that work very differently, due to culturally based values and perceptions. Also, the results from the analysis suggest a relation between culture and History, which reflects the musical playing and the need for better cultural knowledge. The emerging role of technology as an important tool to foster cultural experiences and optimize the learning process was enhanced, and we can perceive how it facilitates musical learning and the integration of musicians in a new cultural model.

Discussion

With this investigation we aimed to help future students build a successful strategy for their studies, relying on literature and the experience of other students in a similar situation. Although we cannot make generalizations related to the situation of students of other nationalities undergoing a similar process, we purpose a new insight of the phenomena and a
better understanding that can hopefully lead to broader researches, which could help to make more general conclusions. We suggest here to look within the western culture for diversity, namely in Classical music.

Brass playing reflects not only the mother tongue (intrinsically the culture of the musician) but also the culture related perceptions of values inherent to music. In this point, Heyne and Derrick (2014) bring us some new information to complete the previous idea from Budde (2011), stating that the mother tongue is indeed perceived on brass playing. They concluded that differences could be noticed not only on the cultural way or style of playing, but also rooted in phonetics and phonology of different languages (Heyne & Derrick, 2014). The authors also state a decreasing language influence on articulation for professional players. However, we must take to discussion the fact that advanced students (as those asked in our interviews) realized strong differences on playing evidencing the mother tongue, which makes us conclude that its influence might not completely disappear. It might happen that there is a desire of matching some other language pattern on playing (as for the Portuguese students in Germany).

One arising question, similar to the one Valerie Peters (2014) makes in her chapter in the book of Barret and Webster (2014), is if students can be proficient in several musical cultures. In our opinion - meaning with this the possibility of students wanting to learn and reproduce a new culture, a way of playing and interacting - it could be at least very difficult to achieve that for some cultures, due to the high level asked for in auditions and the need for fulfilling expectations. Learning a new culture takes time, and so does creating habits of playing, thus leading to the conclusion that it should be fairly difficult to think otherwise than focusing on one single culture to learn in depth. Miller and Shahriari (2009) also bring up the individual listener’s interpretation as result of conditioning and life experience, making sense of the similar common values of people who share the same background on performing music. It is not meant that this applies as a rule, but the likelihood of consistence between interpreter and listener might be seriously higher when sharing the same background, what could otherwise generate misunderstanding. We do not intend to impose this as a fatality, there are indeed exceptions to this idea with students having success as outsiders or simply branded as natural talents.

About the integration of the Portuguese students, we believe that it might help anyone (student) studying abroad but that in the specific case of brass players it could be determinant in order to achieve professional success. It would be interesting for further discussions to understand the relationship between German fluency and the better integration and success of the students.

Technology appears at this point as key since it enables students, professional musicians and researchers a definitely greater experience approaching and getting to know the new culture, shortening the process in various ways. Technology also changed the way we listen to Classical music and its market. Freitas Branco (2005) stated that decades ago we would need to attend a concert if we wanted to listen to music, and hire musicians if someone desired to have music in any context, but nowadays since we get to listen to music everywhere, the need for a concert is no longer that obvious. Pinho Vargas (2010) also points that due to the strong blending of recorded music in our lives, a recording that would since years succeed the concert, today the need for a recording is crucial in order to have a concert. Carlos Rodriguez (2014) refers to the Internet as the “ultimate listening space”, being rich in possibilities and allowing users to access unlimited music, adding that “The music listening conditions acquired with handheld digital music players and headphones thus provide privacy in public places, making them private heterotopias” (p.98). It follows that technology makes possible for students to listen constantly to music, and more important, music that they are looking for and wishing to listen to, a key point
that can boast the students’ experience on musical learning. Despite all the many new possibilities opened by technology, we believe we have yet to see its full potential in the future. Henceforth, the impact of technology in upcoming years will be one of the most interesting topics. If the current students are now exploring all the new social networks and online availability of knowledge (and music), the future students – labeled as born and educated in the digital age - could provide us with insights about the influence of the online learning tools on the preparation for further studies abroad and professional success.

We do not expect this evidences to prevail for many years to come, as does not most of the knowledge in science. However we would be glad to realize in later upcoming investigations that the Portuguese brass players do not need anymore to move abroad in order to look for professional success anymore. It would also be of most interest to interview the same students in a few years’ time to analyze their success and to face the actual conclusions. We (also) further believe that this research topic could be explored in other educational environments, fostering the preparation of the students for the new cycle of studies and broadening the teachers’ understanding of the situation and of what could be done to improve learning.

**Final Considerations**

In this era of universal values it might be difficult to understand those of music culture rooted in historical traditions and practices. Indeed, we find indeed growing evidences of high quality music making in Portugal and the non-ceasing efforts from musicians and composers to establish it in the European context. However, the influence of former politics and events in the History lead the current Portuguese brass players to look for solutions across boarders and for that purpose we must consider the German hegemony in the Classical music context in order to understand the process these students are undergoing. We do not want nor should show this evidence as fatalist. There are not only exceptions to this process, but also new possibilities coming in the form of technology which could facilitate the process of knowing and adapting to a culture more easily. Also, the multicultural environment of music universities in Germany makes international students feel more comfortable and accepted, which generates more confidence to embrace this process.

The differences in educational programs in Portuguese and German music universities lead us to the conclusion that each country is preparing the student for the surrounding professional field, which means that in the Portuguese case a general approach to the performance is taken into account and less importance is given to the orchestral part, due to the almost non-existent auditions in the country. In Germany (on the other hand), probably due to the well-defined system of orchestras, the studies are directed to the orchestral part, focusing on the audition process and simulating auditions.

We would like to express our concern for the reader of this paper, as we do not pretend to take the Portuguese and German Histories as static. As two countries that over centuries participated in the development of Europe, they underwent wars, politics and mass migrations, among other factors. However, it is on the basis of these transformations occurred in every society - politically, socially and culturally connected – that this study comes to a meaning. Our perspective over cultural relationships may be supported in the words of Kramer (2011), who says: “Interpretations, whether of music or anything else, can be invalidated, but it is impossible to validate them.” (p.27). This new insight on the culturally sensitive side of Classical music can be contested, due not only to the interpretive value of music but also to the daily changes our societies undergo. However we tried exhaustively to give fundament to our idea, which turned
out to be in accordance with the experiences and opinions of the Portuguese students, enabling future students with a better understanding of the process and of what it takes to become a professional musician under the described conditions.
References


Self-assessment and Learner Autonomy: Challenges in Foreign Language Teaching in India

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Abstract
Learner autonomy is becoming increasingly important in the context of language education, so much so that it has moved from being a mere option to assuming an entirely legitimate status by itself. Self-assessment is recognized as an important tool towards autonomy in the Western world, but there is relatively little evidence to assess the employment of autonomy in India. This paper attempts to shed light on the question of self-assessment and autonomy with regard to the Indian education system and foreign language learning. Specifically, I attempt to determine a) the importance given to self-assessment in the restrictive Indian context, and b) how the scope for assessment practices can be expanded in the Indian foreign language context. In order to study this, I surveyed a sample of 20 teachers and 30 students and their assessment practices and ideas relating to it. The findings point strongly to language assessment patterns currently in use in India that prove inimical to autonomy. There is an absence of discourse on self-assessment in India and the learner is more comfortable being assessed than assessing himself. Pre-service and in-service trainings need to incorporate this fundamental concept on an immediate and continual basis, to enable metacognitive language learning, intercultural skills and reflective practices. Given that introducing self-assessment would require changing mindsets and transforming the education system, I conclude that giving self-assessment a permanent place among Indian learners and teachers could prove to be a great challenge.

Keywords: Autonomy, self-assessment, language, India
Self-assessment and Learner Autonomy

Introduction

Autonomy is today a key word in language learning (Benson, 2001; Little, 1991, 2007; Reinders, 2010; Smith, 2013). Self-assessment stems out of autonomy and finds its place in relation to it. Helping a learner develop self-assessment skills is to help him affirm his identity. Encouraging the learner to assess himself and take initiatives, is to lead him towards the path of autonomy. In this sense, allowing a learner to self-assess is to recognize him as a subject; it is a recognition of his identity that allows him to grow.

In attempting to evaluate the role of self-assessment in the Indian system, here are some issues I try to bring to light. Do students play an equal part in their learning? Are they being guided to assess their own success in language learning? Are they offered a chance to evaluate their own progress, build on their strengths and weaknesses? Are learners even thinking about their learning, their obstacles and their achievements? Do classroom practices reflect such concerns? How do teachers react to these mechanisms? Do they use self-assessment? Can foreign language learning in India incorporate these techniques? These are some of the questions that form the framework of this article that researches on self-assessment, learner autonomy and teacher discourse in the Indian context of French language learning.

Literature review

Autonomy and self-assessment are strongly related to one another and support each other in the learning process. It might be practical to define the perspective in which these terms are understood in this paper before we proceed further.

The concept of autonomy gained importance in language learning with several studies, one of the foremost being that of Holec (1981). Holec’s definition came from his practical work with students at the Centre de Recherches et d’Applications Pédagogiques en Langues (CRAPEL), University of Nancy, France, in the early 1970s. Holec defines learner autonomy as follows:

“To take charge of one’s learning is to have, and to hold, the responsibility for all the decisions concerning all aspects of this learning, i.e.: determining the objectives; defining the contents and progressions; selecting methods and techniques to be used; monitoring the procedure of acquisition properly speaking (rhythm, time, place, etc.); evaluating what has been acquired.”

The Common European Framework for Languages (2001) also largely influenced the place of autonomy as vital to language learning. Autonomy is not to be construed as a self-generated capacity. It is inherent in learners, but not spontaneous and needs to be developed (Barbot, 2000). However, it is not always to be perceived as something that learners lack and need to be taught. To some measure, autonomy exists in all learners and they are able to participate in their own learning (Smith, 2003). Autonomy is a well-used and well-referred term, which has been subject to different perspectives and understanding (Dervin, Badrinathan, 2012). However, we will keep Holec’s definition as “taking charge of one’s learning” (Holec, 1981). Based on this definition, in this paper we refer to autonomy as a concept which allows the learner to proceed towards autonomous practices and ways of learning. That is, when the learner takes charge, he also takes responsibility. In taking responsibility, he unravels hidden areas of his learning and develops an opportunity to work upon them, which otherwise would not happen in a teacher-driven learning mode. Hence, autonomy also signals an approach which is student-centered, where the learner pursues his personal learning goals, has a range of learning strategies at his disposal, and exercises thought-about choices to fulfill his goals. Although achieving
complete autonomy is difficult, one can gear towards autonomy, step on the path of autonomisation and autonomous practices, whose efficacy is largely dependent on variables like context, educational systems, work culture, and situations of learning, to name a few.

Self-assessment is strongly related to learner autonomy as many studies have proved (Bachman, 2000; Dornyei, 2001; Haughton & Dickinson, 1988; Oscarson, 1989; Strong-Klause, 2000). Self-assessment can be used both for a formal certification or as a self-check tool (Gardner, 2000). It can also be constructed in diverse ways, e.g. rubric-enhanced self-assessment, collaboratively, individual portfolios etc. In all cases, it refers to assessment by the learner of himself, hence the modality of administration, which is by oneself. We shall look at self-assessment in this article from a formative perspective, leading towards skill development in learners, rather than a summative perspective, which signifies end of learning and certification. Self-assessment is also about training the learner in order that he may be capable of evaluating and judging himself, a process which is indispensable not just for the individual learner, but also so that he may better appreciate the assessment from the teacher and use it for his own learning growth.

Looking at self-assessment from the above mentioned self-development perspective has three distinct advantages. It makes it pleasurable for the learner and the teacher relieving both of the travails of creating and undertaking a sophisticated mechanism for assessment (like the final examinations). Secondly it allows for a creation of interesting learning activities. Lastly, self-assessment is a process of reflection, of appreciation, a capacity to make an argued, objective judgement about oneself (Legendre, 1993).

We are interested in formative assessment, that focuses on self-development and which includes self-assessment as one of its key components. It is difficult to aim for autonomy without considering self-assessment, which by virtue of its technique and its psychological element, helps an upward learning curve (Barbot, 1990).

Holec established that self-assessment is an indispensable element of the learning process and even argues that all learners engage in it (Holec, 1985). Dickinson (1987) shows how self-assessment is an important tool, particularly for language learners.

**Language Assessment in the Indian context**

The Indian educational places a lot of importance on marks and examination. The teacher holds the responsibility for assessing and determining progress; performance is precious for the student who puts the onus on the grades obtained than on the learning achieved. (Badrinathan, 2011, 2013). They are test takers, rather than test-participants and assessment is the sole responsibility of the teacher. There is also a tendency to engineer the outcomes based on the final evaluation in order to procure best results in learners. Hence, practices favouring a climate of autonomy could well be sacrificed or not even considered, in this framework. One therefore lives in a vicious cycle where examinations determine learning, and learning gears towards examinations. For example, when the examination system of the university of Mumbai moved towards a credit-based continuous evaluation system, it was a matter of a piling up tests and projects in view of obtaining the ‘final good outcome’. In this set-up, important elements for language learning such as spoken skills, listening skills, intercultural explorations get second hand status. In such an environment, there is a tendency to forego autonomous practices in evaluation and maintain traditional practices.
Methodology

20 higher secondary and university teachers of French from Mumbai were part of this study on self assessment in the year 2013-14. A questionnaire allowed us to look into the assessment techniques in use in their practices and thereby understand the extent to which self-assessment was being employed in the classroom. The questionnaire investigated their representations about assessment in general and self-assessment in particular. In the same year, first year 30 university level students of French from Mumbai were administered a questionnaire, at their entry point into the bachelor’s programme in French to understand their ideas on self-assessment and on assessment in general. The questionnaires were studied through content analysis in order to arrive at results.

Findings

The questionnaire for teachers asked about the forms of assessment they used; , whether they used self–assessment as a tool to help students improve their language skills. They were further asked to justify their response. Through the questionnaires, four main findings were revealed.

The responses overwhelmingly revealed that: a) Self-assessment was not used by the teachers. b) Teachers did not realize the value of self-assessment or perceive it as important. c) The current restrictive educational system was disallowing teachers from moving towards self-assessment. Nineteen out of twenty teachers provided responses in the form of: “/ “It is not possible at all”, / “It is the teacher’s job to assess”/ “We have always been doing it”/ “They cannot do it”/ “Then, what are we here for?” / “ We have the expertise for it”/”How can the student judge his own progress like that?”/ “They find it hard to pronounce French words- how they can assess themselves?” Traditionally in the Indian system, the teacher has been the one who assesses and the learner is the one who is assessed. Inverting this paradigm would not be simple, for it would mean parting with the symbolic power of a assessing and delivering a verdict, as 95% of the responses revealed.

There is also the question of reliability of assessment when it is handled by learners that comes out through this discourse. “How can the student assess himself?/ “ They will always rate themselves well”/ “They will not write the truth” “They will overestimate their capacity”/ “How do you know they will tell the truth?” These opinions revealed by respondents cast doubt on the reliability of self-assessment in the Indian setting. As Dickinson (1987) says, teachers after all, have the expertise to make more accurate and reliable assessments. However, the variables in question are many and one cannot make a blanket statement in either direction, concerning the reliability of self-assessment.

There is a resistance towards new practices. Only a small handful of teachers were willing to try out ‘new recipes’ for assessment within the class. The majority is comfortable retaining the ‘study-exam-study’ cycle which has been handed down to them. “There is no time for all that”/ “The current exam schedule itself takes up our time”/ ‘There is already too much to do”/ “Completing the portion is itself a challenge”.

Many teachers are attached to the “sanctity” of current assessments, and see newer techniques as being in conflict with existing ones. A test or an examination is a formal event and cannot be messed with. It is organized, planned and scheduled and needs to be respected. “They need the exams, it’s the only way to assess them”/ I regularly conduct tests in class/ Almost every fifteen days, I organize class tests/ “With regular tests, they are doing better”/ They are forced to
prepare regularly for the tests, its helpful for them.”/ “They know when the final exams are, it allows them to prepare well.

The educational heritage which the teachers and the students have inherited does not prepare them for autonomous learning and self-assessment. There is a firm attitude of ‘this is the way it was, this is the way it will be’, which will need to be shaken in order to bring change. Disturbing this set order is not an easy task. In the case of self-assessment, it appears to represent “subversive changes that challenge the transmission of interactions, of symbolic possessions, of the very function of a teacher and the perceptions of the learner” (Barbot, 1990).  

The inhibitions of transfer of power were evident. Losing power and sharing the space with the student represents a scaling-down in the eyes of some teachers. There is also the distrust about the student who will overestimate his skills or even not be honest about his progress. On the other hand, it also unveils the fact that students may probably not know the techniques of self-assessment and would require to be trained in it. The responses, however, also clearly indicate that the responsibility for learning resided with the teacher and the student had no part to play in it, except take the administered tests. The traditional pedagogy that has been in practice still prevails for most of the teachers.

At a parallel level, the student questionnaire did not reveal startlingly different results. This questionnaire attempted to understand whether the students had used self-assessment before and what they thought about it.

“I would like to be assessed by the teacher”/“I don’t think I am capable of doing that”, “How can I assess myself?/”I cannot do it”/“It’s a waste of time, anyway it’s the teacher who has to give the marks”/ “Does it make a difference? The teacher has to assess anyway”/“The marks are given by the teacher finally, so its better if she decides my progress”. “I have never assessed myself before”/ “Tests, exams and more exams, is what we are used to doing.”

These statements reveal that the student plays the role of the assessed and that clearly the one who assesses needs to be the teacher. There is also a conflict of interest, which comes out clearly, because finally the grades rest with the teacher and the student has little or no part to play in it and hence finds self-assessment to be meaningless. Besides, there is also a tendency to underestimate one’s capacity. The majority of the learners did not seem to judge themselves as capable of assessing their own progress. At no point has any of the 30 students been exposed to alternative methods of assessment as the questionnaires reveal, or invited to play an active part in his learning. It is therefore natural for them to think in these terms. However, if the learner is guided towards self-assessment, it could be motivational. When learning a foreign language, there are moments of anxiety and despair, as often students express within the classroom, especially with respect to pronunciation or spoken skills. Self-assessment could help them see what they have gained, and help them increase their self-worth. Holec (1981) reminds us that learning cultures are an indispensable element for consideration. “What does acquisition imply for the learner? Is it simply learning by rote, retaining words and letters? What is learning? (Being taught?) Or what is teaching? (Making someone learn?).” The situation of the learner has to be taken into account entirely. This is not easy by any standards, because learning cultures are imbibed, less thought-of, difficult to re-examine. But it is important to consider and acknowledge this aspect, because this is what can be an impediment towards autonomy. What is important therefore, is to put in place a pedagogy that would allow space and time for such changes.

Such a shift is certainly not easy, as it implies a transfer and sharing of power. The teacher, who all along has been the one who assesses, needs to share space with the learner.

1 My translation
Moreover, the learner needs to share his time with preparing for the grades, which are an indispensable part of learning. Self-assessment is also about handling both these aspects without stress or conflict. Being able to prepare oneself for the graded assessment, and being able to assess oneself for self-progress. Achieving this goal is not simple. It is also important to note that a teacher cannot guide the student towards self-assessment and autonomous practices if he or she has not been sufficiently guided himself, and in which case would require greater ‘assessment literacy’ (Benson, 2015). To achieve this, it is vital, that teacher professional training incorporate autonomy as a key factor through reflection on classroom practices and pedagogies. A balanced integration of theory and practice, student-centered approaches, analysis of context and situation in which learning takes place and sharing of experience with peers will go a long way in establishing a reflective approach.

If autonomous learning practices and a culture of autonomy is not in practice, both learners and teachers will need support in order to set it in place, to raise awareness about the importance and usefulness of self-assessment and to appreciate its worth. Even then, one has to be wary of the pitfalls. Ideally, developing self-assessment as a skill and a habit should go hand in hand. The teacher and the learner have to be on the same page, sharing values about assessment. Finally, the teacher has to be a model himself, practicing self-assessment in order that one may be an effective spokesperson for the learner self-assessment model.

An educational system cannot undergo a change if one does not modify evaluation. While the discourse on learner-centered approaches in language learning is becoming increasingly important, the teacher still holds the key to success in mainstream curriculum in the Indian context. The responsibility is on the teacher; there is constant assessment, grading, pointing out of errors either formally or informally. In such a context, it is not realistic to expect learners to move automatically towards autonomous learning, take charge of their learning and develop responsibility. The responsibility still largely lies in most cases with the teacher. In the behaviourist mode that is largely in practice, there is seldom a role for the learner to play in analyzing his errors, or even gauging his progress. It is often an open-shut case, leaving very little choice to the individual learner. This situation is in contrast to the learner-centered theory. It is more of the teacher gearing towards what he wants the learner to learn and achieve, than the learner himself wanting to achieve what he wishes to achieve. A shift in paradigm is needed in order to reverse the process from the prescriptive to the analytical and to help the learner gain responsibility. The learner needs to become the subject, instead of the object like what Oskarssen envisaged in 1978 itself when he defined self-learning questionnaires “I know… I am capable of…”, paving the way for developing positive learning strategies. The learner needs to undergo a deconditioning that allows him to perceive assessment not just as an external factor that is decisive, but as a tool that allows him to control and measure his own learning. Self-assessment is not just a method of signaling error, but it is also a tool that is motivational, remedial, that helps develop learning strategies. For which, error perceptions need to change and error needs to be held as a means to regulate and improve learning. Therefore, one needs to take the bull by its horns, change the evaluation pattern, so that learning can undergo a positive paradigm shift. The challenge only begins here.

**Conclusion**

If self-assessment is recognized as an important tool for learner autonomy and language learning, a long-term project has to be envisaged in order that teachers may be trained and involved in this line of thinking. This is essentially to help them modify their beliefs and perceptions concerning assessment and to allow them to consider self-assessment as a tool
towards autonomous learning. This medal has two sides to tackle: one, understanding autonomy and its worth; two, understanding self-assessment and its role in autonomous language learning. Language learning should not be envisaged as an end in itself, but rather should take into account strategies that would lead towards improved learning. Keeping in line with the effective socio-constructivist paradigm, teachers should encourage learners to self-assess, construct knowledge collaboratively with their peers and make them active partners in the learning process. It is also a question of enabling the learner to give value to what he knows, identify what he does not know or lacks and make progress. The challenge, as Holec reminds us, is that “the first demon to exorcise is the lack of capacity of learners to appreciate their knowledge” (Holec, 1981). Well-thought about teacher training initiatives that bear in the mind the specificities of the context, the learning culture of teachers and learners, will propel a step forward in this direction. An ongoing research in which we are engaged, with learners using self-assessment techniques for French language learning will perhaps yield further inputs into the efficacy of self-assessment in this context.
References


Teaching/Learning English as a Foreign Language: Overcoming resistance through drama activities

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Abstract
Learning a foreign language is a citizen’s right in Brazil. Students are, or should be, motivated to learn it, and schools are expected to help them develop various skills as well as creativity to face global challenges. Although educators have endeavoured to awaken students’ interest in learning English, learners still seem despondent and unable to find meaning in learning the language. In this article, the researcher shares her experience and research with undergraduate students of English at the Pontifical Catholic University of São Paulo, Brazil. The pedagogical proposal resulting from the research project – Living drama: theory and praxis in English language teaching and learning contexts – is grounded in an interdisciplinary approach involving educational psychology, drama in education and teaching English as a foreign language. Focusing on significant learning, the proposal emphasises the role of affect in the learning process.
Findings suggest that students’ resistance to learning English may be due to the lack of three interrelated competencies in language learning: 1. linguistic competency; 2. appropriate study skills; and 3. emotional competency. Such resistance seems to have been gradually overcome through drama activities, as students became motivated, more open to learning the language and more confident in building interpersonal skills. Finally, while analysing and interpreting the students’ accounts, the author became aware of the essential role of the learning environment in the learning process.

Keywords: Drama Activities, English Language Learning, Educational Psychology, Affect
Introduction

Education is a civil right in Brazil, and learning an additional language plays an important role in the way people communicate, especially when the need of mastering the English language is taken into consideration. Students should not be excluded or deprived of opportunities for learning English and developing interpersonal skills, which are essential to their personal and professional development.

Although educators have endeavoured to awaken students’ interest in learning English, learners still seem despondent and unable to find meaning in learning the language. Many changes are still needed in terms of educational policies and praxis of English language teaching in schools. Learners are, or should be, motivated to learn it, and schools are expected to help them build various skills, as well as creativity, to enable them to face global challenges. However, many students tend to show reluctance and inhibition towards English, especially in a foreign language class, because they are afraid of making mistakes and being negatively evaluated as a learner and as a person. Demotivation and resentment, as well as low self-esteem and other psychological barriers can be observed in the classroom situation, which can negatively impact the learning process.

In this paper, I will share the results of research on the use of drama in the learning of English which I have carried out with undergraduate students of English at the Pontifical Catholic University of São Paulo, Brazil, where I teach English language. The implementation of drama activities is an attempt to explore ways in which such activities can contribute to students’ engagement in their own learning process.

I lead a research project called “Living drama: theory and praxis in English language teaching and learning contexts”, which investigates the pedagogical benefits of drama workshops. The proposal is grounded in Educational Psychology, Drama in Education and Teaching English as a Foreign Language. Focusing on significant learning, the proposal emphasises the role of affect in the learning process, as well as the pedagogical implications in the use of drama activities in the class.

As the title of this article shows, three ideas have emerged from the very beginning: teaching English as a foreign language, resistance towards learning and drama activities. In other words, teaching English as a foreign language involves the idea that teachers often face some level of resistance on the students’ part, and drama activities can be one of the ways to mitigate such resistance. However, success in dealing with such affective issues require the teacher to accept them as natural responses to the learning process. Brookfield (2006) contributes to this idea when discussing resistance in the classroom:

Remember that resistance to learning is normal, natural, and inevitable. The trick is to make sure it interferes as little as possible with classroom activities that others see as important and helpful (p. 233).

To put it simply, resistance can be seen as a complex phenomenon that involves a combination of factors (Brookfield, 2006). As part of the learning process, it should be understood and accepted by educators, and the main discussion here is the implementation of drama activities in the classroom situation as a path towards success in the teaching-learning of English, and thus to overcome resistance to learning, specifically to learning English.

Theoretical Framework

Three theoretical pillars support this research: educational psychology, teaching English as a foreign language, and drama activities in English language teaching.
The first pillar – educational psychology – draws on my PhD studies on educational psychology, especially on humanism, the philosophical movement that emphasises an intrinsic positive tendency to personal growth, which is manifested when the person is inserted in a facilitating atmosphere. It was from this humanistic movement that the person-centred approach was proposed by Carl Rogers (1969). Rogers’ concepts, generated in a therapeutic setting, were extended to education, which is where I have concentrated my studies. The idea of learning as an experience that involves the whole person has been widely supported. Jarvis (as cited in Illeris, 2009) defines human learning as:

...the combination of processes throughout a lifetime whereby the whole person – body (genetic, physical and biological) and mind (knowledge, skills, attitudes, values, emotions, beliefs and senses) – experiences social situations, the perceived content of which is then transformed cognitively, emotively or practically (or through any combination) and integrated into the individual person’s biography resulting in a continually changing (or more experienced) person (p. 25).

The second pillar, teaching English as a foreign language, has an outlook closely related to humanistic approaches, which have had great impact on this area of study, mainly because of the urge to value the role of affect in the classroom situation. Arnold (2005) points out the need for an integrated approach involving cognition and affect in language learning. That author states that inner factors, which are part of the learner’s personality, should be taken into account, as they determine the student’s success or failure in learning to some extent. Arnold also stresses that anxiety may be “an affective factor that most pervasively obstructs the learning process” (p. 8). For the author, the feeling of frustration, low self-esteem and inhibition might negatively influence the whole process.

Drama activities in English Language Teaching (ELT), the third pillar mentioned above, have been recognised by language teachers, researchers and educators, who have been studying learning theories and pedagogical proposals to English language teaching-learning while integrating drama activities into their teaching practice. ELT can be seen as intertwined with the first two pillars: educational psychology and teaching English as a foreign language, once these main concepts blend in with a real interdisciplinary learning experience. According to Almond (2005), drama is beneficial for many reasons, as it helps materialise the principles presented in the two previous pillars:

Drama is a whole-person approach to language teaching which requires us to look at communication holistically. Creating a character and acting in a play can be a visceral, intellectual and emotional experience which makes the learning process more meaningful and memorable and more transferable to the real world (p. 10).

Another ELT expert, Maley (1998), devises drama activities for language learning, stressing how motivating drama can be in the classroom, as a way to enhance engagement and group interaction:

By working together, the students learn to feel their way to creating their own parts and adapting them...they are learning to rely on one another for their ideas and therefore using a considerable amount of language for discussion, argument, agreement and disagreement, organisation and execution. (p. 13-14)

Yet another ELT author, Heathfield (2005), also proposes drama activities for the English language classroom. He believes these kinds of activities can provide a great deal of
benefit for students because they enhance self-confidence. Moreover, the author emphasises the relevance of the emotional component in the learning process:

The main aim is to build confidence, fluency and spontaneity. This comes before the purely linguistic objectives because it is fundamental. Without confidence, learners’ progress will be limited. Without spontaneity, interaction will feel less natural. Without either of these, fluency will take longer to achieve (p.8).

As in this paper the main emphasis is placed on resistance to learning and to psychological aspects involving the learning process, the theoretical focus will be on the educational psychology pillar.

Joseph (2012), a psychologist and researcher on Person-Centred Approach and Client-Centred Therapy states that Rogers’ ideas on the “organismic valuing process” constitute the “engine of therapeutic change”, and adds that “many of the core ideas associated with person-centred psychology are topics that are alive and well in contemporary mainstream psychology” (p. 26). Rogers sees the organismic valuing process as vital for change; it is seen as an intrinsic positive force that may lead to change, which is manifested when the person experiences a favourable emotional atmosphere.

Having transposed those concepts to education, Rogers proposes the concept of significant learning as the basis of his theory of learning. In an attempt to explain the concept of significant learning, Rogers formulates and systematises his theory into principles, four of which are key to this discussion:

1. Every learner is potentially ready to learn and is able to achieve this potentiality;
2. Every learner has organismic capacity of valuation;
3. Every learner manifests resistance towards learning
4. If resistance to Significant Learning is low, then the learner will achieve his potentiality towards learning (Duarte, 1996, p. 19).

These four principles suggest that individuals have an intrinsic drive to learn and that it is this drive which enables learners to choose what and how to study. Undoubtedly, experiencing learning generally demands effort and involves risk-taking, and consequently resistance towards change might occur. However, it is worth considering the fourth principle, which states that if resistance is low, students are most likely to achieve learning. Therefore, it seems that when teachers implement pedagogical proposals aimed at lowering resistance, they will likely find their students more successful in achieving learning outcomes.

According to the American Heritage Dictionary (2011), in the area of psychology, the word is referred to as “a process in which the ego opposes the conscious recall of anxiety-producing experiences”. Such experiences tend to lead to some sort of change, and resistance towards learning may be understood as a defence against that necessary change.

Certain learning experiences can often be felt as a threat to self-identity, therefore, overcoming resistance towards change will demand a great deal of effort on the learner’s part, a struggle against something that comes from the inside (Duarte, 1996), or in other words, the fear of taking risks. We avoid taking risks because we anticipate judgement from others and even from ourselves. Duarte (2012) states that change:

... demands another outlook on school life and on personal life. Thus, moving from language 1 to language 2, or trying to meet the requirements of the language learning process might be threatening to the learner’s self-image, therefore, resistance to
learning is likely to occur. So, when a learning situation becomes somehow threatening to the student, he sometimes tends to avoid it (p. 120).

On this line of thought, Brookfield (2006) suggests that:

… the basis of resistance to learning is the fear of change. Learning by definition, involves change. It requires us to explore new ideas, acquire new skills, develop new ways of understanding old experiences and so on. No one is the same after learning something (p. 214).

It is important to understand the various factors that might explain students’ resistance and help them find the missing motivation; however, we cannot naively assume that resistance will disappear. It can be overcome in the process of working towards self-development, but it is human and present in learning situations.

Brookfield (2006, p. 217) also states that there are different sources of resistance: (a) poor self-image as learners – probably due to a history branded by failure; (b) fear of the unknown – it is difficult to leave one’s comfort zone and experience the unknown. We tend to hold on to beliefs that have served us well; (c) individual pace of learning in the learning process varies according to what students are experiencing at the moment; (d) disjunction of learning and teaching styles – different students have different learning styles which sometimes fail to fit the teaching style; (e) apparent irrelevance of the learning activity – the learning experience as meaningful experience is essential in the whole process; (f) inappropriate level of required learning – the feeling of not being able to learn helps to dwindle the students ‘self-esteem’. Frustration quickly becomes resistance; (g) fear of looking foolish in public – students who appear to be very self-confident sometimes fear to make mistakes in public; (h) cultural suicide – the fear some students have of cultural exclusion, and of losing their cultural support; (i) lack of clarity in teachers’ instructions – learners feel lost when teachers’ instructions, intentions and evaluation criteria are unclear; (j) students’ dislike of teachers – a good relationship among people in the classroom is key in the classroom situation. Sometimes objections to teachers are justified and sometimes not.

Robert Reasoner’s ideas (as cited in Arnold, 2005) contribute to this discussion when he proposes that resistance involves five key components of self-esteem: sense of security, sense of identity, belonging, purpose, and personal competence, which in my analysis are an essential part of emotional competence.

Having presented and discussed the principles supporting this study, two questions might be raised: How can students be helped to build and sustain their intrinsic motivation towards learning English? How can teachers encourage change and, by doing so, encourage learning?

**Methodology**

**Drama workshops as a pedagogical proposal**

As mentioned earlier, our English language teaching interdisciplinary pedagogical proposal has been implemented through drama workshops comprising 5 stages, described in Duarte (2012): (a) sensitisation, which consists of a corporal and/or vocal warmup exercise, concentration and group interaction activities; (b) improvisation exercise, based on thought-provoking texts which can be either a narrative, or a poem, or a film, etc. Such elements will trigger off discussions and bring forth conflict; (c) choice and preparation - students decide which improvisation situation to concentrate on. They create the story, its characters and write the sketch, making the necessary staging decisions to dramatise it at the end of term. Divided into acts and scenes, all sketches must contain the following essential elements: title,
plot, characters, and cast; (d) dramatisation. At the final stage, students’ work goes public, as they perform their sketches to guests at one of the Catholic University’s theatres (Duarte, 2012, p. 127).

The main goal of this pedagogical proposal is based on the idea that by becoming more open to the experience, the student will pose less resistance to the learning process.

The Research

The English language situation considered in this paper consists of a group of 25 undergraduate students at the Pontifical Catholic University of São Paulo, Brazil, taking an English language and literature course, either to become teachers of English or translators. The meetings took place weekly, in the form of 150-minute sessions for 18 weeks, as part of the college curriculum, in a subject called Drama Workshops.

At the end of term, the students wrote reflective accounts on the following topic: “When I think of the experience I have been through in the Drama Workshops, I…”, and they were supposed to express their opinions and feelings about the experience they had had. They were reminded of the four stages of the pedagogical proposal they had been through in order to write their accounts. They pointed out their achievements in the learning experience, as well as difficulties in drama activities. Subsequently, the accounts were analysed through a qualitative content analysis (Mayring, 2000; Franco, 2008) from an interpretative/qualitative perspective based on a case study approach (André, 2005).

Presentation and Discussion of Results

The various sources of resistance emerging from the accounts were analysed and organised into three categories, which are in fact three fields of learning (Figure 1): linguistic competence, study habits, and emotional competence. These fields are equally important and integrate a wider field which I called Self.

Figure 1. Representation of three learning fields.

Figure 1 depicts the analogy between the language learning process and the set of dynamic forces that interact with one another and intermingle during the whole process (Duarte, 2002). The learner makes use of inner forces integrating affective, cognitive and biological aspects within the learning experience, making it very difficult to establish the boundaries of each learning field, as shown in Figure 1.
The students’ accounts indicated that the difficulties they experienced were related to the three fields mentioned above and were gradually reduced over 18 weeks. However, what the accounts seemed to highlight were difficulties related to the emotional field, which is the focus of this analysis. Some students stated that, in the beginning, they were self-conscious and extremely frightened at the idea of having to expose themselves in class through acting, but that they gradually became engaged in the process:

At [sic] the beginning I didn’t like the idea of dramatising. I don’t like this sort of activity, but then at the end, it was great. Although I made many mistakes, I learned a lot. I have many difficulties to learn English. But this subject demands a lot from us and requires a lot of exposure, and that is why we learn so much. We had the feeling of togetherness and became a real group. We did the impossible to make it happen. (Joyce)

The qualitative content analysis of students’ accounts showed that difficulties were diminished, and therefore the various resistances were lowered for two main reasons, which, in fact, are related to two subcategories of the emotional field: 1- the proposal itself, and 2- interpersonal relationships. Joyce’s report above illustrates the first subcategory when she states that she somehow succeeded because the subject demanded a great deal from her, and therefore it can be said that the drama workshops played an important role. The feeling of togetherness and the feeling that students had become a real group seem to indicate that colleagues play an important part in her success. As mentioned earlier, Brookfield (2006) discusses one of the possible resistances to learning: inappropriate level of required learning, which might cause the feeling of being unable to learn. Joyce complained she did not have a reasonable level of English, which might have caused a strong resistance, although she did overcome it later in the process.

Daniel, another student from the group, reported that the proposal and his colleagues were also essential to his improvement:

One of the biggest difficulties that we have is inhibition, the fear of speaking a language with different sounds from the Portuguese language. Doing relaxation exercises was very important in the process. I noticed that my colleagues used to get nervous before each class, but despite that, they always expected it with enthusiasm. Solidarity and generosity were also part of the classes. Those who knew more (English) helped those who had more difficulty. (Daniel)

Again, Brookfield’s (2006) ideas contribute to this discussion as he states that the fear of the unknown constitutes one of the sources of resistance. In the author’s view, this feeling might hinder the learner’s willingness to learn, as it is difficult to experience something new, especially if the situation entails a threatening exposure of the self. Daniel said he was afraid of speaking English, and possibly he feared making mistakes, but for him a welcoming atmosphere, a positive learning environment (Duarte, 2012) together with certain procedures in class, helped him overcome resistance. He also realised the important role the colleagues played in the process.

Another student, Richard encapsulated the idea that the proposal itself and his colleagues’ attitude were essential aspects to his improvement. He stated:

…I am not a confident person. I worry too much about what other people would think of me and I know that this hinders my spontaneity, but it was awesome to work in a
team. Those who knew the language better tried to help the ones who didn’t, and this helped us to improve as students, as classmates and even as friends. (Richard)

Arnold and Andrés (2009, p. 10) discuss the role of affect in a foreign English language class and quote Carl Rogers (1969), who emphasised ‘positive regard’ as an essential attitude from others in a classroom to help strengthen the inner sources of students’ self-esteem. When drama activities are used in class, students tend to work more affectively together and, in groups, they find ways to interact and cope with a task effectively. The feeling of belonging gradually becomes more evident throughout the course. This is what Beatrice said about her experience:

I think that the course has given us the opportunity to strengthen the friendship bonds in the classroom and we became a real group, especially because of the presentations, which allowed us to get to know each other better, to help one another and, more than that, to learn how to learn a language in a more effective and pleasant way. (Beatrice)

Besides what has been discussed so far, it is worth stressing that the results of the analysis not only indicated students’ attempts to overcome resistance, especially in the emotional field, but also showed some of their achievements in the learning process. Those achievements seem to be indicative of a transformation in their attitudes towards learning. Mariana summarised her experience:

Despite our fear of speaking in public (even worse because it is in English), we did go through the odds and put aside all the shame. It was amazing. I did enjoy speaking in public…What I find most important is that I will take this experience outside the classroom…I feel more confident to make presentations at seminars and share my ideas during the classes.

Many accounts suggest that drama activities, if carried out in such a way that students may feel emotionally open to engage in the process, tend to lead to students’ development as a whole; that is to say, students seem to have had their resistances mitigated in the three fields of learning presented. However, some students’ accounts also indicated that, at the end of the process, some learners were still reluctant when it came to new experiences and some of their comments were related to personal feelings about the proposal itself. The accounts showed that not everybody felt free during drama workshops. Leda stressed this point:

At the beginning of the semester, I wasn’t comfortable with the class at all. But then I decided to give it a go and try to relax and accept the activities proposed with an open mind. But I am still feeling bad and I can’t see much improvement towards my own process of learning. (Leda)

This has led me to think that willingness to engage with dramatisation in EFL classes may be put down to personality traits which should be respected. Therefore, for the production of final sketches as well as for the improvisation exercises, students should be guided to concentrate on specific activities, such as writing sketches and stage managing, rather than on dramatisation.

When proposing a daring activity such as dramatisation as part of the curriculum, we should make sure that all students are absolutely aware of its purposes, as well as of teachers’ expectations, otherwise resistance towards the pedagogical proposal may emerge. In Isabella’s words:
But all in all, I prefer the traditional classes and besides that, I think that we are not used to having this kind of classes, and we lack explanations about it, its purposes, advantages, hints on how to take the most of it etc. (Isabella)

In relation to the subject Drama Workshops - the context in which this study developed - the program, its objectives, and its ‘table of content’ were extensively discussed with the students. However, Isabella still seemed uncertain and doubtful about its meaning and its purpose. Thus, it seems necessary to revisit the aims and assess whether the teacher’s expectations meet students’ understanding of the process. In the account above, Isabella leads us to understand how relevant it is to consider the emotional field of learning and its integrated aspects: the pedagogical proposal itself and the interpersonal relationships.

The teacher’s role in the learning process is to be constantly tuned to students’ needs and wants so as to make the learning situation into an experience which gives learners the opportunity to play an active role in their own process of change and growth, and consequently to improve their abilities in the three fields of learning discussed previously. As I reported in an interview to my university television station (TVPUC-SP, 2014):

The activities should have a meaning to students and this meaning is created inside the classroom together with the students…they search what to study, what to write, how to act, and I keep guiding them step-by-step so that they can achieve this goal.

Farkas, a student from a more recent group, was also interviewed on his experience in the Drama Workshops and conveyed a feeling of achievement and freedom:

The classroom was not supposed to be a prison, because I believe that this conservative and traditional way of teaching doesn’t allow students to ask questions or have debates with teachers. It lacks openness. So, subjects like this one and like the others I’m taking make me feel comfortable here. I’m not tied in. I have a voice.

**Conclusion**

I was about to finish the paper I presented at the Third 21st Century Academic Forum at Harvard, and I was still analysing students’ accounts of their experiences in learning English through drama, when I was led through a stream of reasoning over the various experiences I have had when using drama activities in different learning contexts so far.

What I realised was that any pedagogical proposal for the teaching of English can only be really effective if a broader issue, in fact an essential component, is taken into account. This is what I call the learning environment, which entails two different aspects: the social educational aspect and the various physical spaces where learning takes place.

The social educational aspect requires an outlook on education that is geared towards the growth of human beings as a whole, to the key role of interpersonal relationships, and to the urge to consider and include the development of creativity, as well as affect, in the learning situation. Physical spaces where learning occurs should not be restricted to the classroom itself, as learning can happen in the school break-out area, in a garden, at home, or on stage (Figure 2), among other spaces. In other words, when the classroom is expanded and students choose where and how to experience learning, they tend to become freer and more engaged in the process.
This study has demonstrated that the three fields of learning - study habits, linguistic competence, and emotional competence - along with the learning environment, play a crucial role in mitigating resistance to learning. The former can be the basis for pedagogical practices, while the latter can be the basis for political acceptance, and for the application of such practices by curriculum developers.

From now on, this is the research path I intend to pursue, supported by the premise that students should be aware of their needs and resistances, so that they can evolve into authors of their own creations.
References


Internal and External Factors that Lead to English Language Conversational Anxieties among Thai Undergraduate Students: Basis for Instructional Improvement

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Abstract
This study aims to assess the factors that cause anxieties among Thai undergraduate students when they converse in the English language: to develop an action plan that will eliminate the conversational anxieties of the target group. The findings in this study showed that the internal factors being known as experiential, motivational, linguistic, acuity and physical and the external factors defined as contextual and cultural have a direct effect on student respondents’ anxieties when conversing through English language. Findings proved that the internal and external factors perceived by the student respondents had significance in their demographic profile; by gender to experiential factors; year level and program to contextual factors but no significance in their place of birth, more so, there is correlation between the internal and external factors with the physical and motivational factor having the highest correlation coefficient.

Keywords: Internal and external factors, conversational anxieties, English as a foreign language
Introduction

As individuals we have different means of expressing ourselves, but we interact ultimately by conversing verbally. We express our thoughts through whatever language we feel comfortable using. The complication arises if we converse in a language which we are not comfortable with, needless to say, if this is not our native language. This is the case for most Thai undergraduate students, wherein conversing with the use of English language is a barrier to free and flawless dialogues.

English is considered as the most widespread and important language today. It is a major language of international business, diplomacy and professions. It is the official language of most international organizations. It is used not only for communication between native speakers of English but also between non-native speakers. Therefore, it is safe to say that one acquires a certain degree of conversation advantage if fluent in the English language; especially when living in a country with limited English contact. On the other hand, poor speakers of English suffer from discrimination, thus, giving them additional pressure and anxiety whenever they attempt speaking the universal language.

As countries become increasingly modern and competitive, conversing in English is advantageous for everyone. Thus, institutions of higher education in Thailand have included principled programs, workshops and training to familiarize students in an environment that has English as its primary language. Students are required to speak English, in and outside the campus. The activities and the policies bring out conversational anxieties among many Thai undergraduate students. It is hypothesized that “conversation anxieties” are the result of certain factors which make up the scope of this research. These factors are internal and external factors. Internal factors consist of; experiential, motivational, linguistic, acuity and physical while external factors consist of; contextual and cultural. The inhibiting factors include: lack of motivation, hesitancy, and discomfort, which act as barriers for English language fluently.

Methodology

This research focused on factors that lead to conversational English anxieties among Thai undergraduate students enrolled from 2014-2015. Using the purposive sampling, the study was limited to 300 student respondents from Bansomdejchaopraya Rajabhat University, Dhonburi Rajabhat University, Suan Sunanta Rajabhat University, Bangkok University, Eastern Asia University and Kasem Bundit University.

This study demanded for the accurate descriptions, comparisons and contrasts in the conversational English anxieties being the dependent variable, the independent variables which are the internal and external factors and the demographic profile as the intervening variable.

A personally devised two-part questionnaire was used as the primary means in data collection for the study regarding the internal and external factors that lead to conversational English anxieties of the respondents. The first part determined the profile of the respondents in terms of year level, learning area, age, gender and place of birth. The second part is five-point scale type test items to assess the factors that bring about the student respondents conversational English anxieties in terms of cultural factor, experiential factor, contextual factor, physical factor, motivational factor, linguistic factor and acuity.

The questionnaire was translated into the Thai language for reliability. The questionnaire was tested and re-tested by one hundred non-respondents for item analysis and validation. Then the study was conducted.
Internal and External Factors that Lead to English Language Conversational Anxieties among Thai Undergraduate Students

The questionnaire was administered and overseen by Thai lecturers. The questionnaires were given to students from all levels and learning areas of Bansomdejchaopraya Rajabhat University, Dhonburi Rajabhat University, Suan Sunanta Rajabhat University, Bangkok University, Eastern Asia University and Kasem Bundit University.

The questionnaires were gathered and recorded, described analyzed and interpreted. The statistical treatment used was frequency count and percentage to show that actual distribution of the purposively selected Thai undergraduate students. Ranking was also used to determine which among the items were given higher weight. The weighted mean was used to determine the extent of perception of the respondents on their assessment of the internal and external factors leading to their conversational English anxiety. Then, T-test and ANOVA to test the null hypothesis of significant difference on the perception of the respondents’ conversational English anxieties, correlation coefficient to determine the significant relationship of the dependent variable, the independent variables and the intervening variable.

Findings

It utilized 300 purposively selected Thai undergraduate students as respondents. The descriptive method of research was used with the interview and questionnaire, which served as tools in gathering data and information. The statistical treatments used were the frequency distribution, percentage, ranking, weighted mean, ANOVA, correlation coefficient and correlated t-test.

The demographic profile of the respondents was summarized. The mean average of the respondents’ age was 21; hence a majority of them were at their early twenties. Sixty four percent point seven (64.7%) or majority of the respondents were female. Thirty seven point three percent (37.3%) or a majority of the respondents were in their second year. Sixty percent (60%) or a majority of the respondents were those that have three or less language subjects. Sixty percent (60%) or a majority of the respondents were born from the provinces.

The extent of assessments of the respondents on the effects of internal factors were summarized. Student respondents’ composite mean in experiential factor resulted to 3.10, motivational factor to 3.32, acuity factor to 3.24 and physical factor to 3.27, all were interpreted as “Sometimes”, while linguistic factor resulted to 3.63 interpreted as “Often”. All Internal factors have direct effect to the respondents, making them anxious when conversing through English language.

Overall, out of the five internal factors, the linguistic factors had the most effect. This could be attributed to the student respondents’ limited technical know-how of the English language; vocabulary, grammar-structure, etc. In conclusion, their assessment of their abilities and their mastery of the English language are very low, hence, resulting in their low esteem towards conversing through English language. Correspondingly, their motivational factors ranked second.

The extent of assessments of the respondents on the effects of external factors were also summarized. Student respondents’ composite mean in contextual factor resulted to 3.84 interpreted as “Often”, while culture factor resulted to 2.93 interpreted as “Sometimes”. Hence, both contextual and cultural factors have direct effect on the respondents, making them anxious when conversing through English language.

In summary, out of the two external factors, contextual factors had the most effect. This could be attributed to situational or incidental opportunities by which the student respondents had the use of conversing through the English language. Even the educators...
prefer the use of their native language rather than English, their learning skills and opportunities inhibit them from conversing effectively in English language.

There was a significant difference in the assessments of the internal and external factors in terms of their demographic profile. After testing the significance of the factors in terms of student respondents’ demographic profile, the results were, when tested with their Gender; their experiential factors had significance to their gender; Year level; their contextual factors had significance to their year level; Program; their contextual factors had significance to their Program; and Place of birth, none of the factors have any significance to their place of birth.

There were correlations between the internal and external factors. Physical factor had the highest correlation coefficient with the motivational factor. This could be attributed to the student respondents low esteem and anxiety when conversing through English language, since they perceive themselves as having low physical skill i.e. inability to pronounce correctly and articulate English words correctly. Hence, these factors affect their confidence in conversing effectively.

**Recommendations**

Reflected on the foregoing findings and conclusion, the researcher makes the following recommendations:

The English fundamentals of the students should be strengthened by giving an achievement exam geared to determine the English proficiency of the student before the initial enrolment. If students fail the said test, they shall be required to enroll into a remedial subject that should serve to refresh and strengthen their English proficiency.

The optimal use of English language requires students to speak English in class most of the time by engaging them in activities that would encourage them to speak. Skinner’s theory of rewarding is proven effective, and this theory could greatly help English fluency – driven activities. The university, university departments and student affairs office could assign rewards for students who utilize the second language for the said activities’ success.

The students’ personalities should be developed in order to build confidence when they converse in English: an integration of the elements of the personality development and speech classes. A speech class tackles the technicalities of speaking proper intonation, enunciation, pronunciation and voice modulation among other things, while, a personality class, as the name suggests, develops character. Now, if those elements are combined and formed as a subject, the conversational anxiety of a student shall be eradicated. Not only would the student learn the proper way of conversing, his confidence of doing so would be developed as well.

Speech therapy could be a great exercise. A student, upon his initial interview with the school, must be diagnosed for potential speaking disabilities. If the students have disabilities they must be referred to therapists or experts in the field. In the way, the disability would be given attention, thus helping the students to become good communicators, if not fluent ones.

A daily dose of advice could be a good way to make the students realize the importance to be able to communicate in English. Since speaking in the native tongue (L1) is undeniably a part of ones’ culture and is a norm of the society, the students can do nothing but change their perception of the language.

Considering the given recommendations an action plan must be developed. An action plan would stimulate the learners interests towards learning and conversing fluently and effectively through the English language; to impart to the students the significance of
being able to communicate fluently in English in social and professional interactions; to stimulate the students’ awareness to use English language through different programs and activities; to present and provide programs and activities for the University Lecturers.

<table>
<thead>
<tr>
<th>Area of Concern</th>
<th>Strategy</th>
<th>Department /People Involved</th>
<th>Expected outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>General English Courses</td>
<td>Have more effective lecturers. Follow up with enhancement activities.</td>
<td>Inter-Lingual Institute Faculty Deans Course Coordinator</td>
<td>Motivate to speak English without anxiety.</td>
</tr>
<tr>
<td>Optimal use of language centre and /or academic resources and information technology</td>
<td>Engage students to learning at their own phase, with their own peers.</td>
<td>Inter-Lingual Institute Language Coordinators Staff</td>
<td>Students practice freely with materials that are trendy and updated.</td>
</tr>
<tr>
<td>Reinforcing and strengthening the lecturers’ English language competence.</td>
<td>Refresher seminars and intensive English classes</td>
<td>Inter-Lingual Institute University Lecturers Staff</td>
<td>A better command in English thus provide good examples to students</td>
</tr>
<tr>
<td>A high regard of the students under English programs (Humanities &amp; Social Sciences and Education Faculties)</td>
<td>Intensive seminars and workshops specifically designed to advance their level of English.</td>
<td>English Major Students from the Faculty of Humanities and Social Sciences and Faculty of Education</td>
<td>Producing fluent and confident English speakers.</td>
</tr>
</tbody>
</table>

Table 1 Action plan for the improvement of instruction.
References


An Analysis of the Development Management Organization: Case Study of the Regional Office for Asia and Pacific

Wanna Thongyen, Chumnan Thongyen and Ratthanan Thongyen
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Business Administration
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Abstract
This study which focuses on the International Labour Organization (ILO), specifically the Regional Office for Asia and the Pacific, has the following objectives: 1) To understand the knowledge management approach of ILO ROAP; 2) To explore and identify the salient contextual elements that influence the knowledge processes of ILO ROAP; and, 3) To study the relationships between the context, knowledge processes, and outcomes of knowledge management of ILO ROAP. The research methodology used here was qualitative. The research employs documentary research, multiple case studies, in-depth interview, and field visits to assess the organizational knowledge management and to identify the factors related to organizational knowledge management processes. The assessment of the Regional Office for Asia and the Pacific (ROAP) of International Labour Organization (ILO), shows that knowledge management takes place in ILO although OLO does not officially announce its knowledge vision, knowledge management strategy and it does not establish its organizations for any direct responsibilities of knowledge management. The study found that knowledge management strategy involves both the personalization and codification knowledge management strategies. The Knowledge processes include sharing tacit and explicit knowledge, creating concepts, justifying concepts, building and archetype, and cross-leveling knowledge within organization and across inter –organization. There are relationships between contextual elements and knowledge management processes. The contextual elements consist of organizational strategy, organizational structure, information and communication technology is a crucial factor enabling the cross-leveling knowledge process. Without adequate information technology, explicit knowledge effectively be transmitted to others.

Keywords: Management, organization, Asia and the Pacific (ROAP)
Introduction

The impact of effective knowledge management on organizational performance is well recognized and accepted. Knowledge becomes the richest resource/asset of an organization, and knowledge management is the foundation for sustainable competitive advantage IBM stated at the first annual U.C. Berkeley forum on Knowledge and the Firm that, “There is an emerging new theory of the firm, one that recognizes the rowing complexity of work, products, and organizations” He concluded. “The only sustainable competitive advantage comes from what you know and how fast you can put it to use” (DiPaola, 2004; Flynn & Solomon, 1985; Brook, Russel & Price, 1988; Davis & Newstrom, 1989).

The foregoing suggests knowledge management is a key for organizational effectiveness and competitive advantage in many types of organizations. That knowledge management enhances organizational in business and government organizations, even in non-profit organizations as well as military organizations, has been shown in many studies (Huse & Cumming, 1985; LePine et al., 2002; Shore & Wayne, 2003).

The Consultative Committee on Program and Operational Questions, United Nations, conducted a survey about Knowledge Management and Information Technology to help understand the nature and extent of knowledge management activities in United Nations Agencies in 200. This study was intended as input into a discussion about how to enhance the United Nations systems understanding of the concept of knowledge management and the potential use of the Internet by the United Nations to become an active player in promoting knowledge management. The key findings showed that knowledge management is at an early stage. Only a few agencies report tangible results (Swap, 2006; Wagner, 1989; Organ, 2002; Hannam & Jimmieson, 2002). In affirmation of the importance of knowledge and information, the administrative Committee on coordination on Universal Access to basic Communication and Information Services stated that they recognize that knowledge and information represents the lifeblood of the emerging global information society and its attendant infrastructure. Knowledge and information are at the heart of the intensifying globalization trends, and drive the emergence of a tele-economy with new global and social organizational models. Knowledge, more than ever, is power. Information about what is occurring becomes a central commodity of international relations, and determines the efficiency and effectiveness of any intervention, which is a particular challenge for multilateral actors. (United Nations, 2000: 28)

Where rapid progress of information and knowledge management promotes the competitive advantage for the developed countries, unfortunately most developing countries, especially the least developed countries, are not sharing this revolution since they lack affordable access to core information and knowledge resources, the capacity to build, operate, manage and service the technologies involved, and policies that promote equitable public participation in the information society, as both producers and consumers of information and knowledge. Therefore, the united Nation has given recognition to the need to assist these developing countries. (United Nations, 2000: 28)

Objective

1. To understand the knowledge management approach of ILO ROAP.
2. To explore and identify the salient contextual elements that may influence the knowledge processes of ILO ROAP.
3. To study the relationships between the context, knowledge processes, and outcomes of knowledge management of ILO ROAP.
Materials and Method

Unit of Analysis
This study will focus on the knowledge development organization; therefore the unit of analysis in this study is a development organization, specifically the Regional Office for Asia and Pacific of the International Labour Organization (ILO ROAP).

Research Approach

Qualitative Investigation
This phase intends to investigate and to identify the important areas of Knowledge management processes as well as knowledge management context that are currently being used in organizations. For this purpose, the case study method was used through documentation, Interviewing, and observation techniques. The interviews covered the aspects of sources of knowledge, tools currently used in knowledge management processes, and related knowledge management contexts in development organization.

Sample and Sampling Techniques
This study is conducted in The Regional Office for Asia and Pacific of the International Labour Organization (ILO ROAP). In this study, key organizational informants are professionals who contribute to the generation of knowledge are able to access to and use the organization’s knowledge and are also able to describe the structural elements of the organization. As well, the use of the triangular technique to collect data from different sources of information is an effective approach. Therefore the respondent profile considered ideal for this study is a senior executive, middle managers and specialists of ILO ROAP who use knowledge for accomplishment of their tasks and can also provide commentary of the organization’s knowledge activity, as well as relevant actors, members of tripartite agreements, such as government officers who use knowledge from the database of ILO and participate in creating new knowledge for ILO.

The sample was selected by purposive sampling in accordance with responsibilities related to knowledge management and level of position in organization as well as a snowball technique. However, within the limited budget for research, the interviews were conducted with the informants who worked or visited the Regional Offices for Asia and the Pacific during the period of interviewing.

Data Analysis
As this study is a qualitative study that ultimately aims to describe and explain a pattern of relationships, therefore data analysis can be done through conceptually specified analytic categories.

Following the documentation study, interviews and field visiting, researcher analyzed the results by using exploratory content analysis. The results related to knowledge processes were classified and developed (Based on the research conceptual framework of knowledge processes). The results related to knowledge management context were classified and developed to be indicators for specifics and identifying the context (also based on the research conceptual framework of knowledge management context). The result related to knowledge outcomes were classified and developed for specifying and identifying knowledge outcomes, including trend analysis from documents of ILO to analysis the context and knowledge processes of knowledge management.

The documents include Governing Body report, the Strategic objectives, organization chart, ILO worldwide knowledge management related documents, OLO Database, OLO
Bureau of Publications, ILO Regional Office for Asia and the Pacific related documents, ILO programs and projects such as ILO Mekong Sub-Regional Project to Combat Trafficking in Children and Women (TICW) related documents, ILO Ability Asia related documents etc., and the related documents of development organizations such as United Nations research about knowledge management and Interviews with Key Informants: shown in Table 1

<table>
<thead>
<tr>
<th>Positions</th>
<th>Date of Interview</th>
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<tbody>
<tr>
<td>Advisor to Regional Director (Structure and Management)</td>
<td>April, 15, 2015</td>
</tr>
<tr>
<td>Chief, Budget Section, Financial Services Department</td>
<td>April, 7, 2015</td>
</tr>
<tr>
<td>Senior Labour Market and Human Resources Policies Specialist, East Asia Multidisciplinary Advisory Team (EASTMAT)</td>
<td>April, 20, 2015</td>
</tr>
<tr>
<td>Project Manager/CTA, ILO-Trafficking in Children and Women (TICW) project</td>
<td>May, 15, 2015</td>
</tr>
<tr>
<td>Direct, Area Office for China</td>
<td>April, 9, 2015</td>
</tr>
<tr>
<td>Director, Area Office for Pakistan and Liaison Office for Afghanistan</td>
<td>April, 20, 2015</td>
</tr>
<tr>
<td>Senior Human Resources Officer (Former is responsible for Regional Information Technology)</td>
<td>April, 25, 2015</td>
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<tr>
<td>Regional Libra</td>
<td>April, 23, 2015</td>
</tr>
<tr>
<td>Administrative Assistant (Meeting)</td>
<td>April, 24, 2015</td>
</tr>
<tr>
<td>Fellowship Officer</td>
<td>April, 22, 2015</td>
</tr>
</tbody>
</table>

| Constituents of ILO ROAP: Ministry of Labour, Thailand                    |                   |

| Author of KM Book and KM Related Director                                 |                   |
| Director Marketing & Communication, Siemens AG Corporate Information and Operations, Munich, Germany (Author of Communities of Practice, Knowledge Management Case Book: Siemens Best Practices) | January, 9, 2015   |

Table 1: Informants

Results and Conclusion

The assessment of the Regional Office for Asia and the Pacific (ROAP) of International Labour Organization (ILO), shows that knowledge management takes place in ILO although ILO does not officially announce its knowledge vision, knowledge management strategy and it does not establish its organizations for any direct responsibilities of knowledge management. The study found that knowledge management strategy involves both the personalization and codification knowledge management strategies. The Knowledge processes include sharing tacit and explicit knowledge, creating concepts, justifying concepts, building and archetype, and cross-leveling knowledge within organization and across inter – organization.

There are relationships between contextual elements and knowledge management processes. The contextual elements consist of organizational strategy, organizational structure, information and communication technology is a crucial factor enabling the cross-leveling knowledge process. Without adequate information technology, explicit knowledge effectively be transmitted to others.

Discussion

Holistically, it was found that ILO emphasized a personalization knowledge management strategy. This personalization knowledge management strategy consumed the
time and cost of specialists for travelling from country to country. The specialists had an overload of work to do.

The limitation of this knowledge management strategy is the experiential knowledge asset, which is tacit knowledge within Multidisciplinary Teams specialists. Multidisciplinary Teams specialists had to personally travel from one country to another to share experiential and conceptual knowledge assets with the constituents (Delamotte & Takezawa, 2005; Buchanan, 2004; Zack, Michael, 2007).

The problems of this knowledge management strategy are the shortage of specialists, and the time consumed in the development of experiential assets. At present, the experienced specialists had no time to share knowledge with non-experienced specialists (Greenberg & Baron, 2000; Gautam, Dick, Wagner, Upadhyay, & Davis, 2005).

The experiential knowledge is an individual level of knowledge, not organizational knowledge. Therefore, when specialists leave the organization, they take with them the experiential knowledge because it is tacit knowledge (Gautam, et.al., 2005; DiPaola & Hoy, 2004, Adams, Eric & Freeman, 2000; Zack, Michael, 2007).

As ILO knowledge from the codification knowledge management strategy is at organizational and inter-organizational knowledge level, the knowledge is explicit and is riposted organization-wide. It is not individual experiential knowledge that is tacit and it is not lost with the experts. If the experts are not available or if there are no experts at times, people can still access knowledge and can study it by themselves without the socialization knowledge management process. Furthermore, when the experts leave the organization, the knowledge assets still are with the organization. Members of organization, constituents, stakeholders, and public still can access knowledge from the knowledge base.

Personalization knowledge management strategy leads to an organic form of organization with informality, low complexity, and decentralization. The informality, low complexity, and decentralization in project management support the members for more interaction and sharing their knowledge in the field.

The formality of a mechanistic form of organization enhances the codification processes of knowledge management. The members of the organization record, research, and produce well-written reports in qualitative and/or quantitative form to keep as a database of the organization. Thus it explains why the ILO has the combination of historical experience, political legitimacy and universal coverage to be the knowledge centre of excellence of the world for employment and work. And this knowledge function highlights the identity of the ILO within the international community.
References


Resigning Education: Inducing Creativity and Innovation in Learning

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Abstract
The study attempts to explore the creativity and innovation abilities in school education and tries to assess the impact of induced creativity and innovation in learning in the various types of Government schools in Chhattisgarh (India). The study has been designed around two types of schools: I) State Level Government schools (rural and urban) and Central Level Government schools (Rural and Urban). The sample comprised of 200 students, 50 (25 girls, 25 boys) from each school. Divergent Production Ability Battery (DPA) was used as the instrument to measure creativity and Learning Environment Scale (L.E.S). The Learning Environment Scale (LES) has been prepared as an adaptation of the Family Climate Scale (FCS) by Beena Shah and the School Environment Inventory (SEI) by Dr. Karuna Shankar Mishra (1984). The results of the data analysis revealed sufficient evidence to establish that there is a significant positive relationship between divergent production ability and learning environment of the students. Creativity can be induced through various learning activities. Specific learning activities have an effective impact in creativity and innovative practices in classroom learning and teaching practices. The post-test of the study reveals that, in the 21st century, children can depict high divergent production abilities if taken care of and it makes the teaching and learning process more innovative, effective and interesting, especially for children who do not have the opportunity of high income or educated parents. The results of this study would help to foster creativity and innovation skills among the students.

Keywords: Divergent production ability, creativity, innovation
Introduction

Plato once said, “Do not train children to learning by force and harshness, but direct them to it by what amuses their minds, so that you may be able to discover with accuracy the peculiar bent of the genius of each.” The National Curriculum Framework (NCF) (2005) also made it clear that “the development of self-esteem and ethics and the need to cultivate children’s creativity, must receive primacy. In the context of a fast changing and competitive world, it is imperative that we respect children’s native wisdom and imagination” (p.5). It continues that “education must provide the means and opportunities to enhance the child’s creative expression and the capacity for aesthetic appreciation. Education for aesthetic appreciation and creativity is even more important today when aesthetic gullibility allows for opinion and taste to be manufactured and manipulated by market forces” (p.11). Creativity happens when we provide students a learning environment where they can’t escape without thinking. The learning environment plays a major role in the quality of education and it influences the learning outcomes. A proper learning environment is a prerequisite for quality education available to a child, both in school and outside the school as learning is a social process that takes place in the environment around the learners through interaction, observation and experience. It leads to modification in human behavior, human critical and divergent thinking. Runco (1999) suggests that high achieving learning environments involve students in a variety of learning activities that are challenging and aligned with learning goals, promote engaged learning, and draw on the culture, life experiences, and knowledge of all students. They allow students to discuss, argue, and analyze issues and concepts. Students explore, solve problems, and construct knowledge rather than just memorizing it. Their work is authentic, engaging, and important, and it builds understanding from in-depth investigation.

Therefore, schools must be concerned about promoting and nurturing the creative powers of children. Reimers-Hild and King (2009) described components of innovation as fun, creative, diverse, collaborative, and intuitive. Taking small steps to accomplish this goal is the way to go, but in that area we need a lot of support and encouragement. Taking risks and sometimes even looking at failure as “fuel for innovation” can help promote this process (Ryshke, 2012). The revised Cognitive Model of Bloom (Anderson & Crathwohl, 2001) focuses on creativity as the highest objective of instruction. But most of our classroom teaching is limited to convergent thinking and very few practices are made for divergent thinking. Divergent thinking is a unique power of the human mind for leading human beings to a high level of intellectual functioning. Torrance defines it as a problem solving ability. A person is called creative if he has divergent type of thinking especially in the production of ideas, fluency, flexibility and originality. The present study is based on the divergent production ability, which is regarded as an evaluation or assessment of creative ability as explained by Guilford. Divergent thinking is cognition that leads in various directions, some conventional and some original. As explained by Runco (1999), “Because some of the resulting ideas are original, divergent thinking represents the potential for creative thinking and problem solving” (p. 577). Thus, to the degree that these tests are reliable and valid, they can be taken as estimates of the potential for creative thinking.

The learning environment is the most dominating factor and background for enhancing divergent thinking skill. Most of the students who come from an economically poor class do not know where their future lies and what they are capable of. The teachers do not know how to induce the willingness to learn in these learners and keep them interested in learning. The structured classroom has no scope of creativity and innovation. The element of fun, curiosity, discovery, imagination, expression and thinking seems vague. The child is not interested in the art of learning.
Resigning Education: Inducing Creativity and Innovation in Learning

Literature Review

Research into the development of creativity in education is little, although some commentators suggest that creativity can be developed. Seltzer and Bentley (1999), for example, suggest in their recommendations on knowledge and skills for the new economy, that “creativity can be learned” (p. 10) and that the school curriculum should be restructured “to reflect forms of learning which develop creative ability” (p. 10). There is, it seems, a dearth of conclusive research evidence suggesting that creativity can be developed or that progression can be identified in creativity.

An overview of findings from such studies is given below using five categories:

1. Comprehensive approaches: Stein (1974) has summarized studies up until the mid-1970s, in which researchers evaluated attempts to stimulate adult creativity at the individual and group level, using a range of techniques, including role play, brainstorming, psychotherapy and hypnosis.

2. Educational approaches: Various kinds of training programmes have been advocated to develop creative thought processes. Although there have been attempts to do this within a school context, Vernon (1989) concludes that the results of such studies suggest they are much less successful than is sometimes maintained.

3. Psychodynamic approaches: Both psychodynamic approaches and humanist approaches emphasize the development of personality traits.

4. Humanistic approaches: These approaches concentrate on growth within the individual agent. However, neither the psychodynamic nor the humanistic interventions have conclusively improved creative production (Stein, 1974).

5. Behaviorist approaches: Behaviorisms as a branch of psychology have not taken creativity to be a major focus of work. However Ryhammer and Brolin (1999) suggest that some educational programmes contain within them behaviorist assumptions.

The learning environment includes the space and how it is arranged and furnished, routines, materials and equipment, planned and unplanned activities, and the people who are present (Peterson & Kent, 1995). There are information society haves and have-nots; membership of these two classes is significantly predicted by income, education, and, to a lesser extent, race/ethnicity, location, and age. “Except for gender gaps, these disparities have persisted over a period when the technologies of interest have decreased dramatically in price and increased markedly in user-friendliness. More worrisome still, gaps based in income and education have not merely persisted but have, in fact, increased significantly. There is nothing in the data, then, to suggest that, without policy intervention, these gaps will close” (Bikson & Panis, 1997, p. 426). Although Shallcross (1981) identified a range of strategies important in pedagogical approaches to creativity, yet there is a need to find intervention to induce creativity and innovation in learning. Based on the above review of literature, the following research questions were framed:

1. How can we assess the creativity in the children at the elementary level?
2. How do the learning environments play a role in creativity and innovation?
3. How can we measure creativity in children?
4. Is there a way to induce creativity and an innovation in learning?
5. How can we create an environment that encourages innovation and creativity?
Hypotheses

H_1- “There will be a significant difference in between the divergent production ability with respect to State Level Government Schools and in Central Level Government schools.”

H_2- “There will be no significant difference in between the divergent production ability with respect to the boys and girls of State government schools and Central government schools.”

H_3- “There will be a significant difference in between the Learning Environments (LE) with respect to State Level Government Schools and in Central Level Government schools.”

H_4- “There will be significant difference in between DPA of high and low Learning Environments of students.

H_5- “There will be significant correlation between DPA and Learning Environment with respect to High, Average and Low Levels of Learning Environment.”

H_6- “There will be significant difference in the pre-test and post-test of divergent ability test after the implementation of Divergent Thinking Ability programme.”

Operational Definition

1 Divergent Production Ability - According to Guilford (1970), divergent or “synthetic thinking” is the ability to draw on ideas from across disciplines and fields of inquiry to reach a deeper understanding of the world and one's place in it. Guilford has provided six divergent production abilities: ideational fluency, associational fluency, expressional fluency, spontaneous flexibility, originality and semantic elaboration.

2. Learning Environment - This includes the environmental conditions under which learning takes place, an environment or a climate, which not only facilitates learning of a prescribed curriculum and syllabus, but also promotes values and attitudes, creativity and thinking process. However, a child learns from the home environment, too. Hence, to study the learning environment, the investigator shall study both the school environment and home environment for the present study.

Methods of Research

Sample
The study consists of Purposive Random Sampling of class VIII students, boys and girls ranging from 14-15 years of age belonging to both state government schools and central government schools (Total - 04) of rural and urban areas of Bilaspur district, Chhattisgarh.

Interpretation of variables
1. Independent Variable - learning environment.
2. Dependent Variable - divergent thinking abilities.
3. Associated Variable - girls and boys from rural and urban locale.

Research Tools
1. The Battery of Divergent Production Abilities (DPA) Measure of Creativity by Dr. K.N. Sharma, Department of Psychology, University of Rajasthan, Jaipur.
2. The Learning Environment Scale (LES) has been prepared as an adaptation of the scale FCS (Family Climate Scale) by Beena Shah and SEI (School Environment Inventory) by Dr. Karuna Shankar Mishra (1984). Prayag Viswavidyalaya, Allahabad. (Scoring System is given in appendix 1.)
Research Design

The pre-test was taken by using the DPA test. The learning environment was categorized as low, moderate and high and both the learning environment of both State Level schools and Central Level schools were assessed by the Learning Environment Scale.


Post-test was implemented after three months and inferences were drawn.

Findings

H1- “There will be a significant difference in between the divergent production ability with respect to State Level Government Schools and in Central Level Government schools.”

With a view to putting to test the hypothesis, the data of the Divergent Production Ability (DPA) test of all the pupils were arranged into separate categories, and the mean and standard deviation of the Divergent Production Ability (DPA) of the pupil were calculated. The t-values were found out separately to see whether any significant differences exist in the categories. The scores were obtained for mean, S.D. and “t” values. The result obtained is shown in Table No. 1.1.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
<th>df</th>
<th>“t” values</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Central</td>
<td>100</td>
<td>72.05</td>
<td>21.20</td>
<td>198</td>
<td>5.38</td>
<td>Significant</td>
</tr>
<tr>
<td>2. State</td>
<td>100</td>
<td>57.63</td>
<td>16.56</td>
<td></td>
<td></td>
<td>P&lt;0.01</td>
</tr>
</tbody>
</table>

Table No. 1.1: DPA of students of class IX of Central & State Level Govt. Rural & Urban Schools

The “t” value (5.38) thus calculated is significantly higher than the table value (2.60) at .01 level of confidence. From the above calculation, the hypothesis is accepted. The difference between the mean of Central Level Government Schools (72.05) and the mean of State Level Government Schools (57.63) are more or, we can say, significant.

H2- “There will be no significant difference in between the divergent production ability with respect to the boys and girls of State government schools and Central government schools.”

With a view to putting to test H2, the data of the Divergent Production Ability (DPA) test of all the pupils were arranged into separate categories, and the mean and standard deviation of the Divergent Production Ability (DPA) of the pupil were calculated. The t-values were found out separately to see whether any significant differences exist in the categories. The scores were obtained for mean, S.D. and “t” values. The result obtained is shown in the given table:

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
<th>df</th>
<th>“t” values</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Girls</td>
<td>100</td>
<td>64.29</td>
<td>20.78</td>
<td>198</td>
<td>0.34</td>
<td>NS</td>
</tr>
<tr>
<td>2. Boys</td>
<td>100</td>
<td>65.39</td>
<td>19.91</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table No 1.2: DPA of students of class IX of CENTRAL and STATE Level Govt. Schools Boys and Girls
The “t” value (0.34) thus calculated is significantly less than the tabled value (2.60) at .01 level of confidence. Thus, from the above calculation, Hypothesis -H2- is accepted. The difference between the mean of girls (64.29) and the mean of boys (65.39) are much less or, we can say, insignificant.

**Figure 1**: DPA of students of class IX of CENTRAL and STATE Level Govt. Schools Boys and Girls

H3- “There will be a significant difference in between the Learning Environments (LE) with respect to State Level Government Schools and in Central Level Government schools.”

With a view to putting to test H3, the data of the learning environment test of all the pupils where arranged into separate categories, and the mean and standard deviation of the learning environment (LE) of the pupil were calculated. The t-values were found out separately to see whether any significant differences exist in the categories. The scores were obtained for mean, S.D. and “t” values. The result obtained is shown in the table.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
<th>df</th>
<th>“t” values</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Central</td>
<td>100</td>
<td>117.66</td>
<td>18.04</td>
<td>198</td>
<td>2.58</td>
<td>Significant</td>
</tr>
<tr>
<td>2. State</td>
<td>100</td>
<td>100.45</td>
<td>18.38</td>
<td>198</td>
<td>2.58</td>
<td>P &lt; 02</td>
</tr>
</tbody>
</table>

Table No. 1.3. Learning Environment of students of Government Central Level Rural & Urban Schools

The “t” value (2.58) thus calculated is significantly higher than the table value (2.35) at .02 level of confidence. From the above calculation, Hypothesis- H3 is accepted. The difference between the mean of Central Level Government Schools (117.66) and the mean of State Level Government Schools (100.45) are less and a significant difference exists between two groups.

H4- “There will be a significant difference in between DPA of high and low Learning Environments of students.”

With a view to putting to test H4, the data of the learning environment test of all the pupils were arranged into separate categories, and the mean and standard deviation of the learning environment (LE) of the pupil were calculated. The t-values were found out separately to see whether any significant differences exist in the categories. The scores obtained for mean, S.D. and “t” values. The result obtained is shown in
The “t” value (20.68) thus calculated is significantly higher than the tabled value (2.63) at .01 level of confidence. From the above calculation, Hypothesis H₄ is accepted. The difference between the mean of the high environment (85.90) and the mean of the low environment (52.4) is high and a significant difference exists between two environments.

H₅- “There will be significant correlation between DPA and Learning Environment with respect to High, Average and Low Levels of Learning Environment.”

The present hypothesis has the objective to test the effects of the learning environment with the variable of divergent thinking ability of the students. With a view to putting H₅ to test, Pearson’ coefficient relations (r) between the scores of DPA and LE have been compared. For the computation of correlation between divergent thinking ability and learning environment, coefficient of correlation (r) has been calculated for each class separately and for all the two types of school. The correlation thus found has been
transformed into Fischer’s z-function and averages of these z’s were calculated. The mean z has then again been converted into an equivalent (r).

To test the hypothesis on the basis of vicinity and for the total population, all the students of the two types of schools were combined for urban and rural areas separately and then jointly, and the correlation and its significance were tested. The results thus found have been shown below in Table No 1.5.

<table>
<thead>
<tr>
<th>S. No</th>
<th>AREA</th>
<th>CLASS</th>
<th>NO.STUD</th>
<th>Correlation (r)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CLSURBAN</td>
<td>IX</td>
<td>50</td>
<td>+0.88</td>
<td>S. High</td>
</tr>
<tr>
<td>2</td>
<td>CLSRURAL</td>
<td>IX</td>
<td>50</td>
<td>+0.69</td>
<td>S. Moderate</td>
</tr>
<tr>
<td>3</td>
<td>TOTAL</td>
<td>IX</td>
<td>100</td>
<td>+0.78</td>
<td>S. Moderate</td>
</tr>
<tr>
<td>4</td>
<td>SLSURBAN</td>
<td>IX</td>
<td>50</td>
<td>+0.72</td>
<td>S. Moderate</td>
</tr>
<tr>
<td>5</td>
<td>SLSRURAL</td>
<td>IX</td>
<td>50</td>
<td>+0.28</td>
<td>S. Moderate</td>
</tr>
<tr>
<td>6</td>
<td>TOTAL</td>
<td>IX</td>
<td>100</td>
<td>+0.50</td>
<td>S. Moderate</td>
</tr>
<tr>
<td>7</td>
<td>GRAND TOTAL</td>
<td>IX</td>
<td>200</td>
<td>Equivalent r=0.63</td>
<td>S. Low</td>
</tr>
</tbody>
</table>

Table No 1.5: Relationship between DPA and Learning Environment.

The correlation of learning environment of CLS with divergent production ability for class IX students shows significant positive correlation \((r=+0.88)\), which is moderate in urban central schools, and slightly moderate significant positive correlation \((r=+0.69)\) in rural central schools and significant moderate positive correlation \((r=+0.78)\) in total CLS urban and rural schools.

The correlation of DPA of SLS with the learning environment for class XI students shows significant highly moderate positive correlation \((r=+0.72)\) in urban state schools and shows low positive correlation \((r=0.28)\) in rural state schools and significant moderate correlation \((r=0.50)\) in total SLS urban and rural schools.

These results indicate that the learning environment is highly significant in the central urban schools and moderately significant in central rural schools, moderately significantly in state urban and low positive significant in state rural schools. Jointly, we find that there is a moderate significant positive correlation between the learning environment and DPA of students of class IX (equivalent \(r=+0.63\)). On the strength of the above results, the hypothesis is accepted.

We infer that the learning environment has an important role to play in the divergent production ability of the students, which is considered as one of the most important creative factors of individuals. It also highlights that the learning environment of the Central Government Schools is better and have a positive impact on the DPA of the students while the State Government Schools’ learning environment needs to be improved.

\(H_6\) – “There will be a significant difference in the pre-test and post-test of divergent ability test after the implementation of Divergent Thinking Ability programme.”

To test the above hypothesis, the mean scores of pre-test and post-test along with SD values on different areas of DPA were tabulated and subjected to t test.
The above table indicates that all the 100 students of four schools who underwent the intervention programme of DPA depict significant differences in all the pre-test and post-scores in all the eight areas. In all the eight areas of divergent production abilities, the mean scores of pre-test differed from the post-test significantly at 0.01 level. It indicates that the intervention of inducing the Divergent Thinking Programme in eight areas as per the DPA test in three months has proven to be effective in bringing about significant differences in different areas of Divergent Production Abilities as the obtained t-value is found significant at 0.01 level. Hence, the above hypothesis is accepted. From this, we can infer that creativity can be enhanced/fostered or can be induced through teaching, and learning can be made more effective, innovative and creative by inducing different types of activities in classroom teaching. The research findings are supported by the findings of the study of Vora (1984) who reported that creativity increased as a result of treatment of the Divergent Thinking Programme.

**Discussion**

Results obtained in the present study showed that the independent variable learning environment (LE) is significantly associated with DPA, the dependent variable of the study. The noticed association of the two types of schools, i.e. State and Central, needs different interpretations.

**Influence of learning environment on DPA**

The result obtained on H₂ indicates that Learning Environment of a child, which includes both school and home environment, emerged as the most significant factor interacting with DPA in the pupils of class IX of both urban and rural State level government schools and both urban and rural Central level government schools.

The present study suggests that the children belonging to urban locales have better DPA than those belonging to rural locales whether it is a state level school or a central level school. Wright (1987) listed the factors that influence creativity as home environment, “respect for the child, the stimulation of independence and enriched learning environment”. Pratt-Summers (1989) found similar results to the one described above. Jausovoc (1988) and
Dorner (1979) discovered that the teacher’s teaching style (based on Piagetian cognitive theory: exercise training, tactical training, and strategic training) was related to the development of creativity in students. These results support the notion that interpersonal variables are important catalysts and/or inhibitors of creativity. The Urban schools are better equipped with resources – both human and material and the influence of media – TV, internet, channels, peer groups and community all have an influence, which is always not available in rural areas. Sudhir Kumar, M.A. (1992) has reported similar findings of his study “Socio-educational Correlates of creativity among secondary school students in Arunachal Pradesh.” The State government school students had an edge over the central school students in creativity. Exposure to mass media seemed to have a positive significant effect on the creative thinking ability. The students highly exposed to media had an advantage over the low exposed students in their creative disposition. Moreover, interest of an individual is related to DPA and there the above-mentioned media, technical information and sports play a major role which is directly associated with the creativity of a person. Of course, accessibility of these facilities is equally important.

Though the study suggests that there is no significant difference between the DPA of State rural and urban school pupils, there is a significant difference between the rural and urban schools of central level schools. The findings of the present study are similar to those of Guilford, et al. (1970) who found little relationship between performance and divergent thinking and personal interest. However, it does not completely disagree with the findings of Pandey A.K. (1989) who found that the interest of an individual is related to DPA. As we find in the present study, there is a significant difference in between the rural and urban schools of central level schools. Dellas and Gaier (1970) reported in their study that “creative persons are distinguished more buy interests, attitudes and drives than by intellectual ability.”

The relationship between DPA & LE is consistent and positive. The correlation between High LE & DPA, Average LE & DPA and Low LE & DPA are .65, .52 and -.29, respectively. Also, the number of students influenced varies accordingly like 74, 106 and 20, respectively. This shows that correlation depends on the Learning Environment in high and medial status of learning environment and the maximum number of schools comes under the category of medial learning environment depicting a moderate status of correlation with DPA. While the DPA of higher level of L.E. is expected to be constantly high, it can also be noted that a very few people are influenced in their DPA with respect to low level of L.E. The negative correlation – .29 – also shows that the low level of correlation might affect divergent production ability (DPA) showing no influence due to learning environment. Hence, there could be many students whose DPA score are appreciable in spite of their low learning levels. This finding has been similar to the findings of Dubey (1986), who, in her study, “An Ecological Study of Educational Influences on Development,” has accepted the hypotheses that there is a positive association between enriched school environments and creative thinking. Although recent studies of creativity have focused on systems approaches, which explore creativity in a social environment, there is nevertheless evidence (Spiel & Von Korff, 1998) that researchers tend to focus more on the person and the process than on the outcome or the social context in which the creativity occurs. There is some evidence from the Sudan that a “modern” education approach does not necessarily improve creativity (Khaleefa et al, 1997). However, it has been argued that it is essential to create the climate and the skills for fostering creativity in order to educate a generation of young people who can visualize new solutions to the problems of today and tomorrow’s work force, social fabric, and environment (Kessler, 2000).
Influence of Gender Differences on DPA

The present study aimed at determining if there was only significant difference between the boys and girls with regard to divergent thinking ability. It has been found that there existed no significance difference in the DPA of girls and boys of class IX of both urban and rural State Level Schools and Central Level Schools. It may be said that sex has no effect on DPA. This finding of the present study is supported by the studies of Prakash (1966). The majority of the research which concentrates on gender states that there is not a consensus on the impact of gender upon creativity.

Torrance (1983) wrote, “a substantial body of evidence indicates that males and females perform at similar levels of tests designed to measure creative potential” (p. 134). Harriss (1989) found that women were discouraged from becoming artists. Torrance and Allioti (1969) discovered that 13-year-old girls had higher verbal creative ability compared to boys of the same age. Gupta (1979) did not find that there was a significant difference between boys and girls in verbal creative ability but found that there were distinct elements of non-verbal ability in which each scored significantly higher.

Vernon (1989) concludes that the results of such studies suggest they are much less successful than is sometimes maintained. For although specific skills, such as problem solving, can generally be trained and improved upon, there is rarely a transfer to more complex activities such as creative production and the influence of sex do not interfere in the creative process of an individual.

Creativity among Urban and Rural Students

In the present study from the tested hypotheses, we have come to the conclusion that there is no significant difference in the rural and urban State government as far as DPA is concerned. According to Sharma (2006) there is no significant difference between rural and urban students in terms of the degree of creativity. However, Sameeda (1982) supports the present finding that significant differences do exist between the divergent production ability with respect to rural and urban locales in Central government schools.

Inducing Creativity and Innovation in Learning

Divergent Thinking Ability is regarded as the “hallmark” of creativity. The present study infers that creativity can be induced through classroom teaching and learning in students and the test score of pre-test and post-test of the divergent thinking programme depicts a significant increase in DPA. Gulati (1999) also reported that the mean scores improved in post-test in comparison to pre-test significantly both in the case of flexibility and originality and it can make teaching much more effective and interesting as it indulges thinking and engaged minds.

Conclusion

There is a need to restructure and redesign the various aspects of our school; the physical space, the time tabling of lessons, and the relationship between subject areas, in ways which would encourage the interchange of knowledge and creative learning. In setting out on a journey of remodeling learning in new and powerful ways, it may be possible to promote dialogue with our family of schools to achieve consistent and creative learning experiences for pupils.

1. Aspects like Curriculum emphasis, the role of the classroom teacher, the structure of remedial educational environments should be able to foster creativity.
2. We need to actually find out the opportunities for developing activities that take learning out into wider communities and contexts other than schools.
3. Where this already happens, we might forge stronger connections between the formal curriculum and the wider learning that already exists.
4. We must seek community support, expertise and commitment to help in culturing creativity and co-ordinate with them those who can help us with this process.
5. We can also find out the kinds of assessment help to capture creativity and its value for the whole school.

Finally, for all this to happen, we need our schools and organization to entail this idea of fostering creativity as a challenge. The set of organizational challenges implies a task for leaders; to approach their own responsibilities and tasks in a way that models the creative learning process and strengthens culture of creativity. This can be particularly hard in high-pressure schools and organizations, which are striving to meet many different kinds of demand and accountability. However, the challenge is not just to exercise creativity in the gaps and in the margins – it is to bring creative capacity to bear on the core learning challenges and organizational problems those schools and their communities face. For example, if creativity partly involves the ability to transfer knowledge and experience between contexts, how much can this capacity be developed through a curriculum broken up into separate subjects? The national curriculum contains a number of cross-curricular themes, but how are they embedded in and diffused across the range of taught subjects? Is it possible to sequence and combine the teaching of different subjects and stages of the curriculum to maximize the opportunity for transfer of understanding across them, and for generating multiple perspectives on a common body of knowledge? The point is not that there is no scope for creativity in our existing frameworks, but that we should learn to see the extent to which habitual routines, hidden assumptions and external structures condition the extent to which we can model and develop creative learning and school can produce creative learners.

**Delimitation of the Study**

(a) The present study is delimit to class IX - the post-elementary level.
(b) Schools taken belong to the Central government and State government.
(c) Central government schools include Kendriya Vidyalaya from an urban locale and Navodaya Vidyalaya from a rural area.
(d) Two schools, one urban and one rural, were selected from the State government schools.
References


A Software Project Management Innovation (SPM) Methodology: A Novel Method for Agile Software Development

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Abstract

This paper seeks to define and describe a new and effective Agile Software Development Method, which comes under the auspices of the Software Development Life Cycle (SDLC). The method has been satisfactory experimented by the Royal Saudi Air Force (RSAF). This paper called the method “Software Project Management (SPM)” which gives the development team to control and manage software project resources more effectively by increasing team collaboration and productivity thus decreasing the amount of time needed to complete the project. The methodology, therefore, allows clients more time to produce a dedicated and well-integrated application by applying a refined systematic and structured process of continuous refinements within a defined period. This paper fills a gap and contributes knowledge towards Agile Software Development methodologies by providing a new novel method that has been tested, applied, and modified during managing RSAF’s software projects.

Keywords: Software project management, SPM, Agile Software Development, SDLC.
Introduction

In the last decade, Software Development Life Cycles (SDLC) has undergone a major revolution in the Information Systems (IS) arena. Numerous software development methods have appeared in this field. Developmental approaches originated in the field of IS but the risk facing both in-house and outsourcing software teams is to develop applications that meet customer satisfaction within a given timeframe.

This paper describes some of the agile methods. Then discusses the new methodology, which is the topic of this research.

The study is presented in five sections. The following section, reviews some agile software development concepts, their values, principles and characteristics. The second section describes some example agile methods, such as, SCRUM, Unified Process (UP) and Feature-driven development (FDD). The third section covers Software Project Management Methodology (SPM), which is the central feature of this study. The final section summarizes the research by describing its contribution to knowledge, its implications and its scope for further work in the field.

Literature Review

An overview of Agile Software Development

The purpose of this section is to present an overview of Agile software development. To begin with, Agile software development (ASD) is a set of software development methodologies that is an alternative to the traditional waterfall approach. ASD focuses on finding a way of flexibility, close collaboration between the development team and business side, keeping code simple, shorten the development time-frame, respond to predictable and unpredicted change, do more tests on small releases of the system, and delivering each release as soon as it is ready. It consists of a group of software development methods that share the same characteristics.

Agile software development comprises different development methods but teams agree upon the need for collaboration, e.g. programmer teams and business experts in order to deliver a particular software project. It encourages group planning, evolution, many deliveries during the particular project, continuous improvement and flexibility to change (Agile Alliance, 2013).

Agile software development is grounded in techniques developed by James Martin (Martin, 1991) and James Kerr et al (Kerr & Hunter, 1993). In 2001, representatives from Extreme Programming, SCRUM, DSDM, Adaptive Software Development, Crystal, Feature-Driven Development and Pragmatic Programming met to consider lightweight development methods and produced an Agile Software Development Manifesto (Agile Alliance, 2013). At the manifesto’s publication the authors said,

“We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

- **Individuals and interactions** Over **Processes and tools**
- **Working software** Over **Comprehensive documentation**
- **Customer collaboration** Over **Contract negotiation**
- **Responding to change** Over **Following a plan**

    That is, while there is value in the items on the right, we value the items on the left more”

(Agile Alliance, 2013).

Agile Software Development, therefore, considers self-organization, interactions and motivations are more important than process and tools. It also considers working software more important than presenting documents to clients in meetings. Thirdly, it values customer collaboration to fulfill better their requirements because during the initial stages of the project customers cannot always precisely define them. Therefore, customer collaboration/involvement is very important. Finally, this type of development believes that software
projects should not stick to a fixed plan but be capable of making a quick response to change. Highsmith and Cockburn (2001, p. 122) said, “What is new about agile methods is not the practices they use but their recognition of people as the primary drivers of project success, coupled with an intense focus on effectiveness and maneuverability.” (Highsmith & Cockburn, 2001)

There are 12 principles or rules in the Agile Manifesto as follows (Agile Alliance, 2013):

1. Customer satisfaction through the continuous delivery of useful software is important.
2. Changing requirements is welcomed and acceptable even if it comes late during development.
3. The software is delivered within a couple of weeks for each cycle.
4. Developers and clients cooperate and work together on a daily basis.
5. Projects are built around motivated and individuals who are trusted by customers. These individuals should facilitate customers’ needs and prepare the appropriate software environment.
6. Face-to-face conversation is the best method to understand clients’ requirements.
7. The best measurement of progress is the working software itself.
8. Promote sustainable development and all participants in the project should maintain a constant pace.
9. Continuous attention to deliver fast quality software with a high potential for user acceptance and at the same time it should possess the ability to adapt to changing business requirements.
10. Simplicity is important. This can be achieved by reducing the amount of work required to operate the software without loss to its functionality.
11. A self-organizing team is essential because it is the key to achieve best requirements, design and architecture.
12. The team should hold regular discussions about their practices and seek ways to become more effective.

Characteristics of Agile Software Development

There are nine characteristics of Agile Software Development as follows (Agile Alliance, 2013):

1. Modularity: It is breaking the process of development into different modules called activities.
2. Iterative: The development process comes in short cycles to achieve good results with respect to verifications and corrections.
3. Time-bound: For iterations there is a time limit, which makes the project easy to plan and develop, and lower the risks every four weeks.
4. Parsimony: Agile processes attempt to remove unnecessary activities to reduce risks and heighten success.
6. Incremental: Agile processes do not deliver the entire work at once but divide the system into increments. This helps to teams to work in parallel within different time scales.
7. Convergent: Agile processes apply all techniques to reach goals.
8. People-Oriented: Agile processes favor people over process and technology.
9. Collaborative: Agile processes encourage team members to communicate and collaborate with each other for quicker integration in large projects and to be able to work in parallel.
Reviewing some of Agile software development methods:

This section reviews some examples of the previous studies of different methods of the Agile Software Development such as SCRUM, Unified Process (UP) and Feature-driven development (FDD). A brief description about some of these methods follows.

SCRUM

Scrum is an agile software development method that manages software product development, which was developed in 1986 by Hirotaka Takeuchi and Ikujiro Nonaka in the New Product Development Game (New Product Development Game, 1986). It is a flexible strategy that allow development teams to work as a unit in order to reach the software’s goals. The process is described,

“Scrum is a management and control process that cuts through complexity to focus on building software that meets business needs.” (Scrum.org, 2015).

In other words, Scrum is “a simple framework for effective team collaboration on complex software projects” (Scrum.org, 2015).

The main principle of SCRUM is during a software project, the owner of the project has the ability to change requirements even in the middle. This cannot be achieved easily if traditional development methods, e.g., a sequential process, such as, the waterfall model are used. The following diagram presents SCRUM’s process framework.

![Figure 1: The SCRUM method lifecycle (Scrum.org, 2015).](image)

Before describing the main roles in Scrum, this study presents and explains the terms “Product Backlog” and “Sprint Backlog”. To begin with, product backlog is an ordered requirement list for the product. The product owner has the main responsibility for it. It can be changed during the stages of the project. It lists the requirements, functions and features of the product. It has items like description, order, estimated time and value. The advantage here is that requirements can be changed while project is still in development. Product backlog refinement usually takes no more than 10% of the capacity of the development team. The more important items in the product backlog should be more detailed compared to those of lower importance.

On the other hand, sprint backlog is a set of items for each sprint that is selected from the product backlog. During sprint, the sprint backlog is updated after each Daily Scrum.

After describing the above terms, this study presents the three main roles in SCRUM. The first role is the product owner who is a person represents the customer (client) by writing the customers’ needs (user’s story) and ensuring that the development team delivers the correct
and accurate product to the business. He/she is responsible for ranking and prioritizing the requirements and adding them to the product backlog.

The second role is the development team in which the team is made between three to nine people. These people are a mixture of analysts, developers, designers, testers and writers of documents. They are responsible for developing and delivering the parts of the final product at the end of each sprint.

The third role is the scrum master who is responsible for eliminating risks and removing obstacles during the project. This helps the team to achieve their goals. The scrum master, however, is not a project manager but a person who facilitates teamwork and ensures that the Scrum process is used as originally proposed.

Sprint is the core key of Scrum. Each sprint last between 1-4 weeks. During each sprint, no one can make a change but the scope can be negotiated for clarifications. This helps the team to learn more about the issues under work. This approach helps to limit risk to one month of the costs.

Scrum proposes four events in order to adapt (Scrum.org, 2015). First is the sprint Planning event which plans what needs to be delivered during this sprint and how much time is required in order to achieve the work. The maximum time for this stage is eight hours in case the sprint is one-month long. Second event is the fifteen minutes daily scrum meeting which held between members of the development team to assess what has and needs to be achieved during the next workday. The rule of the scrum master is to ensure that the development team has attended the meeting within the fifteen minutes’ period. Third event is the sprint review. This event has a maximum of four hours. This meeting takes place at the end of each sprint to assess what was achieved during the sprint and compare it to the Product Backlog. The product owner explains what has been and not been done in the Product Backlog. The development team presents their work and problems that arose during the sprint and how they propose to solve them. The forth event is the sprint retrospective. This event is a maximum of three hours long. The meeting is a good chance for the team to plan improvements for the next Sprint.

Unified Process (UP)

It is a simple and easy approach for developing business software using agile techniques (Scott W. Ambler + Associates, 2006). The Unified Process captures the nature of Agile in its four phases (Scott W. Ambler + Associates, 2006). The first phase is the inception which identifies the initial scope of the project and the system’s potential architecture. Then the second one is the elaboration phase which verifies the architecture of the system. The third phase is the construction. This phase builds the software on a regular and incremental basis. The final one is the transition phase that validates and deploys the application into the production environment.
As seen in the above figure, disciplines are performed in an iterative manner (Scott W. Ambler + Associates, 2006). To begin with, model aims to understand the business model of the organization and identifies the problem, and finds the best solution. Then, implementation which transforms the model into an executable programming code. Then, the test that evaluates the system for quality purposes. This includes finding bugs and ensuring that requirements are met. Next is deployment discipline which aims to deliver the system to end users. Then configuration management which manages access to the projects’ artifacts. This includes versioning and managing changes to the system. Then, project management which directs project activities. For example, it manages risks, assigns tasks to people and tracks progress to make sure that it delivers on time and within budgetary limits. Then, the environment discipline that ensures that processes, standards, guidelines, software, and hardware are available to the team.

UP produces the system for release in different versions (v1, v2…etc) but before that it delivers development releases at the end of iterations into pre-production servers.
The figure above shows that production release only comes after many development releases. Moreover, the first production release is normally longer than the later ones. For example, if the first production release takes 6 months, then the next production release may be delivered in a shorter time, e.g. 4 months.

UP Agile philosophies are based on five principles (Scott W. Ambler + Associates, 2006). The first principle is that teamwork is oriented. They may need some high-level guidance from time to time. The second one is the simplicity in which a few papers not thousands explain everything briefly. The third principle is the agility which follows the principles of the Agile Alliance. The forth one is the focus on high-value activities. As stated in the characteristic of Agile, it attempts to remove unnecessary activities to lighten risks and be successful. It focuses, therefore, on activities that actually count. Final principle is the tool independence in which any tools are welcomed while applying Agile UP, such as, any open source tools.

**Feature-driven development (FDD):**

FDD claims to be one of the lightweight Agile methods (DeLuca, 2007). It is motivated from a client-valued feature perspective in certain time. The method was developed by Jeff De Luca in 1997 for a development project in Singapore (DeLuca, 2007). The project involved a fifteen-month period and fifty software specialists. Jeff De Luca used five processes to develop.
As seen in the figure above, there are five processes (Highsmith J. A., 2002). The first process is the develop overall model. It started with a high-level of understanding of the system. Then, many detailed models were created. Each model consisted of a small group. Each model (or combination of models) was selected to become the model for a certain domain area. At the end, these domain area models were gradually merged to create the overall model. The second is to build feature list. After completing the first process (develop
overall model) and after gaining enough knowledge, the team identifies the list of features. Each area covers some of the business activities and forms the categorized feature list. The feature list contains the features that are important to the user (client-valued functions). Each feature takes no more than two weeks. If not, then it should be broken into smaller ones. The third process is to plan by feature. This process comes after completing the feature list described above since it starts with developing the plan for each feature by assigning each feature as a class (each class has an owner) to the programmers. The fourth process is to design by feature. In this process, the senior programmer selects some of the related features that can be finished in no more than two weeks. He/she prepares the diagram for each feature enhancement for the overall model. Then, after writing the class, a design review is held. The fifth process is to build by feature. In the previous process, client satisfaction was understood. This step is to produce a completed feature by developing the code for each class. Then each unit is tested to be able to integrate it into the main building up of the software.

After reviewing agile concepts and some of its methods, the next section presents and explains the innovated SPM methodology.

**Software Project Management methodology (SPM)**

This paper innovated the first version of the SPM. Therefore, it stretches and enriches this type of software development and overcomes some of the difficulties encountered when applying other agile methods. It provides a good approach to software project management and solution delivery. SPM is an iterative and incremental approach that uses the principles and characteristics of agile software development and the IIFO method, which prioritizes project items that need to be delivered. The following section presents and discusses SPM in more detail.

**Definition of SPM**

SPM refers to “Software Project Management” method which is a management process that builds systems that is flexible, easy to amend during the development process to achieve customers’ needs and their requirements within a specified time-scale and deliver the work incrementally and iteratively with a high percentage of success.

The paper verifies that SPM is simple to understand, easy to manage and is a lightweight method. In order to apply SPM, there are some sequence of processes involved that perform the methodology.

The first stage has many processes. To begin with, client and developers’ team should agree on a business case that captures the reasoning for the project and presented in a semi-structured written document. This document can be modified during the project’s time-frame. Therefore, the business case helps developers and clients (end-users) in defining the main aim of the project and its initial objectives. Once the business case is captured, the product vision will be rich and will sets the direction and guidance to both developers and end-users. This results in defining and describing the scope of work (SOW) which covers the milestones, deliverables, time-line and the software product that is expected to be produced. The previous processes construct the initial understanding of the project requirements. Once these processes are defined, both parties can complete the project charter and signing the agreement. Then both parities participate in preparing the initial planning which helps to define and build the developers’ team.

The second stage takes no more than two weeks. This stage reviews the documents and label the required products and services. These requirements should be understood and documented but they can be changed during the project. The documentation includes the initial requirements’ list. At the end of each session, the team briefly repeats what they have understood to clear up any misunderstanding. Depending on these products and services, the
A Software Project Management Innovation (SPM) Methodology

team is build. The team has a project’s manager who direct the software team, minimize risks, offer a healthy environment for the team and make sure all roles are defined and tasks are completed within time-scale. The developers team has one or more sub-teams which consist of programmers, analysts, documenters, testers and customer’s representative (end-user). Each sub-team consists of no more than five specialists. The leader of the sub-team is a senior programmer or analyst and contains a end-user representative who can understand users’ needs such as an analyst or a chosen representative from the client’s side can hold this position.

After building the right team and its sub-teams, the project moves forward to the third process which called the prioritized requirements process. Once the team has understood the scope of the project and documentation and the initial requirements activities, the team moves to make a new list that contains the important products’ categories by applying Important-in-First-out (IIFO) for organizing and manipulating the product categories. The output for this process is a prioritized list of requirements activities. This process should not take more than 4 hours.

The iterative and incremental process is the forth process of the SPM. The team break each category into tasks. Then combine them together into segments. Each segment should not take more than three weeks to deliver. Each completed segment should go through testing process and pass through quality assurance process (QA), functional tests and then user’s acceptance. Once the segments pass these steps, they can be integrated into the beta version (development environment) of the software. This process is iterative and incremental.

The final process comes after the last segment. In this process, the complete beta version go under a complete testing process (QA, functional tests and through the client’s acceptance process) as a piece of completed integrated software. This means that the beta version is ready to release. Therefore, at the end of this process, the client signs the acceptance form and start working on the software under the support agreement. This process takes no more than two weeks.
Prioritized Requirements

Initial understanding of the project requirements and initial documentation

Iterative (1-2 weeks)

Initial understanding of the project requirements and initial documentation

Scope of work

Business Case

Product Vision

Project Charter

Kickoff meeting

Building teamwork

Plan

Contract

Figure 6: SPM methodology

Development Process

Iterative (1-4 weeks)

Testing Process

Kickoff meeting

Business Case

Project Charter

Final version is released

Is this last segmentation?

Yes

Yes

Yes

Does Beta pass the Owner test?

Does Beta pass QA test?

Pick up next segment

No

No

No

Yes

Beta version software

Integrate the model into

Yes

Perspective review

Pass

Final review

Pass functional test?

Pass QA test?

Pass the Owner test?

Pass QA test?

Does Beta pass functional test?

Does Beta pass QA test?

Yes

Does Beta pass the Owner test?

Yes

Yes

Does Beta pass QA test?

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Yes

Yes

Final review

Pass

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Explains the SPM from the perspective of Agile

This section explains the SPM’s method from the perspective of Agile. To begin with, SPM complies with the Agile principles. SPM involves customer satisfaction; therefore, changing requirements are welcomed. Software is delivered frequently in small pieces, developers and clients work together in self-organizing teams (face-to-face conversations are essential as stated in 4.1). The methodology is simple, easy to apply and understand. Moreover, SPM contains the characteristics of Agile, i.e. the project is broken into small modules of short development cycles. This generates fixed periods to achieve development, prioritizes requirements, minimizes risks, is incremental, people oriented and encourages team collaboration.

Research contribution to knowledge

The research findings helped deepen the understanding of the different Agile methods. The study is distinctive in identifying and presenting a new agile method that can be a solid ground for further improvement. SPM has improved sequentially inside RSAF’s environment during many in-house and outsourcing software projects. The study’s findings, therefore, are contributed to the knowledge a new approach that match Agile concepts with better understanding and a good explanation in regards to Agile methods.

Implications of the study

This research has theoretical, practical and methodological implications from which academics, governments and firms can benefit. To begin with, this study has a theoretical implication related to its research design through using the frameworks developed in this study and these can be applied as an initial framework for future studies.

The practical implications of this study can help firms and governments to apply SPM in their software projects. It provides an explicit and solid ground roadmap for private and public sectors in their software projects.

Finally, this research provides a methodological implication. It provides a good and new innovated agile method that provides solid ground for theoretical discussion and improvements.

Further work

Further work may build upon this research by improving the method and its framework. This study suggests conducting SPM methods in different environments, cultures, circumstances and time scales to extend the research findings.

Acknowledgment

I am very grateful to Royal Saudi Air Force (RSAF) for giving me the opportunity to apply SPM methodology into their software projects. My thanks also go to my colleagues at the Directorate of Communication and Information Technology (DCIT) for their support and for the valuable suggestions and discussions. In addition, I want to express my gratitude to the clients for their participation by offering their valuable time, which helped me conduct this research.
References
Just Do It! A Reflection of Motivation in Project-Based Learning

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Abstract  
This paper reflects on the theoretical aspects of Project-based Learning (PBL), and attempts to connect it with the practical experience of a team of educators in Japan teaching biological and chemical sciences as a backdrop for an English language instruction class. It discusses parallel learning, and where the convergence of English as a Foreign Language (EFL) with content-based teaching methods lies. The paper outlines the path of PBL and its origins in the medical education field, where it began as Problem Based Learning. PBL has a strong link with “teaching without talking,” as developed by ideas from Geoff Petty, and can be thought of in theoretical terms by using the ideas of Vygotsky. PBL is influenced by motivational principles, environmental influences, and reinforcement of positive principles. The paper traces the incubation of knowledge and suggests where is the tipping point moment of applied knowledge may be. Suggestions are made for recreating PBL classes in other institutions, using both the practical and theoretical foundations discussed.

Keywords: PBL, motivation, reinforcement principles, EFL
Introduction

In Japan, we teach children to ask questions at a very early age. But later we send them into secondary and tertiary school classrooms where we ask them to quietly absorb information without questioning it. Project-based learning (PBL) encourages students to ask questions and explore topics that interest them within a given subject. PBL really places students back into the driver’s seat of learning. PBL is not simply "doing projects": it is a process of learning that involves both the students and the teacher. The teacher serves as a guide while the students control the learning. One major misconception of student engagement is the idea that all learning should be fun. True, “fun” projects can engage some students, but only temporarily. In fact, challenging and rigorous assignments are often more motivating than fun and easy activities. When educators provide rigorous and authentic projects and give students voice and choice, students will accept that challenge. PBL does not necessarily demand more; it demands more challenging work. Educators who can implement PBL using the above recommendations will find that their students want to learn the material more deeply, further engaging them in their own learning process. In one form or another, PBL may be seen as a guided form of self-directed learning where students must first become aware of the abilities they already possess, but then be guided by the educator who can show them the many various-colored doors of choice, exploration and creativity. When educators provide rigorous and authentic projects and give students voice and choice, students will accept that challenge.

Students in Japan, as one example, may be able to produce notable test scores, but that doesn't mean they will be prepared to take advantage of future career opportunities that lie ahead of them. What makes someone successful in the 21st century is definitely not their ability to memorize facts. What will make someone successful is their relentless capacity to innovate and to create. It's the students’ ability to network, to make friends from their own circles and from other countries. It's their ability to see through challenges, to look for opportunities in problems, and to take action and initiative to change things instead of waiting for someone else to do something.

Many countries, including Japan, are aiming for higher standardized test scores; but this is just a holdover from an outdated educational era. Fixing the horse wagon will not get our current student generations to the moon. Emphasizing test scores over creativity can undermine young students' talents and confidence, which are the very principle qualities that the global economy now requires and encourages. Any "outlier," like Lady Gaga, for example, would be of no use in the village where she grew up. But it is interesting to see how she has become a mega-star in the U.S. because of a desire for diversity of talents. Tolerance, talent and technology are the essential ingredients needed to produce the next generation of innovators or "black collar" workers, defined by Auerswald (2012) as entrepreneurs who do not seek lifetime learning rather than lifetime employment, a phrase he coined to illustrate innovators working in the Steve Jobs mold. They connect, create, and contribute whenever and wherever it makes sense. They try to minimize their spending in order to maximize their flexibility.” Innovators will be the ones who will produce not only breakthrough products that affect many, but also new solutions to social, environmental and policy challenges that will keep our global societies running fluidly.

At the heart of PBL lies the idea of asking questions and looking for answers. Students must learn to ask good questions, and teachers must consistently facilitate an inquiry-based environment so that the quality and authenticity of projects progressively benefit the student. Teachers must always ask the question: How can new technologies and methodologies be used to further support and nurture PBL? Students need to be challenged in order to develop their strengths, creativity and confidence.
Just Do It! A Reflection of Motivation in Project-Based Learning

Because PBL is student-centered, PBL students also need to be consciously aware and think about what they want to gain from doing projects. Each project offers an invitation for students to think about their strengths, interests, and weaknesses that they want to improve. Figuring out what outcome to produce as a result of their learning should get students thinking about another good question: What can I create that is meaningful to me and useful to others?

One necessary element of PBL is that students are able to engage in authentic and meaningful activities. In order to reach this level of engagement students must be able to envision an authentic audience that would benefit from their learning activities. In our case, we engaged students in an authentic, chemical engineering setting working together with Japanese engineering faculty, English as a Foreign Language (EFL) teachers and employees of Nicca Chemical Ltd., a large, local chemical company. Students were required to research Nicca as a company and they were asked to select one of Nicca’s various products to highlight during their presentations.

Nicca has a broad range of products ranging from hair shampoos and hair styling wax to various industrial grade textile chemicals. We asked students to imagine being inside of Nicca’s shoes where they were required to pitch the company’s actual product to a targeted audience of their choosing. Students were asked to niche-down their target demographic very specifically, where they would then create a 30-second video advertising not only one of Nicca’s products, but also provide a solution for consumers in a creative, engaging way. Many of the results exceeded our expectations. The students enjoyed the activity, and it had a definite impact on their attitude towards learning in the class.

Building projects around authentic purposes like these can make an impactful difference with students; when the work matters and is shared with an authentic audience, students are intrinsically motivated by the fact that what they are doing has value. This hands-on learning and applicative approach has resulted in a virtuous cycle of creativity, which was clearly based from the motivation the students garnered through their own voices and choices. The initial project frame was structurally bendable and guidable, and through the collaborative efforts of the Japanese engineering faculty and EFL faculty, we feel a harmonious and synergistic outcome via project-based challenges that bore much fruit.

**Theoretical Framework**

The growth of Project-based Learning, from its beginnings in the early 1960’s medical community, to classrooms of all levels and types, marks a shift away from the traditional “chalk and talk” methodology of science teaching. In this paper, we will talk about some of the important ideas behind Project-based Learning, and how motivation becomes a key factor in retaining student interest in the project, itself, as well as in the science and ideas.

Project-based Learning has its origins in the medical community in the mid-1960’s, where medical schools began to use it to train residents to recognize and diagnose problems in patients. At the time, the teaching method was referred to as “Problem-based Learning,”(PrBL) and was focused on a very specific medical scenario and how to complete a diagnosis from a patient presenting symptoms. The first substantive analysis of PrBL from Norman and Schmidt (1992) found that, from the beginning, PrBL was designed to help the students focus on self-directed learning. Students exposed to PrBL learned better, had better recall, and were more motivated to learn on their own. These students found “the learning environment to be more stimulating and humane than do graduates of conventional schools” (Norman & Schmidt, p. 564). There are important differences between PrBL and PBL, and the evolution of the two into separate categories have been noted by Perrenet, Bouhuijs and Smits (2000); Mills and Treagust (2003); and by Savery (2006). Perrenet et al. compared PrBL and PBL in the university setting, finding that the key difference between PrBL and PBL was that PrBL was better for understanding the theoretical aspects of learning, while
PBL was better suited to investigate practical or real world applications. They stressed the application of what was to be learned, particularly in hard-science and mathematically-oriented subjects, and cautioned that PBL cannot be used to make statements about universal truths. However, they further cautioned, outside knowledge must still be obtained. Mills and Treagust base much of their study on the findings of Perrenet et al., and define a project as a “unit of work,” within parameters set by their clients (p. 8). They notice too that “skill in metacognition is also essential for successful learning in PBL” (p. 7). They recommend that PBL become a substantial part of engineering programs, so as to foster the real-life feeling of client-driven work. Savery comes to a similar conclusion. Both are learning strategies with student direction in mind, but the major difference dividing the two is that while PrBBL can be done by individual students, PBL stresses the need for group learning and cooperation. Savery (2006) notes that PBL has not simply been a fad, it is now an integral part of many school curricula, and is increasingly recognized by industry leaders to produce the critical thinking skills necessary to remain competitive in the engineering and science fields. Savery cautions that the class must have a recognizable goal, but not with defined outcomes, in order to foster these skills, and that autonomous learning is crucial in the venture. Indeed, a number of studies confirm how PBL encourages autonomous learning (Jones, Rasmussen, & Moffitt, 1997; Thomas, Mergendoller, & Michaelson, 1999, Grant, 2002; Dochy, Segers, Van den Bossche & Gijbels, 2003; Harada & Yoshina, 2004; and Hmelo-Silver et al., 2007). An even more comprehensive outline of PBL can be found in Thomas (2000), who gives a broad overview of the state of the research concerning PBL at the start of the millennium, and arrives at the conclusion that PBL is both popular with students, and as, if not more, effective than the traditional classroom. Chu, Chow, and Tse (2011) report the usefulness of PBL to support and furthermore to scaffold inquiry in student academics, which further supports the influential role PBL has in student development.

The effects of PBL in science classrooms have been studied as well, particularly by Barak and Dori (2003), who studied the effects of using PBL in an university chemistry class. In comparison to students being taught by the same instructors in other classes, the students participating in PBL class had better recall of both concept and information on post-tests and their final examination. A study by Mergendoller, Maxwell, and Bellisimo (2006) compared PBL taught, and lecture-based taught economics classes among motivated high school students. It found that the results of using PBL to be strong, using a rigorous statistical analysis. Finally, Lou, Chung, Dzan, and Shih (2012) find that blended learning and PBL are key components to any successful pedagogical approach, and that science courses be designed upon this model to encourage student intellectual stimulation and growth.

According to Bandura (1994, 1997), students’ self-efficacy helps determine how students think, feel and behave, which directly relates to their motivation and performance. Positive self-efficacy protects students against peer victimization and depressive symptoms, both of which have negative influences on their academic performance (Caprara et al. 2004, 2010). In other words, students who lack confidence in their problem solving and ability to socialize are more likely to be depressed and possibly bullied due to the emotional and social maladjustments from self-efficacy deficits (Juvonen et al. 2000). Hence, this can create a vicious cycle where low self-efficacy leads to drops in academic performance and confidence, which further diminishes self-efficacy.

Finally, PBL incorporates many of the benefits that an inductive teaching/learning approach provides (Prince & Felder, 2006, 2007; Smart, Witt, & Scott, 2012). It is seen as an alternative to the “traditional” classroom style of the lecture-driven, “teach-test-teach” (i.e., the “deductive”) model. This teaching methodology allows the classroom to become student-centered and more interactive, and creates an atmosphere where students feel more inspired to learn. Here, the emphasis is on the “why” of the learning, rather than simply the “what.” Furthermore, it encourages a collaborative spirit among students, and gives them an
opportunity to work with and for their peers. This creates, for the proponents of inductive
teaching, the beginnings of a “community of practice”; in other words, groups of people
learning together to create an atmosphere of collaborative methodologies for further
understanding of mutual problems.

Motivation and Environment
To effectively implement PBL in the classroom, educators must first motivate and
engage their students. Teachers can often accomplish this by allowing students to provide
input on their learning experiences. When educators begin providing voice and choice to
students, however, they often do so sparingly. Instead, teachers need to personalize each
student’s level of voice and choice based on how they learn. On the ambitious end of offering
voice and choice, an educator can serve as a conductor overseeing how students will shape
their learning experiences, what path they will take and how they will demonstrate that
learning. Educators should continually aim for this student-centered learning style, and not
adhere to a permanent practice of offering limited voice and choice.

Students, in our experience, accept the challenge of rigorous projects when they
believe that there is an element authenticity in the endeavor. One necessary element of PBL
is that students engage in authentic and meaningful activities. In order to reach this level of
engagement, students must be able to envision an audience that would benefit from their
learning activities. Engaging students in authentic work can make it easier for them to see
how their activities could influence an authentic audience by introducing them to real world
challenges. Reflecting on questions such as “Who can provide us with relevant, expert
feedback?” and “Who would find our work valuable and needed?” can help educators develop
meaningful PBL activities. Students can make a difference and educators should build
projects around authentic purposes. When the work matters and is shared with an authentic
audience, students are intrinsically motivated by the fact that what they are doing has value.

One major myth of student engagement is the idea that all learning should be
fun. While interesting and fun projects can engage some students, it does so only
temporarily. In fact, challenging and rigorous assignments are often more motivating than
what may seem on the surface to be enjoyable and easy activities. One of our reflections is
that, as students ourselves, we have experienced times when we were appropriately
challenged. During those times, we lost track of time, we thought more deeply, and we
learned—which is to say, we retained knowledge and were able to reproduce it
later. Educators should seek to challenge students. PBL does not demand “more more
more”; it demands challenging work.

Educators who implement PBL using the following strategies will find that their
students want to dig deeper and learn the material. Sometimes these projects “get out of
control” in a good way and spawn new, authentic projects that teach important content
skills. A skilled educator can see this deviation as an opportunity to harness students
motivation and to further engage students in the learning process.

Reflections on Motivation and PBL
In our classroom, we used a fusion of current practices and ideas of inductive teaching
and classroom lecture. We were guided by two streams of thought: first, the theories of Lev
Vygotsky, particularly in his vision of the Zone of Proximal Development (ZPD); and second,
the teaching practices of Geoff Petty, where he advocates the “teaching without talking”
principle we have followed in our classroom. Both of these worked to help navigate the
students throughout their learning. A close reading of both of these thinkers shows how the
combination of what may at first seem to be contradictory practices are actually encouraged
by both authors. Furthermore, it has helped us to define our ideas of using the ZPD to what
we call “the tipping point.” Let us first turn to each of these authors, to understand our reading

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of their thoughts.

Lev Vygotsky was a Russian psychologist who developed his theories of childhood education and language development in the early 20th Century. He was well known and respected in the USSR during the 1960’s, and came to the attention of educators and psychologists outside of the Soviet Union during the late 1970’s and early 1980’s (Kozulin, 1990). Vygotsky’s research focused on the cognitive development and mental practices of children and adolescents. His most widely available works (Vygotsky, 1978, 2012) give an outline of how the mind works to supply a person with the thinking, and therefore the analytical tools necessary for both action, and, importantly, communication. He outlines one of his most important theories, the Zone of Proximal Development, in this way: “It [the ZPD] is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers” (Vygotsky, 1978, p. 86).

His followers later categorized four main steps in using his theoretical practices: one, stimulating motivation to solve a problem by creating interest in it; two, giving the students the facts and informational access tools to research the problem; three, giving students an outline of how to do good research, and to narrow in on the problem at hand; and finally, four, giving the students a focused project or problem to be solved, and the guidance of how to do this effectively (Karpov, 2014, p. 186-187). It is important to note that Vygotsky and his adherents find that the purely inductive approach to learning is counter-productive, and can cause serious problems to the development of a learner’s ability to create solid research capabilities. Allowing the student to simply “go find knowledge” forgets, they say, the fact that without some structuring, the student may confuse facts, distort the questions, or follow strange paths of inference. In order for actual development (i.e., learning) to occur, according to Vygotsky, scaffolding from someone with expertise is necessary.

A strong proponent of inductive teaching is Petty (2014), who is less a theorist than a proponent of the practical side of this means of teaching. He emphasizes that the best approach to material presentation is quite similar to the Socratic Method, in that he asks students to answer questions pertaining to the topic at hand, and then asks them follow-up questions based on their answers (Petty 2002). These questions are planned to elicit thoughtful answers and designed to allow the student some interest in the topic at hand. This also inspires the student to create a line of inquiry of her own, and this becomes a feed-back loop, whereby the teacher gives guidance and instruction, the student answers the questions provided, and the teacher then learns also, in that the student provides the direction for learning in future classes—all of which he calls the “Quality Learning Cycle” (Petty 2014, p. 45).

Petty cautions, however, that the tasks the students undertake be a challenge to them, and that they are pertinent to the material at hand, which is in the same vein as the warning of the Vygotskyans. We have found in the classroom that this is an important part of the class preparation. Without sufficient planning, a seemingly interesting lesson can quickly go awry. In our first iteration of our class, one of our students discussed his and his fellow students desire to practice and use more English in the class. This informed our class preparation, and we learned ways to mediate the desire to communicate with the science learning. Our PBL class allowed students to apply their knowledge and learn through the very process of asking a specific question or by solving a problem. Done effectively, it can scaffold students’ self-directed learning and support them through each stage of problem solving, thereby positively boosting their self-efficacy. PBL also naturally encourages teamwork and community building, as students work on their group projects while encouraging one another through the challenge and discovery process. Given the right context and environment, students can further strengthen their confidence “muscles” and revisit their own views of themselves in relation to others to ultimately develop a stronger and
more enlightened version of themselves. When students become truly active participants in their own learning, breakthroughs, both large and small, take place. This tipping point threshold is a student-centered, individual phenomenon that can only take place within optimal contexts and environments.

This is exactly the feedback loop that Petty describes, and it was our first insight into what we determined to be the “Tipping Point.” However, a closer look at this process reveals the theoretical basis of Vygotsky’s ZPD, and stylizes the practical steps necessary to understand how to go from the first ZPD to the next. In figure 1, below, we mark our imagination of the steps leading there.

Figure 1: Process to the tipping point

First is the presentation of the topic. Here, the questions from the teacher, the refinement of vocabulary meaning, and the problem to be discussed are all addressed through the communion of teacher and student interaction. Step one of the process is the acquisition of knowledge; through the navigation of facts and information. The black lines represent the direction of the interaction: from the topic comes the steering principle of what is to be learned, and how. In step one, the three modes of knowledge acquisition derive from the topic of inquiry; in step two, these information bases stimulate the student to analyze the facts or principles she has gathered, and to begin to synthesize them into a more coherent fashion. This fosters her own interest in learning, and allows her to better understand the subject, and, after successful navigation of the topic by using this process, primes her for another moment of learning. She now has the expectation that enjoyment is not simply in unplanned, unstructured “play,” but in the correct means of inquisition. This is the moment where we believe a teacher has “taught without talking.” Finally, as the student becomes accustomed to the process, the disinclination to learn based on fears of failure or lack of interest in the learning process decreases. This is what we believe is the Tipping Point: where a student is no longer a passive purveyor of facts, but an active participant in her own learning. It also marks the end, for a time, of the ZPD, in which the knowledge of the teacher and that of the student realizes a gap. However, it is at this moment where the student is ready for more complexity in the classroom. By scaffolding not only the learning within a lesson, but scaffolding the expectations of learning during the course of a class, we can encourage our students to view
problems not as insurmountable challenges, but as puzzles to be solved. This can also lead to greater moments for independent study, where a student no longer needs a teacher to constantly become the interlocutor, but rather the student can begin to ask demanding and intelligent questions, herself.

**Conclusion**

Project-based learning allows students to apply their knowledge, and learn through the very process of solving a problem. Done effectively, it can scaffold students’ self-directed learning and support them through each stage of problem solving, thereby positively boosting their self-efficacy. It can also encourage teamwork and community building, as students work on their group, or team, projects and encourage one another through the process. In this environment, students can build up their confidence again and revamp their own views of themselves in relation to others.

In this reflection, we have sought to pair the theoretical with the practical. A danger in traditional teaching is that students will cease to be interested in a subject, when they are not vested in the outcome of learning. Demotivation is a dragon-like creature, which seeks to destroy all attempts at teaching, burning away the desire to learn. However, the moment the student believes that what they are doing is relevant to their life, this beast is slain. The zone of proximal development is an actual gap, but one that can be negotiated, and through the inductive approach of project-based learning, teachers can reach out to students, confident that the students are going to reach back.

With independent study, students may learn at their own pace at a level that is challenging and appropriate for them. Curriculum that realistically meets students at their level serves to motivate and encourage them, as the material will neither be too difficult nor too easy. Instructors are also available to support students on a one-to-one or small group basis to tackle difficult skills together. With more personal, student-driven learning, many students with low self-esteem can rise above the negative mindset of being a victim. Instead, they may learn to see themselves as empowered individuals who are active participants in their own learning. One of the major advantages of project-based learning is that it makes school more like real life. PBL is an in-depth investigation of real-world topics, worthy of students' attention and effort. By bringing real-life context and technology to the curriculum through this PBL approach, students are encouraged to become independent workers, critical thinkers and lifelong learners. Teachers can also communicate with administrators, exchange ideas with other teachers and subject-area experts, all the while breaking down invisible barriers such as isolation of the classroom, fear of embarking on an unfamiliar process and lack of assurance of success. PBL is not just a way of learning; it's an effective way of learning together. Students learn to take responsibility for their own learning in order to form the basis for the way they will work with others in their adult lives. This can then foster the love of lifelong learning advocated by Aeurswald, through learning how to transverse the ZPD, and becoming shapers of the 21st Century.
References


Exploring the Theory of Constructivism through Active Learning Strategies in a Classroom

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Abstract
In most Indian secular education settings, students are accustomed to passive learning where the teacher plays a dominant role in passing on information to students who are considered repository of knowledge. Contrary to this is using the active learning strategies which encourage the students to interact cognitively, socially, behaviourally with content and processes to construct knowledge within the classroom. Specifically, this qualitative action research is an attempt to see how students respond to active learning strategies such as audio-visual resources and role-plays to form their own understanding and learn individually as well as socially in a peer-group. Data is primarily obtained through teacher reflection journals, student work, student reflections, and external observer’s feedback. This study found that students enjoyed participating in activities and were engaged in its processes. It enhanced student learning and helped students take responsibility for their own learning. Active learning strategies also assisted the teacher in understanding her role as a teacher in student learning and aided her in achieving classroom objectives.

Keywords: Active learning strategies, individual knowledge construction, social knowledge construction
Introduction

Tell me and I forget,
Teach me and I remember,
Involve me and I learn
- Benjamin Franklin (1706-1790)

Most schools in India follow the traditional approach to teaching. This ‘banking’ system of education dominates a classroom culture where students operate as passive listeners in whom knowledge is deposited, and where the primary goal is passing an examination. Learning, too, is assessed on the basis of remembering information, and the best answers are those that are closest to the textbook from which they are taught. Thus, students are usually required to rote memorise their answers often without understanding associated meanings. With years of being taught under these conditions, students’ potential to think and make decisions related to their own learning can be heavily compromised.

These traditional teaching methods have predominantly shaped my academic background, too. Disillusioned by this system of education and its resultant negative effect on students’ psychology, I turned to life-skills education, and started my career teaching these skills in schools and in private classes. I adopted ‘active learning’ strategies which were a requirement to achieve my educational objectives. From the beginning, I could clearly observe its impact on my students. Thus, I decided to base my research on active learning and its impact on students' learning using the theory of constructivism.

Active learning

Watkins, et al. (2007) state that, through active learning, the learner may be engaged in learning in various ways, such as behaviourally - by actively using and creating materials; cognitively - by actively thinking, and constructing new meaning; and socially - actively engaging with others as collaborators and resources. Active learning helps students to integrate new material with what they already know. Meaning-making arises out of the experience of doing an activity. Students in the process of learning actively construct knowledge through interaction, reflection and personal experience of doing the activity. They link new knowledge with past learning and construct new meaning for themselves.

As active learning is designed to promote higher levels of student engagement, it can also show enhancement in student learning. In active learning classrooms, the teacher does not have total control. In many cases, students are the decision makers and are given the responsibility to decide what they want to learn and how they want to learn. It can also give freedom to each student to decide what learning outcome they would personally like to derive out of the activity. It can be a flexible environment – for example, the teacher could carefully design their sessions and plan to achieve certain outcomes and in responding to students’ participation and engagement - demonstrating that both teaching sessions and outcomes alter considerably (but are no less effective) (Gradowski, et al., 1998). Active learning can transform a classroom from being monotonous to one in which each session is different and creative. When varied active learning strategies are employed in a classroom and adequate opportunities for social interaction are provided, it can lead to individual knowledge construction and social co-construction of knowledge.

Individual knowledge construction

Jean Piaget (cited in Bauman, et al., 1997) conceived the constructivist theory of cognitive development. He emphasised that children, adolescents and adults ‘develop’ rather
than receive knowledge from other individuals. He believed that learners construct their own 'reality' by means of experimenting with the environment. He perceived this process to be biological and predetermined. Educationists termed this belief as ‘discovery learning.’ Thus, Piaget viewed the teacher to be the ‘guide on the side’ who, by setting up activities, aided the learning process. The learner, through interaction and experimentation with the activities, would develop his understanding of himself and the world around him.

**Social knowledge construction**

Vygotsky (cited in Pound, 2008) built on Piaget's theory of individual constructivism to create social constructivism. He stated that the role of dialogue and social interaction is a key element of constructivist learning. He viewed learners as constructing knowledge together through social interaction with others (peers and other adults), and making meaning through their own skills and experiences. Social constructivism also includes the importance of thought, language, perception, self-reflection and the interplay with culture, process and content. Vygotsky and Bruner (Bruner 1986, 72-73) both emphasised the significant role of the teacher in the concept of 'zones of proximal development' or 'scaffolding' in the construction of knowledge (Pelech & Pieper, 2010). Bruner believed self-reflection is an important activity that helps the learner establish a relationship with himself and through social interaction with other people in his environment, and assists him in understanding his changing roles in these contexts. Development of sense of self is another indication of effective learning. Active learning is most likely to be successful when the learner individually constructs new meanings for himself, thus transforming himself personally. He also transforms himself by constructing new knowledge through interaction with other people in his environment.

**Research question and aims**

Researching active learning as a method of teaching, I learnt that it was a pedagogical approach informed by constructivist theories of learning. I was thus motivated to explore the theory of constructivism through active learning in a classroom in Mumbai.

**Aims:**
1. Exploring the role and meaning of active learning in academic literature.
2. Investigating how individual knowledge construction takes place in a classroom.
3. Investigating how social construction of knowledge takes place in a classroom.
4. Exploring the role of a teacher in facilitating active learning in a classroom.
5. Investigating the active learning process and its effects on student learning.
6. Exploring the role of active learning in supporting the teacher to achieve class objectives.

**Context of the research**

My research was conducted in the Bandra religious education centre in Mumbai, India. I taught unit 2 of the ‘Ethics and Development Module’ to grade eight students aged between 13 to 14 years. The classes were held once a week for the duration of five weeks, each comprising three hours with twenty minutes of break time between the classes. Around 18 students attended each session. My classes were observed by the class host teacher, who is also a current graduate of the ‘Secondary teacher educator program’ (STEP).

**Methodology**

Through my practise, theories of constructivism were put to test through active learning strategies to understand its practicality. The study was conducted over a period of
five classes of 15 hours with 18 students aged between 13 to 14 years. During this time, I implemented a series of intervention strategies to engage the students in active learning. This paper will mainly focus on two out of five active learning strategies that I implemented. They are audio-video (AV) resources and roleplays.

Data collection methods
Active learning can be best assessed in depth through qualitative data. To achieve triangulation of data, I employed four data collection methods to ensure validity and reliability:
1. Teacher journal (own reflections)
2. Field notes (external observers' oral and written feedback)
3. Student work (class activity response sheets, charts, etc.)
4. Student journal (reflection sheets)
5. Student interviews (audio recording)

Individual knowledge Construction using audio-visual resources:
The objectives of the class were:
- a) To acquaint students with the ethics of self-help and support in Muslim societies of the past, and
- b) To make them aware of the close relation between faith and the world which Muslim societies express through ethical endeavours.

Description of tasks and what happened?
The ethics of Islam invite Muslims to exercise their social responsibilities to ensure the well-being of their communities and societies. In Muslim traditions, we find the ethics of help expressed through both individual and institutional actions. I selected two video songs which were to be played, one in each to two groups of students. Fifteen students attended the class and were divided in two groups (Group A, which saw the video of the song ‘Saving Me,’ and Group B, which saw the video of the song ‘We Are the World’ for Haiti relief). After each song was shown, students were provided with individual worksheets with critical questions to make meaning of the song on their own. Baltzer (1996), in Rewitz (2008), has established that the majority of the students in a given classroom are visual learners. He also theorized that listeners will be more attentive in a class when they are engaged visually as well as aurally. LeeSing and Miles (1999), in Rewitz (2008), stated that perception and attention are factors that mediate learning. They theorized that if a student’s perception and attention could be maximized, then the learning of the student would be enhanced.

AV Resource ‘Saving Me’: the first video ‘Saving Me’ shows a man being saved by another individual. After he is saved he realises that he could see a constant show of numbers above every individual which indicated the time they had until their last breath. He could not see any numbers above himself. However, he does receive one after he saves another woman who is about to die. The objective of showing this video to the students was to initiate their thoughts on the shortness and precious nature of life which is a gift to mankind from God. According to the verses of the Quran which the students had worked on in earlier classes, this gift was to be used for good deeds so that one may achieve salvation. Doing good deeds is also one of the ethics of Islam and, through this video, I intended to bring out students thoughts on this concept.

AV Resource ‘We Are the World’: the second video features the song ‘We Are the World’ re-sung by various contemporary leading singers to spread awareness of the Haiti disaster in 2010. Through the song, the various artists urge people to think of the world as one humanity and come forth to help the people of Haiti. The video also features some of the
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worst hit areas of Haiti and the plight of people. It encouraged people to come together to support the people of Haiti. Through this I wanted students to think about ways people come together to help others in need. The ethic of self-help and support is highlighted through the song. Thus through the song, I attempted to initiate feelings of care and motivation to support people who need help.

Social knowledge construction using A-V resources:
Role play has the potential to unleash student imagination and transport them to an imaginary world where they are able to devise a solution for their real world problems. This is one of the ways that students can see themselves as contributing members of society. It plays a major role in supporting students to imbibe ethic of care for humanity and an attitude of willingness to take action and bring change through personal endeavour.

The objectives of the class were:

a) To introduce students to the situation of Ismaili community at the dawn of the 20th century and some of the major issues they faced in different parts of the world, and
b) To help the pupils understand the role of the Imam in setting up the ‘Agakhan Development Network’ (AKDN) which is a group of development agencies that supports humanity in many ways.

Description of tasks and what happened
Fifteen students attended the class. Before the role play, students were taken through a discussion where they discussed various challenges faced by people all over the world, which were noted on the white board. The class also discussed the various non-government institutions (including the AKDN) which serve humanity and combat those challenges. Students were then divided into two groups to work on the role play. They were given the freedom to decide on one challenge as a class and through the role play present its solution. Both the groups had to work on the same challenge. The challenges were to be chosen from the list created from the discussion. The majority of students voted for ‘26/11/2008 terrorist attacks on Mumbai.’ My observer and I each facilitated one group. I introduced the element of competition in the role play to make the class more engaging. The external observer played the role of a judge and give away the verdict to the group who brought about a better solution to the situation. Students came up with the script, dialogues, and plot by themselves and presented it. After the presentations, students of both groups were given the opportunity to ask the opposite group critical questions. After the class a debriefing activity was to be conducted and students were given reflection sheets to write.

Group A re-enacted the situation where terrorists take over the Taj Mahal hotel in Mumbai. They built an NGO called ‘Yes we can’ which collects money from politicians and celebrities in return of a promise to give them publicity which would boost their career. They use this money to fund an operation to rescue victims trapped in the hotel and take the terrorists into custody. Group A won the competition.

Group B re-enacted a scene at Leopold bar in Mumbai which was also taken over by the terrorists. They altered the real incident by depicting informed citizens at the bar who call the police who in turn come and take the two terrorists into custody.

Data analysis and discussion
How effective was individual and group work?
The theory of constructivism explains how knowledge and understanding are slowly constructed. It suggests that learning is an individual process. Each individual builds an ‘idiosyncratic vision of reality’ which is partly based on similar experiences but is shaped by
individuals’ prior knowledge, understanding and experience (Pritchard & Woollard, 2010). Thus, as will be seen below, the learners, though exposed to similar learning content, depending on their prior experience with the subject and how they undertake activities, demonstrate a different interpretation and learning outcome.

**How well did students learn on their own?**

If students would have learned through the transmission model, they would have repeated everything that the teacher said and some would have used the teacher’s own words to explain the concept of care and concern for humanity. However, the active learning process exposed students to the video, think on the questions given on the student worksheet and write their thoughts. Each student gave a different response to the questions on the student worksheet. This shows that the process of active learning has helped them to think on their own and relate the information (from the AV resources) to their own past experiences. Knowledge construction, according to Piaget (cited in Moore, 2000), is a process through which individuals each with their prior set of experiences interact with their physical and social environments, transform themselves to make a new sense of the world and develop in the way they think and perceive. Below is the review of student responses that shows that each student has learned something from the video and made meaning for themselves.

Many students expressed a feeling of sadness and shock seeing the plight of the people of Haiti. Some realised the comforts they were blessed with and made up their minds to make donations for Haiti. This shows that the students were emotionally affected by the videos. A few expressed being inspired by the awareness created by the celebrities and realised that it is possible to also create awareness through such initiatives. One student was so motivated that he tried to reach out to the people of Haiti through an Internet game, ‘Farmville’. This behaviour shows that students were inspired and feeling of care and compassion for fellow brethren seems to have developed in their hearts. Individually, two students made practical plans on helping Haiti people. These kinds of responses show traces of thought process and self-reflection. Through self-reflection, the learner establishes a relationship with oneself and his environment (Bruner, 1986). Students have thought of the present environment in which they have known institutions which work for humanitarian causes. One student had made that connection of informing AKDN and seeking their help, while another student came up with similar thought of creating an institution like ‘Ismailia helping society, which will help the people of Haiti. The video of the song ‘Saving Me’ also brought about intense feelings where two students went beyond practicality to say that they would contribute their property and reading skills to the needy. Overall, these responses demonstrates that the active learning process has brought about cognitive, affective and behavioural transformation in the learners. There were also students who seemed to have given general answers which may suggest that the active learning cycle needs to be repeated with a different pedagogy. It could also be possible that some students may be mentally distracted during the class and thus may have not been able to connect the videos to their past learning experiences.

**How well did students learn in a group?**

Role plays and mind maps both gave students the opportunity to express themselves in different mediums other than written work. Vygotsky (Vygotsky, 1962, in Pound, 2008) emphasized the significant role language plays in the development of abstract thought. Learners construct knowledge together through social interaction with peers and other adults and construct meaning through their own skills and experiences. Discussions within the group in the planning period demonstrated that students were thinking and expressing themselves. Ideas being originated, developed, rejected and re-accepted displayed social,
cognitive and behavioural collaboration and processing of information to personalise and build new knowledge through co-construction. Students came up with different outputs. There were two different role plays with different perspectives and solutions. This shows that students active engagement in learning. This proves the success of the active learning cycle. Also, some students expressed that they found the activities ‘interesting’ and they enjoyed group work. In role play, students were given the independence to choose the situations they found interesting. They were given complete freedom to choose the setting, roles, script and manoeuvre of the situation to present the solution. I believe this is what brought about participation and engagement in students. In my context (India), students in secular settings are not usually given such opportunities. Active learning entails teachers giving up their authority and learners taking up the responsibility of their own learning, where learners make decisions (Watkins, 2007). They make decisions on what they want to learn and how they want to learn it. The presentations of the role plays and showed that active learning strategies were effective. However, the most important role of implementing active learning strategies is that it should help learners make meaning for themselves from the activities. Below is an analysis of students’ responses given in reflection sheets about their learning and meaning-making from each of the activities they were exposed to after their interaction with the content of the subject, the active learning pedagogy and group work.

Students were able to relate with the role that they were playing and thus they could easily realise the moral and ethical outcomes through feelings and experiencing the situation themselves. Student G writes, “I learned that killing people is a sin and also that it is very hard to save people’s lives.” “Drama is a shared and cooperative activity which fires the collective and individual imagination” (Baldwin & Fleming 2003, p. 7). It activates the learner’s imagination and transports them to an imaginary world where they get an opportunity to solve the problem/challenge that they are enacting. This act empowers them as it liberates them from their own inhibitions and constraints and limitations. They experience the freedom to be someone else, and, by acting as the other, they connect to the other’s feelings and experiences. Students, by acting as the victim or terrorist, felt the emotion which otherwise might have been difficult to explore. Student H writes, “I learned about the challenges faced by the targets in a terrorist attack and the police.” Student G wrote, “I was the commander and I killed the terrorist, but I was dead too. My team won.” The mind, body and emotions are given the opportunity to connect and function together rather than separately, enabling children to make all round and interconnecting sense of their experiences and learning (Baldwin & Fleming 2003, p. 7) 2003, 7). As orally expressed by student A, “Playing the role of a victim, I learned to keep faith in God in difficult situations and find strength to save others at the risk of my life.”

Factors that helped implement successful active learning strategies
Student Autonomy

The presentations of the role plays showed that active learning strategies were effective. Coming from an Asian background and facilitating students from the same background, it was difficult for me to trust them to take responsibility of their own learning. As a teacher, for successful implementation of active learning strategies, I had to let go of my inhibitions and allow myself to trust them to guide their own learning. An interesting comment was made by a student A while presenting the role play. “... it helped me learn better and it was much more fun, compared to the old fashioned way of reading and by hearting. It made me feel as though I was an equal part of the class as my baima (teacher).” This made me realise that students in my context appreciate autonomy and are able to take
Responsibility for their own learning. Student autonomy is one of the goals of education; it is an approach to educational practice which aims to give responsibility to students for what and how they learn. To be effective learners in higher education and subsequent employment, the attributes of autonomous learners are highly desirable. Giving them space and opportunity to practice autonomy in the classroom can be the first step towards complete autonomy and being effective learners (Boud, 1981).

**Learner engagement and involvement**

As suggested by my external observer, I used strategies like group division, pairing, kinaesthetic activities, freedom to present, etc. and it did bring positive results. I realised that the success of an activity is maximised when the students also enjoy it.

**Scaffolding or the ‘Zone of proximal development’ (ZPD)**

As stated by Vygotsky (in Wood, 1998, p. 26), Zone of proximal development (ZPD) “refers to the ‘gap’ that exists for an individual (child or adult) between what he is able to do alone and what he can achieve with help from one more individual who is more knowledgeable or skilled than himself.” As an informed teacher, I prepared myself with all areas of knowledge that may be encountered during my classes and twice in the five practicum classes. I experienced ‘teaching moments’ which I grasped and helped scaffold students learning.

**Challenges that hindered active learning**

There were many challenges, too, which helped shaped my learning. From my analysis, I realise that areas like time management, choice of content and significance of completing the process of active learning are among the few areas I need to improve to bring about effective learning and achievement of class objectives.

**Critical Questioning**

Facilitating a constructivist classroom requires one to ask qualitative, thoughtful and critical questions which have the power to engage all students in thinking, talking and making meaning of concepts (Walsh & Sattes, 2005). The teacher plays one of the most crucial roles in active learning. Through her knowledge, the teacher guides learners to make meaning of the activity, content and process. I also realised that I needed to learn critical questioning without which student learning is limited and only surface level. Probing students with higher order questions would have led to deep thought, reflection and effective learning. This would further enhance a learner’s knowledge. This one of the areas I need practice and study.

**Teacher as time – keeper in the active learning process**

The active learning cycle needs to be completed so that students gain maximum benefit from the process. The process involves four stages: Planning for the class, implementation of the plan in class, reflection and gaining new learning and finally and re-application of the learning back in class. Reflections from my teacher journal and my observer’s feedback made me try various measures to complete activities in its allotted time in class. However, few objectives like understanding the working of AKDN and the role of the Imam were not given as much time required for students to grasp them effectively. However as my research also required processes like authorising students to lead class, discussion time etc., it led to exceeding the allotted class time.
Need for an assessment tool:
In this research, I have tried to analyse the effectiveness of my practice by analysing students’ responses based on my own understanding and support of literature in the field. In the future, I would enhance my practice by making my data more reliable and accurate by administering an assessment tool.

Findings
The findings suggest that in both situations (learning on their own as well as with others), students responded to the active learning strategies as enhancement in their learning was evident from their responses.

Detailed findings related to intervention
My findings indicate that students learn effectively, both on their own as well as with others. After students were exposed to the content and process of active learning, I found reflective questions aided them to think on their own and learn, whereas, in a group, students learned through interaction with other. Students learn different outcomes in different settings. It was found that learning acquired on their own was more personal and cognitive. Students were more reflective as they depended on their past experiences and their responses were subject-related (based on the content shown in the video). Whereas in learning with others, as students relied on each other, their learning was more behavioural and social. Student responses in learning with others not only included knowledge gained through the content and process of learning, but students also reported on attributes like team spirit, cooperation, acknowledging others perspectives and acceptance of learning from each other. Thus, it can be said that, while learning on their own, students tend to reflect on selves and grow cognitively, and intra-personally identifying their own personal characteristics and potentials, whereas learning with others helps student imbibe social characteristics and develops inter-personal skills.

Individually as well as socially, students have exhibited learning, and the students’ reflections indicate that they enjoy learning more in groups. Reflecting on my classes too, I have observed that when students enjoy a class, learning is more effective. This has led me to constantly look out for strategies which not only help me achieve my class objectives, but are also ‘fun’ according to students. Among the five different active learning strategies adopted for the practicum classes, most of the students enjoyed the group activities which involved cooperation and team work, i.e. role play. I believe partly because it induced an element of competition between the groups which acted as an external motivation for students.

Conclusion
This research has been a landmark in my development from a teacher to a teacher researcher. This journey helped me explore the various facets of learning by engaging students’ heart, mind, and body through cognitive, social and behavioural active learning strategies. The learnings I derived from my research has helped me understand myself, my students, and the learning process and helped me extend to community of learners all over the world. I recommend educational researchers replicate this research in their contexts or build it further through their experiences.
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References


Teacher Education in the Age of Technology

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Abstract
Technology in education is not a novel concept. Since there have been teachers and pupils there have been instructional tools to enhance the learning process. Technology is a powerful enabling tool which caters to educational change and, if used discerningly, it enhances the quality of education while making teaching and learning an interactive and interesting process. Yet technology is nothing without a teacher who has planned her lesson, where care is taken to intricately and seamlessly weave in technological interventions. In this age of globalisation it is a logical step that education uses advanced information and communication technologies. India too is a part of this new approach to transaction of education. Technology has seeped into the lives of the common man in India in a myriad of ways. From mobile technology to learning software, we can see its evidence in educational institutions. Yet India is still grappling with problems, like poor school enrolment, wastage and stagnation, shortage of teachers and poor infrastructure. These are the problem of an ancient nation with a population of millions, who are in need of quality education.
The challenge that faces Indian society is that despite being a cash-strapped nation, India has to transform schools into hubs of opportunity. This will foster ability in students to construct knowledge and develop creativity. Teacher education needs to be reviewed in the context of India’s problems and the interface with a technologically advanced world. Translation of this tenet in practice means that teachers need to become key agents who can bring a continuously evolving society into being. This mandate will affect their role in a dramatic manner and therefore teacher education needs to be geared towards it. Teachers need to be imbued with a professionalism that keeps them abreast of new technologies and strategies, while committing them to continuous professional learning. The revolution in technology will continue and so will the revolution in educational practices and the way we perceive an emerging economy.
This paper aims to analyse the problems India faces in coming to terms with the demands of a technologically advanced society and the role teacher education plays in that context.

Keywords: Digital natives, catalysts, collaboration, professionalism
Schools today stand at the cusp of change. Globalization and its deep connection with technology has brought a palpable transformation in society and the way we perceive knowledge and its transaction. Schools have to prepare learners for rapid change and themselves transform into hubs of opportunities, so that they are able to foster abilities to construct knowledge creatively. Translation of this concept means that teachers need to become catalysts, key agents that can bring a new continuously evolving society into being (Hargreaves, 2003). How would this mandate affect their role while keeping them abreast of new strategies and technologies to be studied? To align themselves to the needs of society today, teachers need to be encouraged to teach in order to foster high order thinking skills, metacognition, constructivist approaches to learning and understanding, cooperative learning strategies, while employing a wide range of assessment techniques and the use of computer based and other information technology that enables students to gain access to information independently. The learners should also be able to create knowledge, apply it to unfamiliar problems and communicate effectively to others (Hargreaves, 2003; Novak and Gowin, 1984). Essentially, learning to teach or teaching to learn, in the present times, is technically more complex and wide ranging, since it draws on a base of research and experience about effective teaching that is always changing and expanding (Hargreaves, 2003).

Today’s teachers need to be continually engaged in pursuing, upgrading and self-monitoring their teaching and reviewing their professional learning, consulting and critically applying educational research, so that their practice is always informed by it. They can no longer be complacent that once they are qualified to teach they are qualified to teach forever (Hargreaves, 2003; Koehler and Mishra, 2007). It’s not something you work upon, finding the appropriate strategies through trial and error. In today’s society it is vital that teachers engage in action, inquiry and problem solving together in professional learning communities, which can be in the real or virtual world. Teachers’ must be helped to develop capacities for dealing with change and undertaking inquiries when new demands and problems repeatedly confront them. They have to make their schools into learning organizations where capacities to learn and structures that support learning are widespread among the teachers as well as the learners. It is an atmosphere that is stimulating for learning. In this way the school becomes an effective learning organization for teachers, administrators and learners (Hargreaves, 2003; Koehler and Mishra, 2007).

Is the present system of teacher education developing teachers with the skills and orientation needed to enable their learners to be successful in the 21st century? Today’s learners are already active participants of online communities with a wealth of resources that extend beyond the bounds of their schools and well beyond a single teacher’s knowledge and skills. These learners will pursue careers in a knowledge economy that rewards teamwork, continuous learning and innovation. Yet teacher interns continue to be immersed in antiquated programs that equip them to deliver primarily traditional, stand-alone, text-based instruction in self-contained classrooms. Moreover, the reports calling for reforms in teacher education only set higher and higher benchmarks for traditional teaching (Hargreaves, 2003). The reforms fall short of the needs of digital learners as they are preparing teachers for obsolete jobs. We cannot focus only on teacher preparation for schools should also change. Schools need to evolve from teaching organizations into new kinds of learning spaces. Teachers need to be trained so that they are ready to work in the schools of the future. It is time to reinvent teacher education for today’s learners, who need teachers who have the knowledge and skill to facilitate participation in a collaborative, Web-based learning culture (Novak and Gowin, 1984; Hargreaves, 2003). These teachers would be able to:

- Facilitate and inspire student learning and creativity so that all students achieve in the global society;
Teacher Education in the Age of Technology

- Enable students to maximize the potential of their formal and informal learning experiences;
- Facilitate learning in multiple modalities;
- Work as effective members of learning teams;
- Use the full range of digital learning tools to improve student engagement and achievement;
- Work with their students to co-create new learning opportunities;
- Be life-long learners, and
- Be global educators.

In order to prepare teachers with the above characteristics it is essential to transform teacher education programs into 21st century learning organizations staffed by teacher-educators who themselves are imbued with the characteristics listed above. Psychology and neuroscience have compiled a sound body of knowledge about how people learn (Novak and Gowin, 1984). Teacher educators need to integrate these and model research based-pedagogical practices throughout the pre-service teachers’ academic instruction and field experiences. Moreover, collaborative, inter-disciplinary and inquiry based learning projects will provide teacher educators the opportunity to foster in their interns the ability to use appropriate pedagogical strategies coupled with effective technological tools (Koehler and Mishra, 2007). In the digital world of today it is important that teachers should be comfortable and competent using analytical tools in contemporary data systems to better understand the needs and progress of their students and to determine the most appropriate instructional responses. Preparation programs need to provide extensive learning space for practice in the use of contemporary data system. It is imperative to expose teacher interns to cutting edge technologies, individualized pedagogical strategies, and advanced data systems. The new educational practices will enable the teacher interns to work effectively in a rapidly evolving world (Hargreaves, 2003). The teacher education programs need to be keenly responsive to accelerating changes in global society and ready to quickly shed outdated policies and strategies to embrace new and more effective approaches that address the needs of 21st century learners (Koehler and Mishra, 2005).

Literature Review

Hargreaves (2003) proposes that we should reshape the future of schooling as we now live in a knowledge society. To teach now means to prepare learners for a world of creativity and flexibility provides examples of schools which operate as creative and caring learning communities and shows how years of “soulless standardization” (page 45-66) have seriously undermined similar attempts made by many non-affluent schools. Hargreaves takes the critical reader beyond standardization to a future where teaching is concentrated on high skill, creative, life-shaping goals, as that is the focus of a knowledge society. The book is a critical analysis of the role of teachers in society and the impact of bureaucratization on teachers and learners alike and how can it be reversed.

What makes teachers use technology in classrooms is an important area that needs to be carefully addressed. Baek, Jung and Kim (2006) look at technology in classrooms in Korea. They emphasize that technology enhances classroom teaching, but that there are many obstacles that get in the way of teachers’ use of technology in the classroom. The researchers undertook an experiment to find out why teachers use technology. They found that teachers use technology not because it makes children learn effectively, but because they are compelled to do so. The authorities insist on the incorporation of technology. Smith and Greene (2013) investigated the implementation of e-learning as a method of instruction to help pre-service teachers evaluate and improve upon the implementation of their lesson plans.
in their real-world practicum experiences. The results showed that participants reported improved lesson planning, improved lesson implementation, and visual interpretations of best practices.

Other studies have found that even with inclusion of new technologies in the classroom, actual instructional strategies remain largely unchanged. Hofer and Swan (2006) found that teachers are hesitant to adopt a transformative view of technology where laptops are more than notebooks, PowerPoint means more than handwritten overheads. O’ Mara and Laidlaw (2011) noted that the problem for teachers was not technologies but the methods used to implement them. Instead of using technologies to change curriculum, teachers continued the regular drill and practice. Teachers continued to drill skills even with iPad, iPod, Smart Boards, apps, and laptops to supplement material (Kirk, 2011; Little, 2011; Steffenhagan, 2011).

Change is sometimes slow and, oftentimes, change is slower in education. Integration of technology in teaching only happens when the teacher is comfortable and competent in doing so, provided the technology resources are available to the teacher. They will become competent when technology instruction is both provided and modeled for them in their education and when they are expected to use them in their teacher education courses. If pre-service teachers graduate with full competence in the use of technology and familiarity in how to integrate it into education, the use of technology in classrooms will increase. Universities should not rely on "chalk and talk;” only then will school educational experience change.

The Problem

The problem of teacher education in India is: Teacher Education programs in India are not preparing teachers who are aligned to the needs and trend of the technological age. Ironically these teachers are prepared in antiquated programs that equip them to teach text based stand-alone classrooms.

Objective

To study the status of Technology in Teacher Education programs in India, in the four courses, B.Ed., DIET, B El. El. Ed. and M.Sc. Mathematics Education.

The Design of the Study

The sample size was of 50 pre-service teachers from B.Ed. B.El.Ed, DIET and M.Sc Mathematics Education. The sample was delimited to the capital of India, Delhi, since it is representative of the diverse Indian population. The tool used was that of the structured questionnaire with ten questions.
Analysis and Discussion

The teacher education program incorporates teaching strategies of both the digital and analogue classroom.

![Pie chart showing responses to question 1](Figure 1)

Our teacher education program uses technology enabled methods of teaching which are inherent in the teaching learning process of the teachers.

![Pie chart showing responses to question 2](Figure 2)

Figure 1 and 2 clearly show a pattern indicating that Teacher Education programs incorporate technology enabled methods while educating their interns. It is important to understand that the question asked in the questionnaire is regarding incorporation of technology and not the nature of the incorporation.
The program has space for the interns to evaluate and integrate available ICT material of different subjects.

Figure 3

The program incorporates use of computers to create ICT material that can be used in the classroom.

Figure 4
Figures 3 to 6 show an overwhelming tilt towards negative responses. Respondents have said that their program has no space to:

- Use computers for creating material for teaching;
- Allow teachers and interns to work together to evaluate material available on the internet, and
- Create interactive platforms through technology.
The responses to question 7 and 8 show a marked skewness in favour of the use of technology (see figures 7 and 8). There is no module to teach the use of technology and to create original material with it in teacher education. Then why does the analysis show skewed responses? The researcher was prompted to raw data as being a teacher educator oneself, it was known that there is no module in DIET, B. El.Ed, Or B.Ed. to teach the use of technology. But M.Sc. Mathematics Education program was not a course familiar to the researcher. The responses of the respondents were reviewed and the positive responses were of the M.Sc. Mathematics education students. The next step was to get a better understanding
of the program. It was clear that M.Sc. Mathematics Education was a newly conceptualized course with greater academic and technological review rigour. The students were taught how to create technologically-based learning material.

The teacher education program prepares the interns to work with diversity of spaces, resources, media and methods of learning- teaching in both in classrooms and online environments.

Figure 9

The program encourages forming of learning teams- of learner and accomplished educators and subject matter experts, who work together on issues related to innovative use of technology in teaching

Figure 10

Figures 9 and 10 indicate a decided lack of collaborative efforts and opportunity for working in blended environments. There is an apparent lack of appreciation of nuances of a digital learning space.

The responses show an inherent paucity of efforts in aligning teacher education to the needs and trends of the digital age. Though teacher education programs use video clips and
movies to enhance teaching or schema activation, nothing original is created by teachers or interns to use in their classes. Powerpoint presentations are also made by teachers and interns, but there is no manifestation of creativity. These attempts were motivated by the original teachers’ personal passion. The use of technology is not an inherent part of the program itself. Technology is not a part of the teacher education program in Delhi, either in strategy or content, except in M.Sc. Mathematics Education.

**Conclusion – The Road Ahead**

The careful study and analysis of the responses to the questionnaire clearly indicates that there is an urgent need to create space within the prescribed curriculum of Teacher Education courses in India. The rationale behind creating the novel learning space is that interns can learn the usage of technology and how to create original teaching learning material to be used in the classroom in that format.

Understanding the principle of using technology can help broaden the minds of the teacher and teacher educator, to the possible of elimination rote learning and drill, thereby creating room for creative discourse between teacher educator and intern, to be followed by similar interaction and learning between teacher and learner in the school classroom.

Technology needs to be taught through workshops, collaboration and interaction, which will help foster practical transaction of technology. It is not theory that has to be understood and learnt, but the confidence to tinker and tweak technology and customize it for individual needs. More importantly teachers and teacher educators need to understand that the journey of integrating technology with pedagogy is not a utopian dream. A teacher needs to weave a detailed plan with technology integrated strategies. Using technology without appreciating its nuances and mathematical basis will not yield viable results.

Administrators need to understand the imperatives of technologies, while initiating changes in education. This environment will facilitate the evolution of our digital immigrant learner into a digital native. This is a prerequisite if we want learning to be effective and learners to become efficient citizens.

We all know that India is a cash strapped nation, but that does not take away from teacher education needs to be aligned to the needs and trends of the technological age. Only then will our young citizens develop minds, open to change. Traditional text based classrooms are not preparing learners with open and receptive thinking which is essential for a nation’s progress. We do have access to technology in India, but it will only remain a statistic if the citizens who can use it don’t have open and flexible minds.

The Indian, socially conscious corporates and innovators like Ratan Tata and Sugata Mitra are showing the way in which technology can be integrated in our lives followed by education, thus opening the minds of our young citizens to embrace, in the words of Aldous Huxley,” …. The brave new world”.
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The Interrelatedness between Metacognitive Learning Strategies and Autonomy in Adult EFL Classes

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Abstract
Recently more and more qualified and skilled people are demanded in order for catering for the requirements of highly competitive world. This trend has led education to less focus on the improvement in specific skills, but more on lifelong learning outcome, which is “autonomous learning.” The requirement for augmenting the number of autonomous learners has paved the way to the introduction of some methods among which incorporating metacognitive learning strategies into regular English language teaching courses takes its place. Metacognitive model of strategic learning does have a facilitative effect on language learning through four processes; planning, monitoring, problem-solving and evaluating. The execution of these four processes is highly likely to stimulate autonomy amongst language learners. Thus, the ultimate purpose of this case study is to investigate the probable interrelatedness between metacognitive model of strategy training and autonomous learning in preparatory classes adult language learners attend to. With a view to achieving this objective, 26 intermediate level university prep class learners are subjected to training on metacognitive strategies for three months. The findings of the study gathered through both qualitative and quantitative data collection tools reveal that university prep class learners’ motivation level increases and they tend to become autonomous language learners by employing metacognitive learning strategies.

Keywords: Metacognitive learning strategies, learner autonomy, adult learners, learner motivation
Introduction

One of the issues in the field of English language teaching to which the attention and interest of teachers, administrative staff and researchers has been ascribed over the last three decades is the matter of learner autonomy. The shift from teacher fronted classes to the ones where learner autonomy has been prioritized could be associated with the conception that the dominance of teachers in language classes is conceived to be a great handicap lying in front of the success and autonomy learners could gain.

Given the steadily growing popularity of autonomy in learning both within and out of the territories of classrooms as stated by Benson (2006), comprehension of what is proposed by autonomy in general and learner autonomy in particular appears to be highly significant. Little (1994) defines autonomy as a whole including a potential for ‘detachment, critical reflection, decision-making and independent action’. In line with the definition of autonomy proposed by Little (1994), Holec (1981) defines learner autonomy as “the ability to take charge of one’s own learning … to have and to hold the responsibility for all the decisions concerning all aspects of this learning”. Taking into account the power delegated to learners in terms of getting control of all the decisions with respect to learning, it is not unlikely that autonomous learning is comprised of different layers of awareness. Simard (as cited in Porto, 2007) puts forth that autonomous learning involves diversified awareness in distinct areas: language awareness (sensitivity to how language works), self-awareness as a language learner (the learner’s attitudes toward the target language and language learning in general), awareness of learning goals (the learners’ understanding of their goals in language learning and of their strengths and weaknesses), and awareness of learning goals (the learners’ awareness of learning strategies and the resources available to them to foster learning).

Independent learning or self-directed learning is the term used interchangeably in the literature with autonomous learning. Irrespective of the term preferred, the common point amongst these terms is verbalized by Holec (1981). He emphasizes the existence of “ability” whilst defining autonomy and underlines the notion that managing the learning process is an ability which is not inborn rather it is natural or learned through formal instruction. As could be derived from the definition of autonomy, autonomous learners take the responsibility for the steps they take in due course of learning which has been designated to be endless. In this process, learners are not alone but do possess the consultation and guidance of their teachers as needed. The support of teachers aids learners to get control of learning, setting goals, planning and using strategies when they encounter difficulties.

In order to help learners become autonomous and struggle against remaining as passive receivers of the information provided by teachers within the walls of classes, metacognitive strategies are to be presented to and utilized by learners. The metacognitive model of learning was introduced to the literature following the detailed research on learning strategies (Chamot & Kupper, 1989; Chamot, Barnhardt, El-Dinary & Robbins, 1999). Materna (2007) describes metacognition in learning as follows:

“From an educational perspective, true learning is looking beyond the superficial meaning of a concept and understanding the concept from multiple perspectives. Metacognition is the ability to understand your own thinking processes and to apply active learning strategies that will promote a sense of knowing, in other words, knowing what you know and knowing what you don’t know as well as knowing those strategies to use to learn what you don’t know” (p. 91).

The metacognitive model of learning consists of four processes: planning, monitoring, problem solving and evaluating. Merely by means of concentrating on the meanings these
four processes carry, encouraging and enabling learners to become autonomous seems achievable. By the medium of the strategies brought together under the title of metacognitive model of strategic learning, learners can overcome the times of difficulty and facilitate their learning process.

Encountering autonomous learners in Turkish context, regardless of learner age, does not seem to be likely. University prep class students, the major concern in this study, largely depend upon the knowledge of their teachers. The unwillingness, or unawareness of learners to apply metacognitive learning strategies, which could positively influence the learning process, may be eliminated with the training on metacognitive strategies. In this study the effect of metacognitive learning strategies on attaining learner autonomy will be explored. This study seeks answers to the following research questions:

- Is motivation an influential factor in developing autonomy among prep class learners?
- Can learners become autonomous by the help of metacognitive learning strategies?
- What kind of changes will occur in students’ perceptions of being autonomous learners subsequent to applying metacognitive strategies?

**Methodology**

The study was conducted as a group case study lasting three months. Twenty intermediate level prep class learners whose ages differed between 18 and 21 participated in this study. The participants had 26 hours of English course per week. Both qualitative and quantitative data collection tools were employed to gather data. In order to collect the quantitative data two questionnaires were administered. The first questionnaire was an adapted one from Chamot et al (1999) on metacognitive model of learning which contained 20 questions. The other questionnaire was taken from Motivated Strategies for Learning Questionnaire (hereafter MSLQ) and it included two questionnaires as 33 motivation strategies questions and 12 metacognitive self-regulation strategies questions. Qualitative data were gathered by semi-structured interviews which were conducted at the beginning and end of the study.

At the beginning of the study one of the researchers conducted a semi structured interview to shed light on the current state of the participants concerning their awareness of the facilitative effect of metacognitive learning strategies on their own language learning journey. This semi-structured interview was also a means of finding out the existing motivation level of the participants. In pursuit of the administration of the interview, the questionnaires were given to the participants to extend the information about the participants’ perceptions of metacognitive learning strategies and motivation. To analyse the data collected from pre and post questionnaires Wilcoxon matched paired test (SPSS 22.0) was used.

Researchers designed the courses in such a way that metacognitive learning strategies were infused into the regular implementation of the program in the classes. The first step in metacognitive model of learning is planning during which good language learners take decisions about how to approach and carry out the task. As for planning, setting goals, directed attention, activating background knowledge, predicting, organizational planning and self-management strategies were presented and practised in the class. Monitoring, another component of the four processes, enables learners to check the effectiveness of the strategies while they are coping with the task. For monitoring, asking if it makes sense, selectively attending, deduction, induction, personalizing, contextualizing, taking notes, using imagery, manipulating, self-talk and cooperating strategies were in concern as dealing with the units in student course books. The strategies of problem solving step in as students face difficulties in
The Interrelatedness between Metacognitive Learning Strategies and Autonomy in Adult EFL Classes

learning process such as inferencing, substitution, asking questions to clarify and using resources. After the completion of the task, competent learners assess the success in the task and the effectiveness of the strategies applied during the task. At that stage, evaluation strategies come forth. In this study, verifying predictions and guesses, summarizing, checking goals, evaluating yourself, and evaluating your strategies were taken advantage of.

Findings and Discussion

The interview conducted at the beginning of the study revealed that the participants were not aware of how to become autonomous language learners by the medium of drawing advantage from metacognitive learning strategies. In addition to this, it was observed that the participants were not motivated adequately to carry on struggling even if they encounter obstacles in their learning process. As a way of collecting quantitative data, the questionnaires taken from MSLQ and the questionnaire adapted from Chamot (1993) were administered in the class. It was understood from pre-questionnaires that the participants were not motivated enough and did not know how to apply metacognitive learning strategies and their influence on language learning.

As can be seen from Table 1 on motivation which is adapted from MSLQ, providing instruction to the participants on metacognitive learning strategies resulted in the rise of the motivation level of the students (p<.05). The term motivation refers to the reason for someone to take action and the reason may be intrinsic or extrinsic (Ryan & Deci, 2000). Whether learners are intrinsically or extrinsically motivated, they can possess the willingness and eagerness to do their best to accomplish their goals. The researchers were able to observe the positive effect of increased motivation level on students and this could be drawn from Table 1.

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Negative Rank</th>
<th>Positive Rank</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>If I try hard enough, then I will understand the course material.</td>
<td>7,89</td>
<td>5,00</td>
<td>0.028</td>
</tr>
<tr>
<td>2</td>
<td>When I take a test I think about items on other parts of the test I can’t answer.</td>
<td>7,63</td>
<td>8,79</td>
<td>0.50</td>
</tr>
<tr>
<td>3</td>
<td>I am confident I can do an excellent job on the assignments and tests in this course.</td>
<td>6,38</td>
<td>9,21</td>
<td>0.026</td>
</tr>
<tr>
<td>4</td>
<td>I want to do well in this class because it is important to show my ability to my family, friends or others.</td>
<td>6,50</td>
<td>7,77</td>
<td>0.034</td>
</tr>
<tr>
<td>5</td>
<td>Considering the difficulty of this course, the teacher, and my skills, I think I will do well in this class.</td>
<td>4,50</td>
<td>7,75</td>
<td>0.022</td>
</tr>
</tbody>
</table>

Table 1: Motivation (MSLQ)
Table 2 belongs to the adapted questionnaire from Chamot (1993) on learning strategies which indicates the statistically significant difference (p<.05) achieved by the medium of three-month instruction on learning strategies. The participants commenced to use strategies more subsequent to the training.

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Negative Rank</th>
<th>Positive Rank</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Do you try to set goals before starting to deal with an activity?</td>
<td>15.00</td>
<td>8.63</td>
<td>.002</td>
</tr>
<tr>
<td>2</td>
<td>Do you concentrate on particular task and ignore the others?</td>
<td>7.50</td>
<td>10.07</td>
<td>.010</td>
</tr>
<tr>
<td>3</td>
<td>Do you plan the task and content sequence?</td>
<td>11.00</td>
<td>8.73</td>
<td>.008</td>
</tr>
<tr>
<td>4</td>
<td>Do you focus on key words, phrases, and ideas?</td>
<td>6.00</td>
<td>9.64</td>
<td>.040</td>
</tr>
<tr>
<td>5</td>
<td>Do you consciously apply learned or self-developed rules</td>
<td>4.50</td>
<td>6.33</td>
<td>.026</td>
</tr>
<tr>
<td>6</td>
<td>Do you use synonym or descriptive phrase for unknown words?</td>
<td>3.50</td>
<td>6.00</td>
<td>.031</td>
</tr>
<tr>
<td>7</td>
<td>Do you ask for explanation, verification, and examples?</td>
<td>7.50</td>
<td>10.27</td>
<td>.027</td>
</tr>
<tr>
<td>8</td>
<td>Do you use reference materials about the language and subject matter?</td>
<td>5.50</td>
<td>9.47</td>
<td>.001</td>
</tr>
<tr>
<td>9</td>
<td>Do you judge how well you learned the material/did on the task?</td>
<td>6.00</td>
<td>8.31</td>
<td>.004</td>
</tr>
<tr>
<td>10</td>
<td>Do you relate or classify words according to attributes?</td>
<td>4.50</td>
<td>8.88</td>
<td>.002</td>
</tr>
<tr>
<td>11</td>
<td>Do you use previously acquired linguistic knowledge; recognize words that are similar in other known languages?</td>
<td>4.00</td>
<td>8.29</td>
<td>.001</td>
</tr>
</tbody>
</table>

Table 2: Questionnaire on Metacognitive Learning Strategies
The last table, Table 3, on learning strategies taken out of MSLQ signals the raised consciousness amongst the participants of metacognitive learning strategies via the instructions on metacognitive learning strategies.

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Negative Rank</th>
<th>Positive Rank</th>
<th>P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>During the class I often miss important points because I am thinking of other things.</td>
<td>4.63</td>
<td>9.23</td>
<td>.017</td>
</tr>
<tr>
<td>2</td>
<td>When reading for this course, I make up questions to help focus my readings.</td>
<td>6.25</td>
<td>10.43</td>
<td>.008</td>
</tr>
<tr>
<td>3</td>
<td>When I become confused about something I’m reading for this class, I go back and try to figure it out.</td>
<td>5.00</td>
<td>8.75</td>
<td>.010</td>
</tr>
<tr>
<td>4</td>
<td>If course readings are difficult to understand, I change the way I read the material.</td>
<td>7.67</td>
<td>10.42</td>
<td>.080</td>
</tr>
<tr>
<td>5</td>
<td>Before I study new course material thoroughly, I often skim it to see how it is organized.</td>
<td>7.17</td>
<td>10.00</td>
<td>.106</td>
</tr>
<tr>
<td>6</td>
<td>I ask myself questions to make sure I understand the material I have been studying in this class.</td>
<td>10.50</td>
<td>10.50</td>
<td>.114</td>
</tr>
<tr>
<td>7</td>
<td>I try to change the way I study in order to fit the course requirements and the instructor’s teaching style.</td>
<td>4.33</td>
<td>8.92</td>
<td>.007</td>
</tr>
<tr>
<td>8</td>
<td>I often find that I have been reading for this class but don’t know what it was all about.</td>
<td>7.07</td>
<td>8.81</td>
<td>.549</td>
</tr>
<tr>
<td>9</td>
<td>I try to think through a topic and decide what I am supposed to learn from it rather than just reading it over when studying for this course.</td>
<td>7.60</td>
<td>7.44</td>
<td>.357</td>
</tr>
<tr>
<td>10</td>
<td>When studying for this course I try to determine which concepts I don’t understand well.</td>
<td>2.00</td>
<td>8.92</td>
<td>.001</td>
</tr>
<tr>
<td>11</td>
<td>When I study for this class, I set goals for myself in order to direct my activities in each study group.</td>
<td>9.00</td>
<td>9.50</td>
<td>.000</td>
</tr>
<tr>
<td>12</td>
<td>If I get confused taking notes in class, I make sure I sort it out afterwards.</td>
<td>3.50</td>
<td>10.36</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 3: Learning Strategies from MSLQ

The interview carried out at the end of the study extends the insights on the force of metacognitive learning strategies while trying to create autonomy in the classroom. The comments of the participants advocate the data gathered through quantitative data collection tools. Feeling more motivated could be explained by the effectiveness of equipping language learners with metacognitive learning strategies. Some of the responses of the participants during the interview are given below:

- Teacher: Are the strategies you practiced useful for you?
S1: Yes, they were useful. Now, I take notes during lessons and revise what I learn as much as I can do when I go home.
S2: I couldn’t apply all of the strategies, but I am more conscious what to do to be more successful.
Teacher: Do you apply the metacognitive learning strategies?
S3: Yes, my scores are higher now and if I use these strategies all the time, nobody can pass me.
Teacher: What do you think about the relation between motivation and success?
S4: Motivation is important for success and you motivated us very well. I am more confident now.
S5: I was afraid of failing the prep-class, but now I am sure that I will pass, I study very hard, I use extra materials at the dormitory and work with my friends who are better than me.

Conclusion

Autonomous learners, who are confident and willing to study both inside and outside the territory of school, know how to become more successful and are aware of accelerated language learning process resulting from employing metacognitive learning strategies. That is not unlikely to be the dream of English language teachers which may be fulfilled via the efforts of both teachers and learners. English instructors in Turkey need to do more to change the beliefs of adult prep class learners about traditional language classes which are characterized by the dominance of teachers and learners acting as passive receivers of the disseminated data and learners leaving behind what they learn in the class. University prep-class learners, the major concern of this study, were in need of the guidance of their English instructors to build a new learning model by which they could turn into motivated learners and be conscious of applying metacognitive learning strategies in their lifelong language learning journey. Following the training, the participants were able to realize the importance of employing metacognitive learning strategies especially when they got stuck as learning. Provided that teachers believe in the potential their learners have and try to bring that potential to light, learners can turn out to be autonomous learners who are disciplined, logical, reflective, flexible, responsible, persistent, willing to take risks, confident and aware of their own learning process.

Implications

Language teachers must become skillful in supporting learners and disseminating information. In order to do this, we need to know what methods learners use to learn and how they are motivated since language learners need to be highly motivated and have the ability of self-monitoring to become autonomous. According to Zimmerman (1986) “learning is not something that can be done for students rather it is something that is done by them”. In line with what is put forth by Zimmerman, the results of this study reveal that the students are more likely to succeed on the condition that they can learn to control their learning. Since teachers seem to function as key figures in presenting metacognitive learning strategies in the classroom and promoting language learners to apply them, the initiative aiming at increasing the employment of metacognitive learning strategies by learners of all ages could be initialized by training English language teachers on these strategies.
The Interrelatedness between Metacognitive Learning Strategies and Autonomy in Adult EFL Classes

References


Efficient Learning Strategies Designed for Military Personnel Who Have Experienced One or More Traumatic Events: A Better Understanding of their Needs and Specific Characteristics

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Abstract
This study aims to better understand a specific learning context involving military personnel in the Canadian Armed Forces who have to learn French as a second language in order to advance in their career. It has for goals to describe the learning strategies that are most efficient based on the specific needs of military personnel who have experienced one or more traumatic events in conjunction with the specific characteristics that cause positive or negative interference with their learning and the perception of their self-efficacy. The context of this research takes place in Canada where military personnel who want to access senior positions have to be bilingual with French or English as a second language. They have a limited time to achieve their target linguistic profile. Timeframes depend on their trades and the operational needs of the Canadian Armed Forces. Of course, all of the military learners have participated directly or indirectly in military operations throughout their careers. Therefore, because of the nature of their jobs, they have a greater chance of having experienced a traumatic event during their careers. This could lead some military personnel to suffer from operational stress injuries, which could interfere with daily functioning when they return from a mission or from combat. In this context, so many factors can interfere with learning and memory processes during the second language training; however, stress and emotions are the two main one. Therefore, learners who have experienced one or more traumatic events might develop sensitiveness to certain stimuli related to an event and that could affect their attention span in the classroom. The teacher’s role is to facilitate learning. The teaching strategies should take into account the experiences of the learners, and especially those who have experienced one or more traumatic events, which might interfere with their learning. Each learner will adapt differently to a new learning environment. Some military learners might develop a strong or a weak perception of their self-efficacy toward their learning and their progress. Thus, with this exploratory and descriptive research based on a mixed design with a qualitative approach: which includes an interview (60-90 minutes) and a questionnaire (115 questions), I will describe a particular learning context with the perception of the main actors, their efficient learning strategies and their perception on their self-efficacy.

Keywords: Learning, PTSD, Military, Self-Efficacy.
Introduction

Because the context of this research emerges from my practice, it is necessary to mention that at the time of writing, the researcher is also a teacher working for the Federal Government as a civil servant for the Canadian Forces Language School, and the learners are military personnel in the regular Canadian Armed Forces (CAF).

Since the Official Languages Act of Canada (1969), Canada is officially a bilingual country. Throughout all the provinces and the territories of the country, the two languages most commonly used are French and English; which means it is mandatory for all military personnel and all employees of the Federal Government to be bilingual at a certain positions in the hierarchy of the organization in order to offer services in both languages. In the CAF, there are around 72% Anglophones (Revill and Pinsent, 2009). Therefore, for the most part, military personnel have to learn French as a second language (FL2) in order to advance in their careers and to be able to communicate with their troops in both main languages when directing operations. For this reason, in this article, I will refer to FL2 for military Anglophone learners in the CAF.

It must be noted that in the CAF, there are several language schools. The military personnel who participate in this study are attending or have attended the Canadian Forces Language School of Canada located in the National Capital Region (Ottawa/Gatineau). They are aged between 35 and 50 years old and have been in the military for several years. The most majority of the learners have participated in military operations around the world and within Canada as officers or non commissioned members. Because of the nature of their jobs, many of the soldiers might have experienced one or more traumatic events during military operations. Thus, their experiences might interfere with their learning after returning from missions where they have experienced elevated levels of stress and had to face life-threatening situations. As well, their second language training might be challenging because of their careers and their specializations. This will be discussed in this article.

Problems to Consider

At the Canadian Forces Language School located in the National Capital Region, in Québéc (Canada), each year, military learners try to obtain a linguistic profile in order to advance in their career and command their troops in both official languages. As a FL2 teacher for the National Defence of Canada, I personally have observed different manifestations of stress in the classroom.

In fact, not only the amount of time allowed for the FL2 training during the career could represent a stress factors for some military personnel; many factors can interfere with their second language learning. Among those, there is the capacity to adapt to the difference and to a new environment (Krashen, 1981; Paradis, 2004; Spencer, 2009). Most of the learners haven’t had to sit all day long for many hours since a long time. They also have to adapt with speaking in another language with a short amount of words to express a specific idea. They often feel they don’t have enough vocabulary to say everything they would like to express. In addition, their capacity to adapt to the other culture and their level of knowledge of the second language affect their learning according to Walqui and Ed (2000). Those authors report that the level of competencies in the first and second language can also influence second language learning. According to them, the more a learner as been in an academic context, the more efficient he is toward his learning by developing strategies more convenient for him.
Their age is also an additional factor which could create stress and could interfere with their learning: military learners are adults. As a child, learning a language involved procedural memory, in a reflexive way, and demand to learn four communicative skills: to listen, to talk, to read and to write. Listening and talking are skills developed when the child is in contact with speakers. All the grammar rules and other specificities of the language are learned in school like reading and writing (Krashen, 1981). For an adult learner, learning a second language is not only the development of four skills but also the acquisition of knowledge in a reflection way (Ellis, 2008). Besides, it is more challenging for an adult to learn a second language because of the age and the brain plasticity (Bourassa, 2006; Cordier and Gaonac’h, 2007; Couchaere, 2001; Dworczak, 2004; Ellis, 2008; Pepito and Dunbar, 2004; Squire and Kandel, 2002). The memory process decline with ages, but adult learner will feel it particularly after 35 years old (Squire and Kandel, 2002). However, it can represent an advantage if the adult can rely on learning strategies that is has acquired through his life according to Ellis (2008). Learning a second language requires efficient mnemonic strategies, and the experience of the learner might be relevant to transfer some information, especially new vocabulary and verbs conjugation.

On the other hand, efficient teaching strategies should consider other stressors which seem more related to their careers and their past experiences. Military personnel are often deployed to dangerous environments: they have to participate in dangerous situations and in combat (Cossar, 2010; Grossman, 2008). During their second language training, because of the curriculum provided by the military instruction academy, they are asked to talk about their past and to related highlights of their careers and some memories, and lessons learned that might include the death of a friend or a tragic event. For some learners, it could be the first time they talk about it. Their work ethic and intense training include killing the enemy (Grossman, 2008). Some learners admitted having flashbacks and images intrusions related to previous experiences or military operations during their second language training. Certain can deal very well with stress symptoms because they have recourse to efficient coping strategies whereas others encounter some challenges during their learning and find it very difficult. While relating memories, some learners can experience different reactions because of their increase exposure to traumatic events by the very nature of their job. Indeed, military personnel have a prevalence to develop PTS, even if they have been prepared to be often deployed to dangerous environments. They train to react precisely in dangerous situations and execute specific tasks in combat, but like every human, they can react differently in front of danger (Grossman, 2008).

Military Instruction

Before attending to the Canadian Forces Language School, all the military personnel trained intensively in order to support military operations. For this reason, they are prepared for the most part to deal with very high stressful situations and traumatic events. The military instruction is usually done in three steps: 1. explain the objective (mission) – tell; 2. demonstrate all the steps required - show; 3. imitate and repeat until it is done without effort - go. However, learning a second language is way different from other courses and military training: it doesn’t require the same steps according to the communicative approach. It demands more cognitive effort and is support by more cerebral spheres including semantic and episodic memories. Thus, because learning is a complex process that includes different spheres of the brain, there is a probability that some topics could be more sensitive for some learners if they experienced one or more traumatic events (Ehlers and Clark, 1999; Ehring and Ehlers, 2011; Kleim, Ehring and Ehlers, 2012).
Traumatic Events

The participation of the military personnel in mission and in dangerous situations like in Afghanistan, in Iraq, in Rwanda, in Bosnia and more could be more direct or indirect according to their trades and ranks. According to Herbert and Wetmore (1999), some people have a greater chance of being exposed to traumatic events. Those authors divided them in three categories: 1. victim of unnatural disasters (terrorism); 2. victim of natural disasters (earthquake, tsunami, hurricane); 3. victim of acts of violence, crime (combat, sexual assault, killing). It seems that the victim of acts of violence by the hand of a man have more prevalence to develop PTSD symptoms (Geninet and Marchand, 2007).

According to some authors, including Branker (2009), war and military operations in Iraq have an undeniable effect on military when they return, after fighting. Some soldiers return with physical injuries and mental injuries (TBI, operational stress, depression, and PTSD. PTSD and depression are often concurrent diagnoses according to Simoneau and Guay (2008). For O’Herrin (2011) and Rodriguez Martin (2009), the prevalence to develop PTSD increase if the military has deployed several times in war zone against insurgents. According to other authors, including Bouchard, Baus, Bernier and McCreary (2010), it is the combination of combat and peace keeping operations that would have a more negative impact on mental health of the military, and not only the participation to one or another.

In reality, certain factors contribute to the probability that a traumatic event will have long term consequences on the mental health of an individual (Acheson, Gresak and Risbrough, 2012). Those factors are commonly called risk factors or vulnerability. It refers to the circumstances, to the environmental aspects, and to the victim particularity. Therefore, several authors (Bouchard, Baus, Bernier and McCreary, 2010; Jehel and Guay, 2006; Martin, Germain and Marchand, 2006) relate that the intensity of PTSD is determined by the intensity of the threat and to the level of suffering felt. In other words, the impact of an event on military personnel’s life differs according to the personality of the individual, the perception of the context where the event takes place, the duration of the event, and surely the strength of the fear or horror at the moment.

According to Janoff-Bulman (1992), there are three main fundamental beliefs when humankind is confronted to a traumatic event, they will believe that: 1. we live in a good world, fair with everybody, where each person is nice and trustworthy; 2. we live in a world where everything happens for a reason, everything make sense, is logical; 3. or finally, have the magic thought: it will never happen to them. They are invincible. So, it is the personal characteristic perception of the individual that will influence PTSD development or not. On that point, many factors influence the resilience capacity and recuperation of certain military personnel (Tychez, 2001). Consequently, it is not all military who have experienced one or more traumatic events that will develop PTSD. For the same reason, it is not all military that will have learning or memory difficulties.

Bourrassa (2006) reports that when someone is facing a high level of stress, the nervous system is getting ready for a primitive response: freeze, escape or attack. The heart beat and the breathing will accelerate. She mentioned that the body reacts according to eight modalities: all the five senses (ears, eyes, nose, touch, taste) as well as the three body responses, which comprised the posture, the movement and the sensation arising. She explained that there is a change in reading time. Grossman (2008) added that all the warriors during military operations and combat show isolated movement: they have a focussed attention and their survival instinct is activated. Sometimes, they don’t even hear the sound of their gun fire.
Resilience Program

CAF have developed a program to prepare better the soldier previous to a mission so they are able to deal with stress symptoms better during dangerous situations in theatre of operations. This program is called Road to Mental Readiness (R2MR) and “it encompasses the entire package of resilience and mental health training that is embedded throughout CAF members’ career, including the deployment cycle. R2MR training is layered and tailored to meet the relevant demands and responsibilities CAF personnel encounter at each stage of their career and while on deployment. In this way R2MR is designed to ensure that the most appropriate training is provided when required to ensure CAF personnel are prepared mentally for the challenges they may encounter. The overall goal of this training is to improve short term performance and long term mental health outcomes.”  


While the program seems efficient for some of the military personnel deployed, a large percentage (2/3) of the military personnel deployed isn’t diagnosed for PTSD symptoms or depression when they return and won’t seek for help (Fikretoglu, Brunet, Guay and Pedlar, 2007). However, many reasons can lead someone not to talk about some symptoms encountered while others will demonstrate efficient coping strategies.

Operational Stress and PTSD

On a statistics perspective, 58 % of the natural disaster victims and military personnel involved in combat have a prevalence to develop PTSD according to Bouchard, Baus, Bernier and McCreary (2010). In United States, between 14 and 19 % of the military personnel deployed might develop PTSD or depression according to O’Herrin (2011). In Canada, 13 % of the military personnel deployed in Afghanistan will come back with an operational stress which resulted in PTSD and depression said McKay (2012).

Actually, military personnel might develop operational stress, depression and PTSD because when they return from a mission, they need to adapt progressively to the return to the reality. Whereas some will adapt progressively, others will experience persistent operational stress for two to six months or more after they return. To be diagnosed with PTSD, the patient need see a specialist, but not all the military are comfortable talking about what they have experienced during a mission with a specialist. While some will seek for help, others will think that if they talk, it could impact their career or they will be seen as weak (Burke, Degeneffe and Olney, 2009).

PTSD’s Impact

PTSD has a negative impact on the quality of life of the people who have suffered from it. In fact, PTSD has a negative impact on the general mood of the person, her temper and her capacity to concentrate to the daily tasks. Individuals suffering from PTSD become very affected in all spheres of their life: conjugal, familial, professional and social according to Boyer, Guay and Marchand (2006). Several studies clearly show the impact of PTSD on learning, especially the capacity to memorize (Buchanan, Etzel, Adolph and Tranel, 2006; Ehring and Ehlers, 2011; Kleim, Ehring and Ehlers, 2012; Schaefer, Pottage and Rickart, 2011; Tapia, David, Michel and Wissam, 2007).

Learners who have experienced one or more traumatic events might not have been diagnosed for PTSD but can develop sensiveness to certain stimuli and that affects their attention span in certain occasions (Sinski, 2012). Some learners might express less tolerance to
Efficient Learning Strategies Designed for Military Personnel Who Have Experienced One or More Traumatic Events

brightness, background noise, body movements, or any elements related to the traumatic event. They will experience interferences in their learning, especially their reading skills. Moreover, some cannot simultaneously listen to a presentation and take notes (MacLennan and MacLennan, 2008). They might have difficulty to concentrate during studies. PTSD diminishes the capacity to plan, to organize, to prioritise goals and to set objectives: to manage. Nonetheless, it doesn’t matter how efficient a teaching and learning strategy could be, some student might experience PTSD symptoms and it can affect their attention span.

While their attention span can be affected by many factors, in the classroom, the teacher can observe some symptoms such as: 1. behavioral manifestations (lower tolerance, hyperactivity, aggressiveness, rage, and impulsivity); 2. cognitive manifestations (memorisation difficulties, intrusion and flashbacks, difficulty concentrating, difficulty adapting to change, dissociation, and specific learning strategies); 3. emotional manifestations (withdrawal, avoidance, shame, frustration, low self-esteem, feelings of discouragement).

The experience they have acquired during their careers might interfere with their learning and affects their perception of their self-efficacy. Consequently, some military members might develop a weak perception of their self-efficacy toward their learning of FL2 if they don’t see themselves succeeding while experiencing stress symptoms or/and memory difficulties.

Self-Efficacy

Self-efficacy is a well know concept for the military personnel in the CAF says Cossar (2010). For this author, all the military instruction is based on self-efficacy so that they can perform in stressful situations and believe in their contribution for the success of the mission. The author Bandura (2007) explains that all adults have different experience. When they are confronted with a challenge, when they are put in a learning situation, they have two choices. They can have the motivation to excel and proudly succeed; or view the learning situation as a threat, an impossible challenge. Their judgement on the beliefs to succeed will be based on their experiences (Bandura, 2007) and on their preparation (Cossar, 2010; Grossman, 2008): the actions they take to achieve their goals and their perceptions on their self-efficacy. The way they perceive their self-efficacy will influence their engagement and by consequence their performances. Many authors (Bandura, 1988, 1997, 2007; Carré, 2003, 2004; Galand and Vanlede, 2004) support the strong relationship between self-efficacy, performance and perseverance.

Objectives

Because of some stress symptoms manifestations in the classroom, because of memory difficulties and because not all the military affected by PTSD are diagnosed, there are two main objectives in the research: 1. to understand and to describe the learning strategies that are most efficiently promoted learning FL2 according to the specific needs and characteristics of military personnel who have experienced one or more traumatic events during their military career; 2. to understand and to describe what are the needs of those learners according to their specific characteristics, to what interferes with their learning and to their self-efficacy.

Theoretical Frame

When learning a second language, learners are asked to participate actively and to collaborate with their teachers (Krashen, 1981; Perrenoud, 2002, 2008). They have to be more conscious of the most effective ways they learn so that they can reach their full potential and be able to communicate in their second language into functional situations (Ellis, 2008). According
to the communicative approach, learners are invited to participate in interactive and oral exercises to develop their competences and skills in communication (Germain and Netten, 2005, 2006 a., 2006 b.). The teacher should choose teaching activities based on the reality of the learners. Their learning should include words, pronunciation, verbs conjugation, agreements, and above all sentences created from: authentic documents, role plays, debates, discussions oriented toward the career of the learner and his life experiences (Cohen, 1996; Germain and Netten, 2005, 2006 a. and b.; Germain and Séguin, 1993; Knowles, 1980, 1984, 1990; Krashen, 1981; Loiola and Tardif, 1992; Puren, 2001).

Beside the communicative approach, in order to develop language skills and knowledge at the same time, Knowles (1980, 1984, and 1990) believes in andragogy which is the art and science of adult in education. This theory has been developed more than thirty years ago and is based on the experience of the learners. What is special about this research is that the experiences of the learners include homicide, peace keeping operations, humanitarian interventions, search and rescue, NATO and UN missions and the defense of the country. Military personnel have to deal with stressful situations thorough their careers; their learning should be oriented toward their communicative needs at work to direct military operations. However, some of the learners will meet challenges during their learning. Most of the stressors related to those challenges can be divided into four different categories: cognitive, social, psychological and environmental.

**Cognitive**

In order to learn a language, one must process and memorize some information. Learning a language involves many actions and the ways to encode the information could differ from one person to another. According to many authors (Chamot, 1987; Cohen, 1996; Oxford, 1990), there are four learning strategy levels: cognitive, metacognitive, affective and social. For Begin (2008), a learning strategy is defined as a series of actions, metacognitive or cognitive, used in learning situations, oriented in the goal of completing a task.

When an individual attempt, consciously or unconsciously, to memorize and to learn a second language, he tries to cease new information and to transform it in mental representations (Ellis, 1985, 2008). When the individual is encoding information, all the mental representations are regrouped in three categories: 1. visual codes; 2. phonologic codes; 3. semantic codes. Each code comprises elements like: colors, shapes, series of letters, etc. (Dworcezak, 2004). Among those codes, the visual codes are really important because according to Squire and Kandel (2002), vision is the main sensorial modality for humans. For those authors, more than half of the cortex is dedicated to the treatment of the visual information, either the colors, the shapes, the movements, the orientation, and the spatial localisation of an object. Bourassa (2006) supports this statement and says that visual acuity regroup seventy percent of the sensorial receptors.

Once the information is transformed in mental representations and encoded, its recall should be efficient afterward. However, by constantly adding new information, it is necessary to modify the way the information is already represented. The restructuration of the information into the linguistic system is affected by the life experience of the learner, his memories and the information attached to it in relation to the new information to memorize. According to Dworczak (2004), there is an important flexibility in regards to the treatment of the information. The more the frequencies of associations to memorize are high, the more the memory stabilizes: and the individual forgets less. For Ellis (2008), the more the learners are advanced, the more they are competent and have more skills to learn and overcome their learning challenges. Bourassa (2006) agrees to this and adds that some experience’s memories have a bigger
emotional charge; therefore, it could facilitate the treatment of some information in a certain way, because some words might have a strong emotional dimension and might not need many repetitions to be encoded; or, on the other side, it could harm the memory process if the learner prefers avoiding some words with a strong emotional charge. Grossman (2008) tells that the memorisation and the encoding of some information related to a traumatic event are done in a selective way for warriors. All the information is not treated and encoded the same way.

Social

On the social aspects, some authors like DiRamio, Ackerman and Mitchell (2008) have studied the integration of veterans on campus and they have discovered that, for some veterans, a transition was needed in order to adapt to a new environment and new interactions. They felt a difference of age between veterans and other students of the institution; and reported that several veterans mentioned having less tolerance toward immaturity of certain students. They had integration difficulties, “difficulty to stay in the game”. Therefore, the environment and the interactions have an impact on learner’s perception of their self-efficacy and performances. DiRamio, Ackerman and Mitchell (2008) point out the importance of a belonging to a community for the majority of the veterans. It was important to create a place for them to meet and gather. Beside the social aspects, it must be taking into account also that their affective and psychological specific needs could be different from other students because they might have been exposed to one or traumatic events and it could interfere with their learning.

Psychological

A lot of psychological and affective elements can interfere with second language learning. The main one could be stress management. Stress is an element to consider because of the short timeframe and the age of the learners. Having a short amount of time to learn can be stressful. Also, experiencing memory difficulties can increase stress and affect learning. Some learners feel frustrated sometimes, discouraged, and diminished because of their lack of vocabulary to express a specific idea. Also, it is necessary to consider the possibility that some learners might experience PTSD symptoms like flashbacks, lack of attention and concentration, short temper, lack of sleep and difficulty to listen and to take note at the same time. The learner’s perseverance toward learning and his ability to overcome difficulties influence his perception on his self-efficacy and his development. Moreover, there are environmental elements which could promote learning or on the opposite affect negatively self-efficacy.

Environmental

According to many specialists working with military personnel and veterans, the disposition of the environment must consider that for the most part they have knee and back injuries, and impaired hearing. Consequently, many breaks should be provided so they can walk around the room and stretch a little bit. Also, conversations should be interactive and the desks should be organized in the shape of a “U”, where each student is facing each other, and can read on the lips of the other if needed. There should be also some care to limit background noise, promote natural brightness, and develop a “zen” environment. It should be mentioned also that some military personnel would be incline to choose their place, and if it is the case, they should have the right to do so. For some of them, it might be something important related to a traumatic event. Because of the nature of the event, some would prefer to sit by the door while others will insist to sit in the corner. A good communication and collaboration with the teacher is needed.
In addition, the best learning environment should be a safe and respectful environment based on collaboration instead of competition among learners. It should take into account the personal experiences of the learner; the ranks (officers or non-commissioned members); and the service commanders (Navy, Army, Air Force, Special Forces).

If they can learn in a healthy and warm climate, it can reduce or eliminate stressful conditions and the emotional distress attached to it. It might increase their perception of their self-efficacy and their performances.

**Methods**

This research studies socio-psycho pedagogical dimensions. It is an interpretative research articulated around the relationship and the interactions between the learner and his learning environment, between the learner and the teacher, between the researcher and the learner, and between the researcher and her environment. It aims to describe a particular learning context with the perception of the main actors: the learners. It is an exploratory and a descriptive research based on a mixed design with a qualitative approach: which includes an interview (60-90 minutes) and a questionnaire (115 questions).

The interview is divided in two sections. In section one, there are questions comprised in the psychological dimension: some questions related to the historical of the participant to better understand his specific characteristics and his perception about PTSD. Others related to the military career and his participation in a mission or in military operations (Bouchard, Baus, Bernier and McCreary, 2010). In the second section, there are some questions in link with the teaching strategies and the education dimension, the environmental and social dimensions and their perceptions of their ideal learning environment.

After the interview, participants are asked to answer a questionnaire (115 questions) including four measuring scales and some demographic questions.

**Measuring scales**

Some scales can predict performance of the learners in their second language. The Strategy Inventory for Language Learning (SILL) scale from Oxford and Burry-Stock (1995) has 50 questions. It allows analyzing the factors that may identify the frequency of the linguistic strategies used by learners in a second language; because according to those authors, there is a strong relationship between frequencies SILL and the level of performance in the second language. Besides, according to Mizumoto (2013), self-efficacy and learning FL2 are strongly related. He developed a scale of 23 questions and the results of this study showed that self determination learning can considerably increase vocabulary knowledge.

Furthermore, according to Yilmaz (2010), SILL questionnaire describes the various learning strategies. However, this author was also preoccupied by the participant’s perception on their self-efficacy. So he created six questions related to the six subscales of the SILL questionnaire: 1. memory strategies; 2. cognitive strategies; 3. compensatory strategies; 4. metacognitive strategies; 5. affective strategies; 6. social strategies. Those two scales are, according to Yilmaz (2010), a great tool to better understand learner’s strategies and to describe their perception on their self-efficacy.

The learner’s judgement on his belief in hi competences to succeed play a crucial role in his engagement and his performances during his learning (Bandura, 2007). For this reason, Noels, Pelletier and Vallerand (2000) created the Language Learning Orientations Scale built with 21 questions and based on the Learning Orientations Subscales (LLOS-IEA) from Deci and Ryan (1985, 1995). It measures the self-regulation and self-determination of the learner. This
scale helps to understand better and describe needs and specific characteristics of military learner by taking into account their preferences and their perception on their actions. It includes: 1. amotivation on one side of the spectrum; 2. extrinsic motivation by regulation; 3. extrinsic motivation introjected; 4. extrinsic motivation identified; 5. intrinsic motivation by accomplishment; 6. intrinsic motivation by learning; 7. and motivation by sensations on the other side of the spectrum. The more the motivation is internalised, the more the determination to succeed is strong. The more the motivation is extrinsic, the more it affects negatively self-determination. With this scale, it is possible to better understand all the actions that a learner will take to learn and to progress and his motivation behind his actions.

The last section of the questionnaire included 13 questions to collect personal information like gender, age, rank, trade, etc.

This research has been approved by DGMPRA Social Science Research Review Board and the Office of the General Doctor (Mental Health Specialists) of National Defence of Canada; also, by the ethical board of the Université du Québec en Outaouais, in Gatineau.

**Conclusion**

I am still collecting the data, but from what I have learnt so far, I could say that just a few changes will positively affect the learning context for military personnel. As Puren (2001) has mentioned, there is not an absolute linguistic system, there are so many different ways to learn and to make progress. It is necessary to better understand the needs of military learners, who have experienced one or more traumatic events in order to provide them a better learning environment in regards to their specific characteristics. And to identify those factors that interfere with their learning and perception of their self-efficacy based on their learning strategy inventory.
References


Efficient Learning Strategies Designed for Military Personnel Who Have Experienced One or More Traumatic Events


Master Students in University–Industry–Government Collaborations

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Abstract
This study shows how extensively master students collaborate with industry and government around the time of their graduation. This finding corresponds with the triple helix model, which predicts that university-industry-government interactions are likely to increase in the knowledge economy. Our findings also complement the results of the previous literature concerning the industry-interactions of doctoral students. Further, we provide empirical illustrations of how work-based learning such as placements and internships, and thesis made in collaboration with employers, are experienced by master students. This is important because a large majority of the literature have concentrated on employers’ perceptions of the employability of new graduates. By exploring graduates own views on stakeholder interactions further understanding can be achieved about how to promote employability skills of new graduates. Finally, we use a regression model to study whether pre-graduate university-industry-government interactions have an effect on the probability to find a job.

Keywords: Triple Helix, employability, student-stakeholder collaboration
Introduction

Recent studies of university-industry relationships have stressed the importance of doctoral students, who are not only important knowledge producers in collaborative research projects, but also an important channel for knowledge transfer between universities and firms (Bienkowska and Klofsten 2012; Thune 2010). However, in addition to doctoral students, a large number of master students interact with firms/government or receive funding from firms/government before their graduation. As well as doctoral students, these master level students are important “bridge builders” between the university, industry and government.

This mainly empirical paper aims to shed light on the following questions. (i) How common phenomena certain kind of forms of industry/government interactions are among graduate students? (ii) How students experience these interactions?

Because our data stems from individuals who have just graduated, we are also able to look at whether the interactions during the studies have any effect on the probability to be employed after the graduation. This is our third main interest in the paper at hand.

Triple Helix context

In scientific history, double and triple helixes play a significant role. In 1953, Linus Pauling and Robert B. Corey presented that the DNA of organisms can be described as three chains, which wrap around each other and take a spiral-shape. Only a few months later, James Watson and Francis Crick presented their own double helix model. Now, we know that the latter model became known as the correct DNA template. The triple helix model, instead, has used as a model for a variety of transition processes for example in molecular biology.

The triple helix was used to model institutional structure and its evolution for the first time in technology research workshop in 1994 by Henry Etzkowitz and Loet Leydesdorff. Their interest was to analyse relations between university, industry and government and in particular to model the constant change in those relations; (Leydesdorff and Van den Besselaar 1994; Etzkowitz 1994; Etzkowitz and Leydesdorff 1995). The triple helix model combined Etzkowitz’s long-term interest in the university and industry relationship between the analysis of institutional evolution; (David and Foray; Nelson 1994; Leydesdorff 2012).

According to Leydesdorff and Etzkowitz, the university-industry-government relations are driven by a common goal to promote innovation, in which science based knowledge is central. With such a common goal, the three sectors are beginning to take the role of the others though at the same time retaining their traditional missions. As a consequence, hybrid organizations and networks appear.

In universities, the traditional teaching role is likely to change as education policies are geared towards emphasizing employability and workplace skills, entrepreneurship education and collaboration with industry as part of educational programs. To promote e.g. employability and collaborations we need to know, what kind of problems appear in student-industry collaborations. There are some literature focusing on samples of PhD students who participate in specialized industrial PhD programs or collaborate with industry in some other less formal way. From those studies we know that several characteristics of the collaborations, such as firm characteristics, type of organization, resource exchange and routines developed during the course of collaboration, have an effect have an impact on PhD students’ interaction experiences; see (Thune 2010; Butcher and Jeffrey 2007; Wallgren and Dahlgren 2005). In addition to doctoral students, a large number of master students interact with firms or receive funding from firms before their graduation. Very little is known about master students experiences or problems in industry collaborations, although master level students are important “bridge builders” between university and industry as well as doctor students.
Employability context

The former literature has highlighted the importance of work-based learning such as placements and internships in promoting the employability of graduates (Wilson 2012). The large majority of the literature have, however, concentrated on employers’ perceptions of the employability of new graduates; see e.g. (Lowden et al. 2011). We aim to take a look at the other side of the issue: we explore graduates own views on their employability skills, and whether work placements and also thesis made in collaboration with employers could be used as a mean to promote employability skills.

An Empirical Study

Research design

Our data stems from 296 persons who have graduated from the Finnish university (University of Jyväskylä) to qualify as a Master of Science in 2013. These persons were interviewed by phone to gather data on several questions concerning e.g. their industry collaborations during studies. Data collection began in xx 2013 and was completed in February 2014. The sample of interviewed persons covers 20% of all new graduates from University of Jyväskylä in 2013. To ensure that the distribution of fields of sciences in a sample correspond to the whole population of graduates we used stratified sampling. The random sample from graduates from each faculty was taken in a number proportional to the faculty's size when compared to the population of all graduates.

University of Jyväskylä is a multi-disciplinary university located at the Central-Finland. It has its origins in the first Finnish-speaking teacher training college founded in 1863, thus it has played a significant role in Finnish cultural history. The university is divided into seven faculties: humanities, information technology, education, sport and health sciences, mathematics and science, school of business and economics, and social sciences. Each faculty provides undergraduate and graduate degree programs in more than one subject.

Characteristics of respondents

Interviews were based on stratified random sample of MSc graduates. We had seven strata representing the faculties of the University of Jyväskylä. For this reason, in absolute terms, most of the sample of the interviewees came from the biggest faculties, Humanities and the Faculty of Education. Non-response rate throughout the study was very low, about 5%.

The age range of the respondents is wide: the youngest respondents were under 25 and the oldest almost 60 years old. The youngest respondents came from Faculty of Mathematics and Science and from Faculty of Humanities. The average age of the respondents in these faculties is less than 30 years. In addition, in Faculty of Mathematics and Science, all respondents were under 37.
Thesis made in collaboration with industry or government

Of all the respondents 35 per cent made their graduation thesis in collaboration with industry or government. As can be seen from Figure 2 below, there are some variability between faculties in shares of collaborative works. In faculty of information technology over 60% of master thesis was collaborative works whereas in faculty of education the corresponding figure was around 25%.

Given that thesis was a collaborative work, the topics of them were suggested by the stakeholder institution as usually as the student herself/himself. Only slightly more than a half (53%) of the topics were invented by stakeholder institutions.
A share of 34% of the collaborative thesis resulted in to a follow-up project or event with the stakeholder. In this context, it is worth to mention the Faculty of Information Technology, in which more than half of the collaborative thesis led to a new project /event. Of all the follow-up projects, 19% were work attachments between graduates and collaboration firms or organizations.

The question of whether the topic of the thesis was invented by the stakeholder or by the student herself seems not to have a direct effect on the probability to end up in an employment relationship with a partner organization. In roughly half of the thesis leading to a work attachment the topics were invented by students themselves.

**On-the-job training/Internships**

Of all the respondents 65% participated in some kind of on-the-job training that was included in their studies. It seems that graduates consider on-the-job training as an important
factor in the probability to get the first job after graduation: around 60% of the respondents say that on-the-job training has helped them at least moderately in finding a job. Especially graduates think on-the-job training improves their ability to perform at work. When the impact of on-the-job training on the performance at work was asked, 80% answered it has affected at least moderately.

Figure 5: How much on-the-job training/internship has affected on your probability of become employed? Share of responses by faculty. N=159.

Figure 6: How much on-the-job training/internship has affected on your ability to perform at work? Share of responses by faculty.

**Employment**

In general, graduates from the University of Jyväskylä find jobs very quickly: around 80% of them become employed within few months after graduation or even faster; see Figure 7.
Regression analysis

In the previous chapters, we have presented illustrative evidence on how graduate students interact with industry and public sector around the time of the graduation. We concentrated on two perhaps most common ways of interaction: graduate thesis made in collaboration with stakeholder institutions and on-the-job training. Next, we link these two forms of student-stakeholder collaboration to the concept of employability which, in turn, is closely related to the probability of finding work after the graduation.

As a method of analysis we employ regression model, which allows us to study how large part of variation in post-graduate employment statuses among graduates can be explained by variation in pre-graduate interaction with potential employers. One benefit of regression analysis is that it allows us to model also the effects of several other characteristics of graduates, such as age and work experience, on the employment. This ensures that our results concerning the effect of pre-graduate interaction are not driven by these other characteristics. At the same time, we understand that there might be some other relevant factors that are not observable in the data. That is why we do not argue that our results are causal in the strict sense. Instead, we aim to provide illustrative information related to our research questions.

Our base model can be written as follows:

\[ Y_i = \alpha + \beta_1 CoWork_i + \beta_2 OnTheJobTrain_i + \text{OtherChar}_{i} \gamma + \varepsilon_i, \]

Where \( Y_i \) is a binary variable indicating whether respondent \( i \) was employed at the time of the survey, alfa is a constant term, beta1 ja beta 2 are unknown parameters that represent the effect of collaborative thesis, CoWork, and on-the-job training, OnTheJobTrain, on the right-hand-side variable \( Y \). The unknown parameter vector gamma represents the effects of other characteristics, OtherChar, of respondents on \( Y \). This term is added to the model to ensure that the estimates of the beta variables are not driven by the other characteristics. Finally, epsilon is the usual error term in the regression model.

As a further analysis we estimate also the model, where the dependent variable \( Y \) is the number of months between the graduation and the time of getting the job given that respondent has finally employed.

We estimated the unknown parameters of the model by OLS. The estimation results are reported in Table 1 below. When the dependent variable was a binary variable, the estimated coefficient of Collaborative thesis does not deviate statistically significantly from zero.
Instead, the coefficient of on-the-job training .16 and is statistically significant. As the dependent variable can be interpreted as the probability to get a job, the results say that participating in the on-the-job training increases the probability of being employed by 16 percentage points.

We studied further those respondents who were employed at some point after (or even before) the graduation. We regressed the velocity of finding a job i.e. the number of months before a respondent become employed after the moment of graduation on the same regressors as in the case of the binary dependent variable. From the second column of Fehler! Verweisquelle konnte nicht gefunden werden., we can see that given that a graduate will be employed after the graduation, she/he will find a job on average faster if her/his thesis is made in collaboration with a stakeholder institution.

Table 1: Regression of probability to be employed (Model 1) and the number of months between the graduation and the time of getting the job given that respondent has finally employed (Model 2). Standard errors are in parentheses and are robust to heterogeneity; p-value indicated by *** p<0.001, ** p<0.01, * p<0.05.

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<th>Model 1</th>
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<td>(0.0544)</td>
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Conclusion

This study shows how extensively master students collaborate with industry and government around the time of the graduation. We find that 35 % of master students made their graduation thesis in collaboration with stakeholder. In addition, 65 % participated in some kind of on-the-job training that was included in their studies. This finding corresponds with the triple helix model, which predicts that university-industry-government interactions are likely to increase in the knowledge economy. Our findings also complement the results of the previous literature concerning the industry-interactions of doctoral students.

Further, we provide empirical illustrations of how work-based learning such as placements and internships, and thesis made in collaboration with employers, are experienced by master students. On average master students opinion is that industry/government collaborations have a positive effect on their employability and ability to perform at work.

Finally, our regression results indicate that (i) on-the-job training increases the probability of getting a job and (i) making a collaborative thesis increases the speed of finding a job.
References


Audience Is Everything: Rewriting Composition Classrooms to Incite Democratic Participation, Social Activism, and Public Discourse

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Abstract
It is often assumed that the college classroom signifies a “public” space and that the writing done therein is an inherent form of “activism” (Ervin, 1997). But this supposition is misplaced. The reality is that composition courses teach rhetorical skills in a sort of abstract vacuum where the writer is expected to compose for an academic audience alone—often an audience of one: the instructor. The notion, then, that writing for a composition course is a form of public activism is misleading because the classroom is, in fact, a restricted community in which writing is transmitted to a privileged audience instead of a public one. Because academic writing is taught and disseminated within realms that remain largely inaccessible to those outside of the institution, academia has created a semi-closed circuit that mobilizes writing and research but only in an orbital, exclusive fashion.

Such limitations of audience and purpose prompt three concerns for the college composition classroom: the disengagement of the composition student; the perpetuation of dominant, hidden ideologies; and the neglect of our democratic responsibility to foster discourse between author and society. Composition courses offer a unique opportunity to address these issues using public discourse. This essay will explore the problems of engagement, ideology, and discourse by surveying student opinions regarding composition classes and by positing that an opportunity for improved composition pedagogy exists in our ethical obligation to use the composition classroom to generate practiced, democratic advocates. In recognizing our social responsibility to the communities that sustain our institutions, instructors can repudiate the gravitation toward armchair politicking and instead incite real-world change alongside our students. And in teaching writing as and through communication, we may just salvage what remains of our students’ longings to write what matters.

Keywords: English composition, academic writing, audience, public discourse
Introduction

“Audience is everything.” This is the line that I fed my college-level English composition students in each and every course that I taught. Like the realtor’s age-old mantra on location, I emphasized the importance of audience until the very mention of it was met with eyeballs rolling in sockets and audible huffs and pffts. I am not the only one, though, to tout this or a similar phrase. As an undergraduate writing major, I too was indoctrinated early on as to the necessity of audience awareness. The professors that I looked up to and then went on to work alongside stressed the need for budding college writers to accommodate a specific readership.

In addition to faculty, this audience-is-everything tune is a recitation sung by masters in the field of composition pedagogy. What I refer to below as an “ideal” audience, Paul Silvia (2007) calls an “inner audience,” claiming that “an image of who will read your paper . . . will help you with your writing decisions” (p. 80). Lisa Ede and Andrea Lunsford (1984) assert, “the writing process is not complete unless another person, someone other than the writer, reads the text also” (p. 169). Peter Elbow (1981) reminds readers to “pay lots of attention as you write to your audience and its needs” (p. 177). Although these are just three examples in a veritable galaxy of writers who write on writing, it is safe to assume that the lecture on audience import is rooted deeply in the discipline’s history.

It took me six years of teaching higher education writing courses to begin to wonder about and to question my concept of audience. One day, I asked a student struggling to find her authorial voice, “Who is your audience?”

“You,” she replied coolly.

“Right, but to whom are you really writing—who do you want to read this essay?” Her reply: “Well, no one. Because I wouldn’t write an essay like this outside of class.”

While at first this student may appear to have been suffering either from extreme sarcasm or a lack of understanding, these words, however flippantly delivered, left an impression on me. As her comment sank in, I began to see the difficulty in our positions: I was indeed the audience, and no matter how much time I spent lecturing on an “ideal” audience, my students were not being encouraged to engage in the type of writing in which audience truly mattered. In asking students to imagine an ideal audience but to write for an actual audience of one (me), I was essentially disconnecting my students from the goal of writing as communication. My exercises in audience awareness were not only somewhat futile and perhaps disengaging to student writers but they were also allowing for the recurrence of many layers of hidden ideologies to pass by, unquestioned and unevaluated. In addition to disengagement and the perpetuation of ideological agendas, the instructor-as-audience problem indicates a third issue: public discourse. Containing student writing to the classroom leads students to “an impoverished sense of writing as communication because they have only written in a school setting to teachers” (Elbow, 1987:51). Writing, we must not forget, is communication, but this communal piece is lost on composition students who are expected to write for elite, in-house audiences that rarely extend to true public spheres.

In this paper, I argue that approaching the composition classroom from a perspective of social responsibility and public discourse sheds an essential light on the goals and outcomes of academic writing. This essay will explore the results of a survey of student opinions about composition courses both as they are and as they might be. In doing so, I hope to illustrate that dissatisfied, disengaged students can be reanimated if instructors address the problem of audience. By replacing the practice of the in-class writing devoid of a public audience with the...
opportunity to write for and to people, groups, or institutions in the public domain, we create the opportunity to address the issues of student engagement, ideological and hegemonic preservation, and social responsibility.

**Literature Review**

This review of the literature includes primary research in the form of empirical studies. However, I also draw upon secondary sources and analyses because I view interpretation and the translation of lived experiences as valid forms of knowing. To exclude these from my study or to devalue them does not support the qualitative researcher’s notion that “research is a process of trying to gain a better understanding of the complexities of human experience” (Marshall & Rossman, 1999, p. 21). To gain a more holistic understanding of our world, I strive to draw from different disciplines and rely on various types of resources to help me weave a more comprehensive tapestry of understanding.

**Composition & Student Engagement**

Student engagement has been a persistent topic for several decades (Astin, 1984). From effects on minorities (Ream & Rumberger, 2008) to attrition rates (Gilardi & Guglielmetti, 2011) to teaching effectiveness (Polikoff, 2015), discussions revolving around student engagement permeate academic institutions. Breaking down the aspects of student engagement typically results in a three-pronged model. For Trowler (2010), this includes emotional engagement, cognitive engagement, and what she terms “behavioral” engagement, which she defines as “behavioural norms, such as attendance and involvement, and . . . the absence of disruptive or negative behaviour” (p. 5). For Parsons et al. (2014), this three-dimensional model includes both emotional and cognitive engagement, as Trowler’s does, but these authors refer to the third aspect as “affective” engagement, which is “a sense of belonging in the classroom and an interest, curiosity, or enthusiasm around specific topics or tasks” (para. 5). While there are variances in naming the elements that constitute student engagement, essentially, researchers agree that for a student to be “engaged,” she must be interested, active, and challenged.

For the composition classroom in higher education, however, student engagement does not come easily. To begin, first- and second-year students who are required to take English composition courses enter these spaces with no lack of writing anxiety. The pressures of producing an immaculate end product (Bayat, 2014), the “fear of teacher’s negative comments,” “insufficient writing techniques” (Younas et al., 2014, para. 15), and a lack of the time needed for “process, revision, and collaboration” (Rose, 2011:46) all serve to heighten students’ anxieties and impede their writing endeavors. Next, students are disconnected from the work that they do in part because of the lack of an authentic audience. I use the term “authentic” audience to imply a reader who is invested in the text to an extent that supersedes the instructor’s investment, which can be reduced to the quantification of student writing to a numeric grade. An authentic audience is an “active, critical audience” and, more importantly, one that does not seek to employ the text as a mere measurement of a student’s aptitude for writing (Von Mucke, 2010:61). The missing public—or authentic—audience serves to create a rift between the student’s experiences within the classroom and his/her life outside of it.

**Composition & Ideology**

The literature regarding composition and ideology revolves around these questions: what should or should not be taught in the college writing classroom and should particular ideologies
be interwoven into such courses in order to “bring about political and social change” (Hairston, 1992:185). One camp insists that college composition should revolve around creating clear, concise, academic writers by teaching the writing process—Peter Elbow, Andrea Lunsford, Lisa Ede, Donald Murray, Maxine Hairston, and Linda Flower are just a few. Hairston (1992), for example, rails against a composition classroom focused on political agendas and ideological discussions. She regrets that “required writing courses” are increasingly used as “vehicles for social reform rather than as student-centered workshops designed to build students’ confidence and competence as writers” (p. 180). The opposing camp, which includes theorists such as James Berlin, Patricia Bizzell, Charles Paine, John Trimbur, and Linda Brodkey, among others, supports the notion that composition pedagogy cannot afford to ignore the need to connect “literacies with [the] responsibilities of a global citizenship” (Hawisher et al., 2009:55). This dispute indicates that those who teach composition cannot agree on even fundamental aspects of the discipline such as the purpose of teaching writing.

Moving away from this sort of dichotomous approach to composition pedagogy, I focus instead on the problematic nature of the instructor as sole audience, claiming that such a biased audience for student writers serves to amplify a completely different set of ideological suppositions that come standard with the teaching of composition. Because composition can be taught in a way that “favor[s] one version of economic, social, and political arrangements over other versions,” the authoritative audience of one accentuates and promotes an unchallenged master narrative and with it whatever ideologies the particular instructor brings into the classroom (Berlin, 1988:477). In other words, a whole range of hidden ideologies is perpetuated by the instructor-audience despite the instructor’s stance on the appropriateness of teaching ideology in a composition classroom. These hidden ideologies, in turn, provide “students with a rather limited form of literacy” and obscure the complexities of the art of communicating through writing (Ward, 1994:4). Within the classroom, “ideological assumptions” are blindly presented “as mere ‘common sense,’ and . . . contribute to sustaining existing power relations” (Fairclough, 1989:77). These assumptions—which maintain the status quo—cannot be challenged or even recognized by novice writers when the one in power plays both the role of audience as well as instructor.

Composition, Democracy, & Public Discourse

For the sake of argument, I will define democracy as “a way of living in which we collectively deliberate over our shared problems” (Wood, 1998:180). Those who call for educational reform in the spirit of Wood’s (1998) idea of democracy are many. John Dewey, Michael Apple, James Sears, Roger Soder, John Goodlad, Carole Edelsky, and many more envision public education as the way by which to “make this a better world to live in” (Teitelbaum, 1998:40). In their minds, our challenge as educators is to set “new standards of excellence” that revolve around “human dignity, social and economic justice, spiritual enlightenment, and peace and sustainability” (Sears, 2004:5). Striving towards such ends, however, may in fact succeed in cultivating students who will not only be knowledgeable but also ready and willing democratic participants.

The composition classroom provides a unique avenue through which we might inspire this type of democratic and socially aware student. Writing, discourse, communication—these are “social activities” (Heller, 2003). To remove the social aspect of writing is detrimental to the process and the product, and yet, this is essentially what instructors do when we attempt to teach writing skills without an authentic audience. Writing should be a conversation with the public
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(Bruffee, 1983). And Dewey (1916) agrees. A forerunner in the movement to use education as the pursuit of democratic ideals, Dewey (1916) reminds us, “there is more than a verbal tie between the words common, community, and communication” (p. 4). With this formative work in mind, it seems likely that the teaching of composition currently undermines democratic ideals by neglecting the part of the equation that links composition to communication.

Methodology

My ultimate goal as a professor of composition is to find ways to answer this question: How can I better foster student engagement, confidence, and success? This research project was my starting point; it was a way for me to collect the student narratives necessary to address those three goals. I conducted qualitative research because it provides a way for students to tell their own stories in their own voices, offering a more complete picture of the student writing experience (Lincoln & Guba, 1985). In order to address issues of experience, I approached this study using a social constructivist framework and the idea that meaning is constructed. The overall goal of this study was to discover my students’ “subjective meanings to their experiences,” and to do so, I relied “on the participants’ views of the situation” (Creswell, 2013:24-25).

Research Question(s)

The research questions that fuel this study are relatively uncomplicated. The purpose of this research is to determine students’ general opinions about their previous and/or current college composition courses. Here is what I set out to learn:

1. How do students feel about college composition courses?
2. How do students define the purpose of a composition class?
   a. And what do they say should be the purpose of a composition class?
3. What can composition instructors do to foster student engagement and success while simultaneously addressing the need to foster democratic participants?

Framework & Approach

Within the social constructivist worldview, I chose to employ a phenomenological approach that I then supplemented with a narrative approach. I used phenomenology as my main approach because, in the end, my goal was to understand how students feel about their experiences pertaining to composition courses. I gave my participants a chance to describe their experiences—or their “essence[s] of perception” (Merleau-Ponty, 1962:vii)—and from their descriptions, I have woven together their voices in order to work toward a “gradual development of knowing” (Hegel, 2009:21). In addition, I incorporated a narrative approach because this study deals with the unique stories of the participants, and I subscribe to the idea that “the narrative is the main mode of human knowledge . . . and the main mode of communication” (as cited in Czarniawska, 1998:3).

In light of my phenomenological and narrative approaches, participants were asked to write their replies to questions posed in an online survey. One reason for an online questionnaire was to provide students with a convenient and less-intrusive option of answering questions. But there are two other reasons I opted to do written instead of verbal interviews: the act of storytelling and the act of writing. Storytelling “can situate us as tellers of our own truths” (Benmayor, 2012:vii). In having participants consider these questions on their own time and compose smallish narratives of their experiences and opinions, I provided them with the occasion
to reflect on and then compose their “lived realities” (Benmayor, 2012:viii). Flores Carmona and Luschen (2014) purport that storytelling is more than just a creative endeavor—it “is an important aspect of culturally relevant pedagogy and social justice education” (p. 2). With this text in mind, I elected to encourage participants to craft their own critical stories of their experiences in English composition courses.

After convenience to the student and the act of storytelling, my third reason for using a written survey was to empower my students to write. Writing is often mistaken as the mere act of documenting what is already in our minds. But the act of writing is more closely related to the creation of new ideas than the recording of existing ideas—it enables us to form connections that are yet undefined. Jim Suchan (2004) agrees and writes that the act of writing is “a process of discovery, knowledge creation, self-revelation, and . . . personal identity formation” (p. 311). I wanted to provide my participants with this same type of opportunity for self-analysis and idea generation—an opportunity to construct their identities and to make meaning.

Data Collection

This study was conducted at a Midwestern community college. I chose a community college due to the general mission statements of such institutions, which focus on student success, community engagement, and social responsibility over research. The vision statement of this particular college challenges “students to meet the needs of the community and the world.” Given this statement of purpose, I thought it would be appropriate to conduct my study at this community college as my argument is based upon the need for a greater attempt on behalf of academia to engage in public dialogue with the surrounding community. The participants for the study were recruited from English Composition II courses. The rationale for surveying second-year students was that these students have more experience with college-level composition courses and therefore have more to say about them. All English Composition II instructors teaching during the Summer 2015 semester were emailed. They were informed of this study and encouraged to email their students and invite them to participate. Per NMSU’s Institutional Review Board (12067-A) as well as a second IRB through the community college, students were emailed a cover letter explaining the study’s parameters and providing the link that would take them to the survey. Fifteen students participated in the online survey.

Data Analysis

The data analysis aspect of qualitative research gives me cause for concern. Like St. Pierre and Jackson (2014), I am “concerned about analysis that treats words (e.g., participants’ words in interview transcripts) as brute data waiting to be coded” (p. 715). When “words are reduced to numbers,” what we are essentially doing is engaging in a “positivism that presumes that language can, indeed, be brute and value-free” (St. Pierre & Jackson, 2014:715-16). This push to quantify participants’ words and to transform experiences into coded data negates the very reason for collecting critical narratives.

As a qualitative researcher, as a scholar who most closely aligns with a social constructivist theory, and as a professor of composition, I struggle with the fact “that analysis in qualitative methodology continues to be mired in positivism” (St. Pierre & Jackson, 2014:717). Jackson and Mazzei (2012) take this problem of data and discuss it in terms of normativity or “sameness” (p. 4). By grouping and coding participant writing, what we as researchers are doing is compartmentalizing lived experiences into categories of normal versus abnormal, studying and validating that which is “normal,” according to our numbers, and discarding that which is
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different. In the spirit of queer theory, the act of quantifying and coding certainly does not allow researchers to “critically examine processes of normalization and reproductions of power relationships” (Shlasko, 2005:125). My worry is that in our continued attempts to defend the validity of qualitative research, we as qualitative researchers sacrifice not only the essences of the voices of those who write and speak to us but also the positions we claim within our particular theoretical frameworks.

Conflicts aside—if that is at all possible—I recognize the need to interpret qualitative research results. After all, research is meaningless without analysis and interpretation. Vygotsky’s (1978) theory of learning suggests that understandings are formed not individually or internally but through culture and context—socially constructed. Therefore, for this research study, I have taken the written results of my survey and attempted to generate a narrative that encompasses the voices of all of my participants, both those who conform and those who do not. I have also noted the silences in this narrative; I perceive the absence of words to be just as important as the words themselves. My endeavor to capture my participants’ experiences in a holistic fashion is my way of validating my participants’ critical narratives as well as remaining true to the spirit of qualitative research.

Results

The survey results indicate three main factors that affect students’ perceptions of college English composition courses:

1. writing pretexts and previous feelings toward the discipline,
2. personal experiences with individual courses and instructors,
3. and perceptions of what liberal education means and the purpose of college composition courses.

Pretexts

All students come to the table with different pretexts regarding academic writing. Those participants in this study who did not harbor negative feelings towards writing indicated that they were “happy” taking composition courses. Most participants, however, were unable to state that they were happy taking composition courses simply because they did not consider themselves “big English fan[s] so it makes it really hard for [them] to like the class and give it [their] all.” While students recognized that “as much as [they] did not want to take composition courses,” they did recognize that if they want to get a degree, they “just [have] to do it.” A student’s pretexts partly determines her current feelings.

In-Class Experiences

Pretexts are not the only aspect shaping students’ feelings towards composition courses. Specific in-class experiences also affect their perceptions. The minority of students who reported being happy to take composition classes also reported having had positive in-class experiences. These students feel that teachers who present “amazing class ideas and an amazing course structure . . . can completely revolutionize the way English is taught.” What this means is that teachers and curriculum that have the potential to positively influence how students perceive the discipline. Moreover, if students are wiling to acknowledge and then adjust their pretexts, then they are able to change their perceptions from negative to positive. Here is one example from the survey: “After seeing what the course would exactly be like, I did not mind it what so ever . . . I liked the way it was set up. Overall my college composition classes [went] over very well.”
These contented voices, however, are the minority. As mentioned, the majority of participants dislike having to take English composition, and part of the reason is due to ineffective teachers or disengaging classes. For example, participants revealed that many teachers fail to “make the class interesting to everyone” and seemed to design their curriculum solely for the benefit of the “writing talented.” Certain pedagogical choices do not allow those students who may not be strong academic writers to gain an appreciation for the discipline. Participants also noted feeling resentful of composition courses when they could not place them in relation to their majors. Here is what one reported: “I didn't find this course hard, it was just difficult to be enthusiastic about it because it didn't pertain to my major as much as other classes.” Essentially, the way a course is taught and the experiences students have in specific courses directly influence how students view the discipline as a whole.

Perceptions of Purpose

The most determining factor in regard to student perceptions of composition classes is the notion of purpose. Those who recounted being happy taking composition classes seemed to more fully understand the definition of liberal education. Participants happy to take composition courses defined a liberal arts education in the following ways:

- “a broad education”
- one in which “the student is exposed to many subjects and gains a comprehensive education [sic], rather than a specific or tailored one”
- the “Freedom to learn what interests you”
- “a very well rounded education” in which “every student should have a strong knowledge in math, reading, science, english [sic], government, social studies, economics.”

Only one student who reported being dissatisfied with the composition experience chose to define liberal education. This individual described liberal education as “one that doesn't hold much of a career path for many students.” The other students who reported being unhappy to take composition courses elected to skip this question. What this silence implies is that students who dislike taking composition courses are either unable or unwilling to define the meaning of a liberal arts education. It is likely that these students do not understand or do not subscribe to Dewey’s (1916) notion that education is a process of “self-renewal” (p. 9).

Unlike the silences in regard to defining a liberal arts education, when asked to define the purpose of the English composition course, participants unanimously replied. And this time, there is almost no distinction between those who claimed being happy and those who claimed being unhappy with composition courses. Only one student wrote a reply that showed his or her deep distaste for composition classes; this individual stated that the purpose of the composition course is “to take more money from [the] student.” Beyond that one response, however, the participants collectively agree on the purpose of taking composition courses. Even those who indicated their dissatisfaction (minus the one participant detailed above) answer this question in a way that shows that the majority of students understand the importance of written communication. The purpose of the college composition course, according to students, is this:

- “to have the knowledge to write in the professional world”
- “to explore our writing abilities and discover new ways to express ideas”
- “to improve/strengthen verbal and written communication skills”

Whether or not students claim to understand the goals of a liberal education, and whether or not they are happy taking English composition, all but one understand the need to improve written
communication through coursework. In other words, students do indeed want to improve as writers, and they recognize that they will need this skill beyond the classroom.

**Student Suggestions**

The fact that nearly all participants understand the purpose of composition classes does not negate the fact that the majority of them are still unhappy with these courses. This distaste could be due, in part, to what they think composition courses should accomplish. When asked how they would change the teaching of English composition courses, students recommend two main changes: more autonomy and more writing practice in genres that extend beyond academic essay writing. In particular, students would like “more choices for composition/writing courses for specific majors. For example if you are focusing on business you should be allowed to choose a business writing/composition course. This course would not necessarily have research papers but more report styles that you see in the business world.” Likewise, students would appreciate courses that are “somewhat specialized. For example they could be on email writing, resume writing, and other things that may be more beneficial.” The participants indicated wanting assignments “ranging from very small writing assignments to one or two large ones, and everything in between. [They] would also make sure the students encounter a diversity of writing techniques.” If “teachers let their students have more availability to choose which assignments that they would like to dive into more,” this particular student believes that student perceptions of composition classes would greatly improve. Participants, in short, recommend that instructors find ways to make the teaching of composition more relevant to their current and future needs.

**Conclusion**

We know that the majority of college composition students are not happy. While they understand the need to think critically and to be able to communicate successfully through writing, they fail to see how composition classes apply to their lives outside of the classroom. Composing essays to a professor does not, to their minds, equate to the writing they will be required to do beyond the institution. Quite frankly, I do not blame them. I would hesitate to suggest limiting the teaching of composition to business or technical writing because doing so might undermine the overall vision of a liberal arts education. However, I can certainly see the need to address what is taught in the composition classroom, how it is taught, and where it is taught in order to meet the changing demands of twenty-first century learners. After all, today’s students

must learn abilities that will sustain them through multiple career changes, new roles in marriage and community life, and forbidding political crises in the environment, economy, and social justice. If compositionists and rhetoricians are to act upon the current research and theory in our own journals, writing programs can no longer be limited to introducing students to the rhetoric of academic fields and majors. (Parks & Goldblatt, 2000:586)

To engage today’s student, English composition instructors must find ways to make this skill relevant and applicable.

**Recommendations**

In regard to where composition takes place, I recommend supplementing the instructor-audience with an authentic, public audience. In essence, we should take writing out of the classroom. Heilker (1997) also focuses on the problem of where composition takes place:
“writing teachers need to relocate the where of composition instruction outside the academic classroom because the classroom does not and cannot offer students real rhetorical situations in which to understand writing as social action [original emphasis]” (p. 71). Providing authentic rhetorical exercises will help students appreciate and engage the complex nature of writing as communication.

To address the “where” of composition, higher education instructors might look toward the principles of experiential and service learning theories. These theories have the potential to alleviate the three problems posted in this paper: student engagement, ideology, and social responsibility. In particular, I advocate Heilker’s (1997) “fifth form of service-learning in composition,” which connects student writers with people, organizations, and businesses in the community that have writing needs (p. 74). The appeal is that “these writing tasks do not simulate or replicate or ask students to hypothesize about anything”; instead, these assignments “enable students to work with a very specific ‘content’: the mission of the agency” with whom they would be working (Heilker, 1997:75). Addressing this overarching problem of audience can reinvigorate our students and their desires to write what is important. It can stem the ways in which instructors perpetuate their own hidden agendas and ideologies. It can fulfill our obligation to enter into and maintain public discourse with the communities that house our institutions. Let us show our students that “rigorous intellectual work is prized . . . because of its ability to make a difference in how we understand and act powerfully on the social world in which we live” (Apple & Beane, 2007:151). In dislodging the instructor-audience, we will no doubt create a space in which our students are able to reclaim autonomy, purpose, and joy within the composition classroom as well as the ability and desire to take their writing beyond it.

A classroom is never simply a means of evaluating a student’s learning or work. Education, if we can agree with John Dewey, is an avenue for developing democratic citizenship whereby social change becomes possible. To fulfill this end, the composition classroom, in particular, must strive to produce texts and writing that can be used for civil disobedience and public discourse. A student who is empowered to take her writing beyond the classroom and into the public arena becomes a powerful voice for equity and social change.
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Appendix: Survey

1. What is your academic standing?
   - I’m a first-year student
   - I’m a second-year student
   - I’m beyond my second year
   - I take random classes as I can
   - other

2. Have you attempted any college writing/composition courses before this one? Indicate yes or no and how many composition courses you’ve attempted (not just passed). (Include previous sections of this course if this is not the first time you’re attempting it.) Example: Yes, I’ve attempted 3 previous courses: EN 101 twice and EN 102 once before this current course.

3. If you have attempted one or more composition courses or sections, were these required for your degree path? And were you happy to take them?
   - the courses were/are required, but I was NOT happy about having to take them
   - the courses were/are required, and I was HAPPY about having to take them
   - the courses were/are NOT required, and I was HAPPY to take them
   - I have not attempted any college composition courses before this one

4. What would you say is the point of taking college composition courses? In other words, why do you think the academic institution requires or offers them?

5. What do you think SHOULD be the point of taking college composition courses? In other words, how would you personally like to benefit from such courses?

6. Tell me how you would change the teaching of writing/composition if you could plan the curriculum. How would you teach or approach it and why?

7. What is your idea of the phrase “liberal education”?

8. Based on how you understand liberal education, do you think composition courses fit into or oppose the idea of liberal education? Why and in what ways?

9. How happy are you with your overall academic experience up to this point?
   - click on 1, 2, 3, 4, or 5 thumbs up icons to indicate your happiness

10. Finally, is there anything else you would like to share about your experience with composition courses? Anything you can tell me about your feelings, ideas, perceptions, successes, or failings in this regard would be great!
Combating Absenteeism and Truancy through Interventions: A Case of Higher Education Students at Botho University

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Abstract
This paper provides a systemic remedial approach to the issues of truancy and absenteeism in tertiary institutions by means of action research (AR). Using Botho University in Botswana as a model for the study, the authors highlight the pivotal role student attendance and positive engagement in classroom activities have in a given student’s academic progression and intellectual prowess. A review of negative implications associated with absenteeism and truancy is conducted and a consensus reached on the adoption of check & connect and other multimodal approaches in effectively reducing truancy and absenteeism. The evidence presented in the paper motivates the effectiveness of multimodal approaches coupled with an incentive-based reward system in gauging, controlling, and reducing the issue of truancy and absenteeism.

Keywords: Action research, absenteeism, truancy, student attendance and positive engagement
Introduction

This paper provides a systemic remedial approach to the issues of truancy\(^1\) and absenteeism\(^2\) in a tertiary institution setting. The researchers have designed the experiment using full-time registered students at Botho University’s main campus located in Gaborone. The study provides a repeatable approach aimed at providing insight into factors contributing to truancy and absenteeism as well as devising ways of improving student attendance in a given learning experience.

Background

In the past decade, the topic of mandatory attendance in tertiary learning institutions has come under debate. With the widespread adoption of e-Learning technologies by institutions seeking more effective deployment of distance learning ventures, the debate has intensified. While some researchers argue that attendance in school is a crucial component of a given student’s success rate (Pascopella, 2007; Kirby, 2003; Durden, 1995), others, such as Ms. Karen L. St. Clair (1999), are of the opinion that the focus shouldn’t be placed on attendance alone, but rather on student motivation together with a number of additional salient factors. “Classroom environments that engage students, emphasize the importance of students’ contributions… will undoubtedly provide encouragement to students to attend regularly” (p. 178-179). St. Clair (1999) is cautious, however, noting that there are exceptions when attendance becomes a requisite in order to demonstrate an adequate level of proficiency – when, in her own words - “… attendance is compulsory because it is part of the grading structure” (p. 179).

There are other researchers (Gomis-Porqueras, 2011) that argue that the increasing use of technology in teaching and learning processes motivates absenteeism. Some argue that the introduction of electronic lecture notes is a major deterrent to good attendance as it does not stimulate learners to attend lectures, thus promoting absenteeism (Magen, 2013).

Contextual Framework

In view of this attendance policy debacle, Botswana has chosen to adopt a policy of academic freedom of attendance in its tertiary education institutions (Ajiboye, 2006). This has effectively left the choice of class-room session attendance to students. While this might sound like a powerful concept that encourages a culture where students are treated as “adults,” it has effectively brought about a number of variations where a high number of truancy and absenteeism cases in Botswana are based on reasons such as attendance to relatives’ burial funerals and chronic ill-health (Ajiboye, 2006). In order to best study the dimensions brought forth by this “academic freedom of attendance” and the “anecdotal reasons,” the researchers focus on full-time registered students as key participants in the action research.

\(^{1}\) In this text truancy – is chronic unexcused absence (Lauren N, 2014).

\(^{2}\) In this text absenteeism – is chronic excused absence.
Combating Absenteeism and Truancy through Interventions

Statement of the Problem

This research is framed under the assumption that absenteeism and truancy can be detrimental to a student’s success in a given learning experience (Nyamapfene, 2010). Through participatory sessions, the researchers examined the merits of the assumption by creating a safe, conducive, and nurturing atmosphere for the study participants to enable them to make the transition to good attendance records. The researchers also hope that the study provides empirical data that can be used to define the correlation between students’ attendance and good academic performance.

Research Questions

![Attendance Remedial Flow Diagram]

*Figure 1: Attendance Remedial Flow – the diagram illustrates the causation between various research questions as they lead to the end of the experiment.*

This study is scoped around the following action research questions:

- If we set up students’ intervention sessions to listen to students describe reasons for their poor attendance, in what ways, if any, will the information about their reasons for poor attendance be used to determine a remedial approach?
- If a remedial approach is adopted in order to combat truancy and absenteeism, in what ways, if any, can the approach reduce truancy and absenteeism?
- If absenteeism and truancy is reduced, in what ways, if any, will the reduced level of absenteeism and truancy impact student performance?

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3 Comprising of absentee students and truants
Research Objectives

The overall purpose of the study is to conduct an analysis of factors leading to truancy and absenteeism and determine a possible remedial approach. The study is aimed at achieving the following specific objectives:

- To investigate the factors leading to truancy and absenteeism in full time registered students at Botho University.
- To devise possible multimodal intervention action coupled with an incentive-based reward system to combat truancy and absenteeism.
- To determine if the adopted remedial approach has indeed had an impact on the level of truancy and absenteeism at Botho University.
- To determine the causal relationship between a given student’s attendance and his/her performance.

Material and Methods

A praxis paradigm was found relevant due to the fact that the ‘action’ component of each cycles as illustrated in figure 1 is executed depending on the conditions faced when planning the next action using action research (Lather, 1986; Morley, 1991).

Figure 2: Action Research as a Process – Adapted from Yuliani, L. 2003.

4 Depending on the student’s reasons for absenteeism and truancy this can be categorized as individual, school-based, family, or neighborhood and community intervention (Teasley. M. L., 2004).
The process begins with the inclusion of the participants, who are full-time registered university students that attained at least 33% or less attendance records. The participants are then invited for the first intervention session.

The intervention session enables the participants to assess the reason behind the low attendance. Depending on the nature of the problem, an individual, school-based, family, neighborhood, or community intervention approach is adopted (Teasley, 2004).

**Population, Sample, and Sampling**

In order to best study the dimensions brought forth by the previously discussed national concept of *academic freedom of attendance* and the anecdotal reasons presented by students, participants were drawn from full-time registered students currently enrolled at Botho University’s Gaborone campus. Using 33% or less attendance records as the participants’ sampling inclusion criteria; the following sampling calculations were made:

Let $N$ be the total number of full time registered students at the Gaborone campus and $n$ be the sample drawn from $N \cong 3759$ using the 33% inclusion criteria. It was then found that

$$n = \sum_{i=1}^{4} n_i = n_{FBA} + n_{FEAS} + n_{FOC} + n_{FEDL}$$

$$n \cong 124 + 26 + 181 + 225 \cong 556$$

From figure 4, we report that the majority of the participants came from the Faculty of Education and Distance Learning’s (FEDL) at $\approx 41\%$ all centered at level 1; this was followed by the Faculty of Computing (FOC) at $\approx 34\%$ spread across the three levels; and the Faculty of

5 In this study, researchers chose the inclusion criteria at 33% or less attendance records but this may depend with the particular policy specification. Overall good attendance is believed to be around 80% or more.

6 Over a guided discussion between the researchers and students

7 See section 2 and 3 above.

8 The largest of the four housed faculties

9 A level indicates the particular year of undergraduate or graduate study a given participant belongs to.

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*Figure 3: Action Research as a Methodology – The diagram illustrates the main transitions as well as the cycles here illustrated as feedback loops.*
Engineering and Applied Science reports the smallest number of participants at \( \approx 5\% \). More details on the other\(^{10}\) Faculties can be found in figure 4. A Google questionnaire was used to collect the initial data and face-to-face interviews were used during the intervention sessions.

![Intervention Participants Distribution](image)

**Figure 4: Intervention Participants Distribution**

**Factors Leading to Truancy and Absenteeism**

The findings of the Google form survey indicate three prevailing factors as leading causes for truancy and absenteeism. Most of the participants reported *late allowance*\(^{11}\) as their biggest issue at 22\%. Surprisingly, 12\% of the participants actually claimed not to have been aware of the *module*\(^{12}\) registrations; and finally 10\% of the respondents cited time-tabling issues as the root of their problem. Figure 5 presents a summary of the prevailing factors identified during the initial intervention sessions.

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\(^{10}\) i.e. Faculty of Business Administration (FBA)

\(^{11}\) Botswana government issued amount of money allotted on a monthly basis to students for miscellaneous personal spending.

\(^{12}\) a unit subject taken as part of a given student’s enrolment to a programme of study.
Combating Absenteeism and Truancy through Interventions

One may also argue that a student’s age may be a factor, as 85% (i.e. the majority) of the participants were less than 25 years old. The reported proportion of female versus male was 52% and 48% respectively; therefore it is fair to conclude that gender has not been of significant deterrent in the study. This is, however, contrary to Pathammavong’s (2011) study that reported that females were more likely to be absent due to health related problems (Pathammavong, 2011). Also notable was the fact that only 1% of the participants were self-sponsored, so one may also argue the fact that student sponsorship may be a factor in attaining good attendance.

Research shows that external influences also result in absenteeism. According to Gomis-Porqueras (2011) “outside options” contribute to absenteeism. I.e. attractive outside options such as work, leisure, social activities, which are not under control of the University mechanisms, make students opt out of attending lectures. However, Holbrok (2011) articulates the impersonal relationship between teachers and students in large classes as a factor that may also cause absenteeism.

Multimodal Interventions and Incentive Based Reward Systems

Following the initial intervention session, participants were grouped into cohorts and a range of intervention approaches were suggested and adopted, with their consent, to help improve their levels of attendance. Eighteen percent (18%) of the cases were referred to the school counselor for special consideration; of these cases, 6% were tied to major illnesses, 2% were family or marital disputes, 1% were self-dependent, 5% had dependents, and there was one case of ‘no specific reason’ for chronic truancy that was also referred to the counselor. Thirty-seven (37%) of the reported cases were tied to financial management issues and these were referred to a budgeting skills workshop. About twenty-eight (28%) of the cases were tied to time management and scheduling skills and these were referred to the carrier service center for consultation. These multimodal approaches have indeed proven to be useful mechanisms in combating the presented issue of absenteeism and truancy.
Figure 6: Proposed Incentives

Figure 6 reports on some of the proposed incentives. It was found that the majority of the respondents (i.e. 44%) preferred marks towards their continuous assessment as a reward towards good attendance. Such a reward system has already proven to be key in motivating students to attend classes at Botho University.

**Impact of Remedial Approach to Level of Absenteeism and Truancy**

Following the intervention sessions, a sharp decline of about 26% from the previous count (i.e. from 556 to 147 absentees and/or truant students) is observed. This is a good indication that both the ‘check and connect’ technique and multimodal approaches were effective in reducing the levels of absenteeism and truancy. The FBA reported a drop from 23% to 17% spread across levels 5 to 7 students (i.e. no record for level 7). The Faculty of Engineering and Applied Sciences (FEAS) reported a drop to 3% across level 5 and 6 students, the Faculty of Computing reported a drop from 33% to about 24% across all levels, and finally the Faculty of Education and Distance Learning (FEDL) reported a drop from 41% to 30% for level 5 students.

We can therefore confidently conclude that there is a clear and noticeable improvement in student attendance following these intervention sessions. This finding is tied with a similar study conducted by Brandy (2012) where multimodal interventions were also found to be ideal in improving student attendance. According to Brandy R Maynard (2012) interventions improve attendance, especially for truant students. The results of their study showed a 4-5% improvement in attendance through interventions.

**The Effect of Student’s Attendance on Performance**

The study also reports a 16% increase in the pass-rates of the student participants from 22% as measured before\textsuperscript{13} the intervention session to 38% after the intervention session. The study also observed a 34% improvement in student marks, however 6% of these improved marks were still failures; thus the percentage of improved pass-marks was reported to be 28%.

\textsuperscript{13} Obtained from the institution’s mid assessment performance feedback
Combating Absenteeism and Truancy through Interventions

However, as illustrated in the above diagram, the collected student performance data does not indicate a significant improvement in student performance before and after the intervention. This finding can be said to be congruent to Ms. Karen L. St. Clair (1999) on the observation that focus should rather be placed on the level of motivation of a given learner\textsuperscript{14}. This also ties with Brenda (2014) who states that interventions on truants must emphasize motivating them to become engaged in “educational and emotional experiences” at school that are academically supportive, interesting and relevant.

**Conclusion and Recommendation**

This is hoped to provide a systemic remedial approach to the prevailing issue of truancy and absenteeism in tertiary institutions (Tertiary Education council, 2009) by means of action research (AR). Using Botho University in Botswana as a model for the study, the authors highlighted the pivotal role student attendance and positive engagement in classroom activities has in a given student’s academic progression and intellectual prowess. In addition to this, the collected student performance data did not indicate a significant improvement in student performance before and after the intervention. The evidence presented in the paper is hoped to motivate the effectiveness of multimodal approaches as they are coupled with an incentive-based reward system in gauging, controlling, and reducing issues of truancy and absenteeism. The findings further highlight the need for devising appropriate mechanisms to help in combating issues of absenteeism and truancy in tertiary educational institutions in the region.

\textsuperscript{14} Together with the listed salient factors such as an engaging class-room environment, etc., as mentioned in section 2.
References


Patent Analysis as a Vector for Innovation in Developing Countries

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Abstract
In developing countries, most of the higher education programs are focalized on theoretical aspects and there is a lack of practical applications of this knowledge for industry and research development. We believe that this trend is mainly due to the lack of facilities in laboratories but also to the idea that theoretical knowledge is more valuable than actionable knowledge. To break this cycle and to improve the degree of innovation in higher education, we believe that the introduction in the curricula of a general knowledge about intellectual property and more specifically of patent information and analysis is one of the best ways. In this presentation, we will show how we intend to develop this approach. Access to patent information via the EPO (European Patent Office) world patent database will be presented as well as access to patent information from the same database via a smartphone (android) application. Some examples of the use of patent analysis in Thailand will show a systematic use of patent analysis improve the innovation in SMEs and clusters. Some recommendations will be incorporated to improve the development of innovation and competencies transfer in developing countries, as well as succinct bibliography.

Keywords: Pre-clusterization, cachassa, moringa oleifera, ipc
Introduction

The economic crisis which hits developed and developing countries at the same time prompted most of the economists as well as some politicians to think and claim that innovation is one of the keys which will enable most of the countries to overcome the crisis by boosting new developments and jobs. In this frame of mind the Palmisano report (Shumpeter, 2004) in the USA (Innovate America), the Beffa report (Louis Beffa, 2005) in France, the Commonwealth (Department of Industry, Australian Innovation System Report, 2013) report in Australia, as well as numerous others in Canada, England, etc. pleaded for the development of a policy of global innovation in these different countries. In developing countries, the situation is the same and different ones move to frugal innovation or inclusive innovation, such as India (Dou, 2014), Viet Nam, China, and Thailand (Stembridge, 2014). The same is true for African countries which developed with the help of International Institution, a different way to valorize the research results as well as the competencies and knowledge developed in public laboratories and research centers. The goal of this presentation is to open a discussion on the real need for developing countries (but this can also be the same for some developed countries) a technological culture besides the knowledge necessary to develop academic research and academic education. Most of the people in charge of the research and higher education in developing countries get their diploma and training in developed countries and, when they are back in their countries, they try to develop the same type of research. This is difficult for several reasons among which are the lack of funding and the lack of equipment. It is clear that if this situation remains, most of the efforts developed in research and theoretical education will not participate to the country development. How to try to bypass this problem will be presented in this paper.

The Mechanism of Innovation

Most of the time there is a mix-up between invention and innovation. An invention is not an innovation and the difference must be cleared up. According to the work sponsored by the European Community (Erikson, 2006) and the statement of E. Zerhouni when he was the Director of the NIH, the following mechanism is developed:

- The state finances the laboratories and research centers to develop various competencies and knowledge. In fact, they build the national intellectual capital.
- These competencies and knowledge must be transformed in products and services robust enough to reach the market and to be (at the best) exported.

It is this second step which is called innovation. This means that laboratories and industries with the help of the state (Federal of Regional) must be associated in such a way that they will build up common projects with a better facility to innovate. These calls are presented according to the work for the development of clusters and public and Private Partnerships (PPP) (Mike Porter, 1998). The following figure which is part of the work of the consortium VINNOVA sponsored by the European community illustrates this point of view.

Figure 1: Cluster Development

If the necessity to develop innovation is a common way to increase industrial development today, the question of time is important. Of course, the development of knowledge is one of the

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1 Viet Nam Inclusive Innovation Project, 2014, Bid package Number: AED4-CS-13
best factors to eliminate poverty and if we look to the development of South Korea we have one of the best examples of this (Watkins, 2008). The following figure indicates the trend of its development over the years. But we can see in this figure that this development went on for over a period of more than 30 years. One important challenge is to try to accelerate this development for several reasons, one of the most important being the demography (Mubila, 2012).

As mentioned above, the demography in African countries is one of the most important in the world simply due to its rapid growth. The following figure indicates the trend in its development.

**An Education and Research Mixing Theoretical, Technological and Practical**

If we refer to the innovation step described above, one of the ways to improve it and to accelerate it is to fill the gap which exists between academic teaching and research and the need of regional (of) national industries. Obviously in developing countries because of the demography the main problem will be the creation of jobs and this cannot be done by very large companies since most of the jobs are created by SMEs. But, in developing countries the SME sector is not really developed and often the basic knowledge necessary is not available. On the other hand, to benefit from the foreign direct investments and to be able to “digest” the foreign technologies it is necessary to have an intellectual and technological capital ready for this task. This is the reason why, we believe that this is from higher education and research that the move must come. Of course, there are vocational and engineering schools present, but they are not so many compared to the number of universities and higher education institutions.
How to introduce a certain amount of technology in education and research is the challenge. If we look to most of the work published by the academics, the references to the technology or application of the results are not common place. If we want to fill the gap between academics and industrialists (or valorization of the research result and competencies) we must find a way to do it. The following figure indicates globally which kind of publications are most of the time used to disseminate the research and development results (Dou, 2010).

![Figure 4: Patent Information is a link between Research and Market](image)

If patents are seen as a tool to protect inventions, another way to use the patents is to analyze their information. With more than 90 million of patent notices the world patent database (EPO European Patent Office, 2013) covers more than 90 countries and contains about 90 million notices. Moreover, the access to the data is free, which is mandatory for developing countries. Patents are very interesting since they cover most of the applications and products development. Most of the information available in patents is not published elsewhere and their evaluation process is quite close and even more drastic than the one used by the scientific journal referees. Patents also have the quality to be well understood by industrialists and technicians and with a decent effort; they can also be understood by researchers and professors. This means that this type of information seems to be invaluable to facilitate the development of more integrated education and research programs. But, even if the patent information is important and can be used to understand how research results and competencies can be applied and used in industry, it is noticeable that if you look to scientific publication’s references, most of the time they do not contain patent citations (except for disciplines like law and to a lesser extent economy).

The information available in patents is not only technical and scientific but also it gives the applicants and inventors names, the patent dates, the patent number and priority number, the protected states, the technologies related, the drawing, the technology used, etc. all of that in a simple bibliographic notice. But, one of their main features is that they enable people to test their ideas, to have a large view of what is done with their knowledge, with some natural resources, etc. The patent information, when correctly used, is a strategic tool to create actionable knowledge, to motivate the industry and the researchers and to demonstrate to the politicians in charge of the development the various opportunities available with the local knowledge and resources. In this way, they are used as a TTP (Tierce Third Party), which demonstrates own added value products are developed from natural resources, how theoretical competencies and results can be integrated in product developments etc.

Using Patent Information to Develop Innovation

The link between innovation and patent analysis has been widely described in the literature (Abraham, Moitra, 2001; Zoltan, Anselin, Varga, 2012) as well as the mapping of the technologies used in various areas. But, the use of Patent analysis to open the way to create added value products from natural resources in developing countries is a starting area of applied research as well as the use of patent information to introduce technology development in theoretical educational programs.
The analysis of patent information allows the knowledge of products and applications already available and may suggest partnerships or new products development (WIPO, 2009; Yanhong, Runhua, 2007; Zoltan, David, 1998) but the focus on the couple technologies locally available and new products has not been widely explored. The WIPO (World International Patent Organization) makes available for the practitioner a wide range of information located in various publications freely available through the Internet and specially directed to the SMEs (WIPO, no. 493, 2009).

Among the information available the following one are in direct relation with this paper (OMPI, 2006). The patent analysis conducted by Mendonça (Mendonça, Tunzelman, 2004) which indicated that “the assumption of limited technological progress for primary commodities versus manufacturing products is no longer relevant. The relationship between manufacturing and technology has changed over years”. The work cited by Lisuka (2006) indicates that “low technologies” may be used to create a new path for the development. In this paper, we will develop how to use patent information to facilitate innovation, regional development and pre-clusterization.

A close analysis also, which can be done by using the same information source and a very close treatment may be done to determine the technological dependence of a country (Dou, Manullang, Dou JM, 2009).

There are different ways to patent in a country. After the first patent granted in one country (Priority country) there is a delay of 12 months available to extend this patent to other countries. In this case there will be different patent numbers covering a family of patents. There is also the possibility to have an European Patent (EP) or a World Patent (WO) via the PCT procedure, or/and OA patent (OAPI, the 16 French speaking countries of West Africa). Example of various patents coverage:

**A coconut de-husking apparatus**, is an Australia Priority Patent. PR=AU1997PO005061 10-02-1997 which has been extended to Indonesia PN = ID20936A 01-04-1999. Then, the Indonesian country will be dependent of this patent (then from Australia) for this type of application.

**Blade with empennage of vertical-axis windmills**, is a Chinese priority patent PR = CN20092052708U 16/03/2009 which has not be extended in other countries. Then if another country wants to extend or to design China as a country of extension or deposit, the foreign patent will be facing the technology already patented by the Chinese. A contrary, because this Chinese patent has not been extended if somebody want to use it out of China it can do it freely.

These two patents explain the mechanism of the technology dependence for the first one and of technology protection for the second but also the free availability of its results. With these different aspects in mind we are going to show some uses of patent information to induce a local development, as well as the process of pre-clusterization and innovation.

The Different ways to Use Patent Information

The main structure of a patent consists of the following documentary fields: Title, Inventor(s), Applicant(s), PN (patent number), PD (patent date), PR (priority patent), EQ (Equivalent patent or family), CT (cited patents: patents related to the invention and cited by the examiner of the patent office), AB (abstract of the patent), IC4 (International Patent Classification (IPC, 1997) with 4 digits), IC (full International Patent Classification 8 digits) (The International Patent Classification divide the field of products, applications and technologies in different domains, the more digits the classification used the more precise it is). There is also the European Patent Classification as well as the US and Japanese ones, but the most useful is the IPC because it is present in all patents.

There are two ways to use the patent information. One which is closely related to the documentation practice will consist to obtain by using more and more precise questions, the most pertinent answer concerning a given subject. The goal is then to get rid of all the “noise” and to restrain the number of answers. The second one which is the one that we will use is very different and opposite of the documentation practice. The goal is to enlarge the view of the user, enabling him to understand all the whereabouts of a subject. In this case, the objective is to perform a larger query, which will overlap the subject and to perform after and APA (Automatic Patent Analysis).
This process is necessary, because the number of patent notices which will be retrieved will be often of several hundred, even thousands.

**The APA (Automatic Patent Analysis)**

To perform such an analysis, we will use the Matheo Patent\(^2\) resident software which enables to query the world patent database or the USPTO databases\(^3\). Once the query is done and the answer is obtained, all the patents (including the family if necessary) are downloaded on a local computer. At the same time, the data are formatted and a pre-determined analysis done. This will enable the user to make all possible combinations of the data present in the various bibliographic fields of the patent notices giving rise to lists, networks, matrices. These statistical treatments are done in a few seconds since pre-programmed allows the user to get answers about the classical questions: who is doing what, with whom, where, when, what technologies and applications are in use, etc.

For academic people, research laboratories and centers, this is interesting since they will be able to test new ideas, to see what people do with their knowledge and competencies, to search for potential partners and for the patents where universities or research centers are the applicants to move up to upstream research. Another aspect of the patent is important (for US, EP and WO patents) this is the non-patent literature cited very often by the examiner. This literature contains scientific publication references and provides a good way to embrace the fundamental research linked to the products or applications protected.

Another condition which, in our opinion, is fundamental for developing countries is the following: patents provide wide information on the way that natural resources (for instance various plants, ores, etc.) are transformed to get them out of added value products. This aspect is important since most of the time natural resources are not transformed and sold as crude material. Moreover, because it is possible to map the various technologies used, it is possible to match some transformations with the local scientific and technological facilities.

The easy way to access the patent literature, its quality as well as its large number of notices is a good way to introduce in research and education some technical aspects which will build a bridge between theory and practice. We believe, because of the low cost (quasi nil) of this methodology that it can induce for developing countries, a move in research subjects and also in the way to consider the competencies of an individual or of a laboratory. In the next part of this presentation, we will develop some examples related to these different aspects.

**Examples of the use of Patent Information in Developing Countries**

We have been developing for several years this way to promote technology and applications in developing countries and the examples which are presented underneath have been published in various papers. This is the reason why they will be presented globally and not precisely detailed.

**Indonesia and the Coconut Field**

As early as 2001, we tested this methodology with success in the North Sulawesi\(^4\). Coconuts are one of most valuable products from North Sulawesi (Indonesia), but only a small number of products are developed locally such as coco fibers, or carbon black (wood burned and crushed to produce a very thin powder that can be used to absorb chemicals in gases or water) from coconuts. Mostly the coconuts are sold as unprocessed material. The profit made from this remains limited. Therefore, it is urgent that within the framework of Innovation a move should be made towards a more sophisticated approach. The results obtained from the patent information analysis opened the

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\(^2\)For more information on Matheo Patent, consult the following site \[http://www.matheo-software.com\]. A demo version of the software is available as well as different examples.


\(^4\) Competitive Intelligence and Regional Development within the Framework of Indonesian Provincial Autonomy, Henri Dou, Sri Damayanty Manullang, Education for Information, n°22, June 2004
way to new areas to add value to coconut products: biodegradable pet litter, building materials, animal fodder, horticultural material, mattress chairs, and objects made from fibers, organic fertilizer, textiles, water treatment, and so on. The following list presents an extract of the most valuable applications and products obtained from the analysis of the IPC 4 digits, the frequencies indicate the importance of the application in the local downloaded database.

Examples of selected IPC (4 digits). At the beginning we chose only the simpler technological applications according the local expertise.

AOIG, *Frequency 69*, HORTICULTURE; CULTIVATION - - OF VEGETABLES, FLOWERS, RICE, FRUIT, VINES, HOPS, OR SEAWEED; FORESTRY; WATERING (picking of fruits, vegetables, hops, or the like AOID 46/00; plant reproduction by tissue culture techniques AOIH 4/00; devices for topping or skinning onions or flower bulbs

A23K, *Frequency 25*, FODDER FOODS, FOODSTUFFS, OR NON-ALCOHOLIC BEVERAGES, NOT COVERED BY SUBCLASSES A23B TO A23J; THEIR PREPARATION OR TREATMENT, e.g.COOKING

B04D, *Frequency 22*, SEPARATION (separating solids from solids by wet methods B04; presses per se for squeezing-out liquid from liquid containing material B30B 9/02; treatment of water C0W, e.g. softening by ion exchange C02F 1/42; arrangement or mounting of filters in air-conditioning, air-humidification or ventilation

C04B, *Frequency 22*, LIME; MAGNESIA; SLAG, CEMENTS; COMPOSITIONS THEREOF, e.g. MORTARS, CONCRETE OR LIKE BUILDING MATERIALS; ARTIFICIAL STONE; CERAMICS (devitrified glass-ceramics C03C 10/00); REFRACTORIES; TREATMENT OF NATURAL STONE

A47C, *Frequency 21*, CHAIRS (seats specially adapted for vehicles B60N 2/00); SOFAS; BEDS (upholstery in general B68G)

B27N, *Frequency 20*, MANUFACTURE BY DRY PROCESSES OF ARTICLES, WITH OR WITHOUT ORGANIC BINDING AGENTS, MADE FROM PARTICLES OR FIBRES CONSISTING OF WOOD OR OTHER LIGNOCELLULOSIC OR LIKE ORGANIC MATERIAL (containing cementitious material B28B;shaping of substances in a plastic state B29C; fiber boards made from fibrous suspensions

Possible local production selected from the above list:

- People locally produce traditional wood houses that are sold in Indonesia, but also in Australia, New Zealand, the US and even Europe. These houses are not insulated and soundproof (especially the internal partitions), but insulating panels as well as soundproof panels can be made from coconut fibers. This opens the way to innovative thinking in house building by integrating different local resources.
- As the region is volcanic, building materials characterized by their very light weight are potentially interesting.
- The near-by port of Bitung provides facilities to ship all kinds of products. The production of biodegradable pet litter therefore may represent an opportunity, as well as insulating panels or building materials.
- The region of North Sulawesi is well known for its pig breeding. The production of fertilizer by mixing pigs' droppings with coconut material is also an opportunity.
- Wine made from fruits is another opportunity (North Sulawesi is a Christian region). In fact, because we worked for more than seven years with Brazilian students and various Brazilians institutions, south-south cross collaboration is interesting, especially in the domain of alcoholic beverages (cachassa), dry fruits (bade), corn (polenta), etc.
- Coconut fibers can be used for water treatment.

These few examples show how, by using technological analysis and patent databases as a source of unique information, people can acquire a global view of the potential development of the area. We successfully use this method in the course in Technology Watch and Competitive Intelligence at the University of Manado in North Sulawesi. These results were used also to select the subject of the research work that the students have to perform during their three to four months of probation period with the local industry. Other subjects than coconuts have been successfully explored in the same way and gave promising results in the field of cloves, nutmeg, seaweed, dry fruits, etc.

The use of patents as a unique source of technical information, associated with a software allowing a fully automatic exploration of the selected set of patents, provide an easy way to build up innovative thinking among the Indonesian students involved in a postgraduate course. The facility provided to build up patent clusters, related technologies, etc. allows the mapping of all the available interactions from the selected patents. This helps the students to begin to think in terms of value-maps and networks. Very often, we associate the results of the analysis to provide data to fill brain storming map, SWOT and Porter diagrams.

**The Status of Moringa Oleifera in Africa**

The Moringa is a plant widely used in Burkina Faso, Madagascar and other part of Africa as a food complement because of its high protein and vitamins contain. In different countries the products from the Moringa are mainly powders made from the leaves and oil from the seeds. After the oil extraction from the Moringa’s seeds, water can also be cleaned using the seed cake. But, most of the time the local people or the stakeholders of this business do not know all the possible uses of “Moringa” as well as the main economic actors. This is important because this may give rise to new ways to valorize the products from various parts of the Moringa or even to make some joint ventures with foreign companies using Moringa crude products.

To solve the problem, we performed a search using the term Moringa in titles or abstracts, using the world patent database and the Matheo Patent software as above to analyze the local database. Parts of the results are indicated below (Dou, Manullang, Kister, Dou Jean, 2015; Dou, Kister, Dou Jean). The result of the search is the following: 115 patents and 58 families. The main countries concerned are: China (33 families), India (9 families), USA (5 families), South Korea (5 families), Japan (2 families). (Done in July 2014) From the titles and abstract words, automatically extracted from the local database we selected various applications. This is represented in the following figure.

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5 Multipurpose tree, [http://en.wikipedia.org/wiki/Multipurpose_tree](http://en.wikipedia.org/wiki/Multipurpose_tree)
Each of the above groups may be analyzed in detail, providing the list of patents, the applicants, their benchmarking, main applications, etc. Even if the use of Moringa seed cake (when the oil is extracted from the seeds) as a water cleaning and purifying agent is known (31), the set of patents presented in the above group open the scope of the use of Moringa seeds or roots in various sanitary aspects.

This is important since in Africa the water concern is of primary importance and because there is a strong need for drinkable water. Other applications can be selected if necessary and the matrix selected applications/countries indicated in which countries the applications are developed. This is indicated in the following figure.
Sri Damayanty Manullang, Jacky Kister, Henri Dou, and Audy Aldrin Kenap

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<tr>
<th>Country</th>
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<td>1</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

Figure 7: Other Application versus Protected Countries

In this figure IPC A = Human Necessities (including medicinal aspects and cosmetics), IPC A61K = Preparations for Medical, Dental, or Toilet Purposes, A61K8 = Cosmetic or Similar Toilet Preparations.

Patent information is also important because the user can access the applicant(s) and inventor(s) names, and from the full text of the patents to some protocols of extraction and treatments of various parts of the Moringa. If in Africa, the culture of the Moringa is mainly done through cooperatives or NGO, this shrub will be used on a large scale in Morocco where more than 25,000 plants will be used in the South Provinces to struggle against the desert development. In this case a large quantity of crude materials from the Moringa will be available. Then the knowledge of the technologies used for its transformation will be important as well as the main companies involved. Further, if research projects are coming out from the development of Moringa it is wise to include in the proposal information coming from APA and not only from scientific information. This will at the very beginning focus the work on useful aspects.

**Conclusion**

Introducing patent information in higher education and research will open the way to a link between science and technology. This is important since most of the time the scientific education programs do not include this link. In the same way, most of the research subjects are not develop with in mind the transfer the results and competencies to industry. In developing countries where the national or regional industrial fabric is not very strong (or it is most of the time the fact of international companies which already have their research center abroad), the introduction of a certain amount of technical applications and concern in education and research will speed the way to local industrial partnerships. This is the way to actually follow some institutions such as the OAPI (African Organization of Intellectual Property), the WIPO (World Intellectual Patent Office) the French IRD (Institut de Recherche et de Développement), etc. Moreover the high demographic growth in developing countries should prompt the politicians to organize at the regional or national level the facilities and programs which will create a synergy between research and industry. Patent information because it provides “true facts” demonstrates that a possible organization of the stakeholder of an area of knowledge or development is possible. All the above considerations and examples speak in favor of such an organization.
References


Study of relationship between Emotional Intelligence and Social Adjustment

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Abstract
This paper deals with the study of the correlation between emotional intelligence and social adjustment. Emotional intelligence is considered to be important for success in all walks of life; whereas social adjustment is the achievement of balance in social relationships usually aided by the appropriate application of social skills. For this study, the researcher had randomly selected the 269 students pursuing Master’s Degree from various departments of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra, India. There were 150 students from the Science faculty and 119 students from the Social Science faculty in the sample for the study. The tools used were the standardized ROQAN Emotional Intelligence Test (REIT) developed by Prof. Roquiya Zainuddin and Anjum Ahmed and Social Adjustment Inventory by R.C. Deva. The tests were personally administered to the sample. It was concluded that gender and faculty plays no significant role in determination of emotional intelligence or social adjustment. The coefficient of correlation between emotional intelligence and social adjustment was calculated as 0.96 (high and significant). The coefficient of correlation between emotional intelligence and social adjustment was 0.97 and 0.95 for male and female students respectively. For arts and science students, the coefficient of correlation was calculated as 0.96 and 0.96. The coefficient of correlation was high and significant both gender wise and faculty wise. Regression analysis indicated that social adjustment was a significant predictor of emotional intelligence as 93% variation in emotional intelligence can be predicted by social adjustment. Thus, it was concluded that socially adjusted students had a higher emotional intelligence and social adjustment plays a significant role in predicting emotional intelligence.

Keywords: Emotional Intelligence, Social Adjustment, post graduate students, coefficient of correlation.
Introduction & Literature Review

Psychologists have described and explained ‘emotion’ differently, but, all agree that it is a complex state of human mind involving bodily changes of widespread character such as breathing, pounding heart, flushed face, sweaty palms, high pulse rate and gland secretions on the physiological side; and on the mental side, a state of excitement or perturbation marked by strong feelings. Feelings are what one experiences as a result of having emotions. The researches and experiments conducted in the 90’s onwards have tried to challenge the over dominance of intelligence and its measure intelligence quotient (IQ) by replacing it with the concept of emotional intelligence and its measure emotional quotient. The term emotional intelligence was introduced in 1990 by two American University professors Dr. John Mayer and Dr. Peter Salovey. According to them, “Emotional intelligence is an ability to monitor one’s own and others feeling and emotions, to discriminate among them and to use this information to guide one’s thinking and others” (page number). Today emotional intelligence is considered to be important for success in all walks of life. According to Hein (2000), “Emotional intelligence is the mental ability underlying the emotional sensitivity, awareness and management skills which help us maximize our long term health, happiness and survival.” Daniel Goleman (1996) of “The New York Times”, adopted the term “emotional Intelligence” and introduced it in his best seller ‘Emotional Intelligence-Why it can matter more than IQ.’ He gave the world a new meaning of emotional intelligence. According to Goleman, IQ accounts for only about 20% of a person’s success in life. The balance can be attributed to “emotional intelligence” or EQ. In 1997, Salovey and Mayer refined their definition as an ability to process emotional information, that is an ability to recognize the meanings of emotions and their relationships, as well as being able to reason and to solve problems on the basis of them. In particular, emotional intelligence involves one’s capacity to perceive and assimilate emotional feelings, to understand the information of these emotions and lastly, the management of them. More recently, Mayer and Cobb further developed the definition of emotional intelligence, into the following four branches (2000): (i)Emotional Understanding, (ii)Emotional facilitation of thought, (iii) Emotional management, and (iv) Emotional identification, perception and expression.

Social adjustment is the achievement of balance in social relationships usually aided by the appropriate application of social skills. Social adjustment is an effort made by an individual to cope with standards, values and needs of a society in order to be accepted. It can be defined as a psychological process. It involves coping with a new standard and value. In the technical language of psychology “getting along with the members of society as best one can” is called adjustment. Psychologists use the term adjustment in accordance with the varying conditions of social and interpersonal relation in the society. Thus, social adjustment can be called the reaction to the demands and pressures of the social environment imposed upon the individual.

The researcher reviewed various researches in the field of emotional intelligence to gain an insight into the problem. K.V. Petrides and Adrian Furnham (2000) in their study titled, “Gender Differences in Measured and Self-Estimated Trait Emotional Intelligence”, studied emotional intelligence (EI) wherein a regression analysis of the data indicated that gender was a significant predictor of self-estimated Emotional Intelligence. A.B. Patil (2006), in his study titled, “Emotional Intelligence among student teachers in relation to sex, faculty and academic achievement” used tools like Emotional Intelligence Test (E.I.T) based on Goleman’s Emotional Competency Model, and he gave some interesting results about the relationship. The study indicated that though gender and faculty plays no significant role in the determination of
emotional intelligence, the academic achievement is significantly related to emotional intelligence. A study titled, “The Relation of LD and Gender with Emotional Intelligence in College Students” by Henry B. Reiff (2001) indicated that gender plays no significant role in determination of Emotional Intelligence.

The study by Uma Devi and Mayuri (2005) titled, “Relationship between Emotional Intelligence and Academic Achievement of Adolescents” suggested that some dimensions of the emotional intelligence were positively and significantly related to the academic achievement of adolescents. Paloma Gil-Olarte Marquez, Raquel Palomera Martin and Marc A. Brackett (2006) in their study, “Relating emotional intelligence to social competence and academic achievement in high school students” found that academic grades were significantly related to emotional intelligence. Samuel O. Salam (2007), University of Ibandon, Nigeria studied the relationship of emotional intelligence and self efficacy to work attitudes among school teachers in South Western Nigeria. The purpose of this study was to investigate the degree to which secondary school teachers, emotional Intelligence and self efficacy are related to their work attitude (career commitment, organizational commitment, work family conflict). The sample was 475 secondary school teachers (Males – 230 & Females – 245) randomly selected from 5 states in South Western Nigeria. The results indicated that teachers who have high emotional intelligence and high self efficacy develop more emotional commitment to their career. It was found that self efficacy was negatively and significantly related to work family conflicts.

In a study by Ajaykumar Bhimrao Patil (2006) titled, “Emotional Intelligence among student teachers in relation to sex, faculty and academic achievement,” it was found that there is no significant difference between emotional Intelligence of male and female student teachers. Also, there is no significant difference in the emotional intelligence of student teachers of Arts and Science faculty and there is a significant relationship between Emotional Intelligence and academic achievement of student teachers. A study of the relationship between emotional intelligence and professional stress among Degree College Teachers by Dr. Sushma Pandey (2006) found that Emotional Intelligence and professional stress of degree college teachers are negatively related. It means when emotional intelligence increases, professional stress decreases. Emotional intelligence is a reassuring and result oriented attitude and a way of dealing with a variety of situations.

There are numerous studies on emotional intelligence but not much has been done on studying social adjustment of higher education students. There were studies on the social adjustment of patients suffering from life threatening ailments and also for special children. This research specifically focuses on the study of the relationship of emotional intelligence and social adjustment.

Methodology

The research methodology used for this study was Survey Method. The researcher had randomly selected the 269 students pursuing Master’s Degree from various departments of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Maharashtra, India. There were 150 students from the Science faculty and 119 students from the Social Science faculty in the sample for the study. There were 101 female and 168 male M.Ed. students in the selected sample. The researcher collected the data regarding the emotional intelligence and social adjustment of higher education students using the following standardized tools:
1. The standardized ROQAN Emotional Intelligence Test (REIT): This test was developed by Prof. Roquiya Zainuddin and Anjum Ahmed. The Emotional Intelligence test consisted of 30 multiple choice questions which measures an individual’s emotional reactions to different situations. The answer is to be given on the basis of how you feel and not what you think. The scoring is based on the choice of answers according to the key given in the manual. The interpretation of scores helps in understanding the level of emotional intelligence. High EI is indicated by a score of 76 and above, normal EI is indicated by a score range of 60-75 and a score below 60 is considered to be of low EI.

2. Social Adjustment Inventory: This inventory was developed by R.C. Deva. This inventory consists 100 items. It provides scores related to Emotional Adjustment and Social Maturity. The inventory has yielded satisfactory reliability and validity indices. The test-retest reliability after a period of two months was 0.91. The inventory has norms for scoring the data obtained.

The researcher personally administered the tool to the sample and collected the data. The tests were scored and tabulated; and descriptive statistics were calculated using MS Excel. The statistical techniques used were t-test, coefficient of correlation and linear regression. The regression analysis was carried out between emotional intelligence score and social adjustment score.

Data Analysis
The data was tabulated and the descriptive statistics was calculated and the difference in mean was tested using t-test at 0.05 level of significance. The result of the analysis is as shown in the table below:

<table>
<thead>
<tr>
<th>Variable Compared</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-ratio</th>
<th>Level of Significance (0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional</td>
<td>Female</td>
<td>101</td>
<td>62.81</td>
<td>7.02</td>
<td>0.26</td>
<td>Not Significant</td>
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<tr>
<td>Intelligence</td>
<td>Male</td>
<td>168</td>
<td>61.89</td>
<td>5.43</td>
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<td></td>
</tr>
<tr>
<td>Social</td>
<td>Female</td>
<td>101</td>
<td>75.48</td>
<td>8.42</td>
<td>0.18</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Adjustment</td>
<td>Male</td>
<td>168</td>
<td>74.17</td>
<td>6.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional</td>
<td>Arts</td>
<td>119</td>
<td>61.38</td>
<td>5.94</td>
<td>0.04</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Intelligence</td>
<td>Science</td>
<td>150</td>
<td>62.91</td>
<td>6.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>Arts</td>
<td>119</td>
<td>73.65</td>
<td>6.95</td>
<td>0.04</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Adjustment</td>
<td>Science</td>
<td>150</td>
<td>75.47</td>
<td>7.56</td>
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</tbody>
</table>

*Table 1:* Test of significance between emotional intelligence score and social adjustment score across different parameters
The coefficient of correlation between emotional intelligence and social adjustment was calculated across various parameters. The result of the calculation and its significance is shown in table below.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Correlation between EI &amp; SAI</th>
<th>t-value</th>
<th>P-value</th>
<th>Level of Significance (0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>0.956</td>
<td>48.80</td>
<td>0.00</td>
<td>Significant</td>
</tr>
<tr>
<td>Female</td>
<td>0.979</td>
<td>42.13</td>
<td>0.00</td>
<td>Significant</td>
</tr>
<tr>
<td>Arts</td>
<td>0.965</td>
<td>40.08</td>
<td>0.00</td>
<td>Significant</td>
</tr>
<tr>
<td>Science</td>
<td>0.969</td>
<td>48.26</td>
<td>0.00</td>
<td>Significant</td>
</tr>
<tr>
<td>Overall</td>
<td>0.968</td>
<td>63.14</td>
<td>0.00</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Table 2: Coefficient of Correlation and its significance between emotional intelligence and social adjustment across different parameters

Regression Analysis was carried out between emotional intelligence and social adjustment scores of the higher education students.

The result of the regression analysis is as follows:

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coef</th>
<th>SE Coef</th>
<th>t-stat</th>
<th>P</th>
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</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.30</td>
<td>0.95</td>
<td>2.41</td>
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<tr>
<td>SAI</td>
<td>0.80</td>
<td>0.012</td>
<td>63.14</td>
<td>0.005</td>
</tr>
</tbody>
</table>

Table 3: Regression Analysis [Emotional Intelligence with Social Adjustment]

S = 1.52 R-Sq = 96.81% R-Sq(adj) = 93.70%
S= Standard error of Estimate, R-sq=Coefficient of determination, R-adj=Adjusted R-square

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>P</th>
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</thead>
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<td>9307.546</td>
<td>3987.49</td>
<td>0.000</td>
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<tr>
<td>Residual</td>
<td>267</td>
<td>623.2275</td>
<td>2.334</td>
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</tr>
<tr>
<td>Total</td>
<td>268</td>
<td>9930.773</td>
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<td></td>
</tr>
</tbody>
</table>

Table 4: Analysis of Variance (ANOVA) [Emotional Intelligence with Social Adjustment]

The findings of the analysis were as follows:
1. The regression equation calculated was,
   Emotional Intelligence Score= 2.30+ 0.80 Social Adjustment score
2. The above equation is a linear equation of the form, Y= C + mX which indicates that the relation is linear between the variables Emotional Intelligence score (Y) and Social Adjustment score (X). The standard error of estimate (S) was 1.52 which is also the standard error of the slope of the linear equation of the regression analysis.
   - $R^2$ Value is approximately 93.70%, indicating that 93.7% variation in emotional intelligence score can be explained with Social Adjustment score.
   - The P-value obtained is 0.00 which is less than 0.05 indicating that there is significant relationship in between independent variables (Social Adjustment score) and dependent variable (Emotional Intelligence score).
   - t-test for variable X (Social Adjustment score), ($t = 63.14 > 1.96$ at 0.05 level of significance) indicated that there is significant linear relationship between Social Adjustment score and Emotional Intelligence score.
Hypothesis Testing

1. There is no significant difference in emotional intelligence between male and female higher education students.

   To test the above hypothesis, t-value was calculated and the findings are shown in table-1 above. The findings indicate that t-value obtained is 0.26 (less than table value 1.96). The difference between emotional intelligence of male and female students is not significant.

   Hence hypothesis is accepted.

2. There is no significant difference between social adjustment of male and female higher education students.

   To test the above hypothesis, t-value was calculated and the findings are shown in table-1 above. The findings indicate that t-value obtained is 0.18 (less than table value 1.96). The difference between social adjustment of male and female students is not significant.

   Hence hypothesis is accepted.

3. There is no significant difference between emotional intelligence of arts and science faculty higher education students.

   To test the above hypothesis, t-value was calculated and the findings are shown in table-1 above. The findings indicate that t-value obtained is 0.04 (less than table value 1.96). The difference between emotional intelligence of arts and science students is not significant.

   Hence hypothesis is accepted.

4. There is no significant difference between emotional intelligence of arts and science faculty higher education students.

   To test the above hypothesis, t-value was calculated and the findings are shown in table-1 above. The findings indicate that t-value obtained is 0.04 (less than table value 1.96). The difference between social adjustment of arts and science students is not significant.

   Hence hypothesis is accepted.
5. The correlation coefficient between emotional intelligence and social adjustment is high and significant for male higher education students.

To test the above hypothesis, coefficient of correlation was calculated and the findings are shown in table-2 above. The findings indicate coefficient of correlation is 0.956. This coefficient of correlation is high and significant. Thus, there is a positive, high and significant correlation between emotional intelligence and social adjustment for male higher education students.

Hence hypothesis is accepted.

6. The correlation coefficient between emotional intelligence and social adjustment is high and significant for female higher education students.

To test the above hypothesis, coefficient of correlation was calculated and the findings are shown in table-2 above. The findings indicate coefficient of correlation is 0.979. This coefficient of correlation is high and significant. Thus, there is a positive, high and significant correlation between emotional intelligence and social adjustment for female higher education students.

Hence hypothesis is accepted.

7. The correlation coefficient between emotional intelligence and social adjustment is high and significant for science faculty higher education students.

To test the above hypothesis, coefficient of correlation was calculated and the findings are shown in table-2 above. The findings indicate coefficient of correlation is 0.969. This coefficient of correlation is high and significant. Thus, there is a positive, high and significant correlation between emotional intelligence and social adjustment for science faculty higher education students.

Hence hypothesis is accepted.

8. The correlation coefficient between emotional intelligence and social adjustment is high and significant for arts faculty higher education students.

To test the above hypothesis, coefficient of correlation was calculated and the findings are shown in table-2 above. The findings indicate coefficient of correlation is 0.965. This coefficient of correlation is high and significant. Thus, there is a positive, high and significant correlation between emotional intelligence and social adjustment for arts faculty higher education.

Hence hypothesis is accepted.

9. The correlation coefficient between emotional intelligence and social adjustment is high and significant in higher education students.
To test the above hypothesis, coefficient of correlation was calculated and the findings are shown in table-2 above. The findings indicate coefficient of correlation is 0.968. This coefficient of correlation is high and significant. Thus, there is a positive, high and significant correlation between emotional intelligence and social adjustment in male higher education.

Hence hypothesis is accepted.

10. Social adjustment is a significant predictor of emotional intelligence in higher education students.

To test the above hypothesis, researcher used regression analysis between emotional intelligence and social adjustment. The results are indicated in table 3 and 4. The regression equation calculated was,

Emotional Intelligence Score = 2.30 + 0.80 Social Adjustment score

The R^2 value was approximately 93.70%, indicating that 93.7% variation in emotional intelligence score can be explained with Social Adjustment score. The P-value obtained is 0.00 which is less than 0.05 indicating that there is significant relationship in between independent variables (Social Adjustment score) and dependent variable (Emotional Intelligence score).

Hence hypothesis is accepted.

**Conclusion**

This study tried to establish the relationship between emotional intelligence and social adjustment. It was concluded that gender and faculty play no significant role in determination of emotional intelligence or social adjustment. The coefficient of correlation between emotional intelligence and social adjustment calculated was high and therefore significant. The coefficient of the correlation between emotional intelligence and social adjustment was high and significant in terms of gender and faculty. Regression analysis indicated that social adjustment was a significant predictor of emotional intelligence as 93% variation in emotional intelligence can be predicted by social adjustment. Thus, it was concluded that socially well-adjusted students had a higher emotional intelligence. Therefore social adjustment plays a significant role in predicting emotional intelligence.
References


Quality of Management Studies: the Difference in Theory and Practices

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Abstract
Management is a vast area of study, which is constantly advancing and increasing its grip in today’s contemporary era, no matter if the working area is Arts, Sciences, Utility Generation, Production, and Marketing. Management is constantly being used in these areas and is becoming a vital part of an organization that later generates large profit margins.

The present Indian MBA teaching scenarios has changed considerably in the past 5 years. The reason for the change is simply that the MBA degree appears to be losing its significance as a degree because it is now offered to students in the form of a distance-learning course. The shift degree from the practical to theoretical course, lack of properly trained academic staff, and deficiency in the curriculum design have been found to negatively impact the perceived value of this degree. The boom period (2000-2005) for the MBA education has hit a halt as a declining number of students apply for this course. A Deviation between student aspiration before and after enrolling in the course, the discrepancy in expectations of the institute from the student and, the variation in the quality of the MBAs demanded by the production sector (goods and service) and the quality of the MBAs supplied have been found. This study focuses on reasons for the decreasing the number of MBA enrollments in Jodpur; and the need for a major shift in MBA teaching approaches.

Keywords: MBA Education, Indian MBA Education.
Introduction

The Masters of Business Administration, or MBA degree has been offered now for 100 years of its existence and continues to attract students from various streams of study all over the world. It is also considered a benchmark of a high life standard for the aspirants. The MBA, which shares a space up on the mantle with other professional degrees such as the Charter Accountant, Company Secretary, etc. are offered as full-time, part-time, executive, and distance learning modes. It has a difficult admission process including, but not limited to, high quality entrance exam, work experience, reference letters, personal interviews, strong academic and social background, and much more. The course is slowly losing its grip in the Indian education market as a plethora of institutions lure candidates with the shine of scholarships and reduction in fee structure. Additional strategies for winning students is to offer reduced admissions and fee rates to girls in order to fill the required amount of seats, which helps institutes fulfill the requirements for Gender Diversity. However in spite of these attempts the local and international student ratio is standing still at zero for the past years.

The surplus supply and reduction in demand of Management candidates by Indian industries has led to the growth in the number of MBA institutes in India. According to the latest figure released by AICTE more than 145 MBA institutes and many engineering colleges which were offering MBA courses have shut down due to lack of admissions in their MBA programs. The number of postgraduate diploma programmes in management institutes has also dropped from 606 to 600 in the same period.

While attending the UGC Sponsored Conference at the Jai Narain Vyas University Jodhpur that focused on the emerging trends and issues being faced by management in recent times, some questions that most of the attendees were wondering about was - why there is a continuous decline in MBA admissions?. In connection to finding the answer, the following research study will also shed some light on why there is a significant gap between the theory of management education and its practicality.

History of MBA education

With the evolution of MBA, the courses have entered different markets and fields of study: MBA in Hospital administration, Masters of Public Administration (MPA), MBA in Military Operations, MBA in Travel and Tourism, MBA in economics etc.

“The Indian Institute of Social Welfare & Business Management (IISWBM)”, a graduate school in Kolkata, which was established in 1953, made the Introduction of the MBA course of study in India possible. The starting of the main stream MBA degree was the Master of Science in Commerce degree. Then the Graduate School of Business Administration (GSBA) was set up at Harvard in 1908, which offered the first MBA course with more than 30 students and a faculty of 15 professors. The globalisation of the MBA degree began in the midst of 1950s with The University of Western Ontario in Canada offering MBA. The University of Pretoria in South Africa followed suit. In 1957, INSEAD became the first European business school to offer an MBA program. The University of Chicago’s Booth School of Business was the first to offer the Executive MBA (EMBA) program to working professionals in 1943. In 1986, the Roy E. Crummier Graduate School of Business at Rollins College (Florida) was the first MBA program to require every student to have a laptop computer. Now, Universities worldwide offer the MBA degree. The degree having a huge
Quality of Management Studies

Admission Process

To apply for a MBA degree the candidate has to pass the GMAT (The Graduate Management Aptitude Test). Some business schools also require applicants to pass the GRE (The Graduate Record Examination) in the place of GMAT. After qualifying the entrance exam, the candidate’s work experience, past examination transcript (the candidate has to score more than 50% in his or her bachelor’s degree in order to qualify of MBA), personal statement and essay, reference or letters of recommendation are put under scrutiny. If the candidate’s above-mentioned paper work is in order he or she is called for a personal interview. When the candidate clears the interview he or she is enrolled as a student and expected to finish the MBA in two years.

In order to increase profit margins and fill the required amount of seats in the program, many B-schools, Business colleges and Universities in give less weight on GMAT and GRE scores. In addition, personal essay writing may be removed, and students with little or no work experience may also be enrolled.

In Rajasthan there are two large institutions which provides MBA degrees RTU (Rajasthan technical, University) and J.N.V.U (Jai Narain Vyas, University) other private colleges are affiliated to these colleges and these affiliations let these private colleges to run the course and provide the degree. To enroll at RTU, the candidate must go online for the CMAT (Common Management Admission Test) counseling and then register and select the colleges they would like to attend. The details of the students are then forwarded to the selected colleges, which is followed by an analysis of their application. After that the selected students are informed of their selection and the enrollment procedure. To enroll at JNVU, the candidate must sit the RMAT Exam (Rajasthan Management Aptitude Test). Once qualifying, the student then registers and waits for the admission list. The university has limited amount of seats which means admission is allotted to students who have the best academic background and work experience.

Course Content

Most top MBA programs cover similar subjects within their core courses. The course runs on a semester basis in which the syllabus is divided into four semesters, and should be completed in two years. All students attend the same. In the second year, the last two semesters students choose from a range of electives, such as: - Marketing, Finance, Human Resources, Travel and Tourism, International Business, Operations Management. Some institutes in India, have started offering specializations such as: Rural Management, Banking and Finance, Insurance Management, Organizational Behavior, Entrepreneurship and Project Management, Health Management, Hotel Management, Business Analytics Management, Oil and Gas Management, Aviation Management, and Media Management.

Research Methodology

The following research study is based on dual- primary and secondary data, the study will include a three phased data collection: -
1) Newly enrolled MBA students will be provided with a set questionnaire to find out their course aspirations.
2) A structured interview with industrialists to ascertain what they expect from MBAs
3) A structured interview with experienced college faculty members to gain an insight on the vast shift of MBA education.
Research Findings

As per the information provided by the Rajasthan Technical University (RTU) of India:

<table>
<thead>
<tr>
<th>S.NO</th>
<th>Year</th>
<th>Total Passed Candidates in MBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2010</td>
<td>3734</td>
</tr>
<tr>
<td>2</td>
<td>2011</td>
<td>3902</td>
</tr>
<tr>
<td>3</td>
<td>2012</td>
<td>3349</td>
</tr>
<tr>
<td>4</td>
<td>2013</td>
<td>2450</td>
</tr>
<tr>
<td>6</td>
<td>2014</td>
<td>1889</td>
</tr>
<tr>
<td>7</td>
<td>2015</td>
<td>Result not declared.</td>
</tr>
</tbody>
</table>

* DATA PROVIDED BY RTU- KOTA.

The study has been conducted to find out the reason for such a major downfall in the number of MBAs passed from 2012 to 2015. The reason for the same is divided into three parts: firstly, the point of view of the students, in which reasons for the downfall in the MBA admissions was given. Secondly, the data that shows how the colleges perceive the reduction of MBA admissions; and thirdly, data from industrialists are presented in terms of their expectations of MBA graduates.

The Students

The questionnaire revealed that for many students the degree has lost its value and importance. The reason for this is that a great many institutions offer the MBA as a distance education in which the candidate is not expected to go to class. It appears that students hedge a negative attitude towards study materials that come via post, or the attendance of online classes, or even online exams. Although distance learning is economical compared to conventional means of education in which students attend classes at a university, many students believe it cannot compete in terms of quality.

The questionnaires also revealed that students felt MBA courses lack in practical experience in terms of training, internship, communication skills and language with MBA students coming our with less of practical based knowledge the demand for them in industries also reduced.

The Colleges

A series of interviews with many college faculty members unveiled that increasing fee structures and earning more profit margins are becoming the new motive of MBA teaching colleges. The objective of teaching and training have taken a back foot because of increasing competition in the MBA teaching market which are offering variety of courses, apart from that lack of proper infrastructure and funding in terms of financial grants and projects are also resulting in trimming the size of faculty members required to keep the degree alive.

The Industry

A close discussion with some industrialist who are looking to hire fresh MBA graduates disclosed that many industries in India Requires workers they need a person who is good at what they do, not someone who has an MBA and doesn’t knows the basics of the companies operation, so the degree doesn’t matter, the training does.
Industrialists with their aim of labor exploitation hire people who have less salary expectation, they think that hiring a MBA will cost them more in respect of salary and non-monetary benefits. Many of the industrialists also pointed out that they are have completely lost the faith in Indian MBAs because they keep on hearing news about fake universities who are selling MBA degree for money and not actually tutoring and training the candidates.

**Conclusions and Suggestions**

As the Indian economy is developing and growing and allows a higher standard of living, the importance of education, is moving up on the priority list of the Indian government. With the increase in global competition the need for experienced, professional and knowledge-based society is one of the biggest challenges faced by the modern twenty first century in India. A strong and focused MBA program can help in solving the problem. Some of the suggestion that came into relevance after conducting the following study, which can ensure that the Quality of MBA education in India should remain similar in theory and in practice and can improve the class of business education in India:

1. Central and State universities should do a continuous appraisal regarding the quantity and the quality of students being enrolled in MBA.
2. MBA should be given the same importance as Charter Accountant and Company Secretary is given in Indian education society.
3. Private colleges should make counseling compulsory for graduate students who want to take admission in MBA so that the students have a clear picture about the course.
4. The HRD (Human resource Development) ministry of India should introduce MQE (Management Qualifying Exam), which will be a common qualifying exam running in all India for students who want to enroll for MBA. The qualifying exam should be of 100 marks, including both subjective and objective questions; student’s personal essay should be included in the same exam. The MQE should include question on the following subjects Logical Reasoning, Management Aptitudes, General English, Current Affairs and Global Economics. Specific subject areas like Marketing, Finance, HRM, and Law should be avoided so that students from different fields of education (Science and Arts) can also be encouraged to take the test.
5. MBA colleges should make practical training and Internship compulsory for all the students it should not be limited to one or two semesters instead should run in all four semesters. Training should be given equal weight age in exams as theory subjects are given. Internship in student’s interested field of subjects will give them better job opportunities.
6. Continuous up gradation should be done of MBA faculty via Faculty Development Programs. Teaching with the help of laptops and usage of specific computer software like SPSS, Windows Office should be made compulsory for all the teachers.
7. A three-way open communication system should be designed by all colleges, which should run them, the students and job placement agencies, so that it will be easy for them to create specific MBAs being demanded in the economy.
8. With the help of Social Media students should make specific groups of MBA students which will help them to discuss their assignment, find solutions to their internship and training problems, making contacts and increase job opportunities.
9. From the college point of view all the MBA education business should be shifted to a new electronic system, which will keep tabs on the students starting from their
enrollment, their assignments, their exam, grade posting to their training reports and job placement. This will also help the alumina committee for future events.

10. More than 70 percent attendance should be made compulsory for MBA students.
11. Teaching methods should be more practical then theoretical. Faculties should switch to Case-study teaching methods.
12. India being a diverse country in terms of castes, class and gender fee structure should be set in such a way that more and more backward classes & girls are encouraged to enroll for the course.
13. Government agencies and private companies should try to provide more scholarships to students who are trying to pursue MBA.
14. Communication and language Lab should be set up for students to teach them interview skills, discussion techniques, language proficiency and ways to design their CV and other professional documents.
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Counseling in Indonesia: History, Identity, Trends and Challenges

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Abstract
Guidance and Counseling or Counseling in Indonesia’s school context has been developing since the 1960s. It has been dealing with its cultural adaptation, mistrust, and low professional standards’ issues as the position is as teachers and without standardized licensure as counselors. These situations have become more challenging when Indonesia started the transition period to a democratic country in 1998. More psychological problems have developed along with the trending of population growth, free trade, politics, and environmental damages. However, psychological services are still limited including the low number of professionals. Today, the psychological difficulties are inevitable for most Indonesians who are living in the more collective community with individualistic pattern of behavior as the result of the surge in globalization and governmental system transitions. To provide counseling services, counselors and other mental health professionals mostly have adopted Western counseling and psychotherapy theories which developed from more individualistic societies but, in Indonesia they are helping individuals from collective communities in coping with individual-patterned mental health challenges. This article will discuss the history of Guidance and Counseling or counseling in Indonesia, Counselor identity as a professional, contemporary trends on social issues, and the challenges of counseling to meet the community demands.

Keywords: Guidance, counseling, Indonesia, mental health
Introduction

The early development of Indonesian guidance and counseling was actually not as an answer for social issues as what happened in the United States of America in the 1900s or even in several Asian countries like China, Philippines, and India (Hohenshil, Amundson, & Niles, 2013). It was implemented without clear purpose since 1960s except to support schools’ visions particularly on student learning process until 1993. If it is expressed in an analogy, Guidance and counseling adoption in Indonesia was like planting a four-season tree in the tropical land that either needs modifications of the tree itself or cultivating the soil so that it becomes cultivable.

Historically, counseling grew in a Western-patterned culture based on the social dynamics before World War I (Dwairy, 2006). When it was adopted in Indonesia, counseling came to a more collective-patterned Eastern culture compared to most Western countries such as the United States (Hofstede, 2013). Consequently, there were cultural meetings between the professionals and the people in Indonesia, which lead to the dialogue about the counseling services and the needs of society. Moreover, the long Indonesian history began with a kingdom that went to colonialism, independence, a new order, and finally a reformation era that has brought its people and social constructions a multidimensional dynamic.

Good, Good, Hyde, & Pinto (2008), stated that it is important to understand disorders without ignoring the context of individuals affected by globalization, neoliberal economic policies, and postcolonial politics. However, this article will not specifically discuss these terms one at a time, rather it aims to frame the paradigm of understanding interactions between Indonesia and counseling beginning with initial counseling implementations to current contemporary issues. It is noteworthy that, in fact, counseling in Indonesia has survived for decades with adjustment and few professional issues until this 21st century. This article will discuss the history of guidance and counseling in Indonesia, counselor identity among other mental health professionals, contemporary trends on social issues, and challenges placed on counseling to provide more effective services amid globalization issues. The terms guidance and counseling are used interchangeably.

The History of Guidance and Counseling in Indonesia

Guidance and Counseling as a profession was introduced in 1962 during a conference held by the Faculty of Teachers and Education held in Malang on 20-24 August 1960. Four years later, Bandung and Malang Institutes of Teachers and Educational Science initiated the opening of a new program on Guidance and Counseling (Bimbingan dan Penyuluhan) (Kartadinata, 2005). This in turn inspired a project development called Proyek Perintis Sekolah Pembangunan (Developmental School Pioneer Project) by the other eight Institutes in Padang, Jakarta, Bandung, Yogyakarta, Semarang, Surabaya, Malang, and Menado. The Guidance and Counseling profession began to develop and resulted in the Basic Plan Pattern and the Development of Guidance and Counseling. This growth is inseparable with the birth of the 1975 curriculum for high schools in which there was a guideline for Guidance and Counseling (Kartadinata, 2005). Fourteen years later, in 1989, a legal letter (SK) from the Ministry of Information was disseminated (SK Menpan No 026/Menpan/1989) containing the rules of credits for teachers under the Ministry of Education and Culture. The Guidance and Counseling service was included in the rules of Indonesian Educational system. However, the implementation still had no clear guidelines or manuals until 1993 (Kartadinata, 2005).

Since its early adoption, the Guidance and Counseling was changed several times. Firstly, it was called Bimbingan dan Penyuluhan or Guidance and Counseling (while the definition of counseling was not a professional relationship between a counselor and a client but more
supervisory like in the agricultural or medical field). With this name, the service was offered from 1975 to 1984. After this time it was then called Career Guidance because of curriculum alterations in Indonesian middle schools, which came to be more career oriented in design and began considering the initial history of Guidance and Counseling in the US. About ten years later, the Career Guidance, subsequently, was called Guidance and Counseling after the school curriculum changed in 1994.

Considered as a curative approach, Guidance and Counseling was initially implemented to treat the maladjusted-behavior of students at schools. Subsequently, the service continued to developing various institutions. Since the professionals in the Guidance and Counseling services were still limited in number, teachers from a variety of educational backgrounds were recruited to be Guidance Counselors at schools. Consequently, many of those teachers did not provide services based on the new professional ethics, which then left the Indonesian society mistrusting of the profession. Currently, this profession is still struggling to gain the credibility within the community, in order for its existence to be more recognizable as beneficial.

Because of the unbalanced policies, the number of professionals, educational backgrounds, and services focused on psychological problems, Guidance and Counseling services were not accepted and this trend resulted in the public perception that the Guidance and Counseling services were merely focusing on the students’ problems or mental health weaknesses. As a result, those who are seek counseling services are perceived of as psychologically weak. Once a student’s parents are invited to the school by the guidance counselor, it means that the student is in a big problem and this stigma can be seen as evidence of inferiority or even lead to social exclusion and excision.

In spite of these problems the service continues to develop. Contemporary positive approaches toward an individual’s psychological issues influence scholars and professionals. The Guidance and Counseling services has gradually moved from clinical to more developmental perspectives (Myers, 2002). Moreover, Kartadinata (1996) has mentioned decades ago that the service of Guidance and Counseling could approach communities with an ecological approach by which individuals are understood by their context or community settings. This statement is in line with Kim and Hwang (2006) in the research about indigenous psychology, which supports the believe of understanding people within their own context, so that a professional will be able to treat people comprehensively.

Today’s development of Guidance and Counseling is in the wave of uncertain middle school curriculum changes. Its service would be different with that of the previous curriculum, and allow Guidance Counselors to implement comprehensive counseling services developed by Gysbers and Anderson (2001) or Dollarhide (2011). Remembering that this profession is highly dependent on changes in a school curriculum, the new services will be dynamic. It means that the profession will need to adjust to the demands of the new school curriculum or national educational system so that Guidance and Counseling services provide better benefits for students and educational institutions. However, it is important for the association to formulate professional standards and improve competences of Guidance Counselors or School Counselors through a more progressive counselor education program in order to meet the needs of the Indonesian community in the 21st century.

Counselor Identity as a Professional

Among other related mental health professionals, such as psychologists and psychiatrists, Guidance Counseling is the youngest profession growing around the world, especially in the U.S (Counseling Around the World, 2012). Moreover, it is becoming more popular in Asian and
African countries. Compared to those two other professions, Counseling offers a different perspective as its name suggests. Commonly known as mental health services, psychologists and psychiatrists seem strongly affiliated with therapy for mental illness, while guidance and counseling provides an approach more focused on developmental processes, prevention, and wellness orientation (McAuliffe & Eriksen, 1999).

Due to its similarity in approach with related professions, it is difficult to define the professional identity of counselors (Myers, Sweeney, & White, 2002). Many counselors find it difficult to clearly identify themselves in terms of their professional identity (Calley & Hawley, 2008). Although the borders with the other professions’ services sometimes are overlapping, Counseling provides a unique service which pays more attention to those who are still in a normal condition or those who are not afflicted with mental illness. According to Witmer and Sweeney (1992), this professional focus is more acceptable with the ecological wellness approach by which a Counselor sees clients as a united system of tasks in life.

With the different characteristics of services, Counseling could be a potential professional bridge amidst other mental health professionals in providing psychological help in the community. Counseling may work for those who are still relatively stable, while psychologists can help individuals who need personality reconstruction, and psychiatrists assist those who need medication or other medical approach recoveries. Once these three professions have one goal in providing psychological services for people, they may collaborate with their specialties without becoming isolated in the identity terrains.

In terms of identity, Guidance Counselors or Counselors in Indonesia are still designed to work in educational settings. Beside the legal nature that has not forcefully supported the service in other fields, most study programs have not offered diverse counseling specialties such as mental health, rehabilitation, social work counseling or other related disciplines. Myers et al. (2002) suggest that the differences between counselors and other professionals are a result of different ways they negotiate their identities. Counselors in the US, mostly identify themselves in terms of their specializations. In addition, they also refer to the population they are serving such as addictions, clinical mental health, and rehabilitation or the settings where they are working at like schools, colleges, hospital, or correctional rehabilitation centers. These ways allow counselors to gain confidence in providing professional services and set clear boundaries at least between professionals in the same fields. Moreover, it also allows them to identify themselves as different from other related professionals.

Indonesian Guidance Counselors are still predominately present in schools although many other counselors work in other fields such as in the family planning organizations, social services, and non-governmental organizations. All of those positions are still affiliated with their ethical codes as published by Indonesian Association of Guidance and Counseling. Ethics is considered as a means of professional unification. In addition, counselor identity could be defined in terms of ethical behavior since professional ethics serves as guideline for counselors to present themselves as a professional (Hendricks, 2008). Unfortunately, Indonesian counselor ethics are not strictly enforceable to be followed by guidance counselors or counselors. Presently this is a vulnerable area for those professionals who conduct themselves unethically. There is no clear procedure on how to make reports when a professional behaves unethically. Furthermore there are no firm consequences or punishment for those who break these ethical codes. Since the low implementation of Indonesian counselor ethical codes, supervision on their practices is also potentially low this adds to societies be decreasing levels of trust towards the profession.

Implementing counselor ethical codes is a primary way to develop guidance counselor and counselor identity as professionals. They are professionals with skills and potentials to
Empower people who need psychological help. Without ethics, counselors’ behaviors may follow their believed values or culture that they are affiliated with. It is a risky business when a professional does not implement ethical codes. They could lose their professional identity and finally provide service poorly and without moral responsibility. Consequently, clients might not meet their wellness and life goals or even turn to be worse.

Interprofessional collaboration with other professionals may be the best way to maximize each of the professions roles so that they contribute more effectively to the most critical problems education, mental health or other fields (Keyton & Stallworth, 2002). Counselor identity in Indonesia may be improved when they are able to perceive themselves as professionals with specific characteristics and specific understanding about their capacities, and uphold the ethical codes as professional counselors.

**Contemporary trends on social issues**

While Counseling around the world faces challenges in their communities, Indonesian Counseling has been dealing with the impact of democracy in the society. Since 1998, Indonesia has also experienced various social issues and natural disasters such as volcanoes, earthquakes and tsunamis. All of these issues are inseparable from the availability of mental health services in the community from both government and non-governmental organizations. Political issues are also leading to connecting an individual’s life in relation with their necessity as a responsible civilian and their roles in the society (Walker, 2008).

Indonesian transitions from an authoritarian system to a more democratic governmental system has more or less influenced the pattern of interpersonal interactions and individual-country relationship. Indonesian masses were easy to run *amuk* either during or after 1997 (during president Soeharto’s administration) caused by political frustration and humiliation, or political violence (Good, Subandi, & Mary-Jo DelVecchio Good, 2007). The term *amuk* is a Javanese term that is defined as culture-bound syndromes delineating individual’s becoming wild, dangerous, aggressively attacking others, or even murdering. Today, similar syndromes are often shown in various social and political occasions which have led to common sense and permissiveness. It seems like behaving in such a way is considered to be acceptable because of the misconception of the term freedom in democracy concept understanding.

In Dwairy’s (2006) book, entitled Counseling and psychotherapy with Arabs and Muslims: A culturally sensitive approach, it is stated that community characteristics determine an individual’s attitudes toward their concerns. Most people in Eastern countries have lived with colonialism for centuries. They remained in their tribes to survive and be free from oppressions of colonizers. As a result, people tend to be interdependent including in terms of all their daily issues. This history influences them to make decisions collectively instead of individually (Hofstede, 2013).

However, with the wave of democratization, people have direct affiliation with their nation similar to when the Industrial Revolution began in the 1760s. To be a democratic country, all individuals have the right to contribute to his or her country no matter what their backgrounds. Those who had no possibility to be a leader, now have such opportunities. With this opening of opportunity, dare to express their ideas in various ways so that their individuality is more salient instead of reflective of collective feelings. People then tend to be aware of their “self” including their autonomy in making decisions and behaving.

This outcome is inevitable since individuals have been for decades in the situation where it was not acceptable to give priority to their “self” and now the door is open widely to unleash their “self” to be who they want to be or do what they want to do. It is known as the freedom of
self-expression. This presents challenges to what mental health professionals such as counselors should do in providing services for communities with this transitional situation.

**Challenges on counseling**

As mentioned earlier, counseling in the US is based on the changing needs of community. Counseling services originated from the Western culture where people tend to value individualization instead of communality (Dwairy, 2006). Independency and autonomy are key ideas that several theories of counseling aim to develop in individuals (Sharf, 2011). To apply such counseling theories and approaches, (Indonesian or other Eastern countries) students in counseling programs may face cultural clashes with the counseling theories itself and furthermore, they may face challenges in providing services to individuals from the local culture. It is considered to be difficult to adopt new values in counseling approaches or theoretical orientation among counseling students or trainees (Sumari, Mohamad, & Ping, 2009).

Beyond the issues of becoming a counselor, it is important to consider the transitions of people who now live in a democratic society as this has brought a new pattern in developing relationships among people. Indonesia is now defined by both collectivistic and individualist cultural values. The political aims for more democracy could potentially alienate past community cohesiveness that could result in personal tensions within families or community. Culturally, Asians are value interrelatedness but the wave of political systems and world dynamics is leading them to be more individualized. According to World Health Organization in the World Mental Health Report, depression is now the fourth leading global burden or disease and it is predicted will be the second leading by 2020. Walker (2008) discussed this prediction in relation to the contribution of political, economics, and social changes toward depression in his book *Depression and Globalization: The politics of Mental Health in the 21st century*.

Of the dynamics of governmental systems and social situations, technology has taken a significant part in most Indonesian behavioral changes. With the boom of Internet access and other high technological devices such as the Ipad and Smart phone, Indonesians tend to be highly consumptive of those products. Being individuals in the middle of a more highly technologized society may lead to mental pressure once those individuals are unable to adjust or utilize their devices exceeding their existence as a human being. In a quote, Albert Einstein said that “I fear the day that technology will surpass our human interaction. The world will have a generation of idiots”. It seems that what Einstein said has happened since technology can reduce people interactions. Today’s easiness with technology has led people to use it more as a replacement rather than communicating with others face to face. Their real world interactions are replaced with a virtual reality.

Regarding the trends of advanced technology use among people, Howard Gardner and Katie Davis (2013) discuss “how today’s generation is different in terms of identity, intimacy with others, and their process of minds”. In the book of The app generation: How today’s youth navigate identity, intimacy, and imagination in a digital World, Gardner and Davis (2013) mentioned that:

*Youth who grow up and live in the age of technology are more attached to the tools or electronic devices and they are more familiar with the facilities offered in apps. With apps, most activities can be done much easier with one touch.*

Gardner compared it with himself who was born in the 1950s and grew up without that kind of sophisticated technology. What has happened in the US with technology occurred in the other countries including Indonesia as well. Smartphone technology and other tools have drastically changed youth patterns of behavior. It provides easiness for them to do something but at the
same time, their mind does not process like when they do a task manually. This burgeoning technology might now facilitate a generation to live easier and be more interesting but we never know what will happen in the next generation when human potentials may struggle hard to grow because of being replaced by technology.

Defining Guidance and Counseling as a four-season tree in a tropical climate, it is important to reflect that to grow the tree in a tropical land it will need modifications. In biological terms, a creature could survive with evolution in an unfamiliar environment through adaptation and natural or human selection. Learning from the origin of Counseling services that emerged in the 1900s, Indonesian Counseling needs to grow by answering community demands in mental health or empowerment services with offering different networked approaches with other professionals. Considering that going to a psychological service is sometimes stigmatizing for clients when seen negatively by other people, Counseling may take this opportunity by offering a new paradigm that is focusing on individual cohesiveness in a communal society. It is important to redesign how counseling could take a part in empowering people from collective cultures. Moreover, Indonesian counseling may take progressive steps in preparing counseling students to be professionals with clear identity through licensure and credential certification for their practice. On top of those points, changing the paradigm of counseling is needed. One paradigm that appears to be a positive prospective is the Wellness paradigm (Myers, 1991). This paradigm may be one alternative describing how counseling can work for individuals with their given situations (Myers et al, 1998). Focusing intensively on how individuals’ potentials help them to reach psychological wellbeing will bring Counseling to be known as a supportive help for people to have a better quality of life without the stigma of diagnosing them with mental illness. Realizing that developing this approach may cost human resources, especially with limited faculty members in Indonesian universities, Counseling may start from its origin as Educational and Developmental oriented services and continue to evolve from there.
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Student Created Digital Video and Language Learning: Voices from Omani Classrooms

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Abstract
Use of expert generated videos have long been in use in the EFL teaching scenario, however, the use of Student Created Digital Video (SCDV) is relatively a novel practice, especially in the Middle Eastern English as a Foreign Language (EFL) classrooms. This research study focused on the application and assessment of an Information and Communication Technology (ICT) based pedagogical approach that culminated in SCDV commercials. The purpose of adopting this approach was to create an ideal blend of technology with foreign language teaching to improve the students’ language skills. In small groups, undergraduate level Omani EFL learners, enrolled in engineering programs, created digital video commercials using English in their interactions. The intervention was carried out over a period of two semesters. The efficacy of the approach was assessed through the perspectives of students, instructors and observers, gathered through the student questionnaires, student focus groups, researcher’s reflective journal, second study phase teacher’s interview, and external observer comments. The findings indicate that the favorable affective stimuli provided through this practice led to the development of English language skills.

Keywords: Information and Communications Technology, Student Created Digital video, English as a Foreign Language
Introduction

The omnipresent nature of Information and Computer Technologies (ICTs) and their ever increasing potential has led to ubiquitous computing environments. This drift has undoubtedly restructured the educational environment in general and language learning and teaching in particular (Smith & Rilling, 2006; Warschauer, 1996; Levy, 1997; Muyskens, 1997; Warschauer & Healey, 1998).

In spite of the above mentioned developments and the resultant calls for the integration of technology into English as a Foreign Language (EFL) courses, approaches which can lead to an effective blend of digital and traditional, resources are still vague. Student-created digital videos (SCDVs) are an example of the emerging dimensions of ICTs and the practice has proved to be beneficial in enhancing students’ learning and motivation (Bull & Kajder, 2004; Yang & Wu, 2012; Kearney, Jones & Robert, 2012). However, more research is required to explore the potential of SCDVs in the EFL field. Therefore, this study aims to examine students’ and teachers’ perspectives on their involvement in creating digital videos in the Omani EFL classrooms.

Student-created digital videos

Originally emerged as digital story, a SCDV is a practice where students, either individually or in groups create a short digital video. During the process, they are involved in a number of activities such as researching, recording, directing, scripting, rehearsing and performing (if they are the actors) and editing. The digital videos (DVs) can also be shared over the Internet with a wider audience on public video sharing websites like YouTube. These digital compositions inspire students as they enjoy working with the latest technologies. This eventually enhances language learning and develops social skills and creativity (Hafner & Miller, 2011). SCDV projects generate excitement among learners; fosters apt use of technology within the curricular frame; weaves into all kinds of subject areas; and has been proved effective for both visual and auditory learners (Frazel, 2010).

Most importantly, in EFL contexts, the process of video creation enhances all the four language skills among students. First of all, it motivates students and involves them in the writing process which encourages them to word their compositions with a concise point of view (Boase, 2008; Kieler, 2010). Therefore, SCDV is documented as an exceptional learner-centered application in the EFL teaching context (Robin, 2008).

Context

This study was conducted at a private tertiary level institution in Oman. It has been observed that despite the efforts made by the curriculum designers and teachers at school level, a large percentage of Omani students seeking admission in undergraduate courses lack the desired level of English language proficiency. The medium of instruction at tertiary level is English for most of the scientific specializations such as medicine, IT, and engineering (Al-Mahrooqi, 2012). The factors accredited to this low level of English proficiency are: low motivation levels, inadequate exposure to the language, lack of required study skills, and use of traditional methods of teaching (Al-Mahrooqi, 2012; Al Issa, 2005). Therefore, English courses are offered at Foundation as well as undergraduate level to help the students cope with the requirements of their specialization.
The Study

This study focused on the application and evaluation of an ICT based teaching approach where undergraduate level Omani EFL students, who opted to study *English for Communication* course, created DV commercials as part of their coursework assessment. The project was evaluated over a period of three semesters: the first phase was the pilot study stage; the second and third phases were the main study phases. During the first two phases, the researcher herself taught the module, while the researcher's colleague, Dr. David (pseudonym used hereafter) taught the module during the third phase. The purpose was to verify the efficacy of the practice from another tutor’s viewpoint. A mixed methods design was used to find out the perspectives of students and teachers on the role of SCDV in enhancing language and other sub skills among Omani EFL learners.

The project was an assessed assignment with a 20% weighting. It was designed on the Vygotskian (1978) principles of socio constructivism where students worked in collaboration and created knowledge instead of passively receiving it from their tutor. The main objectives were to orient students to the ethics of advertising, motivate them to learn English, and develop language skills.

In groups of four, students were asked to create DV commercials for a product of their choice. They were given seven weeks to prepare the video and two additional weeks to compile the report. Each group was encouraged to create a WhatsApp group called *English for Communication* to facilitate communication outside the class and develop writing skills through chat sessions. The groups were instructed to hold regular meetings and minute their discussion points and decisions. Follow up meetings with the instructor were also conducted with the purpose of monitoring the progress of each group and making students feel responsible towards the tasks allotted to them.

To create DVs, some students used their own cameras and recorded their DVs where the group members themselves acted. Others created videos through pictures using programs such as Moviemaker, Adobe Lightroom, etc. Each group was asked to prepare an audience survey questionnaire to collect feedback on their video. The audience comprised classmates, their English language teacher and observer teachers. The project concluded with a written report and presentation. The report covered the project’s objectives, methodology, and an analysis of the audience’s responses to the questionnaire. The presentations introduced their products, discussed the methodology adopted to create DVs, and summarized learning experiences and challenges faced. Along with the class tutor, two ELT experts were invited as observers.

**Research questions**

The main research questions guiding the study are:

i. What are the students’ perspectives on the role of SCDV in their affective involvement in language learning?

ii. What are the students’ perspectives on the role of SCDV in enhancing their English language skills?

iii. What are the teachers’ perspectives on the integration of SCDV in the *English for Communication* course?
Participants

Undergraduate level, engineering students enrolled in the *English for Communication* course during Fall 2013 and Spring 2014 semesters were the student participants. Regarding teacher participants, during the first phase, the researcher herself was the tutor while Dr. David (pseudonym) taught the students during the second phase of the study. During the first phase of the study, which was carried out during Fall 2013, 31 students (21 females and nine males) registered to study the module. During the second phase of the study, which was carried out during Spring 2014, 22 students (10 males and 12 females) registered.

Data Collection methods

In order to maintain credibility and examine the efficacy of the intervention from different angles, the researcher compared and cross-checked data from the student survey, focus group interviews, reflective journal entries, tutor’s interview, and observers’ comments.

Research instruments

The questionnaire included three parts: (1) background information; (2) items on students’ opinions on the DV project, and (3) open-ended questions which elicited feedback on their experiences with respect to the DV project. This paper is a part of a larger study and this paper addresses only a part of it. Therefore, only a few sections of the questionnaire result analysis are used in the analysis.

Student focus groups

During the first phase of the study, Fall semester, 2013, a focus group discussion with six participants was held and the discussion lasted for 33 minutes. Similarly, during the Spring 2014, a focus group discussion with seven participants was conducted and the discussion continued for 51 minutes. At least one member from each group was included in the discussion to get insights into the working of each group. Discussions were recorded and transcribed for the sake of data analysis.

External observers

Two EFL experts from the research site were invited as external observers during the display of DVs oral presentations. These observers were invited with the purpose of obtaining feedback on the students’ work from an outsider’s point of view and to eliminate the biases that might affect the researcher’s description.

Reflective journal

The researcher maintained a reflective journal with the purpose of recording students’ reaction on the project. After each session, she noted her observations on students’ responses on various aspects of the project. This practice helped her keep track of students’ improvement in various skill areas, reflect upon the students’ feedback and improvise upon the practice. Thus she continued maintaining a journal.

Second tutor’s (Dr. David’s) interview

During the second phase of the study, Dr. David taught the course. To gather his perspectives on the integration of SCDV project in the EFL curriculum and its role in enhancing the students’ motivation and language skills, an interview was conducted. The interview was recorded and transcribed. The interview responses gave useful insights on SCDV integration into the curriculum.
Data Analysis

Student questionnaires were analyzed using Statistical Package for Social Sciences (SPSS) to get descriptive statistics such as percentages. Cross tables were also generated for comparative analysis.

To find out whether there is a significant difference between the results on student perspectives from two different phases of the study, a $z$ test for the proportion (percentage) was performed.

Recordings of the focus groups and the second tutor’s interview were first transcribed question-wise across all responses in order to identify consistencies and differences. Then the responses were analyzed, and categorized under sub-headings addressing the research questions.

Results

To address the first two research questions, which are based on the student perspectives on SCDV, findings from data obtained through student questionnaire, focus group discussions, and $z$ test results are considered. Results of the $z$ test showed that in most of the areas, there was no significant difference between the student responses from two semesters. Therefore, in the data analysis of student survey below, only those areas where the difference on the student perspectives is statistically significant are featured. Third research question is addressed using the first teacher’s reflective journal, excerpts from Dr. David’s interview, and observers’ comments.

Research question one

The first research question explored the students’ perspectives on the role of SCDV project in their affective involvement in language learning. First, responses from the questionnaire and focus groups are analyzed and then synthesized to respond to this question.

Role of SCDV in enhancing English learning motivation

Table 1 features student responses with respect to the role of SCDV project in enhancing learning motivation due to its non-traditional approach.

When enquired whether the project had the real purpose of encouraging authentic language use, 63.7% of the students from Fall semester and 54.6% from Spring semester either agreed or strongly agreed. Conversely, a small percentage from both the semesters (Fall= 6.5% and Spring =9.1%) disagreed with the statement. Considering the overall average, 60% agreed and 32% were neutral, while 7.5% disagreed. The focus group responses quoted below further authenticate their agreement:

Yes everything is depending on if the project is interesting or not everything comes to you if it’s interesting or not. Kids are smart enough .If it has a purpose, they do it.

It was interesting that’s what excited. This project is interesting…if something is interesting to students, they work hard. When something is extremely boring it is not fine it’s not educating but it’s more of an analogue not useful.

Likewise, 70% students from Fall and 72.8% from Spring either strongly agreed or agreed that it was active learning because they were learning while being engaged in various activities instead of being passive recipients of knowledge.

Noticing the positive response on the previous question on active learning through the SCDV project, it is not surprising that most of the students from Fall (74.2%) reported that they had found learning through DV project better and more engaging than the traditional English
Student Created Digital Video and Language Learning

instruction, 22.6% were neutral and only 3.2% disagreed. However, from the Spring cohort, only 54.5% either strongly agreed or agreed, 36.4% were neutral and 9.1% disagreed with this point.

<table>
<thead>
<tr>
<th>Item</th>
<th>Option</th>
<th>Fall 13</th>
<th>Spring 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>I was motivated to do this project because it had a real purpose, leading to meaningful language use.</td>
<td>Disagree</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6.5%</td>
<td>9.1%</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>29.0%</td>
<td>36.4%</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>38.7%</td>
<td>45.5%</td>
</tr>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25.8%</td>
<td>9.1%</td>
</tr>
<tr>
<td>I was actively engaged in learning because it was learning by doing, instead of passively receiving knowledge from the teacher.</td>
<td>Disagree</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6.7%</td>
<td>4.5%</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23.3%</td>
<td>22.7%</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>43.3%</td>
<td>45.5%</td>
</tr>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26.7%</td>
<td>27.3%</td>
</tr>
<tr>
<td>I believe that I learn better through this di-gi-video project as compared to traditional English instruction.</td>
<td>Disagree</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.2%</td>
<td>9.1%</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22.6%</td>
<td>36.4%</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>38.7%</td>
<td>31.8%</td>
</tr>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35.5%</td>
<td>22.7%</td>
</tr>
</tbody>
</table>

Table 1: Learning motivation through SCDV

Enjoyment during the SCDV project due to its non-traditional approach

Discussing the fun students had during the project, as shown in Table 2, the overwhelming agreement (90.9%) shown from the Spring cohort indicates that the students thoroughly enjoyed the project because of its non-traditional teaching approach. Though a significant percentage (71%) from Fall also either agreed or strongly agreed with the statement, the percentage of agreement is not as high as the Spring cohort response. The results of $z$ test also show a significant difference of 10% between Fall and Spring on the agree option.
Table 2: Enjoyment in project since it did not have typical grammar exercises and oral drills

| Item | Option | Fall 13 | Spring 14 | Total | P  | |Z| value | p value | Significance |
|------|--------|---------|-----------|-------|----|----------|----------|--------------|
| I enjoyed working on this project because it was not the typical grammar exercises or oral drills. | Disagree | 1 0 1 | 0.18868 | 0.850485 | 0.395055 |
| | Neutral | 8 2 10 | 0.188679 | 1.532556 | 0.125385 |
| | Agree | 25.8% 9.1% 18.9% | 0.45283 | 1.701246 | 0.088897 |
| | Strongly Agree | 11 7 18 | 0.339623 | 0.277661 | 0.781272 |

Sharing of videos on public platforms

SCDV projects allow students to showcase their creativity on public platforms since the student videos can be shared on social media websites. This encourages students to do their best. Therefore, a considerable percentage (77.3%) of students from Spring (67.7% from Fall and 77.3% from Spring) agreed that they tried to do their best because the videos were going to be shared with public audience. However, the agreement from Fall was lower (67.7%) as compared to Spring. Focus group responses from Fall verify this point further. Most of the focus group participants were apprehensive of sharing their commercials on YouTube though they agreed for the institutional website. When the teacher asked them to put it on YouTube, some expressions were, “oh come on” and “is it necessary”. On the other hand, the Spring cohort students were excited about this idea and shared their commercials on YouTube. They even enthusiastically compared the number of likes and comments each commercial received from the public audience.

The results of z test support this variation of opinion. There is a statistically significant difference of 10% between the Fall and Spring cohort responses for the disagree option. As shown in Table 3 below, 12.9% students from Fall and no one from Spring disagreed with the idea that public sharing of videos motivated them.

Table 3: Motivation due to public sharing of video commercial

| Item | Option | Fall 13 | Spring 14 | Total | P | |Z| value | p value | Significance at 10% |
|------|--------|---------|-----------|-------|---|----------|----------|---------------------|
| I did my best because the video would be shown to public audiences. | Disagree | 12.9% 0.0% 7.5% | 0.207547 | 0.2983 | 0.765475 |
| | Neutral | 19.4% 22.7% 20.8% | 0.339623 | 0.866304 | 0.386324 |
| | Agree | 38.7% 27.3% 34.0% | 0.377358 | 1.551707 | 0.120732 |
| | Strongly Agree | 29.0% 50.0% 37.7% | | | |

Fun element

Overall, the students found the project work fun since 93.5% from Fall and 91.6% from Spring either strongly agreed or agreed with this point. Their passion about the project was also reflected during focus group discussions. In response to the open ended question where the
students were asked to compare DV creation with previous learning experience, a student reported, “It is different and funny (fun filled) than previous”.

<table>
<thead>
<tr>
<th>Item</th>
<th>Option</th>
<th>Fall 13</th>
<th>Spring 14</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Neutral</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>6.5%</td>
<td>9.1%</td>
<td>7.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>38.7%</td>
<td>31.8%</td>
<td>35.8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17</td>
<td>13</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>54.8%</td>
<td>59.1%</td>
<td>56.6%</td>
</tr>
</tbody>
</table>

Table 4: Enjoyment through SCDV project

The following quotes from the focus group discussions further verify that the students enjoyed the project thoroughly:

I enjoyed it. First time ever I enjoyed the project—not kidding—usually I’m thinking about the project and keep it to the last moment—to the last week. This was the first time it was fun.

I agree with this video commercial because it is new in assignments and I like to see such new things.

It does because it is interesting—they ask us to do something new. Not just research and writing—boring that we get in other assignments.

The reflective journal also shows similar comments from students when the project was introduced during the second study phase. In the first week entry she had recorded,

For some time, they just listened to me trying hard to understand what exactly I want. All the students were excited—especially after seeing the samples. They immediately started getting into groups and started discussing the products.

She had also observed that though most of them seemed to be positive, some had negative expressions as well, like the previous semester students. Some of the students’ expressions are quoted below:

Oh my God. We are not good in marketing.

It’s a lot of hard work.

Yes, I’m excited. We’ll learn something new.

It’ll be fun. It’s something new.

However, once the samples from the previous students were displayed, all the students seemed to be excited.

**Research question two**

The second research question examined the students’ perspectives on the role of SCDV in enhancing their language skills.

*What are the students’ perspectives on the role of SCDV in enhancing their English language skills?*
Language skills

As shown in Table 5, a significant percentage of students from Fall (64.6%) as well as Spring (68.2%) agreed that the project enhanced their involvement in language learning.

<table>
<thead>
<tr>
<th>Item</th>
<th>Option</th>
<th>Fall 13</th>
<th>Spring 14</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>3.2%</td>
<td>0.0%</td>
<td>1.9%</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>6</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>10</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>10</td>
<td>7</td>
<td>17</td>
</tr>
</tbody>
</table>

Table 5: Involvement in language learning

The SCDV project involved students in a range of speaking activities including discussions during meetings, rehearsals for acting or presentation, and oral presentations, it is quite surprising to note that the response rate to the question on the role of project in developing confidence in speaking is not very high. Only 54.8% students from Fall and 61.9% from Spring agreed with it. However, a very small percentage (16.1%) from Fall and no one from Spring disagreed with this point.

<table>
<thead>
<tr>
<th>Item</th>
<th>Option</th>
<th>Fall 13</th>
<th>Spring 14</th>
<th>Total</th>
<th>P</th>
<th>[Z] value</th>
<th>p value</th>
<th>significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>6.5%</td>
<td>4.8%</td>
<td>5.8%</td>
<td>0.057692</td>
<td>1.935827</td>
<td>0.052889</td>
<td>at 10%</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>16.1%</td>
<td>0.0%</td>
<td>9.6%</td>
<td>0.096154</td>
<td>0.269231</td>
<td>0.391039</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>22.6%</td>
<td>33.3%</td>
<td>26.9%</td>
<td>0.403846</td>
<td>0.276924</td>
<td>0.781838</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>41.9%</td>
<td>38.1%</td>
<td>40.4%</td>
<td>0.173077</td>
<td>1.020033</td>
<td>0.307713</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>12.9%</td>
<td>23.8%</td>
<td>17.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6: Student speaking skills improvement responses

As compared to speaking skills response, a moderately higher percentage of students from both Fall (67.8%) and Spring (59.1%) semesters agreed upon the role of project in developing writing skills.

For reading, students from both the phases, Fall (67.7%) and Spring (72.7%) were positive about the role of project in developing their reading skills. On the other hand, some students (9.7% from Fall and 9% from Spring) disagreed with this point.
The following excerpts from the focus group discussions regarding the language skills development show positive responses:

First, we first do our research about what is the meaning of the commercial. That’s how we improved our reading because we want to make the best way to make commercial to make our commercial better. In the first video, we have to first speak in English in the library because we were shooting there and we used the English language to speak with them.

Ya about reading skills about video editing I learn about video editing program and so much more and how to make effects also I listened to the videos in Youtube about video editing program and how to create a commercial that’s all.

For writing also we improved our skills in writing the report because it should be formal and all the grammar is correct and all the spelling is correct.

Regarding the question whether the language skills acquired through this project can be applied in real-life situations, as shown in Table 8, a very high percentage (86.3%) from Spring and a significant percentage (71%) from Fall either agreed or strongly agreed. Since all the reading, writing, listening and speaking activities geared towards the video creation task and final report, they encouraged authentic language use. The following quote from focus group is an example of how some activities made use of target language inevitable.

Sometimes we need someone to help us to take video—we need to talk in English—at souq (shop) Maha we meet an Indian man and we want him to take video for us and we asked him(in English).

<table>
<thead>
<tr>
<th>Item</th>
<th>Option</th>
<th>Fall 13</th>
<th>Spring 14</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>This project also reinforced my writing skills while working on the</td>
<td>Disagree</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>video script, detailing product and writing report.</td>
<td>Neutral</td>
<td>9.6%</td>
<td>4.5%</td>
<td>14.1%</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>22.6%</td>
<td>36.4%</td>
<td>59%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>34.2%</td>
<td>51.9%</td>
<td>86.1%</td>
</tr>
<tr>
<td>This project reinforced my reading skills while collecting information on the commercial product</td>
<td>Disagree</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>9.7%</td>
<td>9%</td>
<td>18.7%</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>22.6%</td>
<td>18.2%</td>
<td>40.8%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>35.3%</td>
<td>47%</td>
<td>82.3%</td>
</tr>
</tbody>
</table>

Table 8: Writing and Reading skills development

Table 8: Application of language skills acquired through the project in real life
Lastly, regarding vocabulary enrichment, in addition to the preparation of the commercial, final presentation and report, the focus group participants reported that they discussed many words and phrases before finalizing the slogan, picture captions and dialogues for their commercials.

Research question three

The third research question reflects the teachers’ perspectives on the integration of SCDV in the English for Communication course.

Integration of SCDV project in the English for Communication course

As far as the integration of DV project into the curriculum is concerned, Dr. David was very positive about it. He informed that the students enjoyed it thoroughly. He said:

According to our students, it is one the most memorable if not the best assessment for this course because they could express themselves freely. The course gave them an opportunity for self-expression. They had the freedom to take decisions and be as creative as possible. There was enough room for them to develop themselves.

The external observers from both the study phases were highly impressed with the students’ creations. After the completion of video display session, one external observer stated, “It was a rare spectacle. I have never seen such confidence among students”. Some of the observers later integrated SCDV into their own courses.

The weekly notes from the teacher researcher’s journal revealed that though initially she was a bit apprehensive about the success of the course, she was very pleased as the project matured and reached culmination. The journal entry from week six noted, “Looks like my project is going in the right direction. Student learning is happening in varied ways”. At a later stage she noted, “I’ve never seen such enthusiasm towards any project among my students”.

When Dr. David was asked to compare this project with his previous teaching experience, he mentioned:

I saw a different energy, a different passion…students had a sense of belongingness…. They felt that they were in a new world – a world that they owned!

Pedagogical implications and recommendations

Having used the proposed model for a period of three semesters (two main study phases and one pilot study), the researcher concludes that SCDV projects encompass a number of advantages for students as well as tutors and therefore posit significant pedagogical implications for the EFL academia.

First of all, as asserted by Kearney & Schuck (2004), SCDV can “support, extend, or change pedagogy and curriculum outcomes” (p. 1). After the discussion of findings, it can be safely assumed that the project achieved its objective. At the same time, it supported and extended the pedagogy. Second, in compliance with the Vygotskian (1978) view, it is vital to ensure that the students’ skills are nurtured by providing them ample opportunities to stretch beyond their limits. Findings of the study revealed that the students found DV creation tasks challenging yet manageable. There was a greater use of enquiry learning strategies which was noted by Henderson, M., Auld, G., Holkner, B., Russell, G., Wee Tiong Seah, Fernando, A. & Romeo, G. (2010) as well.

In addition, research has proved that SCDV increases learning motivation and enjoyment (Burn, A., Brindley, S., Durran, J., Kelsall, C., & Sweetlove, J., 2001) among learners and keeps them engaged, including students with challenging behavior (Burn & Reed, 1999). This was
observed by both the teacher participants of this study. According to them, the students spent many hours working together on DV tasks.

Besides this, during the project, the students collaborated on a variety of activities, where they employed real-life skills and engaged in authentic discussions. This made the entire learning process more meaningful.

Overall, the SCDV project enhanced learning motivation among students as they enjoyed the DV creation process. The task gave them a sense of achievement and pride at the end. In this study, the teachers also reported of being enthusiastic about the project and felt that it was rewarding for them as well. Therefore, EFL educators and course designers should consider the possibility of integrating SCDV projects into their courses which aim at engaging students in constructive tasks that promote critical thinking and creativity rather than a mere acquisition of facts.

This study examined the initial stages of the implementation of an ICT integrated approach in the foreign language curriculum at the research site and hence contained a number of limitations. First, the findings were derived from a small population sample of Omani students and it might be difficult to generalize the findings to other courses or other contextual settings. Secondly, since the DV tasks are time consuming and the course comprised other components apart from the SCDV project, there was a crunch of time for both, the students as well as their teachers. Though the students enjoyed the project and were ready to devote out of class time to plan and create videos, there were scheduling conflicts as the students belonged to different specializations and thus had different time tables. Though, after the pilot stage, the teacher realized the requirement for a session on DV creation by a media expert and arranged it as well, due to differing schedules, all the students were not able to take advantage of this session. Lastly, since the students met only once a week in class and only 30 minutes of the class time was devoted to the discussion of DV related tasks and issues; it was difficult for the teacher to keep a track of the roles of different group members.

For ICT use specific limitations, apart from the technical glitches, it has been observed that a considerable percentage of EFL teachers are reluctant to introduce technology in their classrooms. The potential of ICTs can only be fully exploited if there is an enthusiastic participation from teachers. There is still a gap between the innovation objectives and the level of ICT use by teachers (Naqvi, Khan & Al Mahrooqi, 2015).

In response to the limitations mentioned above, to establish a model for integrating DVs into English language curriculum, further improvements are required. Repeat sessions by a media expert on technical support for video design can be arranged so that all the students get an opportunity to get training on how to create a video before starting their work. To keep a track of the students’ progress, e-portfolio can be used as an assessment tool. To avoid issues related to the time factor, it is believed that a higher weighting could be given to the SCDV project so that it has more assessed components and thus more time could be devoted to the DV activities inside the classroom. In addition, forming groups with members possessing different talents might also be a good idea. Also, some form of instruction on the importance of team work and time management might be beneficial before forming the work groups. Identifying the role of each group member and writing this down in the form of a contract might help make each member accountable and more responsible for achieving the goals of the project. Finally, more reflective writing exercises could prove beneficial in enhancing learners’ writing skills.
Conclusion

To conclude, the SCDV project, which was based on Vygotsky’s (1978) socio-constructivist principles, encouraged learners to construct new knowledge as they worked together and collaboratively searched for answers to the problems posed at them. The objective of integrating SCDV project into the *English for Communication* was reasonably accomplished. The results show that the students as well as their teachers enjoyed working on the project and considered it both educational and entertaining. The findings conform to the results of previous studies which reported that DV integration in the curriculum can help develop a range of language as well as other social learning skills, including communication, negotiation, decision making and problem-solving (Reid, Burn & Parker, 2002). The project enhanced motivation and enjoyment (Burn et al., 2001) and supported pedagogy and learning outcomes (Kearney and Schuck, 2004). Most of the aspects considered in the questionnaire, focus groups and the interview received a positive response. These responses suggest that a pedagogical initiative involving the use of SCDVs could be a motivating learning activity that can engage learners and lead to improved learning outcomes. Students developed a range of English language and other skills as the project matured.

An added strength of this approach is that it can be tailored to the needs of students from varied proficiency levels, specializations and educational milieus. Although DV is no longer a novel practice, it has not received the attention it deserves in the Arab region, and to be precise, Oman.

This was the first time such a project was introduced in an Omani EFL context which emphasized the integration of all the four language skills. At the same time it provided students with an opportunity to interact with an international audience when they posted their videos on public sharing websites. It was a meaningful, communicative and an entertaining student-centered activity where the teacher was merely a facilitator. Lastly, it adopted a non-traditional approach where all the principles of creative language learning were practically implemented. Therefore, most students perceived the project positively and learned considerably throughout its various stages.

Hence the findings convince the researcher to conclude that the SCDVs have a huge untapped potential for helping learners to acquire language skills. To conclude, the language instructors should consider the incorporation of SCDV projects into their courses.
References
Family Environment Mode Approach (FEMA): An “Anxiety Buster” to Motivate EFL Learners

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Abstract
Motivation and anxiety can strongly influence learners in the EFL classroom. High motivation and low anxiety have been shown to positively impact on language learning outcomes. This paper introduces the Family Environment Mode Approach (FEMA), an experimental method that addresses these issues by reducing learners’ anxiety and increasing their learning motivation by challenging them to be “pro-mistake”. While the importance of a conducive learning environment has been well established, few researchers have focused specifically on the value of creating a family-like environment mode, where students can help and accept the mistakes of others and provide criticism in a constructive way. In this study, FEMA is used with tertiary EFL learners in Japan and is shown to help improve not only their academic performance but their emotional stability as well. This paper highlights the need for a “mindset” change concerning how English could be taught, in which the classroom environment may nurture learners intellectually, emotionally and psychologically. Classroom observation and participant questionnaires provide insight into students’ FEMA experience. In addition, analyzing the “brainwaves of emotion: beta (14-40Hs, associated with anxiety and alertness), alpha (7.5-14Hs, relaxation and super learning, theta (4.0-7.5Hs, enter into light sleep), delta (0.5-4Hs, entering into deep sleep produces large and slow waves and gamma (above 40Hs, the insight wave)” was also carried out as part of this study. Brainwave frequency was measured by the number of oscillations per second (Wolfe P. 2001, p 9). The results showed that students felt relaxed, talked freely, felt everyone in the classroom was friendly, and accepted the comments and suggestions of their classmates positively.

Keywords: Anxiety, Family-Environment Mode Approach (FEMA), mindset, brainwave
Family Environment Mode Approach (FEMA)

Introduction

Creating teaching techniques to improve the education of English as a Foreign Language (EFL) for students has long been a challenge. While hundreds of techniques have been developed, if students’ thought processes are not altered then none of these can be used to best effect. In the words of Albert Einstein (2015), “we cannot solve problems by using the same kind of thinking we needed when we created them”. Freeing the mind not only creates new possibilities but also, by its nature, generates a change in our behavior.

In a traditional classroom, techniques promoting a conducive, physical classroom set-up have been developed to help motivate students, but less focus has been placed on helping students to change their mindset to embrace a family-environment mode. We provide the student with all kinds of practical necessities, but we do not prepare their mind before beginning to teach. It is like wrapping a box with extravagant and appealing wrapping paper, but the same content is inside. Motivating a change in mindset has been shown to be applicable to all aspects of life; not only education but also in business, where cultivating a family environment helps to achieve excellence in the workplace (Llopis, 2012, pp. 1-2). A positive classroom is one with an environment and culture that celebrates opportunities, transparency, and the opinions of all to enrich conversation and diversity of thought.

According to Asher (1972, pp. 133-139) a teacher’s role is not so much to teach as it is to provide opportunities for learning. The teacher has the responsibility of providing the best language exposure for learners to internalize. Thus the teacher controls language input, providing the raw material for the cognitive map learners construct in their own minds. In giving feedback, teachers should follow the example of parents towards their children. At first parents correct very little, but as the child grows older, fewer mistakes in speech are tolerated. Similarly, teachers should refrain from too much correction in the early stages and should not interrupt to correct errors, which can be inhibiting. As time goes on, however, more teacher intervention is expected, as learning becomes more “fine-tuned”. When implementing a Family Environment Mode Approach (FEMA) within the classroom, the development of the learner’s relationship with the teacher is central. This process is divided into five stages and compared to the ontogenetic development of the child. In the first, “birth” stage, feeling of security and belonging are established. In the second, as the learners’ abilities improve, the learner, as child, begins to achieve a measure of independence from the parent. By the third, the learner “speaks independently” and may need to assert his or her own identity, often rejecting unasked-for advice. The fourth stage sees the learners as secure enough to take criticism, and by the last stage the learner merely works on improving style and knowledge of linguistic appropriateness. By the end of the process, the child has become an adult.

The process of learning a new language, then, is like being reborn and developing a new persona, with all the trials and challenges that are associated with birth and maturation. "Consensual validation," or "convalidation," in which mutual warmth, understanding, and a positive evaluation of the other person's worth develop between the teacher and the learner, is important. The acronym SARD, denoting security, attention/aggression, retention/reflection and discrimination, also encapsulates the psychological requirements for successful learning (Curran, 1976, p. 6; La Forge, 1983, p. 69). These ideas resonate with the researcher’s FEMA in focusing on psychological requirements for successful learning. When a student is completely involved in the learning process, what is retained is internalized and becomes a part of the learner’s persona in the foreign language. When learners have retained a body of material, they are ready to sort through the material and see how one thing relates to another. This discrimination process
becomes more refined and ultimately enables the students to use the language for purposes of communication outside the classroom (La Forge, 1983, p. 69).

To motivate Japanese students to talk more and to eradicate their fear of making mistakes in the classroom, especially in women’s communication classes, is a significant challenge. The researcher frequently encourages students by reminding them that “by making mistakes we grow.” Through mistakes we learn to know more about ourselves, including our limits and capabilities. When we see mistakes as a lesson to learn and not something to fear, they can be viewed as a good companion in the journey of language learning (Dweck 2007, Myer 2012, Sparks 2013).

FEMA, as illustrated in Figure 1, has been designed to motivate students by changing the classroom mindset from a traditional one to one where failure is embraced and mistakes are viewed as a necessary part of the language-learning journey. Importantly, this process can alleviate, or perhaps eradicate, anxiety and stress completely, and opens up the gateway of learning.

Figure 1: Family Environment Mode Approach (FEMA)

Fear has the power to shut down someone’s ability to function properly. When in a state of fear, stress hormones are released, which have been shown to affect our learning and memory. Low and medium levels of the stress hormone Cortisol improve learning and enhance memory, whereas high levels of the same hormone have a negative effect on learning and memory.
Clearly, an environment full of fear and anxiety will not improve learning. No one can perform well on cognitive tasks when their brain is being bombarded with “fight-or-flight” chemistries. A calm environment with a certain degree of variety increases learning, but a tense environment does not.

**Hypothesis**

FEMA can alleviate anxiety and create a fun and stress-free environment, motivating students to accept each other as a family, and accept mistakes and failures as a challenge on the road to success. This process promotes a growth mindset.

**Objectives**

1. To examine students’ anxiety using the Foreign Language Classroom Anxiety Scale (FLCAS) after implementing FEMA.
2. To explore the effects of FEMA that result from moving students’ mindsets away from a traditional approach.
3. To alleviate students’ fear and promote a fun and stress-free environment in the classroom.
4. To understand students’ perceptions of their teachers after the implementation of FEMA.

**Methodology**

This research was conducted during class time and involved three main phases including introduction/presentation to students and ongoing motivational guidance, administering student questionnaires, and measuring the brainwaves of emotion using a sophisticated scientific animatronic cat ears headset that wiggle and swivel to match students’ mood which is called Necomimi. It can sense your state of mind in three steps: first, neurons firing in the brain give off electrical impulses, which are read by the forehead sensor, second, it captures brainwave data, filter out electrical noise, and interprets your brainwaves with NeuroSky’s Attention and Meditation algorithms and finally your mental state is translated into ear movements states: Calibration signal when ear will perk up one will droop, high relaxation when ears will droop down slowly, focus/relaxation when ears will perk up and droop down, high focus when ears will perk up quickly and high interest when ears will perk up and wiggle. During the introductory phase, the purposes, objectives and expected outcomes of FEMA were explained to students as a group during class time and the importance of FEMA was demonstrated. After the initial presentation, these ideas were regularly re-emphasized with the intention of fostering a growth mindset and a feeling of belonging in students. Questionnaires given to students help to probe their subjective experience of the learning process. After FEMA had been implemented for a period of six weeks, students answered both the Foreign Language Classroom Anxiety Scale (FLCAS) and Students Perception of the EFL Teachers (SPEFLT) questionnaires. These questionnaires were given to students in English with a Japanese translation provided (see appendices).

One of the most distinctive features of this research design was the use of Necomimi (brainwave cat ears) to measure the brainwaves of emotion while speaking English during phase three of the project. The device was used voluntarily in a family-like group setting as described earlier by students in an Intensive Speaking Class (ISC). The checking of brainwaves was a collaborative activity, which involved the researcher asking students questions, while other
student participants checked these students’ brainwaves. Necomimi indicated students’ emotional state while speaking English via a variety of directional movements. These movements are determined by the particular light-touch brainwave sensor that is picked up by the ears. For example, if the student is focused the ears perk up, if relaxed they droop. In the case of a reading for “happy” the ears wiggle. At the present time this technology is limited: the ears cannot pick up incandescent rage, existential sadness, or anything in between. Nevertheless, the readings were sufficient to establish general stress levels during this exploratory study and added a characteristic novelty, which helped to engage students in the project.

Result and Discussion

In this study, it was not the researcher’s intention to analyze students’ grades, but rather to focus on emotional stability in the classroom while implementing the syllabus of the communication and intensive speaking classes. She became the students’ “Ma’am Mom” and a “gatekeeper” to monitor their emotions by utilizing FEMA’s homely atmosphere. Just like Asher (1982, pp. 52-59), the researcher believed that an important condition for successful language learning is the absence of stress. First acquisition takes place in a stress free environment, according to Asher, whereas for adults it often causes considerable stress and anxiety. The key to stress-free learning is to tap into the natural bio-program for language development and to thus recapture the relaxed and pleasurable experience of first language learning. By focusing on meaning interpreted through movement, rather than on language forms studied in the abstract, the learner is liberated from self-consciousness and stressful situations and is able to devote their full energy to learning.

Result of Foreign Language Classroom Anxiety Scale

Japanese learners are known to be modest, introverted, and often hesitant to speak, especially in front of other people. FEMA’s role is to motivate and challenge them to speak without hesitation and alter their mindset gradually, leading them to accept failure and mistakes positively. Of the factors that participants considered to be affecting their anxiety in speaking English, the researcher chose areas with the first 3 high scores, as seen in Figure 2.
This result confirms the observations of other authors such as Price (1991), who found the greatest sources of students’ language anxiety in the classroom were speaking in front of their peers, fear of being laughed at, being embarrassed, or making a fool of oneself. Students were also very concerned about making errors in pronunciation and wished to develop an accent that approximated that of a native speaker. Similarly, the Japanese students the researcher interviewed were seriously concerned about their pronunciations and grammar. The researcher frequently reminded students of the idea that “you are going to make a million mistakes to learn a new language!”, and that embracing discomfort is part of the journey (Myers, 2012). In Figure 3, it can be seen that students felt generally well-supported by their teacher during the implementation of FEMA.
The results also indicated that for the EFL learners, the teacher did not change her reaction much when they made mistakes and always made the focus of her expectations clear for the students in a positive manner. However, as in William (2009), 50% of the students felt that the teacher was responsible for their anxiety. The fear of negative evaluation in the eyes of the teacher may be the main cause of student anxiety, and fears about communication and social evaluation are likely based on a student’s relationship with their teachers and peers. Teachers seldom accept the fact that they sometimes affect their students’ behavior. Some students look upon the classroom as a place where teachers have to implement the rules of learning for the students to follow. Most of the time we focus on our characteristics as a teacher in a classroom, neglecting the role we play in creating a limited interpersonal relationship with our students. Thus the researcher encouraged teachers to start changing their mindset too, to play different roles in a classroom: as catalyst, consultant, guide, counselor, and a model for learning. All of these are parental roles, requiring one to respond calmly and non-judgmentally, and let the students understand their own problems. The researcher herself played such a role, with the result that seventy five (75%) of the students preferred FEMA because of the following reasons: they felt everybody was friendly, they could talk freely if they changed their mindset, they could share ideas with members of the family, and feel safe and relaxed. By contrast, 25% of them said they preferred a traditional classroom because they just wanted to be listeners, and talking with group members was stressful, a strict teacher was better, and they could concentrate more when studying alone.

The majority of students agreed that changing mindsets with FEMA could help ease their stress and anxieties. However, when asked if they wanted the FEMA approach to be used by other teachers in different subjects, their opinions were almost equally divided. Why students did not support other subject teachers using FEMA demands further investigation. When asked to comment freely, students said they felt the class was relaxing, comfortable, enjoyable, fun, and
they could speak English freely in the classroom. The teacher and classmates were friendly, and they wanted to continue using FEMA. However, some said FEMA learning was difficult, good only for those who wanted to improve their communication skills, and that they did not like group work.

**FEMA and Brainwaves of Emotions**

To prove that FEMA is an effective approach, the researcher checked the brainwaves of emotions of the students who volunteered to be a part of this fun experiment. The researcher asked the students to prepare questions for their classmates, from simple questions using ‘what,’ to difficult questions using ‘why.’ With this technique, students’ emotions would be determined either in a relaxed state (machine’s ears drooped down), focused and relaxed (machine’s ears stood firmly and wiggle), or relaxed and highly focused (machine’s ears stood firmly.) Students enjoyed the question and answer portion using this machine. Brainwaves of emotions are located in the frontal lobe, which is the most recently-evolved part of the brain, managing emotional impulses in socially appropriate ways for productive behaviors including empathy, altruism, and interpretation of facial expressions. Their emotions were visible to everyone and it encouraged them to be asked questions by their classmates.

**Conclusion**

Though FEMA is in its infancy, this initial exploratory study has already proven that it can be used effectively to enhance the mind-set of EFL learners to embrace the challenge of growth. This was found to present itself in many ways, including being anxiety and stress-free when facing the challenges of the very difficult journey of learning a foreign language, not being scared of what other people might say about them when they made mistakes, and understanding the importance of a fun and stress-free learning experience. The study showed that students gained considerable confidence to speak in spite of many mistakes they inevitably made. These students accepted the fact that with a growth mindset, approaching failure as a challenge could lead them to prosper. Like Community Language Learning (CLL), FEMA is an approach to foster cooperation rather than competition, to develop critical thinking skills and develop communicative competence through socially structured interaction activities. Various techniques and approaches are of no use if educators do not revolutionize students’ mind. Clearly, in order to reduce learners’ anxiety and increase their learning motivation, instructors must deeply consider the influence that the classroom experience will have on their students (Brown, Robson and Rosenjar, 2001).

**Future Research Recommendation**

1. In order to gain a better understanding of the way students relate to the use of FEMA a more elaborate research design would be very helpful in future studies.
2. Allowing students to be questioned by students, teachers and other people who do not belong to the class would provide a valuable contrast to the current paper, in which only familiar participants acted as questioners.
3. Pre and post studies examining participants’ brainwaves of emotion prior to, and post, working with FEMA would be an important part of further studies into FEMA.
4. Above all, the researcher highly recommends that ELF teachers fully understand FEMA’s significance, in order to support its effective implementation. In this regard, stress coping strategies can help to ease students’ anxiety when learning a foreign language (Ocampo and Rockell, 2014).
5. To promote this research in the educational community, it would be most beneficial if special seminars for teachers on the importance of Emotional Intelligence and Community Language Learning could be organized. Disseminating knowledge of FEMA in this way would be a positive step forwards in helping educators to alter the mindset of students and encourage them to embrace failure as a challenge to succeed on the journey of learning a foreign language.
Family Environment Mode Approach (FEMA)

References


### Appendix

**Foreign Language Classroom Anxiety Scale**

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<tr>
<td>1.</td>
<td>Strongly Disagree</td>
<td>強く不同意できない</td>
<td>2.</td>
<td>Disagree</td>
<td>同意できない</td>
</tr>
<tr>
<td>2.</td>
<td>Neither Agree or Disagree</td>
<td>どちらとも言えない</td>
<td>3.</td>
<td>Agree</td>
<td>同意できる</td>
</tr>
<tr>
<td>3.</td>
<td>Strongly Agree</td>
<td>同意できる</td>
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<tr>
<td>1.</td>
<td>I never feel quite sure of myself when I am speaking in my foreign language class.</td>
<td>外国語の授業で話しているとき私は絶対に確かな気持ちになれない</td>
<td>2.</td>
<td>I don’t worry about making mistakes in language class.</td>
<td>外国語の授業で間違いをすることを私は心配していない</td>
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<td>3.</td>
<td>I tremble when I know that I’m going to be called on in language class.</td>
<td>外国語の授業で当てられることがわかっているとき私は震えてしまう</td>
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<td>4.</td>
<td>It frightens me when I don’t understand what the teacher is saying in the foreign language.</td>
<td>外国語の授業で先生が言ってることが理解できないとき私は怖い</td>
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<td>5.</td>
<td>It wouldn’t bother me at all to take more foreign language classes.</td>
<td>外国語の授業をもっとたくさん受けても私は全然平気である</td>
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<td>6.</td>
<td>During language class, I find myself thinking about things that have nothing to do with the course.</td>
<td>外国語の授業で私はその内容と全く関係のないことを考えている自分に気づくことがある</td>
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<td>7.</td>
<td>I keep thinking that the other students are better at language than I am.</td>
<td>私は他の生徒たちがみんな私よりも外国語が上手であると考えている</td>
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<td>8.</td>
<td>I am usually at ease during tests in my language class.</td>
<td>外国語の授業のテストのとき私はいつも落ち着いている</td>
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<td>9.</td>
<td>I start to panic when I have to speak without preparation in language class.</td>
<td>外国語の授業で準備なしで話さなくてはならないとき私はパニックにかかる</td>
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<td>10.</td>
<td>I worry about the consequences of failing my foreign language class.</td>
<td>外国語の授業で結局は合格できないかもしれないとき私は心配である</td>
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<td>11.</td>
<td>I don’t understand why some people get so upset over foreign language classes.</td>
<td>外国語の授業についてある人たちが何故それほど動揺してしまうのか私は理解できない</td>
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| 12. In language class, I can get so nervous I forget things I know. | 外国語の授業で私は緊張して知っていることも忘れてしまう

| 13. It embarrasses me to volunteer answers in my language class. | 外国語の授業で自ら進んで答えるのが私は恥ずかしい

| 14. I would not be nervous speaking the foreign language with native speakers. | ネイティブの人たちと外国語で話しても私は緊張しないだろう

| 15. I get upset when I don’t understand what the teacher is correcting. | 先生が訂正していることが理解できないとき私は動揺する

| 16. Even if I am well prepared for language class, I feel anxious about it. | 外国語の授業で十分に予習をしてきたときでも私は不安を感じる

| 17. I often feel like not going to my language class. | 私はよく外国語の授業に出たくないと感じる

| 18. I feel confident when I speak in foreign language class. | 外国語の授業で話しているとき私は自信があると感じる

| 19. I am afraid that my language teacher is ready to correct every mistake I make. | 外国語の授業で間違いをするたびに先生がそれを直してしまうことを私は恐れている

| 20. I can feel my heart pounding when I’m going to be called on in language class. | 外国語の授業で当てられそうなとき私は心臓がドキドキするのを感じることができる

| 21. The more I study for a language test, the more confused I get. | 外国語のテスト勉強をすればするほど私はわからなくなる

| 22. I don’t feel pressure to prepare very well for language class. | 外国語の授業のために十分予習しておくことに私はプレッシャーを感じない

| 23. I always feel that the other students speak the foreign language better than I do. | 私は他の生徒たちがみんな私よりも外国語が上手であるといつも感じている

| 24. I feel very self-conscious about speaking the foreign language in front of other students. | 私は他の生徒たちの前で外国語を話すことについてとても自意識過剰になるのを感じる

| 25. Language class moves so quickly I worry about getting left behind. | 外国語の授業は進むのが速いので私は自分が後に残されてしまうのが心配である

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<table>
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<tbody>
<tr>
<td>26. I feel tenser and nervous in my language class than in my other classes. 私は他の授業よりも外国語の授業の方がより緊張して神経質になるのを感じる</td>
<td></td>
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<tr>
<td>27. I get nervous and confused when I am speaking in my language class. 外国語の授業で話しているとき私は緊張して混乱してしまう</td>
<td></td>
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<tr>
<td>28. When I am on my way to language class, I feel very sure and relaxed. 外国語の授業が始まるまで私はとても自信がありリラックスしているのを感じる</td>
<td></td>
</tr>
<tr>
<td>29. I get nervous when I don’t understand every word the language teacher says. 外国語の先生が話している全ての単語がわからないと私は不安になる</td>
<td></td>
</tr>
<tr>
<td>30. I feel overwhelmed by the number of rules you have to learn to speak a foreign language. 外国語を話すために学習しなくてはならないたくさんのが文法語法に私は圧倒されるのを感じる</td>
<td></td>
</tr>
<tr>
<td>31. I am afraid that the other students will laugh at me when I speak the foreign language. 外国語を話すときに他の生徒たちみんなが私を笑うことを私は心配している</td>
<td></td>
</tr>
<tr>
<td>32. I would probably feel comfortable around native speakers of the foreign language. 私は恐らくネイティブの人たちと一緒にいても快適だと感じるだろう</td>
<td></td>
</tr>
<tr>
<td>33. I get nervous when the language teacher asks questions which I haven’t prepared in advance. 外国語の先生が私が前もって準備していなかった質問をするとき私は緊張する</td>
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A Survey of Teacher Perceptions of Educational Technology in Selected Primary Schools

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Abstract
This study investigated the awareness and perceptions of primary school teachers about educational technology. A 15-item questionnaire was administered on subjects comprising 100 teachers randomly selected from some primary schools in Afijio local government area of Oyo State in Nigeria. The responses obtained were corroborated by direct observations. The results indicated that although teachers were generally qualified, their awareness and utilization of educational technology was very low, even in the 21st century. This was made explicit by the teachers’ inability to perceive educational technology beyond mere production or improvisation of instructional materials, and their non-application of systems approach to instruction. Many of them hardly make use of learning resources other than the chalkboard; few charts and pupils’ textbooks while some could not even state instructional objectives in behavioral terms. Since the integration of educational technology into classroom practices is largely dependent on teachers’ awareness and perceptions of the concept, the study suggested that more emphasis should be placed on teaching, learning, and utilization of educational technology in the teacher education program for both pre-service and in-service teachers.

Keywords: Awareness, Perceptions, Systems Approach, Educational Technology
Introduction

Over the years, educational technology has been defined in various ways by many educators and media practitioners. Some of such definitions have led to the misconceptions which many people had, and perhaps still have, about the concept of educational technology. The concept is at times equated with mere application of audiovisuals to educational or instructional practices, or the integration of computer and its allied information communication technologies to facilitate teaching and learning as evident in many educational technology related studies (Abidoye & Fatoki 2014; Almekhlafi & Almeqadadi, 2010; Cope & Ward 2002; Dogan, 2010; Erisçi, Kurt & Dindar, 2002; Mas’od, Ngadiman & Sulaiman, 2013; Mundy, Kupczynski & Kee, 2012; Oladosu, 2012).

The real problem lies in seeing educational technology as mere ‘technology in education’ which amounts to grasping the concept of educational technology at only the tool level (Akinyemi, 1984; Ogunranti, 1984). It has been observed that traditionally, the popular image of educational technology is of gadgetry whether audiovisuals or any other teaching machine and their application to teaching and learning process (Gbamanja, 1984). Stewart (1999) emphasized this problem by saying “when we try to examine the approach of educational technology in the developing world, we are very quickly forced to the conclusion that it is largely a technology in education which is being pursued…Emphasis has always been on the use of media and visual materials”. This narrow conception of educational technology has, however, been corrected in many literature by experts in educational technology, and one would expect that by now the 21st century teachers would have had a better understanding of the concept but this does not seem to be so. Therefore, if it is assumed that there are teachers who are yet to have a full grasp of what educational technology is in the 21st century, it then becomes a matter of concern to revisit the issue of teachers’ awareness and perceptions of educational technology with a view to fostering better understanding of the concept and its proper integration into the educational system in general, and the instructional system in particular. It is against this background that this study investigated the primary school teachers’ awareness and perceptions of the concept of educational technology in some selected schools in Afijio Local Government of Oyo State in Nigeria. This is important because teachers’ awareness and perceptions of the concept will largely determine the extent to which it will be put into use in classroom practices.

Literature Review

Akinyemi (1984), in an effort to make the concept very clear, described educational technology as the application of “technology in instruction and technology of instruction”. Ogunranti (1984; 1988) and Omoniyi & Arotiba (2003) also made a distinction between ‘technology in education’ and ‘technology of education’. The former implies the use one makes of products of technology in the educational system in general, and in the school system in particular while the latter (i.e. technology of education) has been described as systematic management of teaching/learning events designed to put one’s knowledge of theories of human learning and human behavior into practice in a predictable and effective manner to attain specific learning objectives (Heinich, Molenda & Russell, 1982). In other words, technology of education is a comprehensive process that emphasizes systematic planning, systematic development, systematic implementation and proper evaluation of the whole educational process in general and instructional process in particular. It has been described as a technological process whose origin lies in the application of behavioral sciences to problems of human learning, motivation,
reinforcement, readiness, perceptions, etc. (Abimbade, 1997; Ogunranti, 1984). It is thus the combination of both technology in education and technology of education that makes for educational technology proper.

Looking at educational technology from a broader perspective, Richmond (1990) saw it as that which brings about the explicit search for effective contribution to learning, appropriately designed learning situation and effective learning more than what the application of audiovisuals could only provide. The teacher who rewards a student by smiling, saying “well done” when the student gives a correct response is said to be employing educational technology, just as if the student is responding to a fully automated system that gives immediate feedback (Sheath, 1999). It is thus the main goal of educational technology that effective and efficient human learning is ensured in all its ramifications.

The Association for Educational Communications and Technology (AECT, 1979) gave a more comprehensive and widely accepted definition of educational technology as a complex integrated process involving people, procedures, ideas, devices and organisation for analyzing educational problems and devising, implementing, evaluating and managing solutions to those problems involved in all aspects of human learning.

This definition implies that the application of educational technology requires the efforts of man and machine, systematic designing, planning and delivery of instruction, effective management, and evaluation of the teaching and learning processes (Dogan, 2010; Omoniyi & Arotiba, 2003). The evaluation of the total instructional processes demands that both instructional objectives and learners’ behavioral objectives be clearly and specifically stated. Writing of instructional objectives in behavioral terms is, therefore, one of the essentials in the application of educational technology to instruction (Omoniyi & Arotiba, 2003).

For more understanding of the concept and the scope of educational technology, some of its elements have been well documented (Imogie, 1984; Ogunranti, 1984). They include:

(i) Understanding of audience and its needs
(ii) Identification of educational problems that should be resolved
(iii) Establishment of priorities among problems
(iv) Specification of goals and objectives
(v) Identification of various alternative strategies for solving the identified and analysed educational problems
(vi) Identification of necessary financial, physical and human resources- prerequisites to the achievement of established goals and objectives
(vii) Analysis of content or message which leads to the achievement of objectives
(viii) Development of evaluation system, a “feedback” system (an assessment mechanism).

These identified elements, according to Chadwick (1979), show clearly that educational technology has as one of its basic tenets systems approach to educational change and improvement.

Abimbade (1997), Aremu, (1999) and Omoniyi & Arotiba (2003) also added that educational technology uses systems approach, behavioural sciences theories and communication principles along with all human, financial and material resources to solve the many educational problems that may beset any country- be it a developed or a developing one. According to Beane (2001), it is essentially one part alongside curriculum development, staff development and development of student learning. Though educational technology is not limited to the application of hardware and software to instruction, several authors on the subject agree that its approach to curriculum development and implementation demands a wide range of combination of media to
achieve various goals (Agun, 1988; Davies, 2001; Omoniyi, 2000). The more the media is used in the teaching and learning, the better it is for learners. Therefore, educational technology requires teachers to be very resourceful and use variety of strategies and means to enhance learning (Obanya, 1988). Gbamanja (1984) was of the opinion that a teacher will have used a part of educational technology if he runs around to get extra materials, uses batteries or any other means instead of electricity and finds appropriate ways of managing the large class. In other words, educational technology demands that teachers should be innovative, using variety of methods and means in their approach.

Statement of Problem
It was observed in the 20th century that the concept of educational technology was not clearly understood by many educators in developing countries, especially the teachers while those who claimed to understand it did not always put it into use in their classroom practices. Many could not perceive educational technology beyond the ‘tool level’ (i.e. technology in education). One would expect that the situation by now would have changed for better. It is against this backdrop that this study sought to investigate the 21st century primary school teachers’ level of awareness, perceptions and utilization of educational technology.

Purpose and Significance of the Study
The purpose of the study is to show the current level of understanding of the primary school teachers about educational technology and the extent to which they apply some of its major tenets or principles, particularly the systems approach, to their classroom practices. It is also to let the teacher trainers see some areas where they need to focus their attention. It is hoped that the study would spur immediate and adequate interventions from all teacher education program stakeholders, especially those that are directly connected with the primary school educational system.

Scope of the Study
This research was a small scale investigation on the level of awareness and perceptions of primary school teachers about the concept of educational technology. It was a small scale investigation in that the investigated level of awareness was based on, and limited to just few aspects of educational technology which student- teachers were supposed to have been exposed to during the course of their study, and which they were expected to put into use as professional teachers on the field. The study was also limited to the primary school teachers in Afijio local government area of Oyo State, Nigeria.

Research Questions
The study sought answers to the following questions:
(i) Do primary school teachers receive any training on educational technology (ET)?
(ii) In which areas of educational technology do teachers receive training?
(iii) To what extent can teachers in primary schools identify elements of educational technology (ET)?
(iv) To what extent do teachers in primary schools understand the concept of systems approach and apply it to classroom teaching and learning?
Methodology

Research Design
The study adopted a descriptive field survey design. This method was chosen because the study was to collect data that described existing phenomena in an attempt to answer questions about the current level of teachers’ awareness and perceptions of the concept of educational technology, and the extent to which it is applied to classroom practices.

Population and Sampling
All the primary school teachers in Afijio local government area of Oyo State, Nigeria constituted the population for this study.

Out of this population, one hundred (100) teachers were selected for the study by random sampling. The subjects that were randomly selected comprised thirty-eight (38) male and sixty-two (62) female teachers. The schools from which the teachers were drawn were selected using stratified sampling technique.

Research Instrument
A 15-item questionnaire and direct observation were used for this study. The questionnaire was developed by the researcher and given face validity by experts in educational technology (ET). Their objective suggestions were found useful and incorporated.

The questionnaire was divided into two sections (A & B). Section ‘A’ sought for demographic data in respect of each subject’s qualifications, age, sex, and years of teaching experience while section ‘B’ sought for information concerning the survey.

The 15 items under section B were grouped into three parts. Part I contained items (i)-(vi) which sought for information on the knowledge of ET acquired by the subjects while in training.

Part II was made up of eight (8) items to test the subjects’ present perceptions of ET, while part III was an open-ended question asking respondents to describe what they understood by the term ‘educational technology’.

Data Collection
The researcher went round the schools of the respondents at different times to administer the questionnaire. The subjects were made to complete the questionnaire and return same immediately. This made it possible for the researcher to have a 100% return rate of the questionnaire administered.

On few occasions, the researcher observed some respondents in the class while teaching.

Data Analysis
The data collected from the questionnaire were analyzed by finding the percentages of respondents’ responses to the items contained therein.

Presentation and Analysis Results

Research Question 1
The content of table 1 answers the research question as to whether the primary school teachers that were used in the study received any training in educational technology.
The above table shows that out of 100 teachers that were involved in the study 24% were graduate teachers while 72% had the Nigeria Certificate in Education (NCE). Majority of those with NCE, however, indicated that they were either undergoing a bachelor’s degree course or awaiting its result. Very few of the respondents did not have beyond either Teachers’ Grade Two Certificate (3%) or Associateship Certificate in Education (1%).

This finding shows that 96% of the respondents had tertiary teacher education training, and must have studied educational technology while in school. Educational technology is always taught as a discipline or a core course in the colleges of education as well as polytechnics or universities where teacher education program is offered.

**Research Question 2**

Research question 2 investigated the aspects of educational technology in which the respondents received training. The subjects were asked to indicate if they ever received training in some identified areas of educational technology.

The result is shown on table 2.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Training received</th>
<th>No. of teachers responding and %</th>
</tr>
</thead>
<tbody>
<tr>
<td>i.</td>
<td>Instructional/Educational technology as a discipline or a course of study</td>
<td>(96) 96%</td>
</tr>
<tr>
<td>ii.</td>
<td>Use of audio, visual and audiovisuals including OHP, filmstrips, slides, CDs, video, etc. for teaching</td>
<td>(47) 47%</td>
</tr>
<tr>
<td>iii.</td>
<td>Production/Improvisation of teaching learning resources</td>
<td>(98) 98%</td>
</tr>
<tr>
<td>iv.</td>
<td>Variety of teaching methods</td>
<td>(97) 97%</td>
</tr>
<tr>
<td>v.</td>
<td>Programmed learning (PL) and computer assisted instruction (CAI)</td>
<td>(18) 18%</td>
</tr>
<tr>
<td>vi.</td>
<td>Systems approach to planning, delivery and evaluation of instruction</td>
<td>(41) 41%</td>
</tr>
<tr>
<td>vii.</td>
<td>Formative and summative evaluation strategies</td>
<td>(53) 53%</td>
</tr>
<tr>
<td>viii.</td>
<td>Use of reinforcement techniques</td>
<td>(61) 61%</td>
</tr>
<tr>
<td>ix.</td>
<td>Teaching as a communication process</td>
<td>(88) 88%</td>
</tr>
<tr>
<td>x.</td>
<td>Educational radio and educational television</td>
<td>(42) 42%</td>
</tr>
<tr>
<td>xi.</td>
<td>Micro-teaching</td>
<td>(95) 95%</td>
</tr>
</tbody>
</table>

As shown above, more than 90% of the respondents indicated that they received training on aspects of educational technology such as production/improvisation of teaching and learning resources (98%), variety of teaching methods (97%) and micro-teaching (95%).

Only 88% of the respondents could, however, perceive teaching as a communication process. The number of teachers who indicated that they were trained in the application of systems approach to planning, delivery and evaluation of instruction was below average i.e. 41%
although 53% and 61% expressed that they received training in evaluation strategies and
reinforcement (reward system) respectively.

Only 42% indicated that they ever received training on educational broadcasts while 47%
had the practical knowledge of audiovisuals such as OHP, slide sets, filmstrips, video, CDs etc.
as instructional media. Computer assisted instruction is the aspect that the respondents (18%) had
the least knowledge about.

The above findings reveal that the primary school teachers’ awareness of educational
technology was largely limited to the production or improvisation of instructional materials
which in most cases are visual graphics, models of objects, specimens and realia. It was also
noted that though the respondents were aware of different teaching methods, their knowledge
of individualized instruction as well as systems approach was very low.

Research Question 3
To what extent can teachers in primary schools identify the elements of educational
technology?

In the second part of the questionnaire were listed some elements from which the
respondents were asked to check as many as they considered to be related to the concept of
educational technology. The result is shown table on 3.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Elements of Educational Technology</th>
<th>No of teachers responding and %</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>The use of audio and audio-visual materials</td>
<td>(87) 87%</td>
</tr>
<tr>
<td>ii</td>
<td>Understanding of learners and their individual needs</td>
<td>(40) 40%</td>
</tr>
<tr>
<td>iii</td>
<td>The application of systems approach to instruction</td>
<td>(32) 32%</td>
</tr>
<tr>
<td>iv</td>
<td>Evaluation of teaching and learning during and at the end of each lesson</td>
<td>(38) 38%</td>
</tr>
<tr>
<td>v</td>
<td>Specification of goals and objectives</td>
<td>(35) 35%</td>
</tr>
<tr>
<td>vi</td>
<td>Selection of various alternative strategies for solving educational problems</td>
<td>(51) 51%</td>
</tr>
<tr>
<td>vii</td>
<td>Preparation of simple teaching aids</td>
<td>(95) 95%</td>
</tr>
<tr>
<td>viii</td>
<td>The use of radio and television programs in the class</td>
<td>(78) 78%</td>
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Table 3: Elements identified as belonging to Educational Technology

The above table shows that 87%, 95% and 78% of the subjects identified the use of
audiovisuals, production of instructional materials, and the use of radio and television programs
respectively as elements of educational technology.

On the other hand, 40% of the teachers could identify learners’ centeredness in education as a
basic component of educational technology. The least recognized elements are items (iii) and (v)
on the table. This is not surprising since it is shown on table 2 that only 41% of the teachers
claimed to have received training on systems approach while in school.

The table below shows the teachers’ scores on the total number of elements recognized as
belonging to educational technology.
None of the teachers could identify all the 8 elements of educational technology listed on table 5. While the total of 68% could identify up to 4 elements, only 32% considered educational technology as being made up of 5 or more elements. This again does not justify the claim made by 96% of the teachers (see Table 2) that they studied educational technology while in training. However, none of the respondents is completely ignorant of elements of educational technology.

**Research Question 4**

To what extent do teachers in primary schools understand and apply systems approach to classroom teaching and learning?

Table 2 item (vi) and table 3 items (ii) – (v) reveal the low level awareness of systems approach among the respondents. This was corroborated by the direct observation of the researcher. Checking through many of the teachers’ lesson notes, it was noticed that quite a number of them did not apply systems approach to their lesson planning. Many could not state their lesson objectives in behavioral terms. The statements of objectives found in their notes were neither: specific, observable, nor measurable. Verbs such as ‘to know’, ‘to understand’ that are open to different interpretations were used instead of action verbs such as ‘to explain’, ‘to list’, ‘to describe’ ‘to apply’ ‘to evaluate’ etc.

It was also noticed that enough time was not spent on lesson note preparation. Their lesson notes did not indicate where they intended to make use of what instructional material, and only few respondents actually made use of instructional materials other than the chalkboard. There was over dependency on charts, many of which were poorly made.

Their classroom evaluation strategy was limited to asking very few questions that test simple recall. The teachers were also monotonous in their use of reinforcement technique during lesson presentation as this was mostly limited to asking class members to clap for the pupils that were able to answer questions correctly.

**Discussion of Results**

The findings revealed that primary school teachers in the country are professionally trained. That 96% of the respondents used for the study had tertiary teacher education is in consonance with the national policy on education which stipulates that Nigeria Certificate in Education (NCE) shall be the minimum qualification for entry into the teaching profession (FRN, 2004). It is, however, surprising that in spite of this high level of training, the primary school teachers’ level of awareness of educational technology in all its ramifications is very low. Many of the teachers are still operating at what Imogie (1984) described as the ‘tool level’ of
educational technology in which case the concept is viewed as mere production and application of instructional media to teaching and learning.

It is also surprising and disheartening that in spite of the fact that a good number of the respondents indicated that they received training on the preparation and utilization of media resources, many of them hardly use instructional materials other than the chalkboard, few charts (many of which were badly produced) and pupils’ textbooks. This corroborates the findings of Onyenemezu & Olumati (2014) that even while in training student teachers rarely use educational media technology.

The study further revealed that only very few of the subjects, as evident by the findings shown on table 3, understood what is meant by systems approach which is a fundamental concept in educational technology. Educational technology has succinctly been defined by some experts as a systematic approach to solving educational problems (Abimbade, 1997; Aremu 1999; Omoniyi & Arotiba, 2003). It might be that this aspect of educational technology was not well emphasized while the teachers were in training. That none of the respondents could identify all the elements of educational technology as presented on table 4 further lends support to the fact that systems approach and its application to teaching and learning needs to be more emphasized in Nigerian teacher education programs. Unless the concept of systems approach as a step-by-step problem-solving technique is well understood, teachers may not be able to apply effectively and efficiently any other knowledge they might acquire in educational technology.

Just few of the respondents (35%) could link specification of goals and objectives with the concepts of educational technology. Little wonder why there were among the respondents those who could not state their lesson objectives in behavioral terms and in such a manner that will contain the three criteria of ‘condition’ ‘task/behavior performance’, and ‘standard’ as described by Mager (1982) and Omoniyi (2008). It is a common knowledge that without a well stated objective, evaluation becomes rather unfocussed!

It is also a matter of concern in this 21st century that many school teachers are not familiar with the use of computer in instruction. Only 18% of the respondents had the knowledge of CAI while none of the schools visited by the researcher had a single computer. This is a big problem that is likely to take a long time to solve considering the bad shape of public school infrastructures and inadequate funding of the Nigerian educational system.

Conclusion

From the foregoing, one can conclude that primary school teachers’ awareness and application of educational technology is not commensurate enough with their academic qualifications. Although Nigerian primary school teachers are trained professionally, their understanding of educational technology leaves much to be desired. It should be noted that adequate awareness of educational technology is a prerequisite for its successful application to teaching and learning. All teachers, therefore, need to be well groomed in the art and science of educational technology.

Recommendations

In view of the findings of this study, the following recommendations are made:

Lecturers of educational technology in teacher training institutions should adequately expose student-teachers to both the theory and practice of educational technology.

More emphasis should be placed on the application of systems approach to solving educational problems in general, and instructional problems in particular.
Workshops, seminars and conferences on educational technology should be organized for teachers from time to time for their professional development. The ministries of education, teaching service commissions, state primary education boards and local inspectors of education should be able to facilitate this.

The local inspectors of education need to intensify their efforts in the area of supervision of teachers in schools. If teachers are not made to put into practice the knowledge acquired while in training, such knowledge can easily fade out of their memory with the passage of time.

Suggestions for Further Studies

The researcher limited the scope of this study to only few public schools. Therefore, the study can be extended to public schools in other local government areas as well as private primary schools to make comparison possible.

The subjects’ awareness and understanding of just few aspects of educational technology was investigated. Further studies may look beyond the few areas.

Apart from teachers’ awareness and perceptions of educational technology, its extensive integration and application at the primary school level is also worth investigating.

The effects of variables such as gender, age, and years of teaching experience on primary school teachers’ perceptions of educational technology can also be looked into.
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Oladiran Kayode Omoniyi


How Teacher Self-efficiency Can Be a Driver for Student Success

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Abstract
The survey of self-efficiency and its influence on human performance has intrigued numerous experts for decades (for instance, Podell & Soodak, 1993; Bandura, 1997; Muijs & Rejnolds, 2001; Nauta, M. 2001; Clayson, D. & Sheffet, M. 2006). The goal of this study was to examine the impact of teacher self-efficiency (TSE) on students’ drive and success. For that reason, eighty senior high school in four diverse cities in Iran, and 150 senior high school students, based on their teachers’ level of self-efficiency, have been selected randomly. For the collection of data, two instruments were used: Students’ drive questionnaires and Teacher self-efficiency. The data were analyzed via ANOVA and Pearson product-moment correlations coefficient. The findings of the survey showed that teacher self-efficiency has a positive impact on the students drive and success. The outcome of the survey and their pedagogical implications are deliberated, as well as recommendations for further study are offered.

Keywords: Self-efficacy, teacher self-efficacy, student drive, student success
Introduction

Researchers and practitioners continue to get intrigued by the role of self-efficacy in learning and teaching. Past literature have offered empirical proof in backing up the efficacy of teacher self-efficacy, or the degree to which teachers believe that they can impact the students’ result, in educational context (Podell & Soodak, 1993; Muijs & Reynolds, 2001; Tschanne-Moran & Hoy 2001). Numerous researches have shown that self-efficacy has been related with teacher persistence and effort in facing problems (Gibson & Dembo, 1984; Podell & Soodak, 1993), self-efficacy beliefs as well as academic success and persistence (Martin & Marsh, 2006; Skaalvik & Skaalvik, 2004), professional commitment (Evans & Tribble, 1986), openness to fresh techniques in teaching as well as positive teacher behavior (Guskey, 1988) as well as employing more positive, teacher-based strategies, humanistic to handle problems related to students (Woolfolk, Rosoff, & Hoy, 1990). Though a substantial body of study (e.g., Gibson & Dembo, 1984; Ashton and Webb 1986; Rushton, Morgan, & Richard 2007) has shown that teacher self-efficacy (TSE) has impact on students and teachers relationship, unfortunately, such surveys have failed to examine more explicitly the relationship between students drive and success and teacher self-efficacy. Additionally, few researches have explored the validity of self-efficacy (TSE) across groups of teachers in diverse setting.

The aim of this survey was two-fold: Firstly, to investigate if there is any difference in students’ success based on their teachers’ level of self-efficacy (TSE), and secondly, was to investigate whether there is any important correlation between students drive and teacher self-efficacy (TSE).

Literature Review

Numerous surveys on teacher self-efficacy have mostly been conceptualized within Bandura’s (1994, 2002) view of self-efficacy. According to the definition put forward by Bandura (1994), he stated that teacher self-efficacy is defined as the degree to which a teacher is confident enough to his or her capability to foster students’ learning. He further stated that human behavior is driven by the interaction of two types of expectations: Result expectancy and self-efficacy; the former involving judgments about the possible consequences that this performance would produce, and the latter is talking about people’s judgments of their ability to carry out and implement successfully a particular task in a particular context.

According to Ashton and Webb (1986), both authors identified that highly efficient teachers have a tendency to be more organized, show greater skills of instruction, clarifying, questioning, and offering feedback to students having problems, as well as maintaining students on assignment. On the other hand, teachers with low efficiency show a more custodial than humanistic approach to classroom management; they spend more vital time in group work as opposed to complete group instruction, they as well feel angered and threatened by misbehavior, as well as experience problem in maintaining students’ assignment.

Lastly, Smylie (1989) did a study and conclude that teachers with high self-efficacy are much more expected to offer opportunities for student communication by employing a variety of models to meet the needs of all learners (working personally, in pairs, as well as in groups). Numerous studies have as well substantiated that teachers with high level of self-efficacy are more expected to split the class into small groups instead of teaching the class as a whole, in that way permitting the opportunity for more individualized instruction (Tschanne-Moran).
Teacher Self-efficacy and Students’ Motivation

In a study by Pintrich and Schunk (2003), they pointed out that drive is a procedure for goal-directed activity, that is instigated and sustained” (p.5). Furthermore, Gardner drive theory (1985) emphasis that students are driven to learn and achieve success when they perceive their teachers care about them. In this case, teachers who are so concern about their students’ success were described as demonstrating democratic interaction styles, developing anticipations for student behavior in light of personal differences, modeling a “caring” attitude towards their personal work, as well as offering constructive feedback.

In addition, teachers with good teaching efficiency encourage students for understanding. These teachers treat students’ misunderstanding in the subject and they utilize diverse visual assistances so as to make the subject more enticing and meaningful. Furthermore, they give students opportunities. Furthermore, these teachers provide students opportunities to engage in conversations and give substantive feedback rather than scores on assignments. Moreover, there is certain proof that teachers’ affect, like enthusiasm for learning and their sensitivity concerning students’ treatment, might affect students’ emotions connected to the goals (Stipek et. al., 1998).

The correlation between students and teachers as well impacts classroom climate; Teachers should realize that they are responsible for regulating the classroom environment, involving regulating classroom discipline, execution of approaches and techniques to learning, interacting with students in the classroom. According to Wentzel (1994), the author discovered that students’ perceptions of positive affinity with their teachers were linked to their pursuit of pro-social classroom objectives for instance as getting along with others as well as being socially responsible, and were more robustly related to students interest in school than perceived backing from peers and parents.

Recognized backing from teachers as well is a positive predictor of the effort in schools as well as the pursuit of social responsibility objectives, involving acting in pro-social ways that encourage peer cooperation (Wentzel, 1994). On the other hand, students who perceive teachers as harsh as well as cold are found to consistently show poor social behavior as well as low social objectives and attain lower academic success, in comparison with their peers (Wentzel 1998).

Most students care about their associations with their teachers and respond with greater engagement as well as effort when they believe that their teachers care about them as well as give them backing. One method that teachers use to convey these qualities is via their discourse with their students in the classroom. Students and teachers discourse in the classroom structure a good manner in which teachers engage student involvement in fostering intrinsic drive, learning as well as balancing suitable challenges with skill levels.

Teacher Self-efficacy and Students’ Achievement.

Several surveys have emphasized on the impact of teacher self-efficacy beliefs on children’s success and achievement at school (Muijs &Rejnoolds, 2001; Tournaki& Podell, 2005). The principle of teacher self-efficiency may influence a student’s achievement in numerous ways: teachers with high teacher self-efficiency principles are more likely to execute didactic innovation in the classroom, employ classroom management approaches and sufficient teaching techniques and encourage students’ autonomy, as well as to take responsibility for students with special learning needs (Allinder, 1994),to manage classroom difficulties (Chacon, 2005), and to keep students on assignment (Podell& Soodak, 1993), than teachers with low sense of teacher self-efficiency. Furthermore, Ross (1992) examines the correlation between student accomplishment, teacher efficiency, an interaction with assigned coaches on a sample of
grade 7 and 8 history teachers in 36 classes. The outcome of the research pointed out that students’ accomplishment was higher in classroom of teachers who had more contact with their coaches, as well as in classrooms of teachers with greater confidence in the efficacy of education.

Additionally, Tournaki and Podell (2005) collected data from three hundred and eighty-four general education teachers so as to investigate how the communication between student and teacher characteristics affects teachers’ predictions of students’ social and academic achievement. In their study, participants responded to one of the thirty-two likely case studies describing a student in which social behavior, reading accomplishment, concentration, and gender were manipulated experimentally, and to a 16-item teacher-efficiency scale. The results of their research displayed that teachers with high efficiency made less negative forecasts about students, and appeared to adjust their forecasts when students’ characteristics altered, whereas low efficiency teachers appeared to be paying attention to a single characteristics when making their forecasts. As well, every teacher responded in the same way to students who exhibited a mixture of aggressive as well as inattentive behaviors, that is, if students were friendly, in attentiveness were tolerated more than if they were aggressive. Also, every teacher made higher forecasts of academic achievement for students reading on grade level even when they were aggressive, than for students reading below grade level even when they were welcoming.

The essentially brief review of this survey has pointed out that the paucity of practical work on examining the influence of teacher self-efficiency on the students’ drive as well as accomplishment in the ESL classroom. This offers a good justification for additional surveys in this area. To this objective, this study addressed the following research questions:

- Is there any correlation between teacher self-efficiency and students drive?
- What is the influence of teacher self-efficiency on the students’ accomplishment?

## Methodology

### Participants

In this study, the participants consist of two groups: the first group consisted of eighty senior high school teachers in four diverse cities of Iran. The senior high school teachers comprise of both female (N=40, 50 percent) as well as male (N=40, 50 percent). A number of these high school teachers reported having a BA degree in English language (N=68, 85 percent). The average years of experience for the participants was 10.17, while the mean age was 31.68 (SD=5.71). For the second group, the participants were 150 students in diverse cities. In fact, the students belong to the classes whose teachers contributed to this research. That is to say, after the completion of the questionnaire, the teachers were divided into three groups, based on their level of self-efficiency. Among each group, five teachers were selected randomly; among these groups, ten students, of each selected teacher, to complete the student motivation questionnaire. Of all the 150 students who took part in the research thirty students were not included in the additional examination for the reason that they did not fill out the questionnaire thoroughly. Manifold responses to individual items were as well treated as unanswered, and were deleted from additional scrutiny.

### Instruments

Based on the aim of data collection, two instruments were used in this survey. The first

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1 The highlighted bullet is a result of non-conformities between writer and publisher.
2 Ditto
instrument is the teacher self-efficiency Questionnaire, developed by Tschanned-Moran & Hoy (2001). The questionnaire involved 24 items which investigated the teacher’s notion about his/her effective control over Instructional plans (8 items), Classroom management (8 items), and Student Involvement (8 items). It employed a 5-point Likert scale (ranging from 1 (Nothing) to 5 (A great deal)), to rank the teachers level of self-efficiency. The items were translated into Persian, and checked for their meaningfulness by the researchers. The questionnaire was then piloted to ensure suitable timing, as well as administration processes, and as well to prevent ambiguity and other related difficulties in the key survey. Employing Cronbach alpha techniques, the reliability estimates of the questionnaire was calculated. Furthermore, the dependability coefficient of the questionnaire was 0.76, displaying a sensibly satisfactory index of dependability coefficient.

The student drive questionnaire (Appendix A) comprises of four sections: Both first and second sections elicit information on students’ intrinsic (items 1-7) as well as extrinsic drive (items 8-12), adopted from Schmidt (1996), the third section look for information on students’ attitude toward learning English (items 13-18), adopted from Gardner (1986), and the fourth section display students’ view about the teachers (items 19-25); this was developed by the researcher. So as to investigate the validity of the fourth section of the questionnaire (for instance, the students’ view about the teacher), it was first reviewed by 8 scholars in diverse universities. Based on the scholars view, some of the items were deleted, and some others were modified.

In this paper, factor examination was conducted on the students’ drive questionnaire to recognize how the items in the questionnaire functioned, and whether they load on diverse factors. They could be really classified into four groups.

In order to be able to run the factor analyses in this study, the preliminary tests of the factorability of data were conducted. The outcome showed that factor analysis was suitable and could produce reliable information. Table 3.1 displays the outcome of the tests of factorability of data.

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure...</th>
<th>0.815</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td></td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>2830.755</td>
</tr>
<tr>
<td>Df</td>
<td>300</td>
</tr>
<tr>
<td>Sig.Bartlett</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 3.1: Tests of Factorability of Data

Based on the above table, Kaiser-Meyer Olkin value was 0.815, surpassing the suggested value of 0.6, and Barlette’s Test of Sphericity displayed important, backing up the factorability of the data.

Table 3.2 below displays the screen plot; the table disclosed that there was a clear break after the fourth component. In other words, after the fourth component the shape of the cure altered its direction and turn out to be, nearly, horizontal, which meant just four components were appropriate for examination.
The major reason for running factor analysis on the data was to verify that the items are statistically connected to each aspect of the student’s drive. Table 3.3 displays the student drive item loaded on four diverse factors.

<table>
<thead>
<tr>
<th>Items</th>
<th>Component 1: Extrinsic motivation</th>
<th>Component 2: Opinion about the teacher</th>
<th>Component 3: Attitude towards learning English</th>
<th>Component 4: Intrinsic motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 2</td>
<td>0.966</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 3</td>
<td>0.897</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 4</td>
<td>0.881</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 5</td>
<td>0.878</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 6</td>
<td>0.869</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 1</td>
<td>0.859</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 7</td>
<td>0.854</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 19</td>
<td></td>
<td>0.882</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item 20</td>
<td></td>
<td>0.879</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As pointed out in the above table, factor analysis, and its later Varimax rotation disclosed the presence of four components on which the items in the questionnaire were loaded robustly. This gives backing to the idea that the questionnaire had four groups of items which addressed intrinsic drive, extrinsic drive, attitude towards English, as well as view about the teacher separately. The outcome pointed out that items connected to students’ extrinsic drive loaded on factor 1, items regarding students’ attitude towards learning English loaded on factor 3, and items connected to students’ intrinsic drive loaded robustly on factor 4. Specifically, each cluster items loaded separately on a diverse factor, reporting the multi-construct nature of the questionnaire.

In addition, the student drive questionnaire was piloted to assist this study gain suitable timing administration process, as well as other associated points in the key phase of the survey. The pilot survey was conducted on fifty students at two diverse schools in Iran. After the piloting of the questionnaire, certain alterations in certain items were made. Also, it was concluded that the questionnaire be clarified verbally in the key survey, to circumvent any misunderstanding by the students. Employing Cronbach alpha, the reliability of the entire instrument in the pilot survey was estimated. It displayed the reliability as 0.85, which was quite acceptable for the existing survey.

**Procedures**

In this paper, for each data gathering session, after a semi-detailed clarification to the teachers on how they were likely to complete the questionnaire, they were asked to write their name as well as school name, but they were guaranteed that the entire data received from them will be publicized anonymously. The reason they were instructed to write their own information on the questionnaire was based on the fact that they want their students’ scores from their
schools, and as well choosing certain students randomly. After that, the self-efficiency questionnaire was dispersed among the teacher partakers, as well as they were asked to fill it out. After the partakers fill out the questionnaire, the data were sorted, and then the teachers were divided into three groups, based on their level of self-efficiency. Of each group, five teachers were chosen at random to choose certain students randomly to complete the students drive questionnaire, as well as also to gather students’ scores from the school they have been tutoring in the past.

In addition, the second partaker in this survey consisted of hundred and fifty students who were chosen from four diverse cities based on their teachers’ level of self-efficiency. After a short clarification on how to complete the questionnaire, the questionnaires were distributed among them. After the completion of the student motivation questionnaire by the chosen participants, SPSS software was now employed to analyze the data.

**Results**

The purpose of this survey is to address two research questions: firstly, the study examines the correlation between teacher self-efficiency and students drive. Based on this purpose, Pearson product-moment relationship was conducted on teacher self-efficiency as well as students drive responses. It was as well carried out on teacher self-efficiency as well as each component of the students’ drive responses. Table 4.1 displays the outcome of Pearson product-moment relationship coefficient on students drive.

<table>
<thead>
<tr>
<th>Teacher Self-efficacy</th>
<th>Students’ motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>80</td>
</tr>
<tr>
<td>Student motivation</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>80</td>
</tr>
</tbody>
</table>

Table 4.1: The Relationship between Teacher Self-Efficacy and Students’ Motivation

As stated in the above table, this study was able to trace a significant relationship between student motivation and teacher self-efficiency. Thus, it can be said that the higher the teacher self-efficiency, the higher the students drive to study. Table 4.2 displays the correlation between diverse aspect of students drive and teacher self-efficiency (that is attitude toward learning English, view about the teacher extrinsic drive, and intrinsic drive) in this survey.

<table>
<thead>
<tr>
<th>Teacher Self-efficacy</th>
<th>Intrinsic</th>
<th>Extrinsic</th>
<th>Attitude</th>
<th>Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>-0.089</td>
<td>0.793(***)</td>
<td>0.240(*)</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>0.000</td>
<td>431</td>
<td>0.000</td>
<td>0.032</td>
</tr>
<tr>
<td>N</td>
<td>80</td>
<td>120</td>
<td>1120</td>
<td>1120</td>
</tr>
</tbody>
</table>

Table 4.2: The Relationship between Teacher Self-Efficacy and Different Aspects of the Students’ Motivation Questionnaire

Based on the table illustration, there is a reasonably positive relationship between diverse aspect students’ drive and teacher self-efficiency. However, for the relationship between students’ extrinsic drive the outcome appears interesting: the more the efficiency of
How Teacher Self-efficiency Can Be a Driver for Student Success

The other aim of this study was to examine if there is any dissimilarity in students’ success based on their teacher’s level of self-efficiency. To address the above-mentioned aim, one-way ANOVA was carried out. The purpose was to display if there is any significant dissimilarity in students’ success in diverse groups, based on their tutors’ level of self-efficiency. The one-way ANOVA was followed by Turkey post-hoc tests to find out where the significant dissimilarity among the group was situated. The outcome of this phase of research is summarized in table 4.3, as well as 4.4.

<table>
<thead>
<tr>
<th></th>
<th>Sum Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>27.757</td>
<td>2</td>
<td>13.879</td>
<td>8.402</td>
<td>001</td>
</tr>
<tr>
<td>Within Groups</td>
<td>127.187</td>
<td>77</td>
<td>1.652</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>154.944</td>
<td>99</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.3: One-way Anova on Students’ Achievement between the Groups (* p< .05...)

The table above display that F value was significant; this displays that there is a significant dissimilarity among the groups. It is as well essential to discover out where the dissimilarity is posited. Therefore, Tukey Post-hoc tests were conducted (table 4.4) to compare the groups, as well as to display where the dissimilarity is.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>(J) GROUP</th>
<th>Mean Difference (I-J)</th>
<th>Std Error</th>
<th>Significance</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>Group B</td>
<td>1.0504(*)</td>
<td>0.38697</td>
<td>0.022</td>
<td>0.1256 - 1.9753</td>
</tr>
<tr>
<td>Group C</td>
<td>Group A</td>
<td>1.9893(*)</td>
<td>0.48576</td>
<td>0.000</td>
<td>0.8284 - 3.1502</td>
</tr>
<tr>
<td>Group B</td>
<td>Group A</td>
<td>1.0504(*)</td>
<td>0.38679</td>
<td>0.022</td>
<td>-1.9753 - -0.1256</td>
</tr>
<tr>
<td>Group C</td>
<td>Group A</td>
<td>9388(*)</td>
<td>0.38679</td>
<td>0.046</td>
<td>0.0140 - 1.8637</td>
</tr>
<tr>
<td>Group A</td>
<td>Group B</td>
<td>9388(*)</td>
<td>0.38697</td>
<td>0.046</td>
<td>-1.8637 - -0.0140</td>
</tr>
</tbody>
</table>

Table 4.4: Post-Hoc Test Results on Different Groups of Students (* p< .05 ...)

From the above table, group A perform significantly in a different way from group B (0.22) as well as group C (0.000). Also students in group B perform better than those in group C (0.46). Therefore it can be inferred that the scores of student B is higher than that of group C.

Discussion, Conclusion, and Implications

This study examined the correlation between students’ drive and teacher self-efficiency. The study also delved into the influence of teacher-efficiency on the students’ success. The Pearson product-moment relationship coefficient was carried out between students’ drive and teachers self-efficiency, as well as four diverse aspects of students’ drive (that is students view about their teacher, students’ attitude toward learning English, extrinsic and intrinsic motivation), so as to investigate whether there is any significant correlation between teacher self-efficiency and students’ drive, and as well the diverse aspects of students’ drive questionnaire. The analyses disclosed that there is a reasonably positive relationship between self-efficiency and student drive (0.446). Therefore, it can be debated that teacher self-efficiency positively impact students’ drive to study. Pearson product-moment relationship as
Dorothy O. Achu and Michael M. O. Ehizuelen

well displayed a positive relationship between certain aspects of students' drive and teacher self-efficiency, that is, student view about their English teacher, intrinsic drive, and students’ attitude toward studying English. The degrees of relationship were 0.394, 0.793 and 0.240 for intrinsic drive, students’ view toward their teachers, and students’ attitude toward learning English. But the outcomes displayed little relationship (negatively) between students’ extrinsic drive and teacher self-efficiency.

In the case of Iran educational context, in which having better scores in English is the best reward for the students so as to find a better job, to pass the course, as well as to be successful in the University Entrance Examination is very vital. According to the result in this study, teachers with higher level of self-efficiency seek to change the students’ attitude toward studying English as well as think through English as a preferred subject to students.

This research as well examined the influence of teacher self-efficiency on the students’ success. In order to address this phenomenon, ANOVA as well as post-hoc test were conducted to investigate if there is any dissimilarity in Students’ success, based on their teachers’ level of self-efficiency. The outcome of one-way ANOVA disclosed that the dissimilarity in the students’ success in diverse group is significant (0.001); as well, the F value was significant (8.420). This shows there is a significant dissimilarity between their success and the group based. The outcome of the post-hoc tests as well disclosed that the students in group A, who had teachers with higher level of self-efficiency, got better scores than those students in group B as well as C. This can be concluded that the higher the level of teacher self-efficiency, the higher the students’ success.

The outcomes of this research give backing to the result of past studies proposing a significant relationship between teacher self-efficiency and increased students’ success, by impacting teachers’ instructional commitment, practice, teacher behavior, and enthusiasm (Tschannen-Morlan and Hoy, 2001;Tournaki & Podell ,2005; Wolters & Daugherty, 2007). The outcomes are as well in proportion to Bandura’s observation (1994) that teachers who have robust sense of efficiency about their abilities can drive their students as well as improve their cognitive development. On the other hand, those teachers who have a low sense of efficiency favor a “custodial orientation that depends heavily on negative sanctions to get students to learn”. (p. 11).

The outcome of this survey, as well, gives backing to Gibson & Dembo (1984) ideas; the authors maintained that teachers with high sense of efficiency believe that students who are not driven to study in class can be taught, given the additional effort as well as suitable methods. In contrast, teachers with a low sense of instructed efficiency think that they can do little if students are poorly driven, and the impact which teachers can exert on their students’ academic improvement is strictly limited by non-supportive or opposing impacts from the house as well as the community in which the students reside. Furthermore, Moran and Hoy (2001) notions that teachers’ self-efficiency is strongly connected to several meaningful educational results like enthusiasm, teacher persistence, instructional behavior, commitment, students success and drive to learn is in line with this study findings.

This research contributes to the literature of the drive and principles of teachers, as well as offers backing for the use of the teacher self-efficiency (TSE) scale outside of culturally Western settings. Therefore, they study can hypothesize that teacher self-efficiency can impact students drive and success in diverse settings as well as therefore it is not context-bound. It is as well vital that educational contexts and schools’ administrators offer obvious opportunity so as to enhance teacher self-efficiency and, consequently develop students drive and success. As for
those young teachers who have not had sufficient chance to build successful experience, as well as for whom self-efficiency may be most malleable, positive attitude as well as verbal encouragement may be particularly significant in building self-efficiency (Tschannen-Moran et al. 2007).

In addition, it appears that personality testing is lagging behind in education compared to the other disciplines. For instance, when recruiting teachers, personality testing is either completely neglected, or there is just a subjective assessment of applicants’ personality. By replicating this survey, with larger samples as well as in diverse contexts, applied linguistics studies can recognize the personality characteristic which is appropriate for English language teaching career. At this point, an objective personality testing can be applied to the applicant for this career as one criterion for their selection, as it is one common method of selection among other occupational groups. These various implications appear to be appropriate if the society as well as policy makers adjust their opinions towards education and teaching.

The findings of this research pointed out that there is a positive relationship between students’ drive and achievement and teacher self-efficiency. However, there are additional topics to be studied concerning the role of teacher self-efficiency (TSE) in teaching. The subsequent ideas for further research evolved from this study:

- Examine the effect of teacher self-efficacy on students’ self-efficacy.
- Further survey is required to examine the effects of teacher self-efficacy on job satisfaction as well as teacher burnout.
- There appears to be a need for further study to determine if teacher efficiency principles can be altered by specific administrators’ action.
- There appears a need for further study to examine whether teacher self-efficiency can affect the extent of parental participation in teaching.
- Further survey is required to examine if the level of teacher self-efficiency varies among beginner and experienced teachers.
References


Dear student

This questionnaire is designed to assist us develop tutoring English at high schools, and it is not connected to your class scores. Please specify your views about each of the following statements by circling the suitable number. Your answers will be kept strictly confidential.

A1. Answer according to the following scale:

Strongly disagree (1) Moderately disagree (2) Slightly agree (3) Moderately agree (4) Strongly agree (5)

1. The main reason I am taking English class is that my parents want me to improve my English.
   (1) (2) (3) (4) (5)
2. I want to do well in English class because it is important to show my ability to my friends.
   (1) (2) (3) (4) (5)
3. I want to learn English because it is useful when traveling to many countries.
   (1) (2) (3) (4) (5)
4. I am learning English to pass examinations.
   (1) (2) (3) (4) (5)
5. I am learning English because English is my compulsory subject.
   (1) (2) (3) (4) (5)
6. If I learn English better, I will be able to get a better job.
   (1) (2) (3) (4) (5)
7. I want to learn English because I want to study abroad in the future.
   (1) (2) (3) (4) (5)
8. English is important to me because it will broaden my view.
   (1) (2) (3) (4) (5)
9. I want to learn English to learn about people of England and USA.
   (1) (2) (3) (4) (5)
10. I want to learn English to get familiarized with the western cultures.
    (1) (2) (3) (4) (5)
11. I really enjoy studying English.
    (1) (2) (3) (4) (5)
12. I love learning English.
    (1) (2) (3) (4) (5)
13. English is a very important part of the school programme.
    (1) (2) (3) (4) (5)
14. I plan to learn English as much as possible.
    (1) (2) (3) (4) (5)
15. I would learn English if it were not our compulsory subject.
    (1) (2) (3) (4) (5)
16. Learning English is an enjoyable experience.
    (1) (2) (3) (4) (5)
17. I look forward to going to class because learning English is so good.
    (1) (2) (3) (4) (5)
18. I really enjoy learning English.
    (1) (2) (3) (4) (5)

A2. Answer the following questions according to the following scale:

Nothing (1) Very little (2) Some influence (3) Quite a bit (4) A Great deal (5)

19. How much is your English teacher interested in teaching English?
    (1) (2) (3) (4) (5)
20. How much is your English teacher interested in English?
    (1) (2) (3) (4) (5)
21. How much does your English teacher use different teaching methods?
22. How much does your English teacher use Scores to discipline the classroom?
(1) (2) (3) (4) (5)
23. How much does your English teacher motivate you in cooperating?
(1) (2) (3) (4) (5)
24. How much does your English teacher provide feedback to students when they have difficulty in understanding the lessons?
(1) (2) (3) (4) (5)
25. How much is your English teacher tolerance to the students’ misbehavior?
(1) (2) (3) (4) (5)
Altering Perspectives and Preserving Diversities:
A Look into Kerala’s Tribal Reform

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Kerala, India

Abstract
India is home to the collective consciousness of 461 indigenous tribes, each with its own established set of attitudes and customs of leading life that is now not recognized as the popular culture. As such the societal development and planning by way of the modern democratic machinery hardly satisfies their requirements of the decent life they have been culturing. The mass education contradicts such requirements, and hence the planning of all procedures of rehabilitating and upgrading the indigenous population is as unsuccessful as ever. This paper tries to check why the Kerala government’s tribal reform measures failed miserably in Attappady leading to many infant deaths primarily diagnosed to have been caused by malnourishment. The main reason is that all succeeding governments were largely failures in foreseeing and implementing altering perspectives in education of these tribes whereby the diversities in their culture, living and livelihood are preserved and integrated into the education system. The budget allocations of the past few years make it very clear that the majority of the funds used was to promote education for these tribes thus striving for their progress and development. This paper also attempts to trace the marginalization of the indigenous tribes in Kerala, both at the central level and the state level, and discusses how the present governmental policies of tribal rehabilitation have altered the concept of education among them, perhaps to the extent of perpetual damage to their cultural ecology and identity politics. However the fact remains that the education system implemented was largely based on western model of education causing irreparable damage to their culture, livelihood at the cost of many lives. The same case can be universally accepted as a reference point for further evaluation and diagnosis of problems in understanding diverse perspectives of the indigenous masses. Also, the paper explores the stereotypical ways of social ethics and sense of responsibility of a nation towards the education of the indigenous tribes suggesting some remedial measures for the same which involves the urgency to reach at a consensus between their primitive practices of ecological sustenance and modern day education. It is certain that instead of taking the efforts to integrate the tribes into the mainstream cultural fabric, we need to respect their cultural perspectives and try to include their findings and research proven by the test of time into the mainstream education and research, especially those related with the study of soil, native healing and cultivation.

Keywords: Scheduled tribes, marginalization, tribal rehabilitation, educational reformation measures, mainstream culture
Introduction

Kerala is a small coastal state, at the southern tip of India skirted by the Arabian Sea on the long western stretch. Prominent historians from Kerala like M.G.S. Narayanan believe that the evidences of settlement of human beings cannot be found in Kerala, earlier than the Megalithic age though tribal movements are likely to have happened sometime earlier. The major reason being Kerala’s topography which consists largely of forests and water belts making early human settlements difficult. The climate of Kerala can be roughly divided into two-summer and monsoon. Kerala is a fertile land housing a largely agrarian society. The state boasts of the highest literacy level in the country as well as a high male- female sex ratio.

According to the 2011 census official data, urban population is 47.70 while the rural population is 52.30. The total population of Kerala is 33,406,061 and the male- female sex ratio is 15,468,614: 16,372,760. The census also clearly points out that the population of Kerala forms 2.76 percent of India in 2011 and also that the population in the state is in degrowth when compared to the 2001 census report. The average male literacy is 96.11 percent while the average female literacy is 92.07 percent. The average literacy in rural areas is 92.98 percent whereas in urban areas it is 95.11 percent. Malayalam is the official language though the people, especially in the urban areas are capable of using English and to a lesser extent, Hindi too.

Kerala is home to 34 Scheduled Tribes largely spread over the districts of Wayanad, Idukki and Palakkad. Wayanad is home to the largest population of Scheduled Tribes.

Scheduled Tribes in India: The Indian Constitution designates tribes as “Scheduled Tribes” under Article 342 based on the “characteristics such as – primitive traits, geographically isolated, distinct culture, and shyness of contact with community at large, and economically backward” (as cited in “Tribal People in India: Scheduled Tribes, Scheduled Areas and Tribal Self-Rule” (2012, para 10). Though there are more tribal communities in India, only 258 tribal communities speaking about 106 different languages are notified as “Scheduled Tribes” as per official data. Designating groups as Scheduled Tribes category according to the Indian constitution entitles them for major benefits and schemes of progress and development. The schemes of the Government for reformatory actions are always at par with the popular notions of the mainstream culture are to be specifically noted in the context. To quote from the text:

“When labeled “scheduled tribe” the community becomes entitled for some constitutional protections and developmental programs designed to end their marginalization and help assimilate into mainstream society. A similar protection is available to Hindu “low-caste” communities which have historically faced discrimination and exclusion at the hands of “upper-caste” people. They are labeled “Scheduled Caste” (as cited in “Tribal People in India: Scheduled Tribes, Scheduled Areas and Tribal Self-Rule”, 2012, para 10).

For special developmental assistance some tribal groups are also categorized as Particularly Vulnerable Tribal Groups (PVTG) (Earlier known as Primitive Tribal Groups (PTG)). The article points out 75 tribal groups as included in this category (as cited in “Tribal People in India: Scheduled Tribes, Scheduled Areas and Tribal Self-Rule”, 2012, para 11).

Scheduled Tribes of Kerala: The Scheduled Tribes are Kerala’s early inhabitants. Since most of the area was dense forest, these early settlements are seen in the forest areas. Most of the Scheduled Tribe concentration is either in the forests, valleys or mountains. They are referred in the vernacular as “adivasis” (primitive dwellers/ early inhabitants). In urban folk language the term is also derogatorily referred for an “uncivilized” person according to the urban standards of refinement and culture. This fact itself proves their marginalized status in Kerala.
The Kerala Government website publishes that there are 34 Scheduled Tribe communities in Kerala (as cited in “List of Scheduled Tribes in Kerala”, n.d. p. 4). The 1951 census records 90.32 percent of population were adivasis in Attappady and it is the most backward revenue block of Palakkad District in Kerala.

Attappady has three major communities- Irular (non-primitive), Mudugar (non-primitive) and Kurumbar (primitive). Kurumbar are referred to as “Palukurumbar” to distinguish them from “Alukurumbar” tribe of the Nilgiris in Tamilnadu.

Scheduled Tribes in Attappady: There are mainly three Scheduled Tribes in Attappady- the Kurumbar, Mudugar and the Irular.

Kurumbar

The ST Department, Government of Kerala has included Kurumbar community in the PVTG (particularly Vulnerable Tribal Group). It is the only tribal group which is concentrated in the Attappady region. The remaining tribes- Kadar, Kattunayakan, Koraga etc are distributed in Palakkad, Thrissur, Malappuram, Kasaragod etc, with the only exception of Cholanaickans found in the Nilambur valley alone. The 2011 census records their population as 2251 and the recorded number of families in the tribe is 543. The family size of Kurumbar is 4.1. The male-female sex ratio is the lowest in Kurumbar (1000:996). Their major settlement is in Agali and Pudur. They speak ‘Kurumbar bhasha’ which is a mixed dialect of Tamil and Malayalam. Their major traditional occupations are hunting, gathering and shifting cultivation.

Mudugar

Their major settlement is also in Agali and Pudur. The 2011 census records their population as 4668 and the recorded number of families in the tribe is 1274. The family size is 3.16 and male-female ratio is the highest (1000:1098). They engage in traditional livelihood patterns like procurement of non-timber forest goods and cultivation. They speak ‘Muduga bhasha’ which is a dialect.

Irular

When compared with the other two tribes the Irular population is the highest and the 2011 census records their population as 26525 and the recorded number of families in the tribe as 7614. Their family size is 3.48 and male-female sex is 1000:1015. They are settled in Agali, Sholayar and Pudur and the major traditional livelihood is cultivation and animal husbandry. They speak a dialect called ‘Irula bhasha’ which shows more affinity towards Tamil.

Social Structures of Scheduled Tribes in Attappady: It could be well assumed from the details given in the “List of Scheduled Tribes in Kerala” p.23, that all these major three tribes are socially centered around the institutions of ‘ooru moopan’ (chieftain of the hamlet), ‘bhandāri’ (treasurer), ‘kuruthalai’ (assistant), ‘maŋŋukāran’ (soil expert) which are hereditary and patriarchal in nature. Though designations like that of the chieftain are very common, the presence of a soil expert is enough indication to their traditional life style that integrates ecology and sustenance.

Background

The central India tribal belt stretches from Gujarat in the west till Assam in the east and covers the states of Madhya Pradesh, Chattisgarh and Jharkhand. The centre allocates heavy funds to these regions as these are believed to be the poorest and having the greatest number of tribal groups. It is also understood that 90 percent of the tribal population is still rural resorting to
primitive agriculture. The article, “Tribal People in India: Scheduled Tribes, Scheduled Areas and Tribal Self-Rule,” states,

“About 80 percent of tribal populations are to be found along the Central India belt and the rest 20 percent are in the North-Eastern States, Southern States and Island groups.”

Budget Allocation: The budget allocation for various schemes/ programs of Ministry of Tribal Affairs for 2014-15 was Rs. 44790.00 million and the Revised Estimates was Rs. 38500.00 million. The total releases made by the Ministry during the year 2014-15 (upto 31.12.2014) were Rs. 30023.10 million, which is 77.98 percent of the Revised Estimates/Final Grants. The budget Circular and tribal Sub Plan Programmes 2014-15 points out that the central sponsored schemes (in 50 percent and 10 percent categories) amount to only 6121.2 hundred thousand rupees for the state of Kerala which is a clear indicator that the Kerala Tribal community is also facing a grave marginalization when the issue of centre funds and budget allocations are discussed. It is also to be noted that it is only as late as the financial year 2014-15, that 3 percent of the total plan outlay is earmarked for the development of the Scheduled Tribe Population (Budget Circular and Tribal Sub Plan Programmes 2014-15, p. 5). The ministry of Kerala was established in the year 1957, after 10 years of gaining independence. Moreover, the government norms of budget allocation and policy implementation are always centered on demographic variables like population.

“The Scheduled Tribes in Wayanad constitutes 18.76 per cent of the total population of the district. As such they are a decisive fraction in the policy framing of the district as well as the State. In Idukki, the district with the second largest population, the Scheduled Tribes are only 4.78 per cent of the district population. In Alappuzha, the share of Scheduled Tribes in the district population is only 0.14 per cent. Approximately 71 per cent of the Scheduled Tribes in Kerala are in four districts, namely; Wayanad, Idukki, Kasaragod and Palakkad” (as cited in “List of Scheduled Tribes in Kerala”, n.d. p. 4).

The major rehabilitation methods adopted were towards modernization of these tribes in every way, like education, food, modern hospital facilities etc.

Diet and Immunity: Ragi (finger millet), Chama (pearl millet) Thomara (horse gram), maize, pulses, vegetables. More than 60 different types of cereals and pulses were supposed to be cultivated and nearly 60 types of green vegetables like keera, paali, munne, chakkara, tav etc were also in plenty, earlier. Edible wild berries, forest fruits and honey apart from fish from the Bhavani and Shiruvani rivers were also in plenty, earlier. The food crops obviously provided them a rich iron supplement to fight their sickle cell anemia to which they are genetically prone.

Native Healers were also in adequate numbers earlier, but this is fast to extinction. Older generation people certify that they had fewer deaths due to anemia and malnutrition as of now. K.A. Shaji’s (2015, July 27, para 8) report of the view of the tribal activist B. Palaniswamy in the Hindu is relevant in the context:

“When we had land and irrigation facilities, our people used to cultivate ragi, chama (bajra), thomara (horse gram), maize, millets and pulses and vegetables. Land alienation and inaccessibility to irrigation facilities have made our lives difficult. Instead of restoring our livelihoods, government is just concentrating on free meal indigestible to our community members…”

In short, the school children are also being forced to follow a food habit different from their tradition as the free meal system in government schools is one that is in agreement with the popular food habits (rice and vegetables etc).

Ration: Ration is a system of providing grocery in subsidized rates to the citizens as part of an initiative by the Civil Supplies Department. In Kerala, rice, wheat, sugar, kerosene etc is provided through ration only to ration card holders. Ration Card Holders are also divided into
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APL (Above Poverty Line) and BPL (Below Poverty Line). The real fact is that some tribal settlements in the interior are not even aware of such facilities. 10160 of the total tribal population in Kerala are calculated to be ration card holders. The total number of households in Attappady is 8589 and the total number of households having ration cards is 6180. That is, the total number of households that do not have ration card is 2400. 10160 households of the total tribal population in Kerala are calculated to be ration card holders, out of which 25.34 percent belong to APL (Above Poverty Line) category. The subsidy rates and amount of subsidized goods eligible is not the same for APL and BPL category ration cards. This fact itself suggests that the Kerala government’s schemes of Tribal Reform have not been successful despite the huge amount spent on such reformatory measures. 10160 of the total tribal population in Kerala are calculated to be ration card holders. 25.34 percent are APL Ration card holders.

Moreover what is being supplied through these ration shops are not of high quality and not in consensus with the diet system of the tribespeople of Attappady. K.A. Shaji’s (2015, July 27, para 8) report in *the Hindu* also contains an excerpt of R.J. Rajendra Prasad, a social worker, whose words are also relevant in the context.

“We are forcing them to follow a food habit different from their tradition. The earlier government promise to supply pulses and millets through ration shops for tribespeople in Attappady is not getting implemented. Rice was never part of their food habit but tribespeople here have been forced to become rice eaters and that too of poor quality rice,” (para3).

Ownership of Property: Land for the tribes is another area of concern which is safeguarded by two laws because earlier and perhaps still the land mafia and big shots in real estate business try to take advantage of these tribes’ ignorance, illiteracy and vulnerability to acquire their agricultural land for selfish motives associated with modernization and globalization.

i) Kerala Scheduled Tribes Restriction on Transfer of Lands and Restoration of Alienated Lands Act, 1975.

ii) Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006.

There are paper reports stating that these acts are not implemented effectively. K.A. Shaji’s report (2015, July 27, para 12) states that, “The Forest Rights Act, 2006, has not been properly implemented in Attappady and it has been pointed out as one of the major issues confronting them.”

**Methods of Research**

This research mainly resorts to secondary data- sources published by the Scheduled Tribes Department, Government of Kerala, news reports, journals, findings by doctors and also NGOs. The data is analyzed to find out how and why the tribal reform measures adopted by the Government of Kerala have failed, perhaps beyond repair and what must the main cause of this degeneration be in planning and implementing proper tribal reform measures in Kerala, no matter how many governments succeed one after the other. The statistical data of budget allocation and implementation of plans in education of tribes is analyzed to realize which models of education are chartered out for the tribes and also to measure their effectiveness.

**Findings**

Civilization may be construed as a much confused term in India. Indian civilization is regarded as one of the ancient civilizations in the world but what Indians call civilization today is largely influenced by western thoughts and ideals, a part of the cultural infiltration that happened during the colonial times. It is a fact that Indians are still not sure whether their present day
culture really suits them or not and this confusion continues in every aspect of Indian life, right from basic needs to the needs of luxury; from conservative gender pull in provincialism to the modern cosmopolitan view. The extent to which the popular government measures in actively including the tribes into mainstream culture as the only potent solution to avoid them from the status of being marginalized is very high.

The Reasons behind Infant Deaths: IMR (Infant Mortality Rate) and ratio of body weight in Attappady is much below the standards prescribed by WHO and much below the statistics of other marginalized sections in India alone. Deaths due to malnutrition took a huge toll in Attappady in the year 2013 which continues in 2014 and perhaps still. Women and infants were largely affected. The reasons for death were diagnosed to be asphyxia, ARDS, apnoea, low birth weight, development growth delay, and IUGR (UNICEF Report, 2013) apart from anemia. Reasons specified were lack of health care facilities, proper hygiene and malnourishment apart from tribal reformatory scheme implementation lapses.

The Hindu, a leading national daily which is stronger in the southern parts of India reports, “Forty-seven infant deaths in 2013, 22 infant and 37 unborn infant deaths in 2014, and nine more so far this year... the statistics from Attappady are disturbing, even alarming” (Parthasarathy, S. (2015, July 18)).

The Kerala government’s measures of saving the tribe from high IMRs were mainly targeted on opening of more health centers, ensuring proper facilities of medical practitioners and medicines in health centers, providing them free food high in nutritional content and the like, of which the main scheme was the opening of nutritional rehabilitation centers notes Parthasarathy S. (2015, July 18).

“Nutritional rehabilitation centers have been started at Agali, Sholayur and Pudur for the children suffering from Severe Acute Nutrition; this brought down the SAN numbers from 299 in April, 2013, to 64 in April, 2015.”

More importance is being given to the western model of rehabilitation and modernization as these Scheduled Tribes are largely marginalized from mainstream culture. Stereotypical movements to eradicate such marginalization were taken by the Government of Kerala which ultimately has been proven a great failure.

**Discussion**

Since man was essentially nomadic in leading his life, it is obvious that human settlements were not without any specific reason. Man has got a habit of taking what he thinks necessary and omitting what he considers to be irrelevant. This is a continuous process that happens through years which we now popularly call “culture”. Behind every settlement there is always a genuine cause of culture and ecological sustenance which are interrelated and complementary.

The Kerala government did not give any importance to the studies of culture and inhabitation including ecology of the tribal settlements. The Kerala government’s tribal reform is based on an attempt to make the tribes, a part of mainstream in everything right from culture to lifestyle. The implementation of ration and various other measures for the progress and development of the tribes in Attappady was a failure. Moreover the budget allocations and vast number of schemes were categorized not according to the need and vulnerability of the tribal groups rather according to their population statistics which indirectly allows a better ‘progression’ for a particular group than the other.

It could well be assumed that this lack of planning of education reforms for the tribes is the main cause of high death rates among the infants and their malnourishment which was why the Kerala Government had to launch additional schemes for their rescue. ‘Janani Janma Raksha’ is
a special scheme to save expecting mothers and their new born kids from malnourishments and high IMRs. It is found out that there was no such scheme in 2012-13 and it was launched only in 2013-14 seeing the greater toll of death. 655 hundred thousand rupees was reserved for this scheme in 2015-16 which varies starkly from the 100 hundred thousand rupees in the year before. The figure itself is a poignant indicator to the alarming death rates. The fund for the ‘Food Support Program’ also has been on the increase from 165-500 hundred thousand rupees from 21012-13 to 2015-16. The funds reserved for the treatment and rescue of sickle cell anemia patients to which they are genetically prone is 120 hundred thousand rupees. These figures indicate that the amount spent to rectify the damage already incurred could have been put to better use for the development and progress of the nation if the education reforms were modified and implemented integrating their traditional ecological practices. Refer to the below figure for more details.

Fig. 1 Special Programs for Attappady to save the tribe from Malnourishment and alarming IMRs.

It could be noted that the fund allocation under the head, ‘Direction and Administration’ of the Scheduled Tribes, gradually increased from 606.48 hundred thousand rupees in 2012-13, to 712.98 hundred thousand rupees in 2013-14 to 786.91 hundred thousand rupees in 2014-15 which steeply rose to 1023.89 hundred thousand rupees in 2015-16. The budget allocation for education is also ever on the increase. Education may include everything from primary schools, to higher education sector set-ups, building of infrastructure like hostels, buildings, imparting training to teachers and the like. The budget allocation for education was 11493.45 hundred thousand rupees in 2012-13, 14514.33 hundred thousand rupees in 2013-14, 17348.86 hundred thousand rupees in 2014-15, and 18443.29 hundred thousand rupees in 2015-16. The fund reservation under the sections of ‘Landless Tribal Settlement’ and for the implementation of ‘Scheduled Tribal Act 2006’ has remained the same, 2000 hundred thousand rupees and hundred thousand rupees respectively. No fund was allotted to Hamlet Development scheme in 2012-13.
2013-14 saw 2000 hundred thousand rupees allocation which increased to 2500 hundred thousand rupees in 2014-15 which again decreased to 1000 hundred thousand rupees in 2015-16. The budget allocation for the implementation of Schedule Tribe Act (1975) also has remained somewhat stable the fluctuation being only 10 hundred thousand rupees. The budget allocation for health and building homes for the tribes is also ever on the increase since 2012-13 starting from 422.25 hundred thousand rupees in 2012-13 to 2172.98 hundred thousand rupees in 2015-16 for health and 2500 hundred thousand rupees in 2012-13 to 4783 hundred thousand rupees in 2015-16 for building and maintaining homes for the Scheduled Tribes. These figures indicate that the Kerala Government has stressed education far higher than anything else and the difference in fund allocation for other developmental measures is striking which may be regarded as very meager when compared to that reserved for education.

Fig. 2 Kerala Developmental Model. Source: The *Budget Circular and Tribal Sub Plan Programs*, (2012-13, 2013-14, 2014-15, and 2015-16)

Fig. 3 points out that the literacy rates in Attappady show that 64 percent of men and only 56 percent of women in Attappady were literate when compared to the literacy rates of the general population where 96 percent of men and 92 percent of women were literate. This data shows that despite the government’s schemes of education reformation in Attappady for the tribes not much progress has been achieved as various socio-economic factors still affect their capability for availing these schemes. Moreover even after they are educated they resort to some governmental jobs which again distance them from their traditional knowledge of primitive cultivation, native healing and ecological sustenance.
Conclusion

The government’s tribal reform is based on an attempt to make the tribes, a part of mainstream in everything right from culture to lifestyle. Already irreparable damage in tribal life has been incurred due to the poor vision and lack of proper planning and some tribes are facing dangers of extinction. The civilization that we believe as ours, itself is paradoxical along these lines. The need to act fast deciding on the altering perspectives and bringing out diversity in education is the need of the hour.

Recommendations

a) Study of Ecology and educating the tribes- the need for ecological sustenance including farming.

b) Preserving cultural implications and attaching scientific perspectives to the same.

c) Preserving indigenous Languages and rescue mechanism like native healing

d) The proper implementation of the Forests Development Act whereby the Adivasis or Scheduled Tribes are preferred for land allocation.

e) The focus need be laid on agriculture and cultivation and not on dwellings and buildings.

f) A suitable market for promoting rare forest goods can be developed whereby they get some resources/ financial aid as well.

g) Promoting Sustained Tourism, ensuring minimum damage to ecology and culture preservation, allowing minimum cultural infiltration to happen.

h) Promoting education- indigenous and modern practices with a higher end to the indigenous education.

i) Promoting native healers with lots of schemes and allowing further research in the area inspecting the scope of productive assimilation of their practices into the mainstream treatment techniques, if possible.
References
Outcome Based Business Model Innovation: Rethinking the Business Model Innovation

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Abstract
Even if innovation is a tricky concept to define, almost all firms need to innovate. Moreover, an innovative approach cannot be limited to the process of developing innovative products, but must encompass the concept of innovating the business model itself. This paper proposes a framework for the creation of innovative business models based on the principles of outcome-based innovation (ODI). This paper represents an attempt to structure an innovative business model capable of truly exploiting strategic opportunities in the market. The cases show that it is possible to extract valuable information from applying ODI analysis to business model bringing to successful results.

Keywords: innovative business model, outcome-based innovation, canvas business model
Introduction

It has been acknowledged that managing innovation is an uncertain practice (Christensen, 2003) surrounded by accidental events, intuition, and heavy doses of serendipity and unconventional practices, none of which are necessarily relevant to the generation of great ideas. One alternative to this random, flailing approach is outcome-driven innovation (Ulwick, 2002). And, while innovation has traditionally been considered in terms of technology and products (Norman & Verganti, 2012), it can also be applied to the business model itself (Chesbrough, 2010; Teece, 2010; Zott & Amit, 2010). Tools have been developed to explore opportunities for business model innovation in uncertain scenarios (Osterwalder & Pigneur, 2010).

These tools help describe how organizations work and generate revenues. More precisely, they assist managers in the conceptualization and communication of the different activities their companies employ to generate value and to create innovative products and services. Thanks to such business model tools as the business model canvas (Osterwalder & Pigneur, 2010), the business model is now considered a key business lever that shapes the overall value delivered to the customer, while also shaping the cost structure that delivers that value. As such, the business model is a means of managing, improving, or even creating innovation. In this vein, the business model is also a route to a better architecture and systems for a business or an activity. Business model innovation—like any innovation—can also be disruptive, with the potential to shake whole industries. As Winter and Szulanski argue, “The formula or business model, far from being a quantum of information that is revealed in a flash, is typically a complex set of interdependent routines that is discovered, adjusted, and fine-tuned by ‘doing’” (Winter & Szulanski, 2001, p. 317)

Starting from this point, the authors have applied Outcome-Driven Innovation (Ulwick, 2002) to the Business Model Canvas (Osterwalder & Pigneur, 2010) to reap the advantages of both methodologies and create an innovative business model. The Business Model Canvas enables innovators to capture the whole picture of their business by identifying the single blocks involved, while Outcome-Driven Innovation helps innovators be innovative not only in the value proposition, but throughout the business model, by identifying strategic opportunities—jobs—that customers need to do and that no one is currently addressing properly.

Business model innovation: theoretical framework and question research

Running a business is a difficult, risky, and uncertain activity, and that uncertainty is amplified by a continuous stream of innovations, constantly changing the business environment. As the rate of innovation increases and the number of organizational failures grows, new methodologies have been introduced to help organizations adapt their business models to the market opportunities.

Important frameworks such as the Business Model Canvas create the bases for a common language around the business model that can help business model creation, communication and improvement. In Osterwalder, Pigneur, and Tucci’s (2005) vision, a business model is a conceptual tool containing a set of objects, concepts, and their relationships. The purpose of the tool is to express the business logic of a specific firm. Osterwalder et al. (2005) consider which concepts and relationships allow a simplified description and representation of the value a business provides to its customers, how it provides that value, and with which financial consequences. Osterwalder and Pigneur (2010) use a systematic, repetitive, and recursive process approach to improve on Osterwalder et al.’s (2005) proposition. The iterative business model development process provides an agile method for investigating customer’s problems and needs
and reacting early enough to find new solutions.

Osterwalder and Pigneur (2010) present five phases (mobilize, understand, design, implement, and manage) as a sequence of tasks in business model innovation. In the “mobilize” phase, the manager’s task is to plan and assemble all the elements for a successful business model design and to communicate the reason and motivation behind the new business model project. The manager’s role is to create a common language to describe, design, analyse, and discuss the business model with the design team. The elements that are relevant for designing a business model are selected by observing the “understand” phase. The design and implementation phases mean action. Alternative and viable business model prototypes are brainstormed, and team’s task is to evaluate and validate the best options for testing and implementation. In the “manage” phase, the business model is adapted and modified to respond to customer and market actions. The role of the business model design team is to constantly monitor, evaluate, adapt, and if necessary transform the current business models (Osterwalder & Pigneur, 2010).

Magretta (2002) and Sosna, Trevinyo-Rodríguez, and Velamuri (2010) indicate that trial and error is the way to discover the most appropriate business model. The right business model may not be apparent from the beginning and may depend on learning and trial-and-error adjustments. Teece (2010) highlights the role of discovery learning and adaptation in the process of business model innovation, and he suggests that a business model should be evaluated against its current ecosystem of suppliers, competitors, and customers and against the ecosystem’s possible evolutions (Teece, 2010, p. 189). Chesbrough highlights technological innovation as a new way to infuse value into a business model: he warns against missing out on the potential value of exploiting new technologies (Chesbrough, 2010, p. 359).

Ries (2011) proposes a lean start-up method, in which business hypotheses are tested in advance: this can shorten the product development cycle and reduce market risks before moving into the next stages of business development.

These experiments provide firms with the necessary information on when it’s appropriate time to shift resources from established business models to new business models. Kijl et al. try to identify external influences that drive business model change or have a disruptive effect on a firm’s business model (Kijl et al., 2005, p. 4). The authors also classify the type of innovation that is at the root of a firm’s business model. A distinction is made between incremental and radical innovation, though both radical and incremental innovations can lead to changes in a firm’s business model. Sosna et al. (2010, p. 384), like Achtengahen, Melin, and Naldi (2013) and Kijl et al. (2005), view continuous business model innovation as a dynamic capability for reacting to market changes and thereby surviving in the longer term. Sosna et al. seek to contribute to the emerging view in business literature, which considers business model development as an experiment, followed by revision and adaptation based on trial-and-error learning (2010, p. 384). Trial-and-error learning is characterized by its iterative nature, whereby actions that produce wanted results are retained and actions that produce negative results are discarded (Argyris & Schön, 1978).

Through their examination of Naturhouse, a Spanish dietary-products business, Sosna et al. (2010, p. 384), show that the metamorphosis of a business model can be categorized into four different stages: initial business model design and testing, business model development, scaling up the refined business model, and sustaining growth through organizational learning (Sosna et al., 2010, pp. 388–96). Table 1 summarizes the literature on business model innovation.
In the previous section, we showed the importance of business model innovation. The approach can be driven by different factors, as shown in Table 1. Since we believe that an innovative business model must be able to define and identify opportunities for innovation, we need a framework richer than a simple business model framework, one that is able to inspire continuous innovation instead of merely refining, evolving, and iterating a first draft of a business model. To that end, we combine a methodology that is normally used in product innovation—Outcome-Driven Innovation (Ulwick, 2005)—with Osterwalder and Pigneur’s (2010) business model canvas. Below, we first describe our methodology and then discuss its application to some practical cases.

### Methodological approach: outcome-based business model innovation

In Table 1, we present a summary of the literature on business model innovation, highlighting the different approaches and drivers. The table shows how various authors have approached business model innovation from different perspectives, focusing on technological, incremental or radical, iterative, lean, trial-and-error, and learning approaches.

**Table 1** Literature on Business Model Innovation

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Business model innovation</th>
<th>Description</th>
<th>Driver</th>
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<td>2010</td>
<td>Technological approach</td>
<td>Exploit new technologies</td>
<td>Technology innovation</td>
</tr>
<tr>
<td>Kijl et al.</td>
<td>2005</td>
<td>Incremental or radical approach</td>
<td>A process based on different types of innovation</td>
<td>Incremental and radical innovation</td>
</tr>
<tr>
<td>Osterwalder and Pigneur</td>
<td>2010</td>
<td>Iterative process</td>
<td>Iterative process involving five phases: mobilize, understand, design, implement, and manage.</td>
<td>Customer change</td>
</tr>
<tr>
<td>Sosna et al.</td>
<td>2010</td>
<td>Trial-and-error approach</td>
<td>A process based on: design, testing, business model development, scaling, sustaining, growth</td>
<td>Environmental circumstances</td>
</tr>
<tr>
<td>Teece</td>
<td>2010</td>
<td>Learning approach</td>
<td>Discovery and learning adaptation</td>
<td>Current ecosystem of suppliers, competitors, and customers and their changes</td>
</tr>
</tbody>
</table>

A Methodology for an Outcome-based Business Model Innovation

According to Osterwalder et al., “A business model is a conceptual tool containing a set of objects, concepts and their relationships with the objective to express the business logic of a specific firm. Therefore we must consider which concepts and relationships allow a simplified description and representation of what value is provided to customers, how this is performed and with which financial consequences” (Osterwalder et al., 2005, p. 5). In an initial proposal, these authors identify four main pillars—the product, the customer interface, the infrastructure management, and the financial aspects—around which they identify some “building blocks.” In a later paper, Osterwalder and Pigneur (2010) directly propose a “nine building blocks business canvas,” the nine building blocks being value proposition, channels, customer relationships, customer segments, revenue streams, key activities, key resources, key partnerships, and cost.
Outcome-driven Innovation predicts more precisely the value created redefining the market concept based on the “job to be done” theory. This theory is based on two very simple concepts: first, that customers hire products and services to get a job done, that the job is the stable unit of analysis, (Christensen, 2003; Ulwick, 2002), and that customers will adopt products and services that help them get the job done better (Christensen, 2003; Ulwick, 2002) and that let them get the whole job done on a single platform (Ulwick, 2005). The second concept is that customers measure how successfully they are able to complete a job in terms of outcomes (Ulwick, 2002). These metrics must be captured and measured so as to obtain an objective and quantitative assessment of market opportunities, i.e., where value can be created.

This value is defined through an opportunity algorithm, which is a function of the importance of each outcome and the satisfaction of customers with their ability to achieve each outcome. Using the opportunity algorithm, it is possible to prioritize the outcomes and place them into one of three categories: underserved (customer unhappy with how well they can achieve this outcome), well served (customers are satisfied with their ability to achieve this outcome, though there may be ways to improve satisfaction further), and overserved (customer not only are satisfied with their ability to achieve this outcome, but there is room to simplify solutions—there is room for disruption).

Outcome-driven Innovation defines these metrics as customer needs and builds upon them. For example, it is possible to identify segments of opportunity by clustering respondents according to needs similarity (outcome-based segmentation), discovering in this way new segments of opportunity that could never be unveiled by traditional segmentation methods.

When we consider Outcome-Driven Innovation in conjunction with the Business Model Canvas, we observe that the two theories address complementary aspects of innovation strategy. The Business Model Canvas allows for understanding in a holistic way the system set up by a company to provide its value proposition to customers, without assessing the value created for the customer. Outcome-Driven Innovation measures the value created for the customer, without directly elaborating on how this value proposition is created and made available to customers.

In the new business model perspective that we are proposing, the advantage derives from addressing existing opportunities, not only by identifying innovative product or service solutions, but extending the ideation to the business model around these product or service solutions, by considering for the entire model the potential impact on customers’ satisfaction metrics—namely, their desired outcomes. As such the entire business model is innovative and may be considered an outcome-based business model.

The outcome-based business model innovation is applied as follows (along the nine blocks of the Business Model Canvas):

1) Value Proposition. An innovative value proposition is addressed using the outcome-driven innovation approach. The problem that customers are trying to solve or the goal they are trying to achieve (and for which they will hire this value proposition) is described as the core job to be done. The job has to be described from the job executor’s (customer’s) point of view (what the customer is trying to achieve) rather than from the product point of view (what the product is actually doing). As an example, what a weed killer does is kill weeds, but the job for which a farmer “hires” the weed killer is growing a crop.

The job is analysed by means of the job map (Bettencourt & Ulwick, 2008). A job map gives a picture of how thoroughly the job is covered by the current solutions, offering an early insight into expansion areas for the company itself and/or entry opportunities for competitors. Customer needs—the outcomes described earlier, which executors are trying to achieve—are
catalogued for each step of the job (Ulwick & Bettencourt, 2008). Outcomes must be expressed as solution-independent statements, formulated in an unambiguous and actionable way. In addition to the core job, there are also adjacent jobs (other things executors do in connection with the core job) and emotional jobs (how executors want to feel), as well as consumption chain jobs (what executors must do in order to get and use the proposed solution).

The complete set of outcomes and jobs are obtained through qualitative interviews with job executors and will normally contain between 50 and 150 “need” statements. Through a quantitative survey of job executors, all these statements will be rated in terms of importance and satisfaction. These values will be translated into opportunity values by the opportunity algorithm.

(2) Customer Segments. The quantitative nature of this analysis allows for the clustering of respondents according to the kind of needs they have (“factor and cluster” algorithms are applied, based on the opportunity scores). This leads to the discovery of segments of opportunity. A strategy may be defined for each segment, and decisions may be taken on which ones to address and on how to tailor the value proposition for each one.

(3) Channels and (4) Customer Relationships. These bring value to the way customers receive the proposed solution, learn to use it, get it installed (when applicable), maintain it (when needed), to repair it (if necessary), and so on. The consumption chains jobs—and in some case their outcomes—will give an indication of what creates value in this part of the model.

(5) Key Partnerships, (6) Key Resources, and (7) Key Activities. This portion of the model describes how things are done. ODI focuses on what to do and for whom, but from ODI we obtain also a clear picture of the value components. It is a logical strategy for controlling what creates value (directly or indirectly) and not bothering about what the nonessentials. We get a strong indication of what we have to focus on, and conversely, we don’t get direct information about what to “make or buy,” although we do have the elements that will support us in those decisions.

(8) Revenue streams. Without making too hasty a generalization, we can say (as a general guideline) that the customer is prepared to pay for each individual value component, and only for that. In complex value chains, the elements of value may lie with different players in the chain. This model gives us a better understanding of who is creating more or less value for the customer, and we can use this information to decide who in the chain should manage which revenue stream.

(9) Costs. The cost structure is mainly determined by the internal blocks in the canvas.

Practical Cases

In accordance with case study methodology, our cases are chosen for theoretical rather than statistical reasons (Glaser & Strauss, 1967; Yin, 2002), with the specific purpose of extending emerging theory (Eisenhardt, 1989). We use a multiple case strategy to obtain “more robust theory because the propositions are more deeply grounded in varied empirical evidence” (Eisenhardt & Graebner, 2007, p. 27). However, choosing right and accurate cases in very small samples is a challenging endeavour (Seawright & Gerring, 2008). In order to justify the choice, the cases have to represent some quite unique and outstanding phenomena or practices in relation to the subject undergoing study (Siggelkow, 2007). We have selected two organizations where the proposed methodology has been applied to identify new areas of value creation. The first case (MacMillan & McGrath, 2005) has been shown in literature to have evidence of the applicability of this approach: it is a case in which, in a mature market, a new business model has been developed around a recognized “new element of value” in the value proposition.
The ready-mix concrete industry is very mature. Companies offer standardized products and play by well-established rules. In this industry, the value proposition consists of a commoditized product, charged by volume. Still, even in this situation it is possible to identify needs that are not appropriately served.

CEMEX realized that although customers considered concrete a commodity product, they valued deliveries: in other words, the right amount of concrete at the right time. In ODI terms, that outcome could be written up as “minimize the likelihood of having idle staff due to a delay in ready-mix concrete delivery” and “minimize the likelihood that ready-mix concrete perishes because it is delivered at a time it cannot be used.”

Building a system to respond to these key needs required acting deeply on the business model. Having deliveries as the key source of the value meant learning from companies in other industries—companies such as FedEx or pizza delivery companies. “Short-notice delivery within a time window” is an additional value proposition that can be charged separately. In Business Model Canvas terms, CEMEX acted on the value proposition and created an additional revenue stream.

In order to sustain the promise, CEMEX had to make the delivery system a core element of the organizational structure, so the company made the logistic system a Key Resource and raised fleet management to the rank of Key Activity. The new proposition was also reflected in new elements in the cost structure, in particular the fleet cost itself and the disposal of the surplus needed to handle short-notice orders.
This reorganization proved to be very successful, and CEMEX grew from a regional player to “the third largest ready-mix concrete business in the world, with plans to capture the number two spot.” (MacMillan & McGrath, 2005).

Note that the risk in undertaking such a transformation depends on the level of uncertainty regarding underserved outcomes. Because ODI provides quantifiable data on those outcomes, the risks are dramatically reduced.

The second case, which is drawn from our research, offers direct experience of ODI practice. A major domestic appliance manufacturer was trying to identify breakthrough innovation opportunities for washing machines in the consumer market. In job-to-be-done terms, a solution-independent description of the job can be relatively general: the job is “cleaning a dirty item of laundry at home in order to make it usable again.”

As in the CEMEX case, this market is very mature, and solutions have been developed for several decades now. One might suppose that the basic needs have been clearly understood and that real opportunities may come only from adjacent jobs and new fancy functionalities. But this is not the case.

When studying the market of people cleaning dirty items of laundry in order to make them usable again, and understanding all the outcomes that these job executors are trying to achieve, we identified a large number of underserved ones—including, surprisingly, in areas that we expected to be better covered.

In particular, users are very concerned about the potential for clothes to become damaged during cleaning and are still unsatisfied with the ability of current solutions to handle stains that are difficult to remove. In fact, there is a market segment that we may call “stain freaks” that is surprisingly large and that is highly dissatisfied with everything relating to stains. On second thought, perhaps this should not be surprising, as we are daily overwhelmed by detergent advertising. But if this is a key area of unmet needs, why should the appliance manufacturer surrender it completely to the detergent manufacturer?

It comes out from the technical analysis that significantly better cleaning results may be obtained when the program of the machines closely matches the temperature curve requirements of the selected detergent. That is, an appliance could promise a measurably higher level of performance if it were employed with a known detergent, expressly matched to a program.

This is achievable in technical terms. But this solution doesn’t fit at all in the current business models of the two industries. To determine the viability of this approach, we undertook a business model ideation session. Thanks to the ODI analysis, we knew in advance that there
was a significant amount of value to be created for the customer by offering a credible improvement in stain removal. The initial tile in the mosaic was to assume an additional value proposition constituted by a “program-optimised detergent.” This value could be built internally or externally. A key partnership with a detergent manufacturer might be the fastest way to that goal, but in that case, the question was how to leverage the Business Model Canvas blocks related to channel, customer relationship, and revenue stream.

Even if a detergent manufacturer were interested in providing a dedicated detergent to an appliance manufacturer, it is difficult to imagine that the latter taking ownership of promotion and distribution, because that would take the appliance manufacturer away from its core business. On top of that, the promotion would have to overcome customers’ existing expectations regarding how they buy detergent and washing machines (i.e., not in tandem: customers are used to choosing their own detergent) and make them aware of where they could get this marvellous solution.

For this reason, a focused brainstorming session was given over to generating options for the different blocks, like for example alternative value propositions (a personalized detergent, branded as the appliance, or by a prime brand), alternative channels (service point network, company website, third-party website such as Amazon), and so on.

An overview is given in Figure 3. Most of the options shown are self explanatory, and it is beyond the scope of this paper to go into more detail.

![Figure 3 Washing Machine: Outcome-Based Business Model Options](image)

The prime criterion for selection is that the option will get the job done better. Having acknowledged that there is no chance that an appliance manufacturer will become a leading detergent provider (with the exception of buying one, which is not a viable option in this case), a partnership is the obvious solution. We developed two partnerships ideas (one, partner with a leading brand, or two, partner with a third-party manufacturer) and two value-proposition approaches: providing the solution under own name or under joint naming (“detergent brand” for “appliance brand”).

From the perspective of the job to be done, there is a preference for the leading brand, which will be able to bring to the venture the experience and the know-how to create the winning detergent; but the leading brand may not have the motivation to enter the venture if it doubts its ability to get a good return on its name. Even if it believes it will get returns, the leading brand still may not be motivated to distribute the product through its channels, at least in the initial phase. An alternative is distribution shared between both partners, along with a Web portal, which can provide the information customers need to use the product correctly. This solution has
the added benefit of addressing the customer’s interest in learning how to use the product correctly, which was identified as an adjacent opportunity.

Adopting this option doesn’t close the door on distribution via other Web portals (such as Amazon) or directly via the detergent’s own channel if the product should experience huge demand. But as a starting point, we thought it best to focus on informing the customer of the existence of the solution, giving them reasons to try the new solution (respect for the detergent brand will help in this), making it easy to get (Web sales when no service point is in reach), and teaching them how to use it correctly.

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The revenue stream choice is driven by a clear connection between a revenue factor and an element of the value proposition. The solution for removing hard-to-clean stains, as additional value element in the proposition, can be billed independently. The billing mode will depend on factors such as loyalty goals, buying threshold, etc.

As for costing, it will depend primarily on the nature of the partnership.

One huge benefit of ODI analysis is that it reveals the impact of different approaches on all the other affected outcomes of the core job, on the consumption chain jobs, and on the adjacent jobs. We can assess and compare in an objective way the value created for the execution of the core job and the jobs around it, so not only can we trust that the value created by the improved stain removal will be appreciated, but we can also get a reliable guide to the different options for the creation of a new business model.

Our work with the washing machine manufacturer is ongoing, so we cannot provide more information on the decisions that the company will take, going forward. But already we see similar solutions coming to the market, and soon the market will reveal which choice is the most successful.

**Results and significance**

Developments in the global economy have altered the traditional balance between customer and supplier. New communications and computing technology and the establishment of reasonably open global trading regimes mean that customers have more choices, a wide variety of customer needs can be satisfied, and supply alternatives are more transparent. Companies strive to assess the value a given product or service has for customers. Until recently, there was no way find out other than to make a real product and then try and sell it.

But over the past two decades, companies have begun to adopt the ideas and principles associated with the customer-driven approach: understand what the customer’s needs are, and
then to invest in the creation of a new product or service that can satisfy those needs. But even having embraced customer-driven thinking, US companies still suffered failure rates of 50%–90% when they attempted innovation (Ulwick, 2002).

Entrepreneurs must recognize that their business model may affect the way a good product delivers value to the customer, to the extent that a bad model may even prevent the company from innovating successfully and serving emerging needs. The job-to-be-done theory, extended with outcome methodology, provides tools to identify (all the) individual elements of dissatisfaction in the execution of a job, and so to assess how well a new solution (innovation) improves satisfaction. This is a value creation assessment. For its part, the Business Model Canvas teaches us that the solution is not just the delivered product or service, but includes the overall setup that makes the solution available to the customer. It is then natural to extend the outcome-based assessment of the value created by the product to the entire business model.

**Conclusion**

This paper presents an innovative business model capable of truly exploiting strategic opportunities in the market. The cases presented give some evidence of its usefulness in at least two respects: using ODI analysis, it is possible to extract valuable information for the finalization of many aspects of the business model. As the CEMEX case shows, basing business model decisions on the optimization of elements of value creation may bring very successful results.

We are applying this approach to other industries, in order to better validate the assumptions, and to streamline processes that will make application of the concepts easier. Meanwhile, we continue to monitor the present implementation in order to see if longer-term developments proceed as we expect. So far, our expectations have been confirmed.
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The Influence of Corporate Social Responsibility on Performance in Indonesian Companies

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Abstract
As a developing country with many corporations operated in natural resources related business, the world also demands Indonesian companies to act more responsibly. The paper examines the influence of corporate social performance (CSP) to corporate financial performance (CFP) in Indonesian companies. After analyzing the theories and previous research related to CSP and its relationship with CFP both in global and Indonesia contexts, content analysis of 2012 sustainability reporting (SR) published by Indonesian companies will then be employed using GRI (Global Reporting Initiative) index to measure the CSP of each company. There were 29 Indonesian companies which published SR in 2012. The CSP will then be correlated to ROE and ROA as measurement for CFP by involving company’s asset, industry group, shareholder type, and number of independent commissioners as control variables. Results indicate that CSP has a positive impact to CFP with asset, industry group, shareholder type, and number of independent commissioners as a control variable. The research shows a significant relationship between CSP and CFP in Indonesian companies. However, as this research only using SR in measuring CSP, more research is needed to include companies that have done CSR programs but have not published sustainability reporting (SR).

Keywords – CSR, CFP, SR, Indonesia
Introduction

As has been explained by ISO 26000 (2010), social responsibility is the responsibility of an organization for the impact of its decisions and activities on society and the environment, through transparent and ethical behaviour that contributes to sustainable development, health and the welfare of society; takes into account the expectations of stakeholders; is in compliance with applicable law and consistent with international norms of behaviour; and is integrated throughout the organization and practiced in its relationships. This is in line with the concept of corporate social responsibility which proposes that a private corporation has responsibilities to society that extend beyond making a profit (Wheelen and Hunger, 2011: 72), attempting to harmonize the goal of achieving economic prosperity, environmental quality, and social justice, or turning the traditional financial bottom line to be triple bottom lines (Elkington, 1997: 2).

Many believe that corporate social responsibility (CSR) activities will bring many benefits to the company. Porter and Kramer (2006) emphasized that strategic CSR will minimize the increasing risk of government regulations, exposure to criticism and liability, and consumers’ attention to social issues. Furthermore, they concluded that CSR will become increasingly important to competitive success. Meanwhile, Welter (2011) summarized the previous literatures of benefits of CSR into three groups, i.e. philosophical purposes, financial reasons, and competitive advantages.

Indonesia is currently on the number 16th of the biggest economy in the world and is predicted to reach position of number 7th in the world (McKinsey Global Institute, 2012). Indonesia is also the only country in the South East Asian region that become the member of G-20 (Group of Twenty), the forum for the governments and central bank governors from 20 major economies in the world. As a place where many companies operate in natural resources related business, the eye of the world also turn to Indonesia to be more socially and environmentally responsible.

The objective of this research is to understand the relationship between the corporate social performance and corporate financial performance in an emerging economy such as Indonesia.

Literature Review

Research on the relationship between corporate social responsibility (CSR) and financial performance has attracted many researchers for years. Generally, the research intends to prove that socially responsible activities by a company will lead to a positive impact to company’s financial performance. However, there have been inconclusive results of the relationship between the two.

Oeyono, et al. (2011) listed several previous research that show the positive relationship between the CSR and financial performance, among others are research by Odemilin et al. (2010), Lawrence and Weber (2008), Moneva et al. (2007), Ruf et al. (2001), Verschoor (1998), Balabanis et al. (1998), and Cochran and Wood (1984). Meanwhile, in-depth analysis by Margolis dan Walsh (2003) on 127 previous research showed that there is positive relationship and only few negative relationship between corporate social performance and corporate finance performance. A meta-analysis of 52 previous research by Orlotzky et al. (2003) also concluded that there is positive relationship between corporate social responsibility and company’s performance. For Indonesian case, Oeyono, et al (2011) investigated the level of CSR conducted by the top 50 corporation in Indonesia and its relationship with company’s profitability and concluded that level of CSR, measured based on Global Reporting Initiative (GRI) guidelines, has a positive relationship with profitability, measured by company’s EBITDA and EPS.
On the other hand, Oeyono et al. (2011) also listed some previous research that resulted in no strong relationship between CSR and financial performance. Among others are research by ACCA (2009), D’Arcimoles and Trebucq (2002), and Mittal et al. (2008).

**Corporate Social Responsibility in Indonesia**

Corporate social responsibility has gained formal legal status within Indonesian regulatory framework since the Indonesian President and House of Representatives enacted Law Number 40 Year 2007 concerning Corporation. The article 74 of the Corporation Law states that it is compulsory for companies operate in and/or related to natural resources to conduct corporate social and environmental responsibility (CSER). That CSER fund has to be budgeted by the company and the budget can be treated as company expenses. This law has provoked many critics especially from business community because of a fear that the government will intervene too far to company’s profit distribution in the form of compulsory CSR fund. That strong negative reaction might have led the government to release an ambiguous and relatively weak implementing government regulation Number 47 Year 2012, in which it does not regulate CSER for Indonesian companies in details as it should be, instead, it seemed only repeat the words that has been stated in the Law No. 40 Year 2007.

Beside the enactment of the CRS article in the Corporation law, in fact, there have many existing laws related to CSR issues in Indonesia. Laws for governance issues include Law No. 20 Year 2001 concerning the amendment of Law No. 31 Year 1999 on Eradication of Corruption Practices and Law No. 8 Year 2010 concerning Anti Money Laundering. For human rights, there is Law No. 39 Year 1999 on Human Rights. For environment issues, there is Law No. 32 Year 2009 on Environment Protection and Management. For labour practice there are Law No. 23 Year 2002 on Child Protection and Law No. 13 Year 2003 on Labour. Furthermore, concerning consumer issues, there is Law No. 8 Year 1999 on Consumer Protection, and for fair operating practices, there is Law No. 5 Year 1999 on Prohibition of Monopoly and Unfair Business Practices. Companies operated in Indonesia also have to follow Law No. 25 Year 2007 on Investment, many laws on taxation as well as laws concerning certain industries.

Special for Indonesian State’s Owned Enterprises (SOE) need also to follow Law No. 19 Year 2003 concerning SOE and several SOE Minister Decrees concerning Partnership and Community Development Program (PCDP) for SOE. These regulations say that every SOE has to allocate 4% of its net profit to PCDP which is divided further to 2% for partnership program to help small medium enterprise (SME) in improving its capacity and another 2% for community development program.

The author views that the issuance of the Corporation Law, which include the regulation on CECR has misled misperception among many business community in Indonesia. As it states that CECR is compulsory for companies operated in and/or related to natural resources, many business players from non-related natural resources industries, such as banking and services companies believe that they do not need to conduct CSR activities. Consequently, there are only very few companies in non-natural resources related sector that have good and comprehensive CSR programmes. The author also sees that majority of Indonesian companies still perceive that they have been doing a good CSR programme if their companies have make some donations to natural disaster victims, or philanthropy and/or trees planting activities.

**Methodology**

The purpose of this study is to know the relationship between CFP (Corporate Financial Performance) and CSP (Corporate Social Performance) in Indonesia. Considering data availability, sample of this study is from 2012 sustainability reports (SR) published by
Indonesian companies. The SR publisher are from state’s and regional government’s owned companies as well as private’s owned both domestic and foreign, listed and non-listed, both from natural and non-natural resources based. There are 29 GRI G3.1-based SRs published by Indonesian companies in 2012.

CFP is measured by its accounting-based financial performance i.e. ROA (Return on Assets) and ROE (Return on Equity). CSP is measured using GRI G3.1 standard, consists of 9 economic indicators, 30 environment indicators, and 44 social indicators (which further consist of 11 human rights indicators, 14 labour and descent work indicators, 10 society indicators, and 9 product responsibility indicators). CSP is calculated using the following formula:

\[
\text{CSP (X)} = \frac{\sum_{i=1}^{9} E(X)_i}{\sum_{i=1}^{9} \max E(X)_i} + \frac{\sum_{j=1}^{30} L(X)_j}{\sum_{j=1}^{30} \max L(X)_j} + \frac{\sum_{k=1}^{44} S(X)_k}{\sum_{k=1}^{44} \max S(X)_k}
\]

\[
\max E(X)_i = \max L_j = \max S(X)_k = 3
\]

Where \(E(X)_i\) is the \(i\)th economic indicator score for \(X\)’s company, \(L(X)_j\) is the \(j\)th environment indicator score for \(X\)’s company, \(S(X)_k\) is the \(k\)th social indicator score for \(X\)’s company. The score takes ordinal values from 0 to 3. The value is 0 if the report does not provide any information as required by the indicator, 1 if the report only give less than half of required disclosure, 2 if the report gives more than half of required disclosure, and finally 3 if the report provides the required disclosure fully.

To understand the relationship between CSP and CFP, the author used partial correlation analysis, by employing 3 control variables, i.e. asset (C1), industry group (C2), shareholder type (C3), number of independent commissioners (C4). C1 are defined as the total assets derived from the company balance sheet. C2 is number 1 – 9 industry group as set by International Standard Industrial Classification (ISIC) of United Nations, C3 is shareholder type, i.e. 1 for domestic private’s owned company, 2 for foreign private’s owned company, and 3 for government’s owned company, and C4 is number of independent commissioners in the company.

**Results**

Hypotheses employed in this research are:

\(H_1\) :There is a (significant) relationship between CFP and CSP if asset (C1), industry group (C2), shareholder type (C3), and number of independent commissioners (C4) are used as a control variable.

\(H_0\) :There is no (significant) relationship between CFP and CSP if asset (C1), industry group (C2), shareholder type (C3), and number of independent commissioners (C4) are used as a control variable.

**Statistical Test:**
Control Variables | | CFP
---|---|---
asset (C1), industry group (C2), shareholder type (C3), and number of independent commissioners (C4) | CSP | Significance (2-tailed)
Correlation (r_{cfp,csp})
| | 0.006** | 0.000**
| | 38.70% | 54.30%

The (2-tailed) significant value from the partial correlation analysis between CSP and CFP (ROE & ROA), are 0.006 and 0.000. Both values are less than 0.05, which means that there is a (significant) relationship between CSP and CFP if asset, industry group, shareholder type, and number of independent commissioners as a control variable. Moreover, the partial correlation coefficient value is positive, which means increase in CSP will lead to increase in CFP.

**Conclusion**

This research shows that for Indonesian companies which has published sustainability reporting, its CSR activities have brought positive impacts in the form of excellent financial performance. This is an important message for business player in Indonesia who generally still sees that corporate social responsibility is more as burdensome and cost centre for the company.

However, as the number of companies which has published its sustainability reporting is still very limited, further research involving the company that has not published sustainability reporting need to be done to give a broader and more real picture of the impact of corporate social responsibility activities to financial performance of Indonesian companies.
Abstract
The aim of this paper is to present the results of a study at the Uludağ University that involved 120 Turkish, preparatory class students in different levels to reveal their perceptions of native English speaker teachers (NEST) and non-native English speaker teachers (NNEST). Quantitative data were collected using a questionnaire consisting of 15 questions with a five-point Likert type scale. The results demonstrate that there is a significant difference between the learners’ perceptions of their NEST and NNEST. However, there is not a meaningful difference among different levels. Students showed high preference for NEST because they could learn more about the NEST’s culture. The subjects appreciate both NEST and NNEST in terms of easing their students’ learning process in different aspects. They also find NEST more proficient in high level classes, and listening speaking skills; On the other hand, NNEST are seen to be more proficient in low level classes, and in grammar, writing lessons according to the students’ perception. Students do not have sharp preference for vocabulary and reading lessons. On the whole, the students agree that the lessons should be taught by both NEST and NNEST since they both have good albeit different qualities. Additionally, proficiency of the teachers is seen as far more important than the teachers’ mother tongue. The case of language teaching by NEST and NNEST has not been examined much in Turkey from students’ perspective. Thus, the indications of this study would be enlightening for the NEST and NNEST to apprehend their incompetence and may arouse their consciousness.

Keywords: Native speakers, non-native speakers, foreign language learner perceptions, EFL in Turkey.
Turkish EFL Learner Perceptions of Native and Non-native English Language Teachers

Introduction

English is the most frequently spoken and taught language all around the world. The teaching of English as a second language is performed by two groups of teachers; native speakers (NEST) and non-native speaker (NNEST) teachers. Brown (2013) defines a Native speaker (NEST) as someone whose main or first language (L1) is English and who has learned it first as a child, and Non-native speaker (NNEST) as someone who learned a language other than English as a first language, and is learning or has learned English as an additional language (L2). The native / nonnative concern is a very interesting topic calls amazing interest in the field of English Language Teaching (ELT). Many researchers have attempted to study the subject. For instance, Benke and Medgyes (2005) studied differences in teaching behavior between native and non-native teachers. Liu & Zhang (2007) analyzed student perceptions of native & non-native teachers. Alseweed (2012) investigated university student’s perceptions of the influence of native and non-native teachers. Brown (2013) examined students’ attitudes and perceptions towards the teaching behavior of native and non-native teachers.

Although considerable research has been done, the literature is surprisingly poor in related research on Turkish EFL learners. A review of the recent literature yielded several studies with Turkish participants. Tatar and Yıldız (2010) studied empowering nonnative-English speaking teachers in the classroom. Üstünluoğlu (2007) investigated university students’ perceptions of native and non-native teachers. Çelik (2006) examined the artificial battle between native and non-native speaker teachers of English in Turkey. Bayyurt (2006) analyzed non-native English language teachers’ perspective on culture in English as a Foreign Language classroom.

It is obvious that there are very few studies on Turkish students’ perception of their native and non-native teachers of English. Thus, it is desirable to perform research focused on Turkish EFL learners. The purpose of the present study is to identify the general perceptions of preparatory class students of native speaker English teachers (NEST) and non-native speaker English teachers (NNEST) at Uludağ University, in Turkey. The study aims to find out which teacher a) makes students learn more about the target culture, b) eases the learning process of the students, c) is more proficient in high / low level classes, d) is more proficient in which language skill.

Method

Participants

The present study was carried out in Turkey with Uludağ University School of Foreign Languages preparatory class students who had been taught English by both native and non-native English speaking teachers for two semesters. 120 respondents, 40 elementary level, 40 pre-intermediate level and 40 intermediate level, evaluated their native and non-native teachers of English. The students study a total of 24 to 30 contact hours of English per week according to their level of English, distributed among the four language skills (e.g., listening, speaking, writing, and reading), grammar, and vocabulary lessons. They had five different teachers, most of whom were NNEST who share the target language learning experience and the students’ native language. There were only two NEST both of whom arrived from the USA with on Fulbright scholarship.

Questionnaire

At the end of the academic year, quantitative data were collected by means of a one-page, double-sided questionnaire consisting of 15 questions for NEST and 15 questions for NNEST, and also two general statement questions. The questionnaire was in the native language, Turkish, to avoid any language boundaries, especially for elementary level students.
The students were asked to rank the statements using a five-point Likert-type scale. In this scale 1 represents strong disagreement, 2 represents disagreement, 3 represents neither agreement nor disagreement, 4 represents agreement and 5 represents strong agreement. The questionnaire included five sections: (a) teaching target culture (Item 1); (b) easing the learning process (Items 2-7); (c) proficiency of the teacher in high / low level classes (Items 8-9); (d) proficiency of the teacher in different language skills (Items 10-15); (e) general statements (Items 16-17). A brief instruction was written at the beginning of the questionnaire to explain the purpose of the study and to clarify important terms used throughout the questionnaire such as NEST / NNEST. The students were asked to respond with honesty.

Findings and Discussion

According to the participants’ responses, 84% of the students consider they would learn more about the culture of the English speaking people with a NEST. 70% of the students agreed that NNEST is more aware of students’ culture and learning needs. They empathize with the needs of language learners and anticipate learning difficulties. Also, 75% of the students agreed that NNEST knows the English language difficulties of their students better than NEST, thus, is more aware of the students’ needs as they passed through the same experience while learning English as a foreign language.

55% of the students found NNEST more experienced and more conscious of the students’ learning styles. However, 72% of the students stated that NEST is friendlier and they could have a relaxed learning environment in their classes. 76% of the students agreed that they would have more positive attitudes towards the learning of English if they had a NEST. 81% of the students agreed that NNEST can give more assistance to a beginner/elementary level student. 67% of the samples believed that NEST should give lectures in more advanced levels such as intermediate, upper-intermediate.

96% of the participants preferred NEST to NNEST for speaking skill. 59% of the students were also in favor of NEST for listening skill. For reading skill, students preferred NEST 55%. Students supported 85% NNEST for grammar lesson. For writing skill again students prefer NNEST 60%. The students were indecisive for vocabulary lesson, 51% of the students preferred NNEST, 46% preferred NEST.

83% of the students didn’t wish that they only had NNEST of English. 60% of the participants stated that the teacher’s native language is not important if they are good teachers.

Conclusion

The purpose of the study was to understand Turkish preparatory class student perceptions of their NEST and NNEST. As Sun (2014) indicates, the perception of what makes an effective English teacher is changing with the changing views of communicative competence and the awareness of intercultural communicative competence. The effectiveness of English teachers should be determined their linguistic, instructional, and intercultural competence rather than simply being a native speaker of English. The results of the study support this idea. One group of teachers is not superior to the other. The participants had different teacher preferences for different items in the questionnaire.

According to the student participants, both NEST and NNEST contribute to their learning process. In general, students find NEST more effective in teaching about the target culture; however, they find NNEST more aware of their own culture and the students’ learning styles since they experienced the same difficulties while learning English. As NEST provides a relaxed learning environment, students found NEST friendlier, and they have more positive attitude towards learning English with a NEST. Most of the participants suggested that NEST can be helpful for advanced levels whereas NNEST can help beginner levels more.
Participants might have found it difficult to understand a NEST in the early grades. However, the students want both types of teachers to speak only the target language in the classroom. Surprisingly, elementary level students supported this idea more than pre-intermediate level students. The students wanted NEST to teach speaking skills with a great majority. Thus, it can be inferred that students prefer NEST especially for listening and speaking skills in order to learn proper pronunciation of English. On the other hand, the participants prefer NNEST for writing, grammar and vocabulary lessons which often need to be explained clearly by the teacher. Alseweed (2012) found that students prefer NNEST since they can explain lessons more clearly than a NEST by using native language to elaborate ambiguous terms that they could not understand in English. As a result, students mostly wanted to be taught by both NEST and NNEST and they give more emphasis on being a good, qualified teacher rather than the native language of their teacher.

This study can be a parameter for universities’ foreign languages preparatory schools to employ NEST in their school. The results of the study may guide the schools to benefit from NEST effectively. For recommendations, NEST can be informed about the culture of the students whom they are going to teach before they start working in that country, this may lead to high satisfaction of the students. For NNEST in-service training programs can be applied to enhance oral proficiency since the most important weakness of NNEST is speaking compared to NEST in view of the students.
References


### Appendix I

**Student perception questionnaire aimed at their Native English speaking (American) teachers**

<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I can learn better about the culture of the English speaking people</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>with a native teacher.</td>
<td>1</td>
</tr>
<tr>
<td>2. A native English teacher is competent because she is more aware of the</td>
<td>1</td>
</tr>
<tr>
<td>students’ culture.</td>
<td></td>
</tr>
<tr>
<td>3. It is good for a native teacher not to speak any Turkish in the classroom.</td>
<td>1</td>
</tr>
<tr>
<td>4. A native English teacher is aware of students’ language needs and</td>
<td>1</td>
</tr>
<tr>
<td>language learning difficulties.</td>
<td></td>
</tr>
<tr>
<td>5. A native English teacher is friendly because she provides a relaxed</td>
<td>1</td>
</tr>
<tr>
<td>learning environment.</td>
<td></td>
</tr>
<tr>
<td>6. A native English teacher is experienced because she is more conscious</td>
<td>1</td>
</tr>
<tr>
<td>of the students’ learning styles.</td>
<td></td>
</tr>
<tr>
<td>7. I would have more positive attitudes toward the learning of English if</td>
<td>1</td>
</tr>
<tr>
<td>I had a native English teacher.</td>
<td></td>
</tr>
<tr>
<td>8. A native teacher can be more helpful for elementary level students.</td>
<td>1</td>
</tr>
<tr>
<td>9. A native teacher can be more helpful for higher level students.</td>
<td>1</td>
</tr>
<tr>
<td>10. A native teacher can teach speaking skill better</td>
<td>1</td>
</tr>
<tr>
<td>11. A native teacher can teach listening skill better</td>
<td>1</td>
</tr>
<tr>
<td>12. A non-native teacher can teach grammar better</td>
<td>1</td>
</tr>
<tr>
<td>13. A native teacher can teach vocabulary better</td>
<td>1</td>
</tr>
<tr>
<td>14. A native teacher can teach writing skill better</td>
<td>1</td>
</tr>
<tr>
<td>15. A native teacher can teach reading skill better</td>
<td>1</td>
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</table>
## Appendix II

**Student perception questionnaire of Non-native English speaking (Turkish) teachers**

<table>
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<th>STATEMENTS</th>
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</tr>
</thead>
<tbody>
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<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>1. I can learn better about the culture of the English speaking people with a non-native teacher.</td>
<td>1</td>
</tr>
<tr>
<td>2. A non-native English teacher is competent because she is more aware of the students’ culture.</td>
<td>1</td>
</tr>
<tr>
<td>3. It is good for a non-native teacher to speak Turkish during the lesson.</td>
<td>1</td>
</tr>
<tr>
<td>4. A non-native English teacher is aware of students’ language needs and language learning difficulties.</td>
<td>1</td>
</tr>
<tr>
<td>5. A non-native English teacher is friendly because she provides a relaxed learning environment.</td>
<td>1</td>
</tr>
<tr>
<td>6. A non-native English teacher is experienced because she is more conscious of the students’ learning styles.</td>
<td>1</td>
</tr>
<tr>
<td>7. I would have more positive attitudes toward the learning of English if I had a non-native English teacher.</td>
<td>1</td>
</tr>
<tr>
<td>8. A non-native teacher can be more helpful for elementary level students.</td>
<td>1</td>
</tr>
<tr>
<td>9. A non-native teacher can be more helpful for higher level students.</td>
<td>1</td>
</tr>
<tr>
<td>10. A non-native teacher can teach speaking skill better.</td>
<td>1</td>
</tr>
<tr>
<td>11. A non-native teacher can teach listening skill better.</td>
<td>1</td>
</tr>
<tr>
<td>12. A non-native teacher can teach grammar better.</td>
<td>1</td>
</tr>
<tr>
<td>13. A non-native teacher can teach vocabulary better.</td>
<td>1</td>
</tr>
<tr>
<td>14. A non-native teacher can teach writing skill better.</td>
<td>1</td>
</tr>
<tr>
<td>15. A non-native teacher can teach reading skill better.</td>
<td>1</td>
</tr>
<tr>
<td>16. Ideally I would prefer a course taught by a non-native English teacher.</td>
<td>1</td>
</tr>
<tr>
<td>17. Native language of the teacher is not important as long as she is competent.</td>
<td>1</td>
</tr>
</tbody>
</table>
The Influence of Corporate Social Responsibility on Performance in Indonesian Companies

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Integrating Mentoring for Capacity Building among Newly Employed Secondary School Teachers in Rivers State

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Abstract
Beginning teachers face numerous challenges such as reality shock, unanticipated loneliness, problem of classroom management, inadequate knowledge of the use of instructional materials and preparation of lesson notes. Mentoring has been identified as a key strategy for increasing the capacity of beginning teachers to gain relevant skills, overcome stress associated by these challenges, socialize better at school and advance more effectively in their profession. This study has examined mentoring for capacity building among newly employed senior secondary school teachers in Obio Akpor Local Government Area of Rivers State Nigeria. The design of the study was correlational and was guided by three objectives, three research questions and three null hypotheses. A sample of 201 newly employed teachers was used for the study. It was a census population as all the newly employed teachers within three years were involved. Two instruments titled “Teacher Mentoring Questionnaire” (TMQ) and “Teacher Capacity Building Questionnaire” (TCBQ) were used for the study. TMQ was used to elicit information on mentoring, while (TCBQ) elicited information on capacity building indices: self-efficacy, organizational socialization and job involvement from respondents. The (TMQ) instrument has a reliability of 0.78 while the TCBQ have reliabilities of 0.90, 0.89 and 0.81 respectively for three capacity indices. Pearson Product Moment Correlation Coefficient was adopted to correlate mentoring with self-efficacy, organizational socialization and job involvement. The results revealed that mentoring relationship related highly and positively with self-efficacy and organizational socialization but moderately with job involvement among the teachers. Based on the findings, some recommendations were made. The ministries of education should put in place formal mentoring programme for all newly employed teachers in order to enhance their capacity and school principals should encourage newly employed teachers to be open to mentoring.

Keywords: Mentoring, integrating, capacity building, organizational socialization
Introduction

Education remains the most vital strategy for continuous development of any nation, as young children and adolescents are the future hope of a nation. An educational system that ensures greater achievements and performance of students is pivotal for the dream of any nation to belong to the world’s leading economy. To achieve this dream teachers are the most powerful professionals for the attainment of the nation’s growth. Rivers State Government of Nigeria in 2011 embarked on massive recruitment of teachers to boost the education standard in her public schools. This noble venture is in line with the growing consensus that quality teachers are the most important factor in determining students’ academic performance (Aminu, 2013). Federal Government of Nigeria (2013) in her National Policy on Education noted that no educational system could rise above the quality of its’ teachers. Center for Public Education (2014) supported this view in her report, which revealed that students’ achievement is more heavily influenced by the quality of the teacher than other factors such as students’ race, prior academic records and family circumstances. The report further indicates that achievement gap widens each year between students with most effective teachers and those with least effective teachers, especially when students receive instructions from quality teachers over many years.

Beginning teachers face a considerable amount of problems in schools and classrooms. Goddard & Obrien (2003) observed that beginning teachers’ initial experience in the classroom is characterized with reality shock and unanticipated loneliness at their workplace. Further, Ingersoll and Kappan (2012) noted that elementary and secondary school teachings involve intensive interaction with school children and that the works of teachers are done largely in isolation from colleagues. This isolation can be very difficult to new teachers with little or no teaching experience. Other areas of difficulties include strains of daily instructions, preparation of lesson notes, discipline and motivation of students, heavy teaching loads and use of instructional materials (Ingersoll and Strong, 2011). Feiman-Namser (2001, p1026) indicated, “The first years of teaching are an intense and formative time in learning to teach, influencing not only whether people remain in teaching but what kind of teachers they become”. Teaching according to Westerman (2006) is the only profession that requires beginners in the field to do the same work as experienced teachers. Teaching is so complex that even the most academically equipped beginners need much to learn in putting their academic knowledge into actual teaching. Ibe-Bassey (2009) further argued that though teacher training equips beginning teachers with critical knowledge about practical teaching, some of the most critical elements of teaching are learned in workplace when beginning teachers start their professional teaching careers.

One strategy that may help beginning teachers overcome some of the initial shocks is to build their capacity in order to enhance smooth transition into the profession. Mentoring of new teachers may be used to achieve this objective. Various research have shown that mentoring has positive effects on career advancements and its an influential instrument for individuals in various professions to develop high level of interest in their various chosen careers (Dreher & Ashi, Lyness & Thompson cited in Okeke & Ugwu 2015). Mentoring of newly employed teachers is necessary for especially a country like Nigeria, which is characterized by declining standard of education and low quality graduates (Amadi, 2012). This observation was earlier buttressed by a report from the Federal Ministry of Education (2007) that disclosed that Nigeria is battling with a sluggish educational system marked by examination malpractices, cultism, and academic incompetence. There is therefore a need to introduce various palliative measures such as mentoring relationships in schools to improve the capacity of novice teachers to properly engage students, develop necessary and develop professionally with limited stress. Beutel and Spooner-Lane (2009, p. 351) wrote that “expert mentoring assist beginning teachers to build their
teaching capacities more quickly and also lays the foundation for innovative professional practice.”

**Review of Variables of Interest**

Two variables of interest in this study are mentoring and capacity building. One good support strategy that can be adopted by beginning teachers to remain and grow in teaching profession may be to establish a mentoring relationship with more experienced teachers within the school system. Campbell and Campbell (1997, p727) described mentoring as “a situation in which a more experienced member of an organization maintains a relationship with a less experienced, often new member to the organization and provides information, support, and guidance so as to enhance the less experienced member’s chances of success in the organization and beyond”.

Mentors are usually older and more experienced teachers that are committed to making a positive influence in nurturing new generation teachers (mentees) to achieve their developmental aspirations by performing two essential functions or roles: career and psychosocial development functions. Carrier functions comprise sponsorship, exposure and visibility, protection, coaching and giving challenging assignments while psychosocial functions are made up of friendship activities, role modeling, counseling and acceptance (Kram 1985). In relation to career functions as regards to beginning teachers are shared experiences, knowledge and advices that can help a mentee improve and advance in the teaching profession. These include improvements in classroom skills, use of technology, teacher certifications, promotions, recommendations to attend conferences, and protection from undue punitive actions, refer to Ross, Viscio, Tricarico and Short (2011) for more details and practical guide.

Key benefits of psychosocial functions include stress reduction (House, 1981), increased confidence and self-efficacy (Newby & Heide, 1992) and better networking (Terezini & Pascarella, 1980) resulting mainly from bond of friendship between the pair. Okeke & Ugwu (2015) in a study of the prevalence of mentorship relationships among five hundred and eighty two (582) female undergraduates in the faculty of education, University of Port Harcourt, Nigeria reported high degrees of socialization among mentored female students when compared to non-mentored students. They recommend the use of mentoring as a means to enhance various areas of the students endeavors.

Mentoring relationships among new teachers in the secondary schools covered in this study can best be described as one-on-one personal relationships between more experienced registered teachers with more than ten years of teaching experience and less experienced teachers with less than three years teaching experience. It was predominantly informal in nature, developed naturally during the course of interactions between the pair. None of the schools in this study were involved in formal mentoring characterized by deliberate matching or assignment of mentors to mentees as explained by (Regins & Cotton, 1997).

Deans, Oakley, James & Wigley (2006) described mentoring and coaching as popular capacity building tools, especially in the area of leadership development.

Capacity building is defined by (Brown, LaFond & Macintyre 2001) as a process that improves the ability of a person, group, organization or system to meet its objectives to perform better. Capacity building does not therefore refer to mere existence of potential but the harnessing and enhancement of existing potentials to identify and solve problems (http://capacity.undp.org/7c.). Glatthorn (as cited in Chukwu 2009) defined capacity building as in relation to teaching as a professional development to build teacher confidence and also equip them with the necessary skills to enhance student learning. UNESCO (2006, p.30) observed that capacity building in educational system “is important both for functioning of education system
as well as capacity building in other sectors” as most sectors and structures rely upon a well-functioning educational system to further develop and improve their capacity. The concept of capacity building is however difficult to assess. Brown Lafond and Macintyre (2001) complained that the concept of capacity building is multi-dimensional, somewhat intangible and often measured indirectly through its indicators. Capacity building was assessed in this study through three indices namely: self-efficacy, organizational socialization and job involvement. These indices were considered to be relevant for strengthening the capacity of beginning-teachers to believe in themselves, socialize properly and perform core functions. Self-efficacy builds confidence of the beginning-teacher that he/she has the capacity to perform teacher functions. Organizational socialization helps the newly employed teachers to develop positive relationships with fellow teachers, administrative staff, students and other important members in and outside the school system. Job involvement enables the new teachers to ‘learn the rope’.

Self-efficacy is the belief in one’s capabilities to achieve desired goals or manage prospective situations (Bandura, 1995). Teachers with strong belief in their abilities tend to be more positive with their teaching and are receptive to new instructional practices (Friedman & Kass 2002). Bozeman and Feeney (2007) conducted a study that examined the effect of mentoring on self-efficacy of early career teachers in Southwest Florida School Districts. A total of 194 responses were received from 1800 invitations issued to teachers within the first three years of teaching in the three school districts that were studied. Result revealed that 155 out of the 194 who are doing well in their teaching profession were assigned to head teachers who have been in the profession for over twelve years as their mentors. This present study similarly investigated two hundred and one (201) out of three hundred and twenty eight (328) newly employed teachers who were informally mentored on the relationship between mentoring and self-efficacy as related to capacity building. These teachers received informal mentoring from the older experienced teachers and the head teachers in their various schools.

Organizational socialization is a learning and adjustment process through which newly employed staff learns to fit into the organization, acquire social knowledge of a particular organization, and understand expected behaviors of their role in order to participate successfully in the organization (Ozkalp, Sungur, & Cengiz, 2006). Oguntunde (2012) conducted a study in Nigeria to determine the relationship between mentoring and organizational socialization among 96 randomly selected student-teachers in agricultural teacher-preparation programme. Results revealed that most of the teachers who have grown well in the profession were those who had the opportunity to understudy and socialize with their senior colleagues when they were employed. The role of mentoring in enhancing friendship, knowledge sharing as well as professional development (Kram, 1985) informed the inclusion of organizational socialization as an index of capacity building in this study.

Job involvement is defined by Agartala (2012) as an individual’s psychological identification or commitment to his or her job. It measures the extent to which an employee is cognitively occupied with, engaged in, and concerned about their present job. Kyeyune, (2013) studied the influence of mentoring on teachers’ sustainability and job involvement in Lagos metropolis, Nigeria. A random sample of 200 participants was selected from ten public and ten private secondary schools in the area. Results revealed significant relationship between mentoring and job involvement among the sampled teachers. Oladele (2009) in addition examined mentoring practices and how they affect teachers’ involvement in their profession in Ekiti state, Nigeria. Findings showed that principals who stayed under experienced teachers when they were newly employed got more involved in their assignments. Job involvement was
included as an indicator of capacity building as it helps to develop employee capacities as well as corporate performance (UNESCO, 2006).

**Statement of the Problem**

There is a general outcry on the falling educational standard in Nigeria, particularly in Rivers State (Ireju & Ahiakwo, 2013). Without intervention, the future educational standard will continue to have a deleterious impact on the quality of teachers and the students produced for the labour market. In 2011 the government of Rivers State embarked on massive recruitment of teachers as a measure to improve the falling standard of education in the state. Surprisingly, some of the newly employed teachers were not well trained and were grossly inexperienced. To further complicate the situation, some did not study education as a discipline, therefore not trained to be professional teachers. In addition to these maladies there are no adequate training programmes to improve their teaching skills after employment. It is very pertinent at this point to state a consensus agreement. The general out-cry on the continued falling standard of education is not based on the quantity (number) of teachers in the system but on the quality of teachers who are less experienced to deliver progressive education to the 21st century learners for improved academic performance. The low level competency or capacity of the newly employed teachers may result to some psychological dissonance such as low self-esteem, poor self-efficacy and poor job performance. A good mentoring programme in these schools may help to alleviate these problems and also improve the capacity of beginning teachers.

This study was designed to determine the extent to which experienced teachers in secondary schools covered in this study practice mentoring relationships with their newly employed colleagues. The objective is to determine if mentoring functions performed by these experienced teachers relate to mentee capacity building measured by three capacity building indices; job involvement, organizational socialization and self-efficacy judging from mentees perspective.

**Methodology**

This study was carried out among senior secondary school teachers in Obio Akpor Local Government Area of Rivers State in Nigeria. The design for the study is correlational and the population for the study consisted of all the 328 newly employed senior secondary school teachers in the area in 2011. A total of 307 of the newly employed teachers were physically present at the time of the study and responded to the instruments. However, 201 of the respondents who indicated that the head teachers and some senior colleagues in their various schools informally mentored them constituted the sample for the study.

Two instruments were used for data collection; Teacher Mentoring Questionnaire (TMQ) and Teacher Capacity Building Questionnaire (TCBQ). Teacher Mentoring Questionnaire (TMQ) is a self-structured questionnaire with 15 items all based on a wide exposure to literature relating to mentoring functions as performed by mentors in the school system. The reliability of the instrument was tested using Cronbach alpha and a value of 0.78 was obtained. Teacher Capacity Building Questionnaire (TCBQ) comprises the capacity building indices of self-efficacy, organisational socialization and job involvement. The self-efficacy was adopted from Teacher sense of Efficacy Scale (TES) developed by Tschannen-Moran and Wool folk Hoy (2001) with an alpha value of 0.90. Organisational socialization was adopted from task socialization of Newcomer Socialization Questionnaire (NSQ) of Haueter, Macan and Winter (2003) with an alpha value of 0.89 while job involvement was adopted from Kamungo’s (1982) 10-item questionnaire with an alpha value of 0.81. Data collected were analysed using mean, standard deviation and Pearson product moment correlation.
Results and Discussion

<table>
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<th>S/N</th>
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<td>1</td>
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<td>Mentoring Self-efficacy</td>
<td>201</td>
<td>54.07</td>
<td>36.05</td>
<td>3.39</td>
<td>0.752</td>
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<td>2</td>
<td>Organizational Socialization</td>
<td>Mentoring Organizational socialization</td>
<td>201</td>
<td>27.96</td>
<td>54.07</td>
<td>3.48</td>
<td>0.671</td>
<td>0.000</td>
<td>0.05</td>
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<tr>
<td>3</td>
<td>Job Involvement</td>
<td>Job Involvement</td>
<td>201</td>
<td>22.67</td>
<td>1.90</td>
<td>0.661</td>
<td>0.007</td>
<td>0.05</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Table I: Results of the relationship between mentoring and capacity building indices (self-efficacy, organizational socialization and job involvement) among the newly employed teachers

Results obtained from this study are presented in Table 1 above and revealed that there is a significant relationship between mentoring and self-efficacy, \( r = 0.752, p < 0.05 \). The strength of the relationship between mentoring and self-efficacy \((0.752^2 \times 100)\) is 56.6%, this implies that 56.6% variation in mentoring of the newly employed teachers can be explained by self-efficacy. The mean and standard deviation for mentoring are 54.07 and 3.39 respectively and that of self-efficacy 36.05 and 2.56. Significant relationship also exited between mentoring and organizational socialization, \( r = 0.671, P < 0.05 \). The effect size or strength of the relationship between mentoring and organizational socialization \((0.671^2 \times 100)\) is 45%. Therefore 45% variation in mentoring of the newly employed secondary school teachers can be explained by organizational socialization. The mean for mentoring was 54.07 and that of organizational socialization was 27.96. Standard deviation of 3.39 and 3.48 were obtained for mentoring and organizational socialization respectively. Finally, the relationship between mentoring and job involvement was significant, \( r = 0.661, p < 0.05 \). The strength of the relationship between mentoring and job involvement is 43.7%. Therefore 43.7% variation in mentoring can be explained by job involvement while 56.3% is accountable to other factors. Mean = 54.07 and SD = 3.39 for mentoring; Mean = 22.67 and SD = 1.90 for organizational socialization. All the three variables under investigation correlated significantly and positively with mentoring. The \( r \)-value was strongest for self-efficacy.

Results obtained from this investigation indicate that mentoring relates significantly and positively with the three indices of capacity building: self-efficacy, organizational socialization and job involvement. The fact that the three capacity building indicators that were investigated related positively with mentoring supports Deans Oaklay, James & Wrigley (2006) that the main aim of mentoring is to build the capacity of the protégée.

Self-efficacy recorded the highest \( r \) value with mentoring. This variable is more of psychosocial functions performed by mentors as theorized by Kram (1985). It can be inferred that mentors in these secondary schools performed more of this psychosocial mentoring function or that the mentees are more interested in improving in this area of teachers’ capacity. Mentors can help their protégée accomplish difficult assignments, repeatedly tell them that they can do better and point out their peers who have accomplished. With these their mentees are more likely to develop higher self-efficacy and improved capacity. Kram (1985) found that mentees felt more competent, self-confident and develop more optimistic view of the future when their mentors were inviting and supporting. More efficacious teachers tend to intensify their efforts and
resources in accomplishing their goals even when their performances fall short. The more efforts they put at improving their teaching skills, the better teacher they become, leading to improved student learning (Bandura & Jourden, 1991). This finding is in consonance with Tschannen & Hoy (2001) finding on the positive relationship between self-efficacy beliefs of novice teachers and their enhanced capacity to perform in the classroom assignments. Improvement on “I can teach well” among mentees can be of great help to effective teaching, professional development and positive classroom experiences.

Mentoring in addition related positively with organizational socialization characterized by proper understanding of the school policies and systems of operations, socialization with staff members and students. Mentees can gain some level of socialization in schools guided by their mentors especially among other more experienced teachers, including participation in decision making and other relevant exposures. Such level of socialization can be helpful in improving capacity of beginning teachers. This finding support Oguntunde (2012) that student-teachers in agricultural teacher preparation programmes who grew well in their profession indicated that the mentoring function they received related positively with their level of socialization in their school. Thus capacity to grow in one’s profession can be linked to the level of socialization in the organization.

This study focused on job involvement motivated by mentors that facilitate learning and promote teaching skills among beginning-teachers as a major contributor of mentees’ capacity building. The positive association between mentoring and job involvement in this study supports result obtained by Noe (1988) on his study on influence of the career and psychosocial function performed on protégée on a development programme organized for educators. Job involvement related positively to attainment of psychosocial functions, and employee evolvement resulted in 56 to 94 per cent in Pakistan organizations (Khattak, Iqbal & Khattak, 2013) indicating that both the organization and the employees benefit through employee job-involvement. Teachers that are involved in their jobs acquire greater teaching skill, eagerly participate in teaching and improve their teaching practice while those with low job involvement tend to be indifferent, easily fatigued and participate less in teaching assignments (Hsieh cited in Yang, Kao, &Hung 2006). Thus, job involvement enhances the motivation and skills necessary for beginning teacher capacity building.

**Conclusion and Recommendations**

The results obtained from this study indicate that capacity of development as assessed by three indices job involvement, organizational socialization and self-efficacy considered relevant by beginning teachers can be improved through mentoring relationships. Secondary school administrators who encourage mentorship are likely to improve the performance of beginning-teachers and that of the school. The concept of capacity building is multi-dimensional which should not be limited to only the three variables studied in this study. The result of this study is an indication that mentoring outcomes can provide an effective index in this formulation. There is need to study other mentoring functions performed by mentors in the school system and integrate them to boost teacher capacity in order to enrich learning in 21st century.

Based on the findings of the study, the following recommendations are made:

The state ministry of education should put in place formal mentoring programmes for all newly employed teachers for capacity building. Newly employed teachers should be encouraged to acknowledge the benefits of mentoring and be open to mentoring for enhanced capacity building. Principals of schools should ensure that newly employed teachers are allocated to mentors before allowing them to start teaching so as to alleviate the initial shock usually experienced by beginning-teachers. Finally, there is need to develop a more comprehensive and standard measure of capacity building scale.
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Blended Instructional Model Based on a Participatory Communication Approach to Teaching Social Media to Undergraduate Students in the 21st Century: Enhancing Communication and Collaboration Skills

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Abstract
Communication and collaboration skills are important and essential to prepare students for the future. They are learning and innovation skills which are essential to the 21st century. According to the growth of Information and Communication Technology (ICT), this is the essential choice of the recent instruction that enhances communication and collaboration skills via computer or other electronic devices. Especially, applying social media which is a communication model to reach people at all levels, therefore, if teachers could use social media sources and tools to support their own teaching, it would give learners access to resources and interact with teachers and other students comfortably. With this importance, the researcher develops and evaluates the blended instructional model based on participatory communication on social media for undergraduate students. The results of this study suggest that this model consists of seven key compositions: social media, students, lecturers, course contents, contents, instructional activities, teaching methods, and evaluation. Furthermore it is composed of five main procedures: selection, planning, operation, acknowledgment and editing, and evaluation. In this study the experimental group exposed to the novel instructional model showed significantly higher scores in the parameters of learning, communication, and collaboration (P<.05) relative to the control group.

Keywords: Blended instructional model, participatory communication, social media, communication and collaboration skills
Blended Instructional Model Based on a Participatory Communication

Approach to Teaching Social Media to Undergraduate Students in the 21st Century

Introduction

Collaboration skills are not only important and essential when preparing students for the future, it should be at the heart of education in the 21st century. That said, students need to use these skills to spend their lives and to work creatively with values for living in the world of knowledge-focused work. Teachers will design instruction for students to learn these skills because these are not taught directly, but managed the process to be learned (Panich, 2012), specifically the world of 21st century skills requires students to work together as a result of digital and communication technology to flourish and become more advanced. The advancement of information and communication technologies enable humans to receive information and communicate quickly through a computer network to exchange data between them; such as, text, audio, images and movies, etc. The information exchange may be communicated immediately or synchronously which allows individuals to communicate with each other at the same time our process is asynchronous which communicates with each other at different times by using the computer as a way to communicate more effectively. This is an alternative way of teaching today particularly, social media. It is a form of communication that reaches people at all levels used widely and under constant development of computer technology, which is likely to become the main media for people in the future (Wijitroaboonyaruk, 2011) because the senders are able to share messages in various forms to the audience through online networks by interacting between senders and receivers or receivers themselves.

In general instruction systems, when considering the teaching process, a process of communication in many respects, both the components and processes can be seen when the teacher acts as a messenger and the students act as audiences, which is required of media. The effectiveness of teaching and learning can be measured by the quality and quantity of changing the behaviour of students (Sookhapreedee, 2003) combined with the advancement of technology has made the process of communicating change from one way communication with the fixed sender and receivers to the condition of two-way communication making each other between the parties concerned more specifically. Communication through social media allows the sender and receivers switch roles, and even change the meaning of the communication process of transferring information into the construction of social reality (Roger, 1986; Roger & Kincaid, 1981; Sthapitanonda, 2004; Sthapitanonda et al., 2006), known as Participatory communication, where two dimensions overlay; a collaborative process between the sender and receivers, and dynamic process in the knowledge combination of participating in communication.

As such, Participatory communication can be used in the design of instruction by supplying the channel and the various forms of participation through social media to assist the learners to take part in the process of communication and collaboration with a focus on the effects of the student’s participation in the communication process by using a dialogue form between the sender and receivers at all times. The heart of the dialogue is a form of participatory communication since communication is based on a participatory model of ritual communication with a switch the role of audiences to be messengers and want to join the group of people to make a conversation form but the conversation alone usually cannot be driven instructional activities to be done, so it requires a collaborative process to help strengthen the effectiveness of learning to students in the 21st century.

Research Objectives

1. To study the compositions and procedures of the blended instructional model based on participatory communication approach on social media for undergraduate students.

2. To develop blended instructional model based on participatory communication approach on social media for undergraduate students.
Research hypotheses

Subjects in the experimental group learned by the blended instructional model based on participatory communication approach on social media for undergraduate students had all the higher scores in self-assessment and communication and collaboration works than the control group by statistical significant difference at the .05 level.

Research Methodology

This study is divided into four phases as followed.

Phase 1 Model Study

This is a study of compositions and procedures of the blended instructional model based on participatory communication approach on social media for undergraduate students.

This phase had two procedures.
1. Studying current states, problems, difficulty, suggestions and instruction of Thai for Communication courses in higher education.
2. Studying, analysing, and synthesising basic information related to the blended instructional model based on participatory communication approach on social media for undergraduate students.

Phase 2 Model Construction

The development of the blended instructional model based on participatory communication approach on social media for undergraduate students.

This phase had three procedures.
1. Creating a prototype of a blended instructional model based on participatory communication approach on social media for undergraduate students by using the data obtained from phase one to prioritize the relationship of the individual compositions and details the procedures to construct the first draft.
2. Conducting to determine the quality of the prototype by sending it to the fifteen specialists in term of Thai language, Educational technology, and 21st century skills considered in the interpretation, scope, and the appropriateness of implementation as well as make recommendations on the compositions and procedures of the blended instructional model based on participatory communication approach on social media for undergraduate students.
3. Editing the prototype in accordance with the recommendations of specialists.

Phase 3 Model Implementation

The application of blended instructional model based on participatory communication approach on social media for undergraduate students.

This phase had three procedures.
1. Testing the experiment and control group students before learning by using a Pre-test to measure the communication and collaboration skills in the 21st century.
2. Implementing the blended instructional model based on participatory communication approach on social media for undergraduate students with the experimental group and observing behaviour of communication and collaboration on social media. Besides, the control group was implemented by the general instructional model. The researchers spent ten weeks or thirty hours and evaluated communication and collaboration works in the first semester of the academic year 2014 between August to October.
3. When the implementation is completed, the researchers tested the experimental group and the control group after learning by using a Post-test to measure the communication and collaboration skills in the 21st century.
Phase 4 Model Confirmation

The certification of blended instructional model based on participatory communication approach on social media for undergraduate students. This phase had two procedures:

1. Using the data from implementing the blended instructional model based on participatory communication approach on social media for undergraduate students in phase three to revise and then, present in the form of illustrations and essays.
2. Sending the instructional model to three experts in term of Thai language, Educational technology, and 21st century skills for evaluating to certify the blended instructional model based on participatory communication approach on social media for undergraduate students.

Results

Instructional Needs

Data obtained from interviewing the initial subjects - 20 faculties who have more five-year experiences in teaching Thai for Communication course from different universities revealed that:

Current states found that the number of students per class now has a lot to cause problems in the classroom management. Students did not practice the skills because the teaching is largely a lecture method, a teacher-centered learning. There are also many sections per semester opening to enroll in the first semester. It follows that they have been asked for cooperation from the teachers in other related fields and this made different standards. One point of differentiation is in the second semester there is less section and this affected to no teaching workload. Students also focused on learning a little because they thought it was a basic course.

Mostly lecturers lack in good teaching skills and tend not to be fully capable. To separate the sections was poor so that the number of students in each section was either many or less; such as, some sections are more than one hundred students. To practice each skill could not have been achieved unless the teacher was able to check the assignments on time and provide immediate feedbacks.

However, it should focus on practicing skills to develop communication and collaboration skills. It may use technology and social media to enhance instruction in case of the teacher cannot resize the sections so that students can practice and be active learners, it should not focus on lecture methods but should be use group process or activity, learning good work group processes and provide activities to practice four language skills with a teacher as a mentor including gives the opportunity for students to analyze their own learning and provides activities/works/projects in accordance with the student's field of study. The teacher must review and reflect on the accuracy and inaccuracy of the students’ works to improve. Skills development will be achieved by the students need to know what is wrong and how to correct it. About assignments, if no fault were told that was true or false, students would have misunderstood that what to do was right and did it then, thus the instructor should be the guide.

Instructional model

The blended instructional model based on participatory communication approach to teaching social media to undergraduate students was developed by using participatory communication to enhance communication skill and social media to enhance collaboration skill. There are seven key compositions including 1) Social media, 2) Students, 3) Teachers, 4) Course contents, 5) Instructional activities, 6) Teaching methods, and 7) Evaluation as shown in Figure 1 and the five main procedures of instructional model including 1) Selection, 2) Planning, 3) Operation, 4) Acknowledgment and editing, and 5) Evaluation as shown in Figure 2.
1) Social Media were the use of websites to communicate and work with others on computers or smartphone devices via the Internet network between the students and the teacher or students and students to facilitate in enhancing communication and collaboration skills by using any web browser to access the website Youtube, Issuu, Pbworks, Facebook.

2) Students showed the role of Thai for communication content learners and use social media to communicate and work together with implementation of the participatory communication process on social media.

3) Teachers were facilitators in the preparation of content and resources to provide students with a better understanding of Thai for Communication Course and prepared social media to help the students perform the task effectively.

4) Course contents contained in the textbooks of Thai for communication (course code 1500117). The students would receive textbooks within the first week of the semester for self-learning or reading before class. The teachers only presented concise contents conducive learning for students to create new knowledge.

5) Instructional activity were organized to teach students to be learnt. The student would study the content knowledge in the classroom and be the practitioners and trained skills in the online in order to know the actual performance and proficiency in communication and collaboration skills for 10 weeks, 3 hours per week, including 30 hours by the proportion of teaching in class of 30% or 9 hours (3 weeks) and teaching online of 70% or 21 hours (7 weeks).

6) Teaching method was the ways that teachers taught the students to perform learning objectives by using the lecture teaching method (offline) to provide students with a better understanding about Thai for communication course. Then the participatory communication process on social media (online) to allow students take the knowledge gained from the classroom to communicate and collaborate via computer to create two works together.

7) Evaluation was the self-assessment before and after the study. The self-evaluation of communication and collaboration skills in the 21st century and the evaluation of communication and collaboration works were used with the rubric's assessment of listening and speaking. (TV Program-Talk) and the rubric's assessment of reading and writing (Essay).
Blended Instructional Model Based on a Participatory Communication Approach to Teaching Social Media to Undergraduate Students in the 21st Century

Figure 2: The procedures of blended instructional model based on participatory communication approach on social media for undergraduate students.
According to the above instructional model procedures, it can be organized the teaching activity for 5 weeks. In the first week, teachers organized the selection activities to find and choose the sample of the best TV Programs (Talk) or Essays form Content Communities like Youtube or Issuu. In the second week, teachers organized the planning activities to establish the production approach together which students would brainstorm their ideas on works via Social Network like Facebook. In the third week, teachers organized the operation activities to start building the communication works through collaboration. In the fourth week, teachers organized the acknowledgement and editing activities to help the students to get to know the works of different groups and comment on the contribution of each group to improve for the final and in the fifth week teachers organized the evaluation activities to determine the contribution of each group.

**Instructional results**

The results of implementing the instructional model can be divided into three areas: the score of self-assessment to measure communication and collaboration skills in the 21st century before and after learning of the experimental group and the control group, the score of communication and collaboration works in the 21st century of the experimental group and the control group, Percent of the behavior of the students expressing as the procedures of blended instructional model based on participatory communication approach on social media for undergraduate students, as detailed below.

3.1 The score of self-assessment to measure communication and collaboration skills in the 21st century before and after learning of the experimental group and the control group are shown in Table 1.

<table>
<thead>
<tr>
<th>Self-assessment score to measure communication and collaboration skills in the 21st century</th>
<th>Before</th>
<th>After</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>S.D.</td>
<td>X</td>
<td>S.D.</td>
<td></td>
</tr>
<tr>
<td>Experimental group (N = 29)</td>
<td>3.77</td>
<td>0.45</td>
<td>4.33</td>
<td>0.42</td>
<td>-4.401</td>
</tr>
<tr>
<td>Control group (N = 25)</td>
<td>3.66</td>
<td>0.50</td>
<td>3.86</td>
<td>0.45</td>
<td>-1.572</td>
</tr>
</tbody>
</table>

*p<.05

Table 1 Mean and Standard Deviation of self-assessment score to measure communication and collaboration skills in the 21st century before and after learning of the experimental group and the control group.

3.2 The score of communication and collaboration works in the 21st century of the experimental group and the control group are shown in Table 2.

<table>
<thead>
<tr>
<th>Communication and collaboration works in the 21st century (40 Scores)</th>
<th>Experiment</th>
<th>Control</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV Programs (Talk)</td>
<td>15.70</td>
<td>10.50</td>
<td>4</td>
<td>.00</td>
</tr>
<tr>
<td>Essays</td>
<td>15.40</td>
<td>11.20</td>
<td>4</td>
<td>.00</td>
</tr>
<tr>
<td>Total</td>
<td><strong>31.10</strong></td>
<td><strong>21.70</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05

Table 2 Mean and Standard Derivation of score of communication and collaboration works in the 21st century of the experimental group and the control group.

From Table 2, the evaluation of communication and collaboration works in the 21st century between the experimental group and the control group and the comparison of the scores in the experimental group and the control group was found that the average scores of TV Program (Talk) of the experimental group (**X** = 15.70) was higher than the control group (**X** = 10.50), a significant
statistical level .05 and the average scores of Essays of the experimental group (\( \bar{X} = 15.40 \)) was higher than the control group (\( \bar{X} = 11.20 \)), a significant statistical level .05.

**Instructional Certification**

Results and suggestions from experts to certify the blended instructional model based on participatory communication approach on social media for undergraduate students found that IOC evaluation results showed that all procedures valued as one meant that it could be used in learning and teaching.

**Discussion**

**Development of instructional model**

The blended instructional model based on participatory communication approach on social media for undergraduate students is an instructional model developing from participatory communication and the 21st century skills enhancement with the use of social media. Each procedure of instructional model development was carried out in a systematic process. This is chiefly seen when it was developed in step by step, each step related in a relationship. Start with a survey of twenty faculties about instruction of Thai for Communication course which is the general education course for freshman undergraduate students in almost Thai university to get information about the current states, problems, difficulty, and suggestions of instruction with the study of basics contents included blended learning, participatory communication, social media, 21st century skills by synthesizing the concept of Thai and International educators. These were defined as the principles, compositions, and procedures of instructional model.

In determining the compositions’ adequacy of instructional model, researcher had linked as systematic by starting with determining the principle of instructional model linked to the proportion specification between the classroom and online learning, objectives, procedures, teaching methods, social media, measurement and evaluation of instructional model, and the role of students and teacher. Then these compositions were produced as a prototype of instructional model and sent to the fifteen specialists in three fields of study: Thai language, educational technology, and 21st century skills for reviewing and giving the recommendations to improve instructional model to be effective prior to apply in teaching to the real situation and adjust the subsequent to become more completed. Then bring the three experts to certify that it can truly be used and appropriate for instruction in Thailand.

Looking ahead, it is obvious that the development of instructional model has proceeded with a systematic approach, including concepts and principles as a basis or a framework for development, has been validated by qualified people and certified by experts. This is consistent with the opinion that an effective instructional model can be used as the pattern of teaching and learning to achieve the objective of strengthening communication and collaboration skills for undergraduate students. The development of this instructional model was consistent with the concept of the development of instructional model of Joyce and Weil (1986) concluded that this development must require support theories, such as, psychology theory, learning theory, have conducted a research to prove and quality checked by applying to the actual teaching situation, as Khammanee (2007) noted that the instructional model should cover the key compositions which have been arranged neatly on philosophical theories, principles, concepts, or beliefs by the important processes or procedures in teaching including teaching methods and techniques that can help teaching based on the theory, principles, and concepts used in the instructional model must have been proven to be effective or acceptable. It can really be used as a pattern to achieve teaching objectives. In essence, this instructional model has also developed the concept of operations of Wiboolyasarin (2014) proposed guidelines for learning and teaching in Thai for communication.
course to enhance the communication and collaboration skills in the 21st century at the 21st Century Academic Forum Conference at Harvard University, United States.

Quality evaluation of instructional model

The results showed that the experimental group taught by blended instructional model based on participatory communication on social media for undergraduate students had the score of self-assessment to measure communication and collaboration skills and the score of communication and collaboration works in the 21st century after learning higher than the control group taught by conventional instruction as statically significance at .05 level which is consistent with the hypothesis. So, the researcher would like to discuss these results as two parts.

1.) Effect of instruction model on the communication and collaboration skills in the 21st century

The study found that the experimental group had the score of self-assessment and the score of communication and collaboration works after learning higher than the control group as statistically significant at .05 level. This finding indicated the instructional model was able to enhance communication and collaboration skills because it opened opportunities for students to communicate together in every step with the final goal was to create works together in groups within participatory communication. It is clear that members in the groups need to be involved and engaged in every step, communicate with each other, alternatively comments, respect and accept the opinions differed from their own. It was consistent with the concept of Sthapitanonda (1999) that participatory communication was a practical process for members of the society on the process of think together, share, listen and respect the other opinions, be aware of rights and duties, jointly analyze issues, exchange of information, find solutions and decide together on the basis of complete information, look at the goal of collaboration to create works based on communication and decision making, so the results of participatory communication came from the cooperation of the members in the group affected the scores of experimental group were higher than the control group which was consistent with Bordenave (1994) said that when people had accessed to communication channels and had expressed their own views, feelings and experiences to fullest, this would motivate and support to individuals in different groups to decide what they were interested in doing and acting together to solve problems. Students were participated by using social media as tools for facilitating communication and collaboration with applying the instruction in the classroom and online teaching to create learning activities required students to work together and became the high quality products. This paper explored the concept of Bonk & Wisher (2000) that the use of social media to learn in small groups made each member of the group have relationship to the learning activities, participate in the success of the group, exchange of ideas, learning resources, and mutual support. Group members were responsible for their learning and work assignments while interacting with other members in the group, thus teacher need to build a learning or working together to achieve anywhere and anytime by connecting all cognitive knowledge for the integration of communication and the creation of new knowledge. The following discussion will focus on the Partnership for 21st Century Skills (2011: online), and Churat (2009), collaboration required the abilities to work with diverse groups effectively, help and compromise in order to achieve goals with the division of duties and responsibilities, and have common purposes or expectations. In particular, the instructional model for Thai for Communication course had aims “to provide students with the ability to communicate effectively” and had a final project as a group work reflecting the ability to communicate and collaborate. As a result, the scores of self-assessment and communication and collaboration works of the experimental group were higher than the control group.

2.) Effect of instructional model on the communication and collaboration behavior of students

The experimental group expressed participation behaviors as an average 19.5 people or 67.24 percent of 29 students showed that students enjoyed participating in group work corresponding to
the speech of Kaewthep (2004) that normally people would like to participate in communication. Particularly, they prefer to carry a conversation rather than sit and only listen. This activity-based instructional model also allows students to express their opinions freely. The teacher involved in the process at the beginning of each week then, allow student to communicate through social media which was consistent with the similarly concepts of Gumucio Dagron (2001), Servaes, Jacobson, & White (1996), Singhal (2004), Sthapitanonda (2004) noted that participatory communication should give priority to dialogue on the nature of the deliberations in order to open the opportunity for members in society to have faced and talked to each other to understand the principles and guidelines for a wide range of information for decision-making in their group. The result can be proud of their participation as well as dedication and devotion to work together. Students taught by this instructional model had participation behaviors in a relatively high level. The collaboration to be successful and effective needed for communication between the members that help good relationships to occur as Darling-Hammond (2010) said that if the students were able to communicate, they could work with others and take advantage of the knowledge and expertise of others. In this model, the activity process would allow students to communicate with each other within the group to agree and find a conclusion together before preceding an activity in the next step. Students must participate in group activities that require interaction, using language to communicate ideas to the group members to understand, and everyone must responsible for their own work by using the concept of Fisher & Frey (2010) and Panich (2012) recommended that the work creation caused by organizing ideas and views of the group can be communicating simplicity and elegance through verbal and facial expression (video clip of a TV program) and writing (essay) via social media by using Wiki technology (Pbworks) so that students would learn to work with others, creative exchange of ideas, and critical thinking about what they read, use content communities content (Youtube and Issuu) to get the basic data for developing their communication skills, and use social network (Facebook) to communicate among the students and the students and teacher. In most circumstances, these were all reflected the communication and collaboration behavior among learners and can be measured and evaluated by observing the behavior and performance of students in accordance with the principles of instructional model.

Conclusion

Reflecting on these facts, we can see that the blended instructional model based on participatory communication approach to teaching social media to undergraduate students is a significant instructional model that higher education institutions should be applied to adjust teaching strategies in general education for promoting the graduate’s desirables and establishing standards for the accreditation of higher education institutions. Executives should encourage this instructional model to improve teaching effectiveness by encouraging teachers in general education courses have understood the purpose of general education and it should be clear in the desirable characteristics of the graduates, especially the 21st century skills, which should encourage teachers to match specific skills that can be applied to a group of general education courses; such as, matching Thai for communication course with the communication and collaboration skills, Academic Thinking and Decision Making course with critical thinking and problem solving, Information Technology course with information and communication technology skills.
References


A.V. Usova’s Contribution to the Field of Concept Learning in Physics Classroom

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Abstract

A.V. Usova (1921-2014) has always been one of the leading figures in Russian physics education. Her theory of physics concept formation was formulated during the 1970s and the 1980s and directly influenced the process of physics education in the 20th and the 21st century. Over the years there have been a lot of theories of concept formation. Her work contributed to our understanding of concept formation (learning, teaching) and the contemporary physics learning process. She formulated her original views on the problem of concept formation independently of Western researchers. She is perhaps the most important Russian educational theorist in the field of concept learning. A.V. Usova suggested to physics teachers the model of concept formation that describes: methods of learning concept in physics classroom, conditions of successful concept formation in physics teaching; structure of complex scientific concepts formation (stages of concept formation), the influence of interdisciplinary teaching on the scientific concept formation, criteria and levels of physics concept formation, methods and techniques of analysis of the quality of concept formation, the role of educational observation and experimentation in the scientific concepts formation, methodology formation for complex physics concepts "work" and "energy". This paper deals with both the historical A.V. Usova’s contribution review and also issues raised by post-Usova approaches.

Keywords: Concept formation, learning process, physics teaching, history of education.
Introduction

Antonina Vasileyevna Usova was born on August 4, 1921 in Bashkiria, USSR. In 1946 she graduated from Kazan State University. She worked at Chelyabinsk State Pedagogical University in the Physics Teaching Department in the period 1951-2014. From 1973 to 2006 she is Head of the Department. She was a famous Russian scientist who made a significant contribution not only to the teaching of physics, but also to general didactics and pedagogy. She earned her Doctorate degree in Pedagogical Sciences in 1970, and became professor in 1973. She died on August 8, 2014, in Chelyabinsk (South Urals of Russia).

She dealt with the problem of concept formation since 1965 (Dammer & Krestnikov, 2011). At that time, physics was one of the most important disciplines in Soviet secondary public schools.

International scientific communication was very difficult due to the Iron Curtain (1945-1991) that symbolized the conflict, ideological and physical boundaries between so-called communist and capitalist states. Nevertheless, some works of prominent American psychologists (e.g. Jerome Bruner) have been translated into Russian. In addition, there were strong academic psychological scholars in the Soviet Union (e.g. Lev Vygotsky). We find references to them in the major works by A.V.Usova. However, most of the works of American psychologists and pedagogues were unknown behind the Iron Curtain, as well as many works of Soviet psychologists, pedagogues and educators remain unknown to Western science. So a lot of problems have been solved independently, although sometimes in a similar way.

Accurate translation from Russian into English is quite difficult. Many tones of Russian scientific language disappear when presenting the same material in English. Probably, this problem can be solved by a method of multivariate representation, when the same thing is spoken in different ways and with different words over and over again. This is very important because we are talking about the life of a particular person, who played a significant role in the educational system of my country (Belozyortsev, 2006).

I am so grateful to people who told me about A.V.Usova’s life, and the responsibility for any omissions, errors, discrepancies of this paper, of course, is mine.

The System of Physical Knowledge and Generalized Plans of Learning

One of the major problems that must be solved by schools is acquiring the scientific knowledge system. Through logical and genetic analysis professor Usova identifies the following elements of knowledge: scientific facts, concepts, laws, theories, etc. Considering them, she indicates their universality and interrelation. A simple classification of physical concepts implies a division into entities, phenomena, properties and quantities.

Her pedagogical discoveries are the generalized plans (i.e. algorithms, strategies, guides, sequences, schemata, rules, techniques) of studying or executing (for concepts, laws, theories, methods, instruments, etc.).

How to study physical phenomena? How to study physical laws? How to study physics entities? Properties? Quantities? What is the structure of the element of knowledge? What do you need to know about this element of knowledge? When can I say about myself that I do know the law? The concept? How to describe a physical phenomenon? Property? Quantity? Physical law, theory? What should I learn if I want to study this theory alone (independently, by self-study)? How to study physics? How to learn physics? How to teach physics?
Complete list of generalized plans includes also rules for conducting observations, experiments, and apparatus learning. These short generalized plans are of universal significance. A unifying framework for concept-learning plans is of special importance for A.V. Usova.

Physics Phenomena
1. External features of the phenomenon.
2. Conditions of the phenomenon.
3. The essence of the phenomenon, its mechanism.
4. Relation of the phenomenon with other phenomena.
5. Quantitative characteristics of the phenomenon.
6. Application of the phenomenon.
7. Prevention of harmful effects of the phenomenon.

Physics Quantities
1. What phenomenon or property is characterized by this quantity.
2. Definition of the physics quantity.
3. Specific characteristics of this quantity (scalar or vector, basic or derivative).
4. Definitional formulas for this quantity.
5. Units of this quantity according SI (International System of Units).

Laws of Physics
1. What concepts are related to the law of physics?
2. Formulations of the law.
3. The mathematical expressions of the law.
5. Who discovered the law? When and how?
7. Examples of natural phenomena, where the law acts.
8. Practical application of the law.

Theories of Physics
1. Scientific facts on which the theory is based.
2. Key concepts of the theory.
3. The basic assertions, postulates, laws, principles of the theory.
5. Results, findings, and predictions of the theory.
6. Limitations of the theory.

Plan of Observations
1. Time of the observation and information about the observer.
2. Purpose of the observation (it is formulated by a teacher or chosen by the students).
3. Description of the observed object.
4. Equipment of the observation (it may be selected by students).
5. Conditions of the observation.
6. Description of the observational procedure.
Results of the observation.
Analysis of results and conclusion from them.

Concept Formation

The book has played the key role not only in the development of methods of physics teaching; it is a significant contribution to the modern didactics, so we consider it in detail.

The Main Topics of the Book
1. Methods of learning concepts in physics classroom.
2. Conditions of successful concept formation in physics teaching.
3. Structure of complex scientific concepts formation (stages of concept formation).
4. The influence of interdisciplinary teaching on the scientific concept formation.
5. Criteria and levels of physics concept formation.
6. Methods and techniques of the quality analysis for concept formation.
7. The role of educational observation and experimentation in the scientific concepts formation.
8. Methodology of formation for complex physical concepts "work" and "energy".

In accordance with the views of A.V. Usova, concept is the knowledge of the essential properties (sides) of objects and phenomena of reality, knowledge of significant connections and relationships between them. Other definitions of concept are not rejected; they are presented in her book and analysed in detail.

In the first chapter of the book "The concept as a logical category", A.V. Usova considers concept as a logical and epistemological category: she gives a rigorous scientific definition of it; describes the connections and relationships between concepts; and discusses methods on acquaintance to the concepts in the case when the definition is not possible or is not required.

In the second chapter, "The development of concepts in the scientific and academic knowledge" A.V. Usova makes a consistent presentation of the psycho-physiological foundations of concept formation, clarifies their nature and role in scientific cognition, features the development of concepts in science, shows the importance of the formation of scientific concepts in the learning process, describes the role of prescientific ideas in it, reveals the essence of the process of concept acquisition, and lists criteria and levels, typical mistakes and difficulties.

The third chapter deals with the ways of scientific concepts formation in the learning process. A.V. Usova analyses the different points of view on the process of mastering scientific concepts by students, different techniques of concept formation used in school practices, and lists the necessary elements and stages of the formation of complex physics concepts.

Concretization and generalization of concepts are represented in the fourth chapter of the book (both theoretical and practical issues).

The fifth chapter is devoted to investigating conditions which facilitate concept acquisition; describing the quality evaluation of it; characterizing opportunities of
interdisciplinary relationships, educational observation and experimentation in concept formation.

The sixth chapter is devoted to methodology of the fundamental physics concepts formation (such as "work" and "energy").

The problem of concept formation was derived from problems of the science foundation learning, but concepts of knowledge play a particular role. Scientific concepts are one of the most important components of the knowledge system. The emergence of concepts is the result of the scientific cognition process of the world (Usova, 1986). Many well-known researchers have paid attention to the problem of formation of concepts (Vygotsky, 1962; Bruner, 1960). The peak of research on the formation of concepts accounted for the period 1960-1980. However, progress in solving the problem has not resulted to significant advances in educational practice. This requires a broad discussion between teachers.

Concept Formation Conferences

Conferences on the formation of concepts have been organized in the Soviet Union and then in the Russian Federation since 1971 (Chelyabinsk, South Urals). The Mastermind of these conferences was A.V.Usova. She organized them annually in the same month—every May.

Participants of these conferences debated the problems of the established concepts formation, interpretation of new scientific concepts necessitated by the development of science. For more than a third of a century, participants studied a huge number of possibilities of concept formation. The emphasis has been on the methods of teaching, which would be found from the viewpoint of concept formation. The problem of concept formation was discussed not only by philosophers, psychologists and educators, but also by physicists, astronomers, mathematicians, chemists, biologists, ecologists, philologists, sociologists, etc. (Usova, 1994).

Proceedings of conceptual conferences discussed by researchers have been the basis for hundreds of master's, and doctoral dissertations, for thousands of methodological recommendations, teaching instructions, textbooks and manuals, scientific articles and monographs (Krestnikov, 2006).

Other Areas of Educational Research

A.V.Usova is perhaps the most important educational theorist in physics teaching of Russian education. She made important contributions to the development of the fields of pedagogical science concerning learning, teaching, studying, etc. Books of A.V.Usova were used in the preparation of thousands of school physics teachers (Usova, 1988; 2002), and not only in the Soviet Union and Russia. Her book “Methodology of Physics Teaching” was translated into Spanish: “Metodología de la Enseñanza de la Física” (Orejov & Usova, 1980).

Problems of Education Considered by A.V.Usova

1. Interdisciplinary relationships in the learning process.
3. General and specific issues of physics teaching at schools and universities.
4. Formation of general learning skills.
5. Teaching students to solving of physics problems.
6. Methodology of pedagogical experiment (elemental and operational analysis).
8. Theory and practice of developing education.
Conclusion

Psychological and didactical aspects of the scientific concepts formation are important to use in the preparation of textbooks and teaching manuals and instructions in physics education. Didactic theory presented by A.V. Usova allows one to find the optimal structure for the learning of physics.

A.V. Usova clarified the essence of the concept formation; analyzed the different views on the concepts learning and methods for their formation, explored the conditions for successful formation of concepts, and ways of improving their quality. She paid special attention to the analysis of errors in the acquiring of concepts, as well as their causes and prevention.

Concept formation theories and their roles in contemporary physics teaching have been theorized over the last 100 years, and many interesting decisions have been found by A.V. Usova. Successful solution of this problem is seen by the teachers mastering the theoretical foundations of the concept formation.

Over this long period of time, both in society and in the education system enormous changes have taken place, however the theory proposed by A.V. Usova remains relevant today.
A.V. Usova’s Contribution to the Field of Concept Learning in Physics Classroom

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Information Literacy Skills of Students from a UK Business School

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Abstract

Information literacy is the ability to recognize there is a need for information and then taking the necessary actions to identify, locate, evaluate, and use the information accordingly. This article reports on a study analyzing the information literacy skills of business school students. Data were collected from student of a Business School in London using a questionnaire survey. Results indicate that students have lower confidence in performing some tasks related to identifying the need for information, planning the search strategy, gathering information, using data management tools and developing a personal profile as part of presenting their synthesis of information found, accessed and used for specific purpose. There are also differences between Level 1, Level 2 and Level 3 students in terms of their confidence in performing the specified task under a particular information literacy skill. The results of this research are beneficial in designing information literacy skill development activities in the future.

Keywords: Information literacy, higher education, business school students
Introduction

Nowadays, as easy access to information is increasing rapidly simultaneously technology solutions are showing up as well. The business environment is burdened by information overload (Bawden and Robinson, 2009; Dean and Webb, 2011). Business professionals use information as an input to their decision-making process, so students in business disciplines are expected to be information-literate and to use information effectively. Many information professionals at business schools have been investigating ways to effectively communicate information literacy skills (Fiegen, 2011). To put information literacy in context, we first provide its definition according to the Society of College, National and University Libraries (2011):

Information literate people will demonstrate an awareness of how they gather, use, manage, synthesize and create information and data in an ethical manner and will have the information skills to do so effectively.

A number of information literacy competency standards have gained broad acceptance in providing guidance on teaching these skills (Eisenberg, Lowe & Spitzer, 2004). Among these standards, those developed by the Association of College and Research Libraries (2000), the Australian and New Zealand Institute for Information Literacy (Bundy, 2004) and the Society of College, National and University Libraries (SCONUL) are the most widely accepted. The key skills suggested by these standards are presented in the literature review.

Rationale of the Study

In information-driven world one needs to be information competent in a complex. The significance of developing an information literate population is widely recognized (Bruce, 2004; Catts & Lau, 2008). Information literacy is a broader term, which encompasses not only skills but also attitudes to and motivation for learning (Herring, 2004). Educator at all level (primary, secondary, tertiary and professional education) needs to focus on developing information literate graduates. In this respect, the research on information literacy skills of the students is highly relevant to enhancing student experience by focusing on students’ current level of information literacy skills and how they can be improved.

Research Questions

This study sought to answer the following research questions by analyzing the data collected:
1. What do students know about finding, accessing and using information?
2. Are there any differences between students at different levels in terms of finding, accessing and using information?

To answer these research questions, this research aimed at systematically exploring the information literacy skills of the students from a Business School with 10,000 undergraduates students in terms of finding, accessing and using the information they need for their studies.

The paper is structured as follows: Following section is literature review on information literacy. Section Method summarizes the methodology employed in the research. Findings are presented and discussed in result section. Finally, in discussion section finding are discussed and suggestions for future research been presented.

Literature Review

Information literacy was first used as a term by Zurkowski (1974) where Zurkowski considered a national goal of achieving information literacy for the private sector in the United States within following decade. Then, almost two decades later Doyle (1992) listed discrete attributes of an information literate person as someone who:
- Recognizes the need for information
• Recognizes that accurate and complete information is the basis for intelligent decision-making
• Accesses sources of information including computer-based and other technologies
• Evaluates information
• Organizes information for practical application
• Integrates new information into an existing body of knowledge
• Uses information in critical thinking and problem solving

Since the 1990s, much of the critical information literacy literature focused on issues related to the development and deployment of information literacy standards (Diekema et al., 2011). There are three key information literacy models developed by Association of College and Research Libraries (ACRL), Australian and New Zealand Institute for Information Literacy (ANZIIL) and SCONUL. The ACRL’s approach to information literacy has been criticized for emphasizing location of information and omitting one stage of the information seeking process which is recognizing when information is needed (Johnston & Webber, 2003). On the other hand, the (Australian) ANZIIL provides a broader base for information literacy in comparison to the ACRL; however, the scope and the plan, which are identified by the SCONUL as key skills, are not touched upon in this broader approach to information literacy.

Lupton (2008) analyzed the drivers for emergence of information literacy as an educational outcome in universities in three categories: Student-centered inquiry-based pedagogies where the learning environment enables students to build knowledge by asking questions and framing problems for which effective use of information is required; explosion of information which necessitates integration of effective use of information into the curriculum; and Graduate attributes where information literacy is identified as a generic skill. Generic skills and graduate attributes are usually considered within the lifelong learning concept (Bundy, 2004) and they include written communication, information literacy, critical thinking, problem solving, as well as teamwork and presentation skills.

The suggestion of Bruce (1997) that students’ experience of information literacy should be explored to strengthen any curriculum developed is still valid. Scholarly debate continues regarding the most effective ways to teach students how to use information (Maybee et al., 2013). Further research is required, starting from where the students see themselves in terms of their confidence in the seven information literacy skills proposed by SCONUL (2011, Table 1) so that we can better embed these skills into the curriculum across all levels.

In a recent study, Diekema et al. (2011) aimed to enable students to experience information literacy with a focus on information use in the construction of knowledge. They concluded that making decisions about authentic problems might focus the learner’s attention in new ways, and help shift students’ conception of information literacy from finding sources towards using information to learn. This is one of the key areas highlighted in the information literacy model of SCONUL (2011) where evaluating and presenting information is emphasized. Therefore, this research followed the comprehensive information literacy model of SCONUL (2011) in assessing the current status of Brunel Business School students.

Methodology
A quantitative research method has been applied in order to answer the research questions posed. With the purpose of addressing research questions one and two, 27 questions adopted from SCONUL (2011) were employed. These questions asked students to self-report their confidence in performing a variety of tasks related to the seven key information literacy skills identified in literature review section. Students’ self-reporting of their performance in information literacy related specific tasks is frequently exercised by librarians as well (Neely,
**Survey Design**

The survey for business school students comprised of seven key information literacy skills; namely, Identify, Scope, Plan, Gather, Evaluate, Manage and Present. These skills were adopted from the core model of information literacy for higher education (SCONUL, 2011), which described the set of generic skills and understandings in relation to information literacy. In order to keep the survey at acceptable length, distinct tasks in each information literacy skill (number of questions under each skill) have been focused. Table 2 shows the number of questions under each skill.

We conducted a comprehensive literature review on information literacy skills and information literacy assessment. Informed by the previous studies in the literature, we designed and conducted a questionnaire survey to assess students’ information literacy skills. The survey was checked for face validity by three academics from Brunel Business School prior to the commencement of the survey. There are seven information literacy skills included in the survey and the reliability of these were tested by Cronbach’s a reliability measure (Table 1). We analyzed the data collected by means of the questionnaire to reveal the current situation of the students’ information literacy skills.

<table>
<thead>
<tr>
<th>Information literacy skill</th>
<th>Information Literacy</th>
<th>Number of questions</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify</td>
<td>Recognize a need for information</td>
<td>4</td>
<td>0.921</td>
</tr>
<tr>
<td>Scope</td>
<td>Distinguish ways in which the information gap may be addressed</td>
<td>3</td>
<td>0.91</td>
</tr>
<tr>
<td>Plan</td>
<td>Construct strategies for locating information</td>
<td>3</td>
<td>0.798</td>
</tr>
<tr>
<td>Gather</td>
<td>Locate and access information</td>
<td>4</td>
<td>0.908</td>
</tr>
<tr>
<td>Evaluate</td>
<td>Compare and evaluate information obtained from different sources</td>
<td>4</td>
<td>0.831</td>
</tr>
<tr>
<td>Manage</td>
<td>Organize, apply and communicate information to others in ways appropriate to the situation</td>
<td>3</td>
<td>0.933</td>
</tr>
<tr>
<td>Present</td>
<td>Synthesize and build upon existing information, contributing to the creation of new knowledge</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 Survey Structure and the Reliability Analysis

A total of 27 questions were asked under the seven key information literacy skills suggested by the SCONUL (2011). The students assessed their confidence in performing the tasks related to each information literacy skill on a 5-point Likert scale where 1 = Not at all confident, 2 = Slightly confident, 3 = somewhat confident, 4 = Very confident, 5 = Extremely confident. Initially. The current level of the students in terms of the tasks under seven information literacy skills has been presented in Table 2 and then in each subsection it has been investigated whether there are any differences between different levels.

Individual questions asked under each skill in Table 1 are given in Appendix A. Information Literacy Survey Questions. The students were asked to assess their confidence in performing specific tasks related to information literacy on a 5-point Likert scale.

**Findings**

**Questionnaire Survey with Students**

The sample consisted of 28 business school students from all three undergrad UK-based education system levels (12 participant in level 1, and 8 participants in the other two levels). Descriptive statistics of data has been presented in Appendix B.
It is evident in Table of Descriptive Statistics that there is deviation from normality in terms of skewness and kurtosis (should be zero for normally distributed data) in some but not all groups. Moreover, it is not possible to apply parametric methods (one-way ANOVA) to analyze differences in different levels since this data is in ordinal scale. The Kruskal-Wallis test is the nonparametric test equivalent to the one-way ANOVA, and an extension of the Mann-Whitney U test, which allows comparison of more than two independent groups where the data is collected in ordinal scale (Cohen et al., 2011) as is the case in this research. That is why, Kruskal-Wallis test is used for the analysis of students’ confidence in their information literacy skills at different levels. Where significant differences were found between different levels of students, multiple comparisons were carried out using the Mann-Whitney U test. Throughout the analyses, the traditional significance level of $a = 0.05$ is used in the tests. In order to save space, only tables for first task has been presented here and the tables for the other six tasks could be find in Appendix (C).

Identify

The tasks involved in Identify comprised of articulating current knowledge on a topic (IDENTIFY1), identifying a lack of knowledge in a subject area (IDENTIFY2), defining limits to the information need (IDENTIFY3) and identifying a search topic using simple terminology (IDENTIFY4). Comparison of all three levels in terms of tasks under Identify is given in Table 3.

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>N</th>
<th>IDENTIFY1</th>
<th>IDENTIFY2</th>
<th>IDENTIFY3</th>
<th>IDENTIFY4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12</td>
<td>14.042</td>
<td>13.792</td>
<td>10.708</td>
<td>11.667</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>14.875</td>
<td>12.313</td>
<td>15.813</td>
<td>12.875</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>14.813</td>
<td>17.75</td>
<td>18.875</td>
<td>20.375</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$X^2$ 0.074 2.069 5.566 6.195
$p$-value 0.964 0.355 0.062 0.045*

* $p < 0.05$ Table 3 Kruskal-Wallis Test: Mean Ranks of Levels for Identify

Only for the fourth task in Identify, which is identifying a search topic using simple terminology (IDENTIFY4), there is a statistically significant difference between the different levels ($X^2 = 6.195, p = 0.045$), with a mean rank of 11.67 for Level 1, 12.88 for Level 2 and 20.38 for Level 3. If the null hypothesis of no difference between levels is rejected, as is the case for IDENTIFY4 then it is possible to identify which pairs of treatments differ by running a Mann-Whitney U test between each pair. The test results are given in Table 4.

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Test statistic</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1 with Level 2</td>
<td>42.5</td>
<td>0.659</td>
</tr>
<tr>
<td>Level 1 with Level 3</td>
<td>19.5</td>
<td>0.022*</td>
</tr>
<tr>
<td>Level 2 with Level 3</td>
<td>13.5</td>
<td>0.045*</td>
</tr>
</tbody>
</table>

* $p < 0.05$ Table 4 Mann-Whitney U Test IDENTIFY4

The results in Table 4 suggest that there is a statistically significant difference between Level 1 and Level 3 and Level 2 and Level 3 in terms of identifying a search topic using simple terminology. There is no difference between Level 1 and Level 2 in terms of the confidence.
in this task.

Scope
The tasks involved in Scope comprised of identifying which types of information will best meet the need (SCOPE1), identifying available search tools (SCOPE2), identifying different formats in which information may be provided (SCOPE3). Results suggest that there is a statistically significant difference between the different levels for SCOPE1. Results of Mann-Whitney U test shows there are statistically significant differences between Level 1 and Level 3 and Level 2 and Level 3 students in terms of how confident they feel in identifying which types of information will best meet the need (SCOPE1). There is no difference between Level 1 and Level 2 in terms of the confidence in this task.

Plan
The tasks involved in Plan comprised of setting a search question clearly (PLAN1), defining a search strategy with appropriate keywords (PLAN2) and selecting the most appropriate search tools and techniques (PLAN3). No statistically significant differences between Level 1, Level 2 and Level 3 in terms of the confidence in performing the tasks under Plan has been found. Therefore there is no need for further analysis (i.e. comparisons using Mann-Whitney U Test).

Gather
Gather comprises of four tasks; constructing complex searches appropriate to different resources (GATHER1), accessing online information and data (GATHER2), keeping up to date with new information (GATHER3) and engaging with the community to share information (GATHER4). Not enough evidence been found to conclude there are differences in different levels in terms of their confidence in performing the tasks under Gather. Although the students’ confidence in performing the tasks numbered GATHER1 and GATHER4 ranges between slightly confident and somewhat confident whereas their confidence in performing the tasks numbered GATHER2 and GATHER3 ranges between somewhat confident and very confident, there is no difference between Level 1, Level 2 and Level 3 in terms of their confidence in performing each task under Gather.

Evaluate
The tasks involved in Evaluate comprised of choosing suitable material on the search topic (EVALUATE1), assessing the accuracy, bias and credibility of the information resources (EVALUATE2), reading critically, identifying key points and arguments (EVALUATE3) and identifying when the information need has not been met (EVALUATE4). The results suggest there are statistically significant differences among levels in terms of EVALUATE3. The Mann-Whitney U test results show that there are significant differences between Level 1 and Level 3, and Level 2 and Level 3 as was the case for IDENTIFY4 and SCOPE1. There are no significant differences between Level 1 and Level 2 students in terms of their confidence in performing the tasks numbered EVALUATE3 and EVALUATE4.

Manage
Manage tasks comprised of using appropriate data management software and techniques to manage data (MANAGE1), demonstrating awareness of issues relating to data protection, copyright and plagiarism (MANAGE2) and meeting the standards of conduct for academic integrity (MANAGE3). No statistically significant differences between Level 1, Level 2 and Level 3 students in terms of their confidence in performing the tasks under Manage has been found.
The tasks involved in Present comprised of using information and data found to address the original question (PRESENT1), summarizing documents and reports (PRESENT2), incorporating new information into the context of existing knowledge (PRESENT3), synthesizing and appraising information from different sources (PRESENT4), analyzing and presenting data appropriately (PRESENT5) and developing a personal profile in the community using appropriate networks (PRESENT6). The results in suggest there are statistically significant differences among levels in terms of the tasks numbered PRESENT4. A Mann-Whitney U test is conducted to identify the differences between each pair of levels. A significant difference between Level 1 and Level 3 and Level 2 and Level 3 in PRESENT4 and PRESENT5 is reported. However, for PRESENT6, there is a significant difference only between Level 1 and Level 3 but no evidence of difference between Level 2 and Level 3. It is related to developing a personal profile where it might be of assistance to the students in introducing the importance of this task in terms of developing information literacy skills. On the other hand, there are no significant differences between Level 1 and Level 2 students in terms of their confidence in performing the tasks numbered PRESENT4, PRESENT5 and PRESENT6.

Discussion

This research set out to investigate the current status of the students in terms of the tasks considered as part of information literacy skills owing to its first research question. It was found that the students had lower confidence compare to each other. These tasks were related to articulating current knowledge on a topic, defining limits to the information need, defining a search strategy, selecting the most appropriate search tools, constructing complex searches appropriate to different resources, engaging with the community, using data management software and developing a personal profile in the community. Therefore, these tasks could be given specific attention during library sessions as well as in lectures and seminars. In overall, the results could be taken into consideration in the process of designing information literacy skill development activities targeted at different levels since different levels have varying needs.

The second research question was inquiring about the differences between confidences of students at different levels in performing the specified tasks. There was no difference in terms of the 10 tasks under Plan, Gather and Manage. On the other hand, differences were between different levels in identifying a search topic using simple terminology, identifying which types of information will best meet the need, reading critically, identifying key points and arguments, identifying when the information need has not been met, synthesizing and appraising information from different sources, analyzing and presenting data appropriately and developing a personal profile in the community using appropriate networks. Where differences were found, they were usually between Level 1 and Level 3 and between Level 2 and Level 3 students. In majority of the tasks, there were no differences between Level 1 and Level 2. For example, for Identify task as results of Table (3) shows there is no difference between Level 1 and Level 2 in terms of the confidence in this task. This result could be due to the fact that the students do search for information intensively in the third year as part of their final year project. For Scope task, this could be beneficial in designing activities for sharpening information literacy skills of our students particularly where they would be required to identify which types of information will best meet the need.

This finding is in line with the findings of Callinan (2005) where information literacy competence improved as the students progressed in their program.

Arts et al. (2006) explored stages in managerial problem-solving skills of participants beginning with formal education and continuing through the professional workplace setting.
They found that progress in expertise in terms of information literacy is not so straightforward or linear as often assumed. Current study presents the importance and relevance the information literacy skills research among Business School students, which will enter professional workplace in future. So there is a possibility of relapse in information literacy skills gained during the university education in a few years following the commencement of professional life. In that respect, the university can take action proactively and offer challenges sharpening these skills for their graduates as part of life-long learning activities. A good example of these activities is short-term courses and seminars organized by universities. Many business schools would have a short session on information literacy refresher at the beginning of the program, in particular at graduate level.

In the light of the extant literature and the findings of this research it is concluded that learning and teaching methods should engage students in more advanced information literacy. Neely (2006) reported that exposure, experience, attitude and students’ relationships with their instructors were major factors affecting information literacy outcomes. That is why information literacy should be tightly embedded in the curricula of business programs as well as programs of other disciplines.

**Limitations and Suggestions for Future Studies**

It should be recognized that this is a small-scale research and one should be cautious in generalizing its results. However, the research and its results are useful for setting the background for a larger scale study involving hundreds of students from multiple schools across different universities.

Another point to note is that this research employed a self-assessment questionnaire, where the students were asked their confidence in completing the tasks associated with the seven information literacy skills. A recommendation for future research would be to combine this research design with librarians’ information literacy assessment tools to reveal whether what students believe they know is translated into practice. For example, multiple choices questionnaire, analysis of bibliographies, quiz/test, portfolio, essay, observation, simulation and final grades (Walsh, 2009) could be considered in addition to or as complementary to the self-assessment.
References


### Appendix A: Information Literacy Survey Questions

The responses are collected on a 5-point Likert scale where 1 = Not at all confident, 2 = Slightly confident, 3 = Somewhat confident, 4 = Very confident, 5 = Extremely confident.

**IDENTIFY:** How confident are you in performing the following tasks related to identifying a personal need for information?
1. Articulating current knowledge on a topic
2. Identifying a lack of knowledge in a subject area
3. Defining limits to the information need
4. Identifying a search topic using simple terminology

**SCOPE:** How confident are you in performing the following tasks related to assessing current knowledge and identifying gaps?
1. Identifying which types of information will best meet the need
2. Identifying available search tools
3. Identifying different formats in which information may be provided

**PLAN:** How confident are you in performing the following tasks related to constructing strategies for locating information and data?
1. Setting a search question clearly
2. Defining a search strategy with appropriate keywords
3. Selecting the most appropriate search tools and techniques

**GATHER:** How confident are you in performing the following tasks related to locating and accessing information and data?
1. Constructing complex searches appropriate to different resources
2. Accessing online information and data
3. Keeping up to date with new information
4. Engaging with the community to share information

**EVALUATE:** How confident are you in performing the following tasks related to comparing and evaluating information and data?
1. Choosing suitable material on the search topic
2. Assessing the accuracy, bias and credibility of the information resources
3. Reading critically, identifying key points and arguments
4. Identifying when the information need has not been met

**MANAGE:** How confident are you in performing the following tasks related to organising information professionally and ethically?
1. Using appropriate data management software and techniques to manage data
2. Demonstrating awareness of issues relating to data protection, copyright and plagiarism
3. Meeting the standards of conduct for academic integrity

**PRESENT:** How confident are you in performing the following tasks related to applying the knowledge gained?
1. Using information and data found to address the original question
2. Summarising documents and reports
3. Incorporating new information into the context of existing knowledge
4. Synthesizing and appraising information from different sources
5. Analyzing and presenting data appropriately
6. Developing a personal profile in the community using appropriate networks
### Appendix B: Descriptive Statistics

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Distinct Techniques to Improve Listening Comprehension and Meta-Cognitive Listening Awareness

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Abstract
Listening forms a requisite role whilst communication in every aspect of linguistic studies. As for foreign language learning, listening is of paramount significance since it yields language input. In respect of students’ notion, listening comprehension is one of the most demanding courses (Jones, 2007). For second language instructors, fostering the students’ listening comprehension skills and preparing them as active listeners is a massive challenge. In this manner, this paper presents findings from a research study exploring the impact of two distinctive pre-listening techniques (giving word bubbles and showing pictures to students) on EFL learners’ performance in listening comprehension and on their activation of meta-cognitive listening awareness. Data were elicited from 30 elementary level prep class students at a state university in Turkey. A comparison between the pre-test and post-test scores demonstrated that the participants achieved significantly higher marks after the treatment classes, but had no correlation with the questionnaire results. The findings suggest that topic familiarity through pre-listening is a salutary predictor of improved performance.

Keywords: Topic familiarity, pre-listening, meta-cognitive awareness, listening strategy
Introduction

In second language acquisition, listening skills tend not to receive sufficient attention although forty per cent of daily communication is spent on listening to others. Despite not having a specific course called “Listening Comprehension” at most university preparatory classes in Turkey, most of the speaking courses embrace listening comprehension activities. The reason for this is that speaking sensibly is mostly feasible through receiving input by listening (Jones, 2007). Therefore, the development of listening comprehension should be one of the basics of language learning.

In terms of the adversities which are experienced by learners in a second language learning environment, numerous complexities emerge. One hardship is the content of the listening tasks which are often not familiar to learners. As a result of this, the possibility of learner misunderstandings can be expected.

A further demanding issue is the different accents, idioms and unfamiliar language chunks spoken by English-speaking people. Moreover, what they listen to is eminently too fast for such learners to catch. Since their normal listening comprehension proficiency speed is not the same as that of the speaker’s, they have to keep pace with the thinking process. One example that can be observed in the classroom is when listening comprehension exercises demand no response until the end of fairly long stretches of speech, in this manner when it comes to giving a response, it becomes a test of memory rather than of comprehension.

In this research study, the use of a top-down strategy through an extensive listening project was planned. This listener-based strategy included generating a background knowledge of a given topic, the situation or the context by the aid of two discrete pre-listening techniques: Giving students word bubbles and showing them pictures. Herewith, this background knowledge was expected to activate a set of expectations that help the listener interpret what is heard and give correct responses to multiple choice questions in various listening comprehension tasks.

This study was effectuated due to the difficulties encountered by a group of elementary level prep class of English as a Foreign Language (EFL) learners at a state university in Turkey. Owing to their differences in apprehending listening texts, responding to written questions and utilizing the essential strategies whilst listening; an extensive listening project comprising assorted listening tasks before which the two mentioned pre-listening techniques were implemented was contrived.

This study aims to shed light on the use of the two pre-listening techniques to aid in listening comprehension, which have not been applied together in a single study. In addition, the results of this study could play a vital role in completing the gap in literature where learners’ meta-cognitive listening awareness and their listening comprehension performances have not been associated.

Literature Review

Listening is a stringent process, not only out of the complication of the process itself, but also due to the motives that characterize the listener, the speaker, the content of the message and any visual assistance that consorts the message (Brown and Yule, 1983). Understanding spoken language is a momentous circumstance for language acquisition (Rost, 1990).

According to Vandergrift (2004), listening is one of the most challenging skills for ESL learners to evolve which is why it is presumably the least explicit of the four language skills. Additionally, Vandergrift (2004) specifies that listening plays a major role in the learning of a second language since it gives the learner information from which to build the knowledge requisite...
for successfully using the language. Listening assures the essential input for learners to acquire the language required for practicing it.

A further point is that listening is a receptive skill which put in the way for productive skills. It was noted that if learners are able to produce something in the target language, the teaching will be more communicative (Sarıçoban, 2014).

Listening Anxiety
The oral aspects of language are by and large seen to be the most closely associated with foreign language anxiety (Salto, Horwitz and Garza, 1999). In disputations of anxiety in classroom language learning, speaking is the most emphasized one. However, listening comprehension can also be considerably stressful for learners. According to Scarcella and Oxford (1992), listening anxiety originates when students feel they are exposed to a task that is too difficult or unfamiliar to them. One example for this is a study implemented on Iranian EFL learners in order to detect the role of teachers in reducing/ increasing listening comprehension test anxiety. Slotting sixty intermediate level EFL learners at Islamic Azad University in this Iranian context, the researcher removed learners’ fear of evaluation by ensuring them that no negative score would be considered and that they had a second chance to repeat the exam. Additionally in the treatment session, the researcher also pursued a strategy to generate a friendly and anxiety-free atmosphere, with the aim to reinforce self-confidence. As a result of the study, the test-giver was prosperous in making them feel less anxious, and eventually, boost their scores (Izadi, 2011).

The Role of Teachers While Listening
A pivotal issue to be perused and commented on is the role of teachers throughout listening sessions. Teaching listening comprehension is- by all means- a challenging task for teachers. The fleeting nature of sound makes it stringent for listeners to concentrate on a particular word or phrases for detailed analysis (Halle, 2002). Herewith, it has been observed that many teachers slip into testing the learners’ listening comprehension rather than teaching them how to listen effectively. At this juncture, there are some issues for teachers to consider and some hedges to implement for further success in listening activities. At the outset, instead of anticipating that learners will in the upshot improve their listening skills on their own, teachers should make allowances for the reasons why students experience difficulties with comprehending listening input (Kavaliauskiene, 2011). Furthermore, to carry learners’ listening skills forward, teachers should pave the way to the adopting of a positive attitude, being responsive, shutting out distractions, listening for specific purposes, looking for non-verbal clues, evaluating the supporting materials, and looking for the signals of what is to come and looking for summaries of what has gone before (Sarıçoban, 2014). An analogous plea is that teachers should guide learners to comprehend what is being said in conversations to let them disregard, redundancy, hesitation, and ungrammaticality (Sarıçoban, 2014). A research study by Jones (2007) addresses the role of the teacher in terms of learner meta-cognitive. The participants comprise children learning EFL at a primary school context in the UK. The four interlinked approaches that the teacher applied in order to promote effective listening were dialogic teaching, developing meta-cognitive awareness, planning and assessing.

As a result, triumph in active and effective listening was attained by setting up the following: a risk-free learning environment, explaining what assessment is, describing the success criteria, giving shared feedback, setting targets together and reflecting on the learning of listening.
Top-down Processing in Listening

Just as with learning reading skills, there exist two simultaneous ways of processing a text. In top-down processing, learners tap their prior knowledge with the intention of making anticipations concerning the text. On the other hand, in bottom-up processing, learners place their trust on their linguistic knowledge to recognize the meaning. It is common for learners to hear every sound before they apprehend the listening text. In contrast, they often adopt a top-down approach to estimate the probable theme (Lingzhu, 2014).

Pre-listening

In addition to various suggestions to listening difficulties, it is important for teachers to impart listeners with specific knowledge required for the comprehension of the listening text rather than solely pore over on linguistic features (Othman and Vanathas, 2014). In this manner, before listening, students should be “tuned in”, so that they know what to anticipate, both in general and specific tasks (Elkhafifi, 2005). Armed with explanations of how miscomprehension occurs during a listening activity, teachers may be able to design remedial pre-listening exercises aimed at tackling the cause of the problem.

Schema Theory

Schema Theory is a substantial issue with respect to helping learners improve their performance in any domain of language learning. According to McDonald (1993); Schema Theory is associated with the organization of information in memory and how existing knowledge mediates the encoding of incoming information and its retrieval from memory. In terms of listening, Carrell and Eisterhold (1988) assert that listeners lack culture-specific content schema. It is very important that the content schemata must be activated for the learners to access their knowledge in English listening. In the light of this theory, a study by Othman and Vanathas (2004), exploring the impact of schema and topic familiarity on listening comprehension. Thirty four intermediate level students who were majoring in Business Studies at a private tertiary institution in Malaysia participated in the study. A treatment phase of four weeks was generated and comprised listening tasks from merely one listening course book. During the study, learners were given visuals and verbals as a means to create a knowledge base before they listened to the passages. Additionally, by means of semantic webbing, giving ideas and suggestions through discussion; the learners had the opportunity to activate their knowledge on the subject. As a consequence, it was indicated that activating background knowledge had a significant effect on the learners’ listening comprehension

Strategic Listening

Instead of concentrating on the product or result of listening comprehension tasks, teachers should concern their interest with the listening process. With this aim, listening strategy instruction should be given. Strategies are conscious steps or actions by which learners can guide and evaluate their own comprehension and learning (Rost, 2002). Zhang’s (2007) research at a Chinese university is an example for the use of strategies in listening. Insufficient listening comprehension, learners’ frustration and a highly stressful classroom atmosphere were the issues which induced the researcher to begin this research.
Extensive Listening

Extensive listening, which refers to any types of listening activities that allow learners to obtain large amounts of comprehensible and relevant input, is a method to assist second language learners in dealing with their listening difficulties (Renandya and Farrell, 2010). The aim of extensive listening is to provide learners with numerous target language input. In this way, learners are given an opportunity to develop their vocabulary knowledge, accent recognition, and their productive skills, such as pronunciation and speaking (Reinders and Cho, 2010). In a qualitative study implemented by Bidabadi and Yamat (2012) on the strategies exerted by Iranian freshmen in extensive listening, the results indicated that these learners of English could employ their own available strategies while engaged in extensive listening. Ranking a group of twelve freshmen university students, it was aimed to gain insight on their use of strategies whilst extensive listening. Majoring in the TEFL course, the participants were exposed to a think-aloud training session and were audio-taped after listening to various real-life conversations from Interchange coursebook during the extensive listening phase. Eventually, it was detected that the learners had entanglement in keeping up with the speaker’s rate. However, they seized the opportunity to employ their own cognitive and meta-cognitive strategies.Alias, they possessed processes and behaviours supporting their improvement in recalling what they had learnt by aid of the extensive listening (Bidabadi and Yamat, 2012). A further study by Chung and Millett (2013), which was constructed based on Level 1 graded learners, recounts that L2 learners’ listening skills acquired by means of extensive listening could be transferred to listening to unfamiliar passages. The study comprised learners of three distinctive groups performing three sorts of treatment, two of which additionally encapsulate reading. The findings of the study propound that learners are able to enhance their listening comprehension and fluency performance by dint of abundant input and consistent practice whilst implementing extensive listening.

The final issue concerning listening comprehension- exclusively strategic listening- is the meta-cognitive strategy use in listening comprehension. Meta-cognitive Approach to listening buttresses training learners to apply penetrative strategies to cope with the demands of listening. Assisting students in managing their learning more influentially, meta-cognitive strategies seem to have a considerable amount of advantages such as generating strategic learners, increasing the speed of learners’ cognitive engagement with listening texts, forming a confidence on learners to learn, removing hesitation to obtain help from their environment, actualizing continual learners who can successfully cope with new situations and executing tactics which match the listening task and adjustments (Selamat and Sidhu, 2011). A research was generated by Yang (2013) so as to ascertain whether meta-cognitive strategy use is effective in advancing Chinese graduates’ EFL listening. The study, which embraced 150 participants at East China Institute of Technology, propounded that there existed progression on middle and low-level experimental learners’ meta-cognitive awareness. Another research implemented on Iranian university students majoring in English aimed to investigate diverse meta-cognitive listening strategies employed by those students and the differences in the frequency of these strategies between high and low-proficient learners. Having Persian as their L1, the participants were implemented International English Language Testing System (IELTS) listening test and MALQ (Metacognitive Awareness Listening Questionnaire) with the intention of measuring their own regulation of their learning process through listening. The results revealed that the participants utilized strategies so as to make inferences and to monitor these differences. However, they had high level of listening anxiety and low self-confidence whilst performing in listening comprehension tasks (Ratebi and Amirian, 2013). A further study by Selamat and Sidhu (2011) explored ESL students’ perceptions towards a meta-cognitive strategy
instruction program (MetSI) to ameliorate their listening comprehension abilities. 34 first-year students at the faculty of education at a public university in Malaysia who participated in the study were exposed to a 10-week meta-cognitive strategy instruction program as a treatment. Being provided with numerous problem-solving tasks, they were given MALQ. The results revealed that the students perceived the MetSI training as salutary in evolving their listening skills and extracting information from lectures.

**Methodology**

**Research Problem and Questions**

In the light of above literature review and specified problems in the field, this study sought to examine the following two specific questions:

1. Which of the two pre-listening techniques provides the best results: giving students word bubbles or showing them pictures related to the listening content?
2. Does the study activate learners’ meta-cognitive awareness in listening through the two pre-listening techniques?

In terms of the first research question, it was hypothesised that the participants would achieve higher scores by means of visuals rather than verbals as pre-listening with the assumption based on research showing that learners feel easier to learn content presented in a visual form than in a verbal form (Chan, 2014).

The hypothesis for the second question was that the participants would enhance their meta-cognitive listening awareness more with the aid of visuals (showing pictures technique).

**Research Design**

A quantitative research design was adopted for the study. Due to the restricted time to implement the research, interviews via audio-recording could not be inserted to the design. A pre-test & post-test design was opted in order to measure the degree of change occurring as a result of the intervention in two discrete ways (giving students word bubbles and showing them pictures).

**Context and Participants**

The study was performed at a state university in Turkey. The institution is the foreign languages school of this university. Participants comprised 30 EFL learners at elementary level English prep classes from diverse departments. Skills-based instruction of English is provided over a period of 15 weeks in one semester. Classes are held everyday. The language of instruction is solely English.

Participants aged between 18-20 who regularly take part in a variety of listening activities, especially inside the classroom. Sitcom video type series, songs, and audio-taped real-life conversations ancillary to their reading and vocabulary tasks were a major part of their classroom instruction and practice. Periodically, invited native speakers come to class and address these learners in English.

The group of participants did not include any heritage language students (i.e., students whose family situation includes exposure to English language). Although the learners were graduates of many distinct high schools, their academic background is assumed to be excessively similar to one another. They were quite eager to participate in this study together with the teacher researcher.
Data Collection Instruments

Data for the study were obtained from the following instruments:

Pre-test

The pre-tests were two similar listening midterm exams of the 2013 fall semester. The reason for applying two different tests was to implement two similar but different tests in order to measure the effectiveness of two distinct pre-listening techniques. The tests include three distinct sections of multiple choice questions were materialized in conjunction with some procedures such as giving clear instructions, playing the tape twice and stopping playing the tape at frequent intervals with the aim of letting students have time to contemplate their written answers.

In both pre-tests, participants listened to passages and conversations which they were not familiar with without attaining a background information concerning the content.

Post-test

Subsequent to the 7 treatment sessions for each of the two pre-listening techniques in the course of the extensive listening project, the post-tests were administered. All participants were given the pre-tests once again as post-tests. The entailment for the students was to answer the same questions that they had answered earlier in the pre-tests.

Questionnaire

Following each treatment phase and post-test implementation, participants were asked to respond to a MALQ questionnaire on meta-cognitive listening strategies. The application of this questionnaire was carried out in order to conceive whether one of the two pre-listening techniques created any difference on learners’ meta-cognitive awareness. The items in this questionnaire by Vandergrift (2006) embraced 5 meta-cognitive factors associated with learners’ listening strategies.

The Treatment

Subsequent to the pre-test, the treatment- via an extensive listening project- was carried out over 4 weeks. The materials for these lessons were obtained from New English File course book. The listening texts were mainly the same level or not higher than the learners’ tested language level ability.

The intervention- stood by the Schema Theory, Meta-cognitive Approach to listening and Top-down Processing Approach- promoted a background of the listening comprehension text through two distinct pre-listening techniques: Giving learners word bubbles and showing them pictures. In this manner, activities were tailored to assist learners to comprehend the listening concept beforehand. Since the primary objective of the study was to carry forward students’ performance in written responses to listening questions; the chief principle during listening was to stop the tape within frequent intervals in order to ensure them with sufficient time to respond to questions and recede from testing their memory through nonstop listening till the end of the test.

Each listening session was generated for 40 minutes a day for four consecutive weeks. In all the treatment lessons, participants completed the required activities individually. They as participants were given multiple choice, gap-filling, chart completion, note-taking, summarizing short stories and written transcription activities throughout the sessions. Even though the participants’ pre-existing knowledge was activated by means of exposure to word bubbles and pictures as two pre-listening activities, they were additionally ensured motivational support and encouragement, mentioning the simplicity of listening through strategies in order to obviate their listening anxiety.
Distinct Techniques to Improve Listening Comprehension and Meta-Cognitive Listening Awareness

Table 1 Data collection process

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Data Analysis

Analysis of data in this study was made with the aid of statistical analysis through SPSS. Tabulated description (i.e., tables) and statistical commentary (i.e., discussion of the results) were employed to construct simple descriptions about the characteristics of a set of quantitative data and to summarize the findings of the study.

The relevance of the data with its normal distribution was tested via Shapiro-Wilk test. In case of this relevance, statistical parametric procedures were employed. The comparisons between pre-tests and post-tests were achieved by use of a t-test. The correlations between variables were analysed through Spearman Rank Correlation Coefficient. Statistical comparisons between pre-test post-test grades were made by obtaining the difference scores in order to behold the effects of the two pre-listening techniques- giving students word bubbles and showing them pictures.

Results

The first research question and hypothesis concerned a comparison between the two pre-listening techniques’ pre-test and post-test results. Through the comparison between the pre-test and post-test scores, a statistical significance was obtained in both measures. As can be seen, the estimated mean on the test scores of the second pre-listening technique (showing pictures) suggests that the first hypothesis could be confirmed. Due to this mean score, showing pictures to learners was found more effective than giving them word bubbles.

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<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>gwb_pre</td>
<td>58.33</td>
<td>30</td>
<td>13.087</td>
<td>2.389</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td></td>
<td>gwb_post</td>
<td>68.67</td>
<td>30</td>
<td>13.126</td>
<td>2.397</td>
<td></td>
</tr>
<tr>
<td>Pair 2</td>
<td>sp_pre</td>
<td>60.33</td>
<td>30</td>
<td>12.590</td>
<td>2.299</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td></td>
<td>sp_post</td>
<td>78.33</td>
<td>30</td>
<td>12.617</td>
<td>2.304</td>
<td></td>
</tr>
</tbody>
</table>

Note: gwb: giving word bubbles (technique 1)
sp: showing pictures (technique 2)

Table 2: Paired sample T-test indicating the distribution of the pre-test & post-test scores
As a result of the implementation of the MALQ scale subsequent to both pre-listening applications, the correlation between the two scale results was positively significant ($r=0.83$, $p<0.001$). However, no significance between the pre-test & post-test scores and MALQ results was yielded. In other words, no relationship between participants’ progress of listening comprehension and their activation of meta-cognitive listening awareness was obtained.

<table>
<thead>
<tr>
<th></th>
<th>malq_g</th>
<th>malq_s</th>
<th>gwb_dif</th>
<th>sp_dif</th>
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</thead>
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<tr>
<td>Spearman’s rho</td>
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<tr>
<td>malq_g correlation coefficient</td>
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<td>.833</td>
<td>.165</td>
<td>.095</td>
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<tr>
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<td>.000</td>
<td>.383</td>
<td>.616</td>
</tr>
<tr>
<td>N</td>
<td>30</td>
<td>29</td>
<td>30</td>
<td>30</td>
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<td>malq_s correlation coefficient</td>
<td>.833</td>
<td>1.000</td>
<td>.003</td>
<td>.120</td>
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<tr>
<td>Sig (2-tailed)</td>
<td>.000</td>
<td>.</td>
<td>.988</td>
<td>.535</td>
</tr>
<tr>
<td>N</td>
<td>29</td>
<td>29</td>
<td>29</td>
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<td>gwb-dif correlation coefficient</td>
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<td>.003</td>
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<td>.988</td>
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<td>sp-dif correlation coefficient</td>
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<td>N</td>
<td>30</td>
<td>29</td>
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Table 3: Correlations (Non-parametric correlations) demonstrating the interaction between participants’ pretest and posttest scores and their level of meta-cognitive listening awareness

**Discussion and Conclusion**

This study investigated the effects of two pre-listening techniques on learners’ listening comprehension performance and their meta-cognitive listening awareness. With regard to the first research question, based on the results of this study, it may be concluded that the practice of both giving learners word bubbles and showing them pictures as two pre-listening techniques has proven to be beneficial at university prep classes in Turkey. Data depending on the scores has indicated that teacher’s showing pictures to participants as a means of pre-listening could activate their performance in giving correct written responses to listening comprehension questions more than giving word bubbles technique. This finding additionally provides support for the gap in the field since no research comparing two distinct pre-listening techniques had been implemented before.

Owing to the presence of Schema Theory and Top-down Processing principles, which were influential to direct this study, exposing learners of English to schema and background knowledge concerning the listening comprehension was found to be substantially useful. Activating prior knowledge became more of an issue. It has been exposed that the time prior to a listening session is quite crucial, which is why this session should be replenished with a pre-listening activity so as to diminish students’ listening anxiety.

A further concern hinging upon the findings of this study is the application of an extensive listening project distinct from the listening classes. Even though much of the listening instruction
Distinct Techniques to Improve Listening Comprehension and Meta-Cognitive Listening Awareness

literature advocates listening instruction using strategies focused on merely one strategy at a time and within a short period of the instruction, the focus of the present study was to implement two discrete strategies through extensive exposure and with naturalistic texts. Participants seized the opportunity to feel as if they were in a real-life context and had no specific purpose other than comprehending the listening texts.

With regard to the second hypothesis in which the listeners’ meta-cognitive awareness would be enhanced in a similar vein as their listening comprehension performance was activated a contingent finding indicated that the learners’ meta-cognition in listening could not be activated while their listening comprehension performance progressed emerged. However, having encountered a listening strategy questionnaire (MALQ) for the first time, students took their first step to obtain a meta-cognitive perception of their own listening.

From the aspect of the teacher researcher, teacher’s role, not only as a manager of the listening process but also as a facilitator who oriented the listening process into a low-anxiety and meta-cognitively aware atmosphere came into prominence.

The last substantial inference to conclude from the findings of this study is that listening is the most arduous one of the four skills and presents a massive challenge for the learners in their language learning process.

This study makes a number of significant methodological contributions. Relating pre-listening and meta-cognition ensured a brand new implementation in listening. In addition, learners at university prep classes in Turkey had not been analysed before in terms of their listening performance as a result of pre-listening training. Furthermore, the consciousness-raising effect of meta-cognitive listening awareness emerged in all participants’ minds and allowed them to benefit from the intervention.

Pedagogical Implications

Learners of a foreign language should possess topic familiarity by means of instructor’s support. L2 instructors should focus more on the listening process than the product by means of instruction aimed at reading strategies. The term “meta-cognition” should be introduced to the foreign language learners not only as part of listening but also of the other three skills. Moreover, instructors should generate a low-stress environment which should allow listeners to concentrate thoroughly on listening items.

Implications for Future Research

As a consequence of the present study, it could be proposed that further research needs to be conducted based on the effects of pre-listening techniques on listening performance of learners. Future studies could be implemented within a larger sample and over a longer time. More than two techniques could be compared and some revision may be done on the MALQ. It is even probable to apply a study and examine one more listening issue with pre-listening and meta-cognitive listening awareness.

Limitations

There are two limitations to consider with the results of this study:
1. Testing threat: Three tests (two pre-tests and a post-test) and 14 treatment lessons had been performed prior to the post-test of showing pictures’ post-test. This means, participants had made a considerable progress until that time due to their exposure to so many tasks.
2. Maturation effect: Whilst implementing this study, participants had already been along listening instructions throughout their usual listening and speaking course. In addition, they had an extra phase of a four week exposure to listening by means of this extensive listening project. In other words, they developed not only with the aid of the pre-listening techniques, but also through their natural flow of academic instruction.
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Abstract
People with intellectual disabilities face environmental barriers every day, which may prevent them from acting independently and fully participating in social life. Environmental accommodations can play a major role for improving their autonomy and social participation level; however, regarding the cognitive design things may become complicated quickly. Bringing about an effective enabling assistance design to be used by people with intellectual disabilities could be a major contribution in guiding a thorough design of universally accessible living environments. In fact, it can foster accommodations useful for the whole population, especially for cognitively impaired elderly people.

Designing enabling assistance requires understanding people’s difficulties to access information, that is, to read, understand and learn. Most of the existing researches in this field are based on the “disability creation process” (e.g. Fougeyrollas, 1998; Fougeyrollas, Chartier, Bergeron, Cote, Cote, Saint-Michel, & Blouin, 1998; Fougeyrollas, Noreau, Bergeron, Cloutier, Dion, & St-Michel, 1998; Fougeyrollas, & Robin, 2013; World Health Organization -WHO, 2002; Fougeyrollas, 2010) to explain how environmental features, in interaction with individual’s impairments, may hinder or prevent the achievement of an activity (e.g. Beaulieu & Langevin, 2014). Nevertheless, there is no model to explain how to develop and promote enabling situations that empower people in developing their capacities for adaptation to their environment.

This article aims then at contributing to knowledge regarding this topic. Our approach draws on knowledge from Psychology, Ergonomics, Special Education as well as Economics.

In this paper, we present a model, which explains how environmental elements can become resourceful when they are aligned with cognitive features of people with intellectual disabilities. We called this model “Resources-centered Human Development Model” – R-HDM.

Keywords: R-HDM, Human Development, intellectual disabilities, resourceful design.
The allocation of resources can help to reduce disparities in social participation (Levasseur, Vanasse, Courteau, Généreux, Cohen, & Kestens, 2012) by enabling individuals to respond appropriately to a situation. For Nosulenko and Rabardel (2007), personal resources enable people to interact with the world fostering individual development. However, efforts to reduce inequalities through distribution of resources, either on the basis of equality (resourcist approach, e.g. Verhoeven, Orianne, & Dupriez, 2007; Bonvin & Farvaque, 2007) or on the basis of the usefulness (utilitarian approach to resources), is not enough to ensure their use and a consequent improvement of the individual’s capacities. Besides, the constraints on individuals are not always connected with a lack of resources. These may also result from not having the means to recognize and coordinate relevant resources. Then, how can we help an individual, especially with intellectual disabilities, to organize and develop coherent and effective behaviour for achieving personal objectives according to contextual conditions?

Based on Fougéyrollas’ model (Fougéyrollas, et al., 1998), the World Health Organization (WHO) proposed an International Classification of Functioning Disabilities and Handicaps (ICF) to clarify the relationship between individual factors and socio-environmental factors (WHO, 2002). Nevertheless, these models do not agree on the place of individual and the role of activity, and “do not incorporate choices and personal goals” (Bonvin, 2012; Mitra, 2014). Moreover, if everyone agrees on the role of resources, they do not “distinguish between the environment and resources” (Mitra, 2014). To address these issues, we developed a model, which explains how environmental elements can become resourceful when they are aligned with cognitive features of people with intellectual disabilities, by elimination of barriers factors and addition of facilitators. We called this model “Resources-centered Human Development Model” – R-HDM. Our research is based on a constructivist approach for the consideration of people’s needs variability and the self-determination principles. We consider an environment which fosters self-determination as an environment that provides opportunities to people to be autonomous and act independently (i.e. make free and informed choices) (Lachapelle & Boisvert, 1999).

This paper is divided into three main sections. The first section presents our research problem and objectives. The next section clarifies the concept of resources and resourceful environments and presents our design method. The last section describes the Resources-centered Human Development Model (R-HDM).
Research Problem and objectives
From Disability Creation Process to Capability Creation Process

The Human Development Model or “Disability Creation Process” (Figure 1), developed by Fougeyrollas (2010), allows explaining situations where people experience disabilities by highlighting the factors whose interaction may hinder or prevent the achievement of an activity. However, no description of this interaction process is proposed. That is why we developed a Resources-centered Human Development Model (R-HDM).

Contrary to Fougeyrollas’ model, R-HDM aims at explaining how environmental features, in interaction with individual’s impairments, may make people more competent by creating alternative capabilities. We consider a competent individual as defined by Delignières and Duret (1995), as “someone who has a structured and coherent set of resources showing its effectiveness in a field of social activity”. Moreover, we acknowledge that competencies depend on three factors identified by Le Boterf (2002): knowing how to act, the will to act, and the power to act. Knowing how to act (which is, for Le Boterf, an essential characteristic of autonomy) refers “to knowing how to combine and mobilize relevant resources”. The will to act encompasses
“individual’s motivation and the existence of a more or less incentive context”. The power to act refers to rights and actual possibilities to act securely in a particular context. R-HDM aims at improving these three factors. To do that, we developed a conceptual framework drawing on Fougeyrollas’ model (2010) and knowledge from Psychology, Ergonomics, Special Education as well as Economics.

Psychology and Ergonomics knowledge facilitate use, relevance and appropriation of resources (i.e., usefulness, usability and acceptability), and describe people’s activity in a particular context (e.g. Leplat, 1997). They also allow to assess the opportunities or possibilities of individual action (i.e., substitutive resources) when normal resources are inaccessible or absent (e.g. Rabardel & Bourmaud, 2003). Special education knowledge refers to pedagogical considerations (i.e., teaching, didactic and learning issues) to implement for reducing or limiting environmental barriers for people with specific needs. Finally, Economics knowledge shows how resources can provide people with actual opportunities of action (i.e, related to the cost-benefit evaluation) making free and informed choices (e.g. Sen, 1999).

Resources and resourceful design: concepts and method

Definitions

Resources issues are widely discussed in the literature (e.g. Leca & Billard, 2005, Rézeau, 2001, Recopé, 1990, Famose, 1983, Delignières, et al., 1995; Le Boterf, 2002). Nevertheless, existing definitions are mainly related to a specific area of research (i.e., sports education, psychology, economics and education). In sports education for example, resources refer to “knowledge, capacities, abilities, attitudes and instruments” (Famose, 1983), “tools” (Delignières, et al., 1995), which people can mobilize and use to accomplish a task. For Récopé (1990), they are “declarative and procedural knowledge, structural and functional capacities, abilities”. In psychology, resources encompass knowledge stored in memory and the means used to activate and coordinate such knowledge (Guillevic, 1991). In economics, resources define “goods and services” (Sen, 1999).

In this paper, resources are studied as considered, in the education field, by DISCAS¹, i.e., everything that an individual perceives as potentially useful for achievement of an activity. Thus, we consider that a resource is not necessarily what is “by nature or social consensus” acknowledged as useful for achievement of an activity. A potential resource only becomes an actual resource when people perceive it as such (i.e. a mean to act and access information). In fact, the use made of a resource is not necessarily one for which it was designed (e.g. case of extending or diverting use). We define a resource as an accessible and usable mean perceived by an individual as useful for the achievement of his/her activity. Consequently, we define a resourceful environment as an incentive environment, which provides essential conditions for people to recognize and coordinate relevant resources for the achievement of his/her activity, as well as to develop alternative resources for creating alternative capabilities.

Design challenges regarding people and resources

People with disabilities are considered, in this research, as emerging “capable individuals with capacities and powers to act”, as defined by Rabardel (2005) in his capable-individual approach. This author defines the capacity to act as “skills, instruments and all the resources developed by an individual, as potentially operative capabilities”. More precisely, he describes it

¹ DISCAS is a “private pedagogical consulting firm” in Quebec that operated in the field of education from 1987 to 2006.
as the “capacity to do something in a specific field of activity; it does not refer to a general capacity”. For Rabardel (2005), the power to act “depends on the individual’s external and internal conditions [...] at a particular moment in time” (i.e. available resources and what Sen (1999) has defined as conversion factors). The difference that he makes between the concepts of capacity to act and power to act is based on the distinction between “what the individual has the capacity to mobilize, and what is actually possible within particular situations and conditions of activity”.

In order to pave the way for developing the power to act with or without declining capacities (i.e., conserve functional capacities despite a physiological decline), it seems essential that situations encountered in accomplishing daily activities leave room for developing and mobilizing resources for that activity. In these circumstances, compensating for functional limitations is a major challenge for any society that wants to offer its population the possibility of a quality existence. While it is necessary, such a remedial and compensatory approach to functional limitations cannot alone ensure the development of the individual’s power to act. Innovations in the design for activity must also anticipate future conditions and preserve functioning for as long as possible. In this sense, we consider that there is a two-fold challenge in designing conditions for successful human development.

The two-fold challenge of design consists of slowing down deterioration in the functional state of the individual functioning and of preserving actual functioning. In the diagram below (Figure 2) the pivot is the capable individual and the two challenges are represented by two levers, which act on the growth and decay of individual development. Of course this action is limited by the individual’s stage of development and current capacities. The area of lever movement is called the “Zone of Proximal Development” (ZPD), which is drawn from the concept Vygotsky (1978) developed in his studies of the child’s intellectual development. This area represents the possible development of a capable individual; it is a zone of proximal development and a potential deterioration zone. This means our ZPD is more an idea of development in deterioration or of movement rather than recovery.

Vygotsky considers two levels of development. The first corresponds to the “current development of the child”, which refers to the degree of development of the child’s mental functions and capacity for independent action. The second refers to the potential level of development of the child in interactions with others and especially with adults who increase the child’s possibilities. We posit that competencies expressed with the help of the environment can be internalized to form the outlines of the child’s development. In other words, “what a child can do today by working with others, he can do alone tomorrow.” The difference between these two levels reflects the child’s learning potential and forms the “closest zone of development” or “zone of proximal development (ZPD)”. However, according to Vygotsky, adult’s mediation and collaboration have their limits: it is pointless to tell the child that its present stage of development does not allow it to learn. Vygotsky considers the ZPD as a more or less stable characteristic of the child at a given moment in its development (this is an area within some things are accessible at a given moment and others less so), and that to be effective, the intervention of a mediator (e.g. an adult or a teacher) must lie within the ZPD. By analogy with Vygotsky’s approach, we consider two plans of human development, namely, growth and decay. The first level corresponds to the current development of the individual and refers to the degree of development attained and his/her capacity to act. The second level refers to the potential level of development, taking into account the characteristics of the individual, situations and places of work and daily existence.
In this logic, and in order to maintain (or develop) the individual’s capacity and power to act, living environments should offer resources tailored to the individual’s needs, to his/her level of development and current state of functioning. On one hand, these resources tend to preserve by stimulating and soliciting actual functions through personal development (e.g. skills, instruments). On the other hand, they compensate for and/or slow down the deterioration of personal functioning by using “mental and physical crutches” (e.g. technical, technological, human), following the principles of scaffolding (Bruner, 1983). This metaphor of crutches describes the whole set of resources that are used to support the individual’s development or construction as long as needed, and which can be removed when the individual is able to support him or herself (Barth, 1993). The adaptation and adjustment of these resources to individuals and situations is one of the essential characteristics of scaffolding (Mercer, 1995).

Whatever the case, the development and deterioration of the user’s capabilities are limited to the zone of proximal development (ZPD), which can be assimilated with the zone of a capable individual’s recovery. In any case, proposed and implemented resources will not enable the individual to do what is ruled out by his/her stage of development and current functional state. They simply provide alternative ways of organizing “an orderly retreat” so as to maintain the individual’s capacity to act.

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2 This expression was proposed by Pierre Rabardel, Professor Emeritus in psychology and ergonomics at the University Paris 8, Saint-Denis, France.
Human development Model and Capability Creation Process

Resources and capabilities

Sen (1999) defines capability as “all the human functionings that are feasibly able to be achieved, whether used or not” (Sen, 1999). For Pavageau, Nascimento, & Falzon (2007), it refers to individual’s effective latitude (Pavageau, et al., 2007), i.e. individual’s room to maneuver. However, we consider as noted by Falzon (2005; 2006), that “what is important are the individuals’ real capabilities providing a tangible freedom of choice in all areas of life, thus ensuring the possibility of personal development”. In fact, the choice is not always up to the individual (e.g. customary or habitual choices).

Individual flexibility and the opportunities for action refer to all the resources available for the individual in the pursuit of personal goals, no matter how they are used. Nevertheless, access to resources does not guarantee the development of capabilities or real freedoms, both of which are conditioned by appropriate conversion factors (Sen, 1999; Bonvin, 2012; Bonvin, et al. 2007) (Figure 3). Robeyns (2000) identified the three types of conversion factors, which are described by Bonvin, et al. (2007): individual factors, social factors and environmental factors. Conversion factors prevent or allow an individual to convert resources or opportunities for action into “potential for individual growth and achievement.” We define appropriate conversion factors as individual factors, social factors and environmental factors, which allow an individual to recognize and coordinate relevant resources for achieving his/her activity autonomously and securely.

![Figure 3 The Capability Approach developed by Sen (Bonvin and Farvaque, 2007)](image)

What are the resources used by the people and why? Under what circumstances are they or are they not used? These questions help to evaluate the actual capabilities of individuals by examining the properties of resources that are pertinent for individuals and that must be taken into account when designing enabling environments or organizations. In our opinion, beyond constraints and requirements of activity, the design of new resources involves exploring user schemas and representations as well as analyzing their uses of resources (e.g. the functions that are appreciated or preferred). As we mentioned above, the use made of a resource is not necessarily one for which it was designed (e.g. case of extending or diverting use). The resource failure and substitution method (MDSR), developed by Rabardel, et al. (2003), is interesting here, because it enables us to link benefits (opportunities) and weaknesses (impossibilities) of various resources used by people in order to show the importance of certain resources. In a previous study (Arab, Pigot, Rabardel, Folcher, Rigaud, & Mokhtari, 2011), we have shown that people organize a measure of redundancy within their system of resources in anticipation of failure or absence. This redundancy introduces flexibility into the individual’s system of resources, enabling him/her to choose the most suitable resource for the situation. Our results also show that the nature of an individual’s system of resources relies on a functional

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3 Schemas refer to organized responses that can be generalized from one situation to another.

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Resources-centered Human Development Model (R-HDM)

R-HDM fits into a developmental perspective. Derived from Fougeyrollas’ model (2010) and integrating approaches developed by Rabardel (2005) and Sen (1999), this model aims to show how living environments can provide actual opportunities for people to be more competent. Environment is seen here as a source of resources, and thus, as defined by Le Morellec, Anastassova, & Falzon (2013) as “a source of capabilities”. Nevertheless, we consider that empowerment is not only a process of social actions as defined by Barr, Cochran, Riley, & Whitham, 1984; Lee, 1994; Staub-Bernasconi, 1991 cited by Le Bossé, 1998. In fact, resources are not only provided by the environment (e.g. people, institutions, organizations), but are also intrinsic to the person. Individuals can cope alone, without resources provided by third parties.

R-HDM, described in Figure 4, makes clear that contextual factors (personal and environmental) offer (or hinder) potential resources that the individual will identify or not as actual resources for his/her activity. Barriers and facilitators, according to Sen (1999), are conversion factors which will prevent or allow him/her to convert resources to opportunities or possibilities of action (i.e. capabilities). In this case, mediated activity is then instrumented as defined in the instrumental approach (Rabardel, 1995). The person mobilizes resources for the development of his/her power to act (with an objective of active socialization) and with time and experience, these resources will in turn be mobilized in the development of his/her capacities to act (e.g. skills, instruments, knowledge). Finally, in accordance with Leplat’s work on human activity (1997), the development of the capacities and powers to act will impact respectively the personal factors (e.g. level of incapacity) and the environmental factors (e.g. complexity of the task).

In the capability approach described by Bonvin, et al. (2007) (Figure 3), resources enable the development of capabilities through appropriate conversion factors. R-HDM replaces the simple relationship between the resources and capabilities by a two-way arrow. This arrow represents a control loop: the capabilities developed by resources through appropriate conversion factors will enable the development and mobilization of new resources, which in turn enrich the individual’s system of resources. We consider that appropriate conversion factors are not limited to the so-called “positive” conversion factors (i.e., facilitators). They also include “negative” conversion factors (i.e., uncomfortable or restricting) that will nonetheless provide conditions for developing new resources, insofar as they enable the subject to remain in the capable individual’s recovery zone (i.e., what Vygotsky called the zone of proximal development). This means that, in any case, proposed and implemented resources will not enable the individual to do what is ruled out by his/her stage of development and current functional state. The uncomfortable or restricting conversion factors are disturbances that according to Piaget (1987) act as “the engine of development and learning.” In this regard, our previous work (Arab, 2012) shows that people are willing to provide mental and physical effort to maintain their independence of action. It also shows that people do not turn directly to compensatory approaches that “do things for them”, but to alternative ways that enable them to act otherwise (e.g. Arab, et al., 2011; Arab, 2012). There is also a two-way arrow between the capabilities and organization of the resources mobilized. The use of one resource rather than another is based on a set of characteristics not on a single feature. This set of characteristics depends on the context, on personal characteristics and those of the situation. The use of a resource also depends on the meaning the individual gives to it, i.e. “functional and subjective values that potentially can be integrated into an activity” (Rabardel, 2005).
activity showing that the capabilities lead to the achievement of an activity, and in turn the activity can produce new opportunities of action.

Figure 4 Resources-centered Human Development Model (R-HDM)

Discussion and Conclusion

People with disabilities are emerging capable individuals, whose individual history and personal experiences allow building reserves of alternative ways to create and produce. These alternative approaches are how we deal with the difficulties encountered in our daily existence and they are conditioned by an individual’s context and current capacities.

In this paper, we showed that the presence of useful resources does not necessarily mean they will be used. The development and use of resources rely directly on the presence of adequate conversion factors. It is only through acting on these factors that individual capacities and powers to act can be cultivated, a constraint that may limit or prevent human development. From a social and environmental perspective, this implies that resources must be functionally adaptable and adapted to the characteristics of the individual and the contextual situation. Particular attention must be paid to selection criteria fostering the use of one resource rather than another, as well as criteria of use that will help perpetuate the use of this resource, sustain its use.
and promote the user’s sense of ownership (Arab, et al., 2011). From an individual perspective, the action should mobilize schemas or mobilize latent reserves of capacities to act, which may be redeveloped. These resources enable the individual to develop new capacities to act and enhance the development of his/her powers to act. We define latent capacities to act as potential capacities to act (often unconscious) that people can develop when adequate conversion factors enable them to convert resources or opportunities for action. These questions are closely tied to the concept of learning or relearning new schemas, which in our view is not about the actions but about the abilities to perceive and optimize resources useful for completing an activity independently and securely. Perceiving and using relevant resources assumes that an individual knows how to explore his/her environment in order to find relevant and usable information.

Bringing about an effective enabling assistance design to be used by people with intellectual disabilities requires understanding individuals’ difficulties to access information, i.e., to read, understand and learn. In this regard, our previous work (Arab, Bauchet, Pigot, Giroux, & Giroux, 2014) shows that focusing on individuals’ needs is insufficient; “it is essential to find efficient ways to provide the assistance” aiming at enhancing activities that should be too complex with usual resources. Our results also show that “the enabling nature of the assistance is based on its structuring effect and its ability to simplify the organization and reorganization of the person's activity” (Arab, et al., 2014). In our opinion, future assistive means must be designed by bearing in mind the necessity to identify and add facilitators (e.g. meaningful cues) and not only to identify and eliminate factors that represent barriers (e.g. distractions leading to attention disturbances). In this field, it seems that there is a connexion to be made between research in Education and Geriatrics. In fact, research in special education can contribute to designing universally accessible living environment, especially for cognitively impaired elderly people. The deepening of these lines of thought can reduce handicapping situations and empower people to develop their capacities for adaptation.
References


