

Envisioning the Future of Education



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Practicing What We Teach: Iterative Design Methods for Innovation Education

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Abstract

There can be little dispute that the past two decades have seen an accelerated change in the hyper-connected parts of both developing and developed worlds. The term VUCA-environment (Volatile, Uncertain, Complex and Ambiguous) describes our new social, political, economic and environmental landscape, and may itself provide some clues about how future generations might be educated, what they may be expected to learn and know, and ultimately how they may be prepared to survive and thrive. We propose that design-led entrepreneurship and innovation are both essential skill-and-mindsets that stand at the core of how future generations will successfully navigate VUCA (Volatile, Uncertain, Complex, Ambiguous) environments. Despite the rise of design-entrepreneurship and a broader acceptance of “design thinking” in business, we contend that entrepreneurship’s connection with design education remains marginalized in today’s mainstream pedagogy. We describe here the VUCA conditions and the emergent values and priorities of the post-recession generations of consumer, employee and learner (millennial-and-beyond). We examine the manner in which these (Gen-Z and Alpha) generations learn, and contrast this with current pedagogical priorities and modalities. We then conclude with the case for Parsons’ *Entrepreneurs Lab (ELab)*: a design-driven business incubator and academic research lab which seeks to develop a ‘design intelligent’ pedagogical approach. We argue that the ELab model and methods address the pivotal role of design in developing that most intangible quality, the entrepreneurial mindset. We further assert that teaching and using design principles and methods for innovation and entrepreneurship will better prepare future generations to better respond to the unknown.

Key Words: VUCA, Innovation, Entrepreneurial Education, ELab

The Problem and its Context: VUCA and Today's Stakeholders

The VUCA Environment

Initially developed as a concept in the post-Cold War era at the U.S. Army War College, the term VUCA (Volatile, Uncertain, Complex, Ambiguous) was first applied, as an acronym, in late 1990s before gaining wider currency in the wake of the attacks of September 11, 2001 (Kinsinger and Walch, 2012). VUCA frameworks began to be adopted by businesses following the 2008-09 financial crisis as many companies and organizations found themselves confronting volatility in their business environments and stress on business models they had developed under more stable conditions (Deloitte, *Fit 4 VUCA*, 2015). The crisis' highest-profile bankruptcies in the U.S. occurred in the financial and automotive sectors, however, between 2008-10 a disproportionate number (over 170,000) small businesses in the U.S. closed (Thomas, 2012), Guo's analysis reveals that a majority of these were businesses which were heavily reliant on credit (Guo, 2014), exposing cash-flow vulnerabilities. Although the financial crisis has bottomed out and global growth has slowly and unevenly returned, many organizations are now experiencing a 'new normal' in business environments that have been profoundly "affected by digitization, connectivity, trade liberalization, global competition, and business model innovation" (Lawrence, 2013: 5). The pre-recession world—as well as its old paradigms—now no longer hold.

Bennett and Lemoine (2014) argue that VUCA conditions are not necessarily negative. While representing clear risks they also give rise to numerous opportunities, particularly for those who are sensitive and responsive to the distinctiveness between and nuances of each of VUCA's four attributes. They are critical of generic management prescriptions that respond to VUCA with such calls as to be "creative," "flexible" or to "innovate," without first defining the expected implications of each VUCA characteristic. As they state "we contend that the term VUCA offers a mélange that is dangerous in its consequences. The four components of the VUCA acronym have unique meanings that should be instructive to leaders; instead, useful differences between the terms are glossed over and their value lost." (Bennett and Lemoine, 2014: 2). To this end, they present a table (Figure 1) which provides examples of, and responses to, each VUCA condition. In comparison with their framework, the authors of this article present a graphic they developed for a presentation at the fifth-annual *21st Century Academic Forum* in Boston (Figure 2). Our graphic describes how educators can teach mindsets and skillsets to better prepare students for VUCA environments. Although each framework has a different purpose (management vs. pedagogy) and each adopts a slightly different nomenclature, the conclusions in both frameworks are broadly similar in terms of the attributes of resourcefulness and experimentation they demand.

Table 1. Distinctions within the VUCA framework

	What it is	An example	How to effectively address it
Volatility	Relatively unstable change; information is available and the situation is understandable, but change is frequent and sometimes unpredictable.	Commodity pricing is often quite volatile; jet fuel costs, for instance, have been quite volatile in the 21 st century.	Agility is key to coping with volatility. Resources should be aggressively directed toward building slack and creating the potential for future flexibility.
Uncertainty	A lack of knowledge as to whether an event will have meaningful ramifications; cause and effect are understood, but it is unknown if an event will create significant change.	Anti-terrorism initiatives are generally plagued with uncertainty; we understand many causes of terrorism, but not exactly when and how they could spur attacks.	Information is critical to reducing uncertainty. Firms should move beyond existing information sources to both gather new data and consider it from new perspectives.
Complexity	Many interconnected parts forming an elaborate network of information and procedures; often multiform and convoluted, but not necessarily involving change.	Moving into foreign markets is frequently complex; doing business in new countries often involves navigating a complex web of tariffs, laws, regulations, and logistics issues.	Restructuring internal company operations to match the external complexity is the most effective and efficient way to address it. Firms should attempt to 'match' their own operations and processes to mirror environmental complexities.
Ambiguity	A lack of knowledge as to 'the basic rules of the game'; cause and effect are not understood and there is no precedent for making predictions as to what to expect.	The transition from print to digital media has been very ambiguous; companies are still learning how customers will access and experience data and entertainment given new technologies.	Experimentation is necessary for reducing ambiguity. Only through intelligent experimentation can firm leaders determine what strategies are and are not beneficial in situations where the former rules of business no longer apply.

Figure 1. Bennett and Lemoine's managerially-oriented framework describing VUCA, with sample prescriptions for each (Bennett and Lemoine, 2014: 3)



Figure 2. Alexander and Fry's pedagogically-oriented framework for design-business experiences aimed toward preparing students for VUCA conditions

An organizational and managerial theory focused on VUCA conditions will tend to emphasize the capabilities and resources that a firm should make to ‘VUCA-proof’ its operation. In contrast, a design-business theory may borrow from Freeman in seeking to holistically engage the requirements of *stakeholders*, each with their own capacity to support or disrupt a firm’s business plan (Freeman, 1984). In addition, this latter theory may combine stakeholder insights with a design-intelligent approach to help businesses imagine and re-imagine their ideas; iteratively developing their business plans and organizational models by building VUCA into the core of the development process. We contend that educating students to produce business plans which account for VUCA attributes, combine stakeholder insights and continually re-iterate using design-intelligent approaches will help to enhance future entrepreneurs and business leader’s capacities in building “antifragility,” in the face of VUCA, into their enterprises (Taleb, 2014).

The values of today’s stakeholders

The values and priorities of today’s consumers, employees and learners are not radically different from those of previous generations. However, we argue that the varying generations are different in particular ways: these (early 21st century generations) are distinguished by the ways in which they are influenced by new environmental pressures (i.e., demands for response to global warming) and by the “Great Recession” of 2008-9. We examine these influences through the lens of 21st century consumers, employees, and learners.

Consumers

The new spenders in the economy: millennial consumers, expect businesses to manifest responsibility to their communities, internally and externally; not only with their shareholders, but also with their suppliers and employees (The 2016 Deloitte Millennial Survey):

No longer seen as monolithic, companies can now build or destroy social (and therefore actual) capital very easily and quickly. Social trends have likewise affected many businesses, bringing about more robust commitments to corporate, social, and environmental responsibility, not as a choice but as a requirement of doing business.

- Fry and Alexander, 2016: 180

The ability to build and grow a business through platforms that bring various stakeholders together is evident in such companies as *Airbnb* (accommodation, founded 2008) and *Uber* (transportation, founded 2009). These are currently the two largest American entities in the new “sharing,” (or collaborative-consumption) economy, both being examples of digital platform businesses. According to Benkler (2006) and Sundararajan (2016), a platform’s key to survival is stakeholder trust, confidence in the network, smooth facilitation of transactions and accountability mechanisms. These highly profitable and fast-growing sharing platforms exemplify how explosive growth and high profitability can result from a well-designed business that engages the values and priorities of a new generation that views sharing of resources as both an ethos and a practical, cost-effective solution.

Employees

Economist Robert Reich has long been a critic of what has become known as the “gig economy” or what he’s referred to as the “scraps economy” (Reich, 2015), consisting of workers whose roles have been disaggregated from traditional careers to ad-hoc tasks that are then purchased—as needed—via sharing-platform services. Examples of such services are *Taskrabbit*, *Instacart* and *Uber*, none of which offer retirement benefits or health insurance, and many of which place employees into a race-to-the-bottom as they compete against each other for increasingly lower wages. Contributing to a trend that has seen workers move from single-role careers to more fluid and collaborative ways of working, workflow tools such as *Basecamp* and *Slack*, and communication and conferencing platforms such as *Skype*, *Facetime* and *Zoom*, have enabled many workers to forego their commute in favor of remote, asynchronous, and sometimes piecemeal collaboration on projects. Motivated by factors that may include combinations of economic necessity, schedule flexibility and lifestyle motivation, many of today’s employees also carry what are called “hyphenated” job descriptions, fulfilling two or more work roles, often within a single work day: a bartender may also work as a part-time account executive, or an *Uber* driver may also work as dog-sitter, perhaps using several ‘sharing’ platforms to match them with gigs.

Learners

The early years of the current century saw many companies experiment with various methodologies to disrupt traditional classroom-based teaching, and the credentialing process that accompanies it. Today, broad faith in the intrinsic value offered by traditional institutions of higher learning is under pressure (Bass, 2012). University attendance in the United States is associated with high costs (The Economist, 2012); according to the Federal Reserve the cumulative student debt burden in the U.S. currently stands at around \$1.3 trillion (Bricker, Brown et al., 2015). This pressure on traditional university education, however, may be mitigated by a recognition that in a slow-growth, yet technologically-sophisticated economy, only the most highly educated will continue to reap relatively high rewards for their labor in an already saturated and exclusive environment (Murphy, Topel, Becker et al., 1999). Additionally, as Arrow (1973) on Spence (1973) has asserted—in certain cases—obtaining an education from a high-profile university may serve as a signal to employers of a candidate’s success in a selective admissions process in which factors such as financial commitment and degree of difficulty of coursework may indicate that the graduate is prepared for post-university life. The authors speculate too that diminished employment opportunities may act as a countervailing force toward the adoption of alternate forms of learning, as young people may be encouraged by diminished employment options into selecting more conventionally-recognized career paths and participating in commonly accepted ways of attaining these.

Education and Business

The complexity of education as a business venture has led a number of digital technology-enabled education ventures to fail. MOOCs (Massive Open Online Courses), such as *Udacity* (2012), *Stanford Online* (2006), *Coursera* (2012) and *Kahn Academy* (2006), have had documented problems retaining students (Alrainmia, Zoa, et al. 2015). These efforts however, have helped to challenge classroom-based learning modalities, even if only used as a supplement to traditional teaching and learning. The influence of *YouTube* and the ubiquity of the internet in the classroom may better presage more profound shifts. As exemplified in the PBS documentary

Digital Media: New Learners of the 21st Century (Digital Media..., 2012), many educators observe that the 21st century American learner is much less dependent on received information and more apt to self-instruction in non-linear, “as-needed” ways, utilizing networks (Siemens, 2012). This trend will continue to apply pressure on the traditional academy to make a stronger case for how the value it offers is commensurate with its cost of attendance. In this environment, we assert that a design-oriented pedagogy continues to retain and add value though involving students in inductive, heuristic processes which are refined and iterated through successive feedback loops using methods such as critique and user-testing.

What can we broadly infer from the values and priorities of today’s latest generation of consumers, learners and employees; the Millennial generation? First, the 21st century American consumer and employee is attracted to companies whose values align with their own; that sharing is perceived as having both a pragmatic and an ethical value; and that a company’s story is important; so brand needs to align with values (Faw, 2014). Second, the 21st century employee expects not only to have multiple careers in a lifetime, but to have multiple simultaneous roles in the workplace; adaptability, flexibility and ability to reinvent one’s working life are expected norms in the 21st Century workplace. Third, the 21st century learner is less patient about received wisdom. This ensures that a pedagogy that does not allow flexible modes of personal investigation and does not leverage the non-linearity and ubiquity of the internet is unlikely to succeed. The immediacy of relevance in material and new classroom approaches must ultimately counter the high costs associated with a higher education.

Why is this a Problem?

Traditional practices conflict with the values and priorities of future learners. Rapid escalation in the pace of change leading up to the 2008-9 crisis, with its subsequent downturns has led policy-makers, journalists and educators to speculate about gaps in the skills that the U.S. population is acquiring (Cappelli, 2014). Certain organizations such as *Turnaround: Arts*, *The Gordon Commission* and others have been responsive in understanding more dynamic learning environments (as opposed to skills per-se) recommending that the education sector help to develop graduates who can adapt rapidly to new circumstances and opportunities (for more information on *Turnaround: Arts*: <https://turnaroundarts.pcah.gov/> and *The Gordon Commission*: <http://www.gordoncommission.org>). A focus on the pros-and-cons of standardized testing and the debates over Common Core Standards (Bleiberg, West, 2014), however, have led many experts to overlook how they might begin to develop adaptable, change-capable students, or recognizing that these are capacities that need to be taught explicitly. Future preparedness has tended to place great emphasis on the importance of STEM (Science, Technology, Engineering, Math) education (U.S. Department of Education, 2016) at least partly in order to enable Americans to compete worldwide with other highly educated citizens. Global benchmarking projects such as OECD’s PISA rankings (OECD, 2015) have helped to fuel this educational arms race. In the midst of its ascendancy, STEM education risks overlooking two important facts in its pursuit of global competitiveness.

First, in the 19th and 20th centuries, the American economy created things that had never been seen before—either inventions or innovations, from the electric light to the passenger airplane. Granted, STEM skills were absolutely necessary for a majority of these breakthroughs. Economist Robert Gordon asserts that America’s age of significant, life-altering innovation is slowing down (Gordon, 2012). If he is correct, then it follows that a “what-if?” or “future-directed” creative thinking might be productively incorporated to STEM’s essential framework in order to advance global competitiveness and to reframe what constitutes a ‘life-altering

breakthrough' in terms of sustainable survival of humans. (This incorporation is called STEM plus Art, or "STEAM;" further defined in <http://stemtosteam.org/about/>).

Second, in the 21st century, it is probable that we may come to see that winning an economic growth race against China or the European Union as less important than collective human survival in the face of severe global challenges—global warming amongst them. But with today's business goal-posts constantly moving, how do we as educators best prepare students for the world's new challenges? And how can we take their values into consideration?

Success in VUCA environments, and meeting the needs of today's consumers, employees and learners, is an absolute necessity for any business, and building these elements into a business plan is a design task. Although this fact is being explicitly and seriously pursued by some business and business-design programs, only a small minority of educators consider STEAM to be a part of their core mission. Under the rubric of "Art" we consider design, haptic problem-solving, applied creativity, and integrated learning to be among STEAM's key attributes, to be taught in addition to codified (technological/scientific) curricula.

Some design pioneers have reimagined the education system in an attempt to predict where economic development, and the skills needed to support it, were heading. In 2003, Roger Martin (at that time Dean of the Rotman School of Management at the University of Toronto, Ontario) partnered with the Ontario College of Art and Design to offer a series of courses on collaboration. In 2006 the Illinois Institute of Technology (IIT)'s Institute of Design launched a nine-month executive master's program in Design Methods. At Parsons School of Design, a BBA program in Design and Management was reimagined in 2004 as a design thinking/business hybrid and in 2012 Parsons launched the graduate program of Strategic Design and Management. In 2008 California College of Art (CAA) launched its MBA in Design Strategy and New York's School of the Visual Arts (SVA) launched its MFA in Design for Social Innovation program.

Stanford University launched their 'D-School' in 2005 facilitated by professor David Kelley, also founder, chairman, and managing partner of the design firm *IDEO*. Kelley has declared, "We want to produce T-shaped thinkers" (Hansen, 2012). This concept was first described in an article by David Guest "[as] combining analytical thinking—the vertical leg of the T—with horizontal thinking: intuitive, experiential, and empathetic" (Guest, 1991).

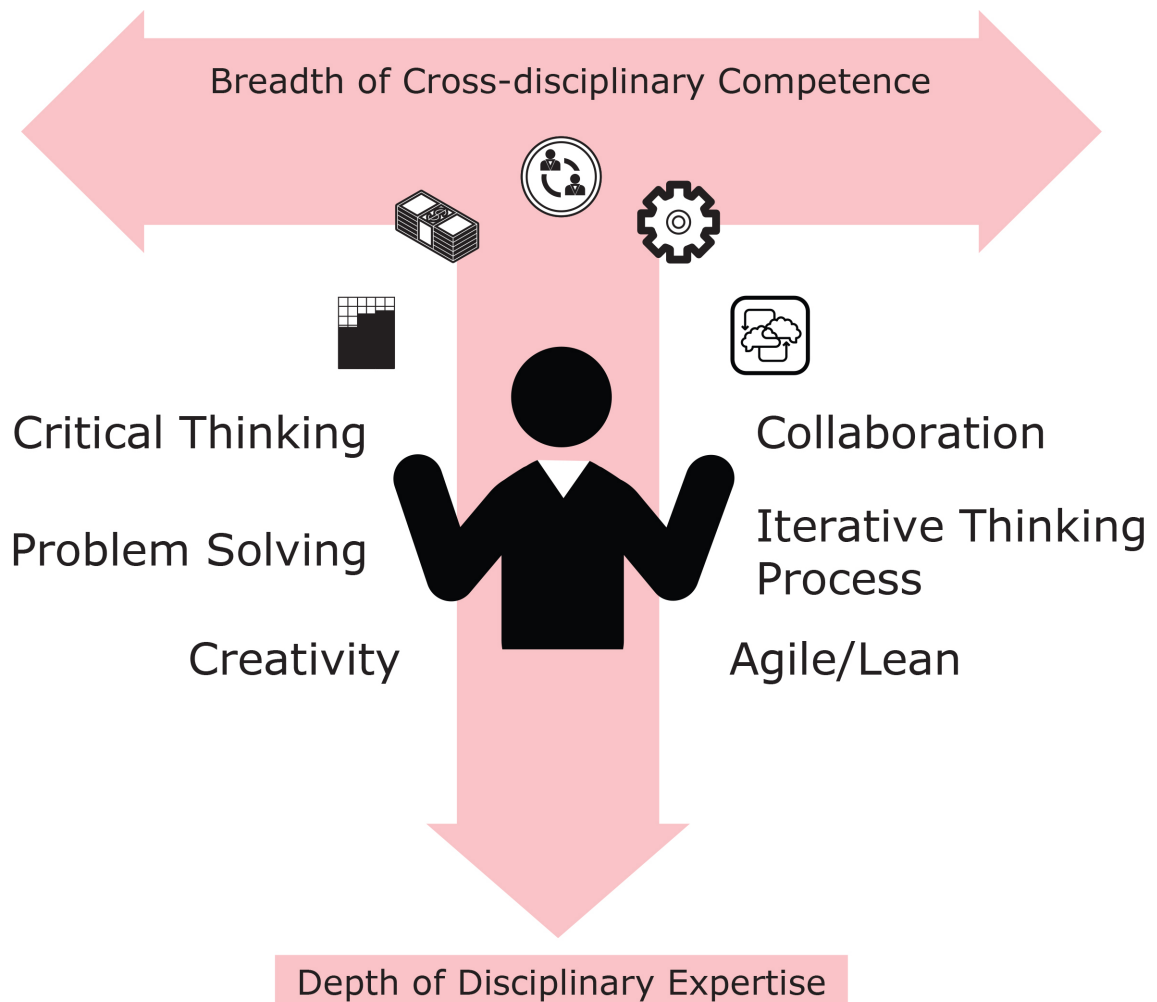


Figure 3. Our illustration of Guest's (1991) "T-shaped thinker," 2016

Despite recent and encouraging developments in the discourse of design-business education, design-business incubators at design schools are scarce. In the United States, currently, only Pratt Institute has an incubator (*BF+DA*), for fashion, and this does not test a distributed (networked) model which builds upon sharing-economy concepts. In contrast Parsons' *ELab* has created a model in which its fellows (those participating in the twelve-month version of the incubator) work on campus and in shared "hot-seat" spaces throughout NYC both in academia and within industry contexts. This model seeks to redress the deficit of entrepreneurial education generally, and design-oriented entrepreneurial education specifically.

ELab was formed in 2014 and is distinguished by Parsons' "design intelligent" approach, a practice we define internally as representing an integration of business logic, economic rationale, and organizational realities with the important capabilities of design thinking methodology and practice that we believe will lead to superior business results, enhanced sustainability and greater social value. *ELab* fuses design-intelligent iterative processes with the progressive values of *The New School*, (for more information see, <http://www.newschool.edu/about/history/>). *ELab* is sector-agnostic, advocates for '[high] impact entrepreneurship' (Acs, 2008), TBL (Triple Bottom Line) values and principles (Elkington, 1997) and promotes utilization of lean strategy (Collis, 2016). *ELab* aims to support and

strengthen the student evolution from academic-to-applied practice through extra-curricular programming, workshops and mentorship in a variety of practical business and design methodology contexts, supporting them to develop a minimum viable product and gain traction with it, thereby preparing their new ventures to compete and thrive in the post-recession landscape.

How Will We Address the Problem?

There are three factors that characterize Parsons' design intelligent pedagogy: i. new modalities of learning, ii. emphasis on innovation, and iii. redesigned models of educational frameworks.

In delivering an innovation-oriented pedagogy, we recognize that future learners (Gen-Z, Alpha, and beyond) have certain, fundamentally different learning orientations and that these in turn can be modeled and leveraged. For today's learners this means swiping, using social and learning apps, gamification, sharing, wiki, and using *Google* and *YouTube* and others as media and tools (Prensky, 2001). We assert that these capacities, however, need to be rooted in problem-solving skills, leadership and teambuilding practices, as well as iterative methods and approaches.

As with entrepreneurs, successful designers must also identify opportunities, observe phenomena to validate hunches, question existing assumptions and practices, envision a better future, work heuristically (through trial and error), and be willing to fail and to reinvent (McGrath, 2011). At the risk of being confused with "business intelligence" (enhanced organizational and decision-making driven by analytics tools and big data), design intelligence can be understood as somewhat connected with what Nigel Cross refers to as "designerly ways of knowing," which act upon non-verbal codes in the material culture (Cross, 2007). Cross regards these codes as facilitating the constructive, solution-focused thinking of the designer in the same way that the other (verbal and numerical) codes facilitate analytic, problem-focused thinking. Roger Martin elaborates on this distinction, stating that analytical, scientific, and deductive-reasoning-driven enterprises value reliability over validity. A "reliability bias" tends to focus on processes intended to eliminate uncertainty, whereas a "validity bias" tends to pursue valid answers to new questions—a process Martin, to paraphrase Charles Sanders Peirce, described as *abduction*: an informed wandering, or "inference to the best explanation" (Martin, 2009: 61).

Parsons' ELab; Testing New Educational Models and Frameworks

If Parsons' 'design intelligence' validates the pursuit of valid pragmatic business answers through both analysis and synthesis, a design hybrid education can offer students the skills that today's business leaders seek (Martin, 2009), especially for organizations aiming to create new value for their customers. Such skills include collaboration, empathy, practical problem solving, social responsibility, multidisciplinary approaches, inventive use of technologies, adaptability and design thinking coupled with business rationale. Today's design-inflected leader draws on the needs of people, combines these with the opportunities technology affords and posits the "what if?" question that is at the conceptual heart of the innovation inquiry. Design's iterative approach helps to create structures that promise to be more resilient to sudden changes of economic climate and technological disruption in a VUCA world.

We have argued that a design intelligent education which recasts design as an entrepreneurial activity with deeply practical implications for every facet of business is a competitive asset, particularly in a VUCA environment. However, uncertainty is... uncertain. Both design and business schools face their own VUCA conditions; perceiving shifting design-

business landscapes, confronted with the rapidity of change and the wicked problem of the multiple permutations of the design-business nexus. Most are in the process of considering how to respond to these uncertainties. In addressing how *ELab* may provide capacities toward addressing these issues we discuss *Lockheed Martin's* “Skunkworks” in its more contemporary iterations:

Skunkworks (n): An experimental laboratory or department of a company or institution, typically smaller than and independent of its main research division.
Oxford English Dictionary

The term Skunkworks was coined in the late 1950s in reference to the Advanced Development Projects laboratories of aerospace company *Lockheed Martin* which was established by famed aerospace engineer Clarence L. “Kelly” Johnson. Kelly wrote the “14 Rules and Practices” of Skunkworks (for more information on Kelly’s 14 Rules and Practices: <http://lockheedmartin.com/us/aeronautics/skunkworks/14rules.html>).

Rule 1 states that, “The Skunkworks manager must be delegated practically complete control of his program in all aspects while rule 4 states, “A very simple drawing and drawing release system with great flexibility for making changes must be provided.” Such guiding principles of creative autonomy and maximum design flexibility, share key characteristics with *ELab's* design intelligent iterative approach. *Lockheed Martin's* informal, or even “illicit,” Skunkworks represented a necessary break from the hidebound management practices of 1950s corporate America (Gwynne, 1997), signifying a belief that the routines and reporting structures that it had itself developed would and could not produce rapid, breakthrough innovations (such as the Kelly team’s enormously complex and ambitious, cold-war era, *SR-71* “Blackbird” of 1966 (still the world’s fastest manned air breathing jet ever flown, with an official top speed of 2,193 mph)). Kelly’s lab produced state-of-the-art engineering marvels using an alternate development-and-management paradigm (Rich, 1994). *ELab's* structure seeks to model the Skunkworks’ in-between (or interstitial) status: *Lockheed Martin* sanctioned a laboratory with maximum autonomy sitting between corporation and independent contractor. Through the manner in which its fellows are distributed, *ELab* similarly inhabits an interstitial space between academia and the 21st Century work culture as it seeks to model today’s workplace with its lean operating budgets, shared capacities and lack of a specific physical locale. Operating without a physical space, *ELab* is housed, conceptually, within *Parsons School of Design*, a division of *The New School*, featuring a distributed (rather than centralized) model which embeds its fellows within sector-specific co-working spaces or incubators in the greater NYC startup community. These features make *ELab* easily scalable and less expensive, in contrast to traditionally-conceived academic business incubators (e.g., NYU’s *Leslie eLab* or NYU and UVA Darden’s *iLab*), which are usually structured as centers within universities, often with a single-sector focus

(refer to Figure 4s' illustration of this organizational contrast):

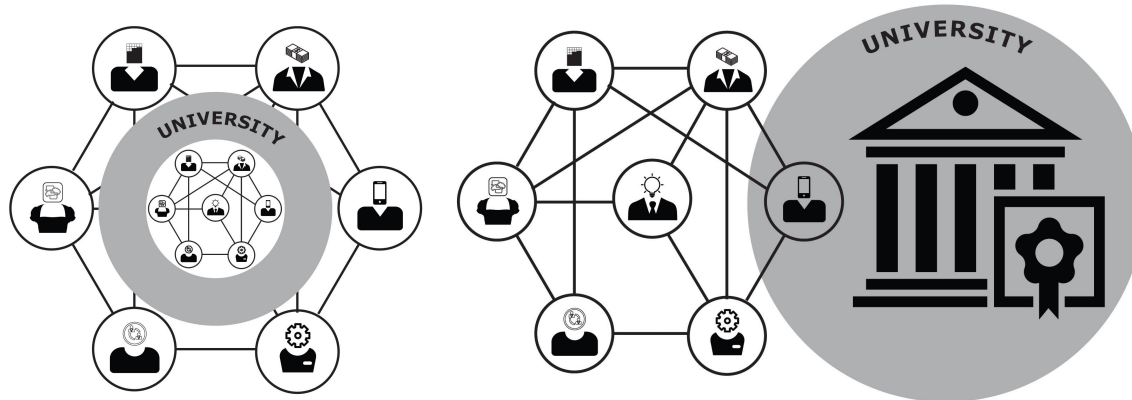


Figure. 4. A campus-based business incubator, or center (left) contrasted with *ELab*'s distributed model (right) in which there is no internal vs. external network. The various personae comprising each network represent financiers, innovators, engineers etc.).

ELab aims to support and strengthen the student transition from academic learning to applied practice, through extra-curricular programming, workshops, and mentorship in a variety of practical business and lean design process contexts. This helps fellows to develop a minimum viable product, gain traction, prepare their new ventures and learn how to thrive in the post-recession landscape. Our networked model is a system in which value is co-created and exchanged, in a distributed way, through a network of participants. An interesting example of creative autonomy and design flexibility at *ELab* is its support of design/innovation methods of collaborating and teaching which nurture faculty to become intrapreneurs. Our founding membership in a consortium of ten universities across New York City committed to impact entrepreneurship through design pedagogy. *ELab*'s network is agile, as well as highly collaborative and integrative—in other words, a contemporary Skunkworks. The Economist describes today's skunkworks as less about leaving employees "alone to think lofty scientific thoughts," and more about creating semi-autonomous networked units with a close communication between "marketing, design and accounting folk, to keep its feet firmly on commercial ground." (Skunkworks, 2008). *ELab*'s close communication between various actors in the network is an intuitive outcome of distributing its fellows dynamically between academic and applied contexts (see Figure 4).

Due to the success of a high proportion of *ELab* fellows (see Figure 5), it has become a model for some new cross-university curricular programs. This is in response to the needs of current students in the new economy and a way of infusing the designer mindset and the T-shaped skills into programs that do not explicitly teach this content. In the same way that *ELab* embraces a distributed model, it has also pivoted from an 'Entrepreneurial Studies' idea (i.e., a program) toward an entrepreneurial *capacity*: one that is shared, like our contemporary economy.

The Impact of Our Methodology

The impact of *ELab*'s methodology is demonstrated in the way we administer and operate the lab. We teach our student researchers to run the lab and to measure the efficacy of our low-cost, easily scalable, networked model. In conducting our internal research. We use design research methods; a combination of mixed methods (both qualitative and quantitative) and we also use participatory research methods, discovering insights that inform and enable us to iterate on the program. Part of a longitudinal study of *ELab* (which is currently in progress), is the assessment of a design-driven mindset for future entrepreneurs and learners, its trial-and-error design, and measuring, the skills transferred and the impact of failure for intrapreneurship. We also hope to design best practices and guidelines for design-driven academic incubators focused on impact entrepreneurship. Our *ELab*'s twelve-month incubator around design-driven impact, for example, has been impressive, our fellows embodying what it means to be change-makers and purpose-driven. Below are outcomes from one of our prototype programs.

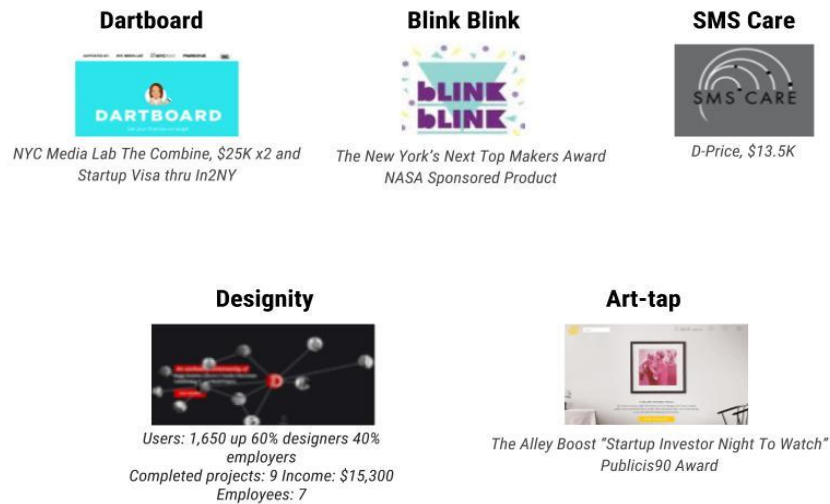


Figure 5. Five ELab-affiliated startups that either received external funding 2015-16 and/or are currently operational

Dartboard (above) tackles personal finance and college loan debt; *Blink Blink* tackles STEAM and technology education for young girls; *SMS Care* leverages SMS technology to alleviate preventable childhood diseases; while *ArtTapX* provides tools to democratize the fine art world. Of note, from last year's cohort of eleven startups, four won financial awards in less than six months and five out of the eleven are currently on their way to becoming financially sustainable.

The Next Step: Fostering an Inclusive Culture of Design-Focused Innovation in Business Across the Institution

While *ELab* provides faculty the opportunity to practice what they teach, it also gives them the ability to test and evolve new models. One of our next steps will be to develop an in-curricular, elective program: one that spans the university's graduate programs and is based on our existing twelve-month incubator model. Incorporating the *ELab* curriculum into a graduate elective course is a flexible way of infusing the mindsets and practices of design intelligent entrepreneurship into various majors while also testing its ability to scale across programs and colleges within our university. We also plan to map the many points of entry for different types of learners at different points in their development by flagging existing courses that would be equivalent to those of the *ELab* curriculum for startups. Finally, through the *Kauffman Inclusion Challenge*, a \$420,000 grant that was conferred on our project in 2016, we intend to further our practice of inclusion by supporting more women and people of color in the design and technology businesses with scholarships and seed funding.

Conclusion

VUCA is not a corporate buzzword, rather it is a “new normal,” set of conditions that we must account for when designing businesses that will sustain human life on this planet. Future learners can navigate VUCA using a “design intelligent” approach consisting of human-centered design, qualitative stakeholder research, rapid low-stakes prototyping, and the testing of new ideas (also known as iterative feedback loops with lots of experimentation) for new technologies and systems. The future-oriented, “what-if?” mindsets of the incoming generation of learners can be both modeled and taught by today's innovative universities. We argue that the lean, networked, capacity-oriented methods we describe here put greater emphasis on *design-oriented* entrepreneurial inquiry, helping our future design entrepreneurs in preparing them to meet our collective future challenges.

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New Factors of Engagement

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Abstract

In the Netherlands, research on student success has been highly influenced by Tinto's integration theory. As part of my broader PhD research, I investigate the possible influence of the use of social media by first year students in higher education on student success. In previous studies I measured the best predictive variables of Tinto's theory, derived from various studies, and conducted factor analysis on them to establish one latent variable. In this paper I focus on the role of the use of social media, in particular Facebook, to eventually adjust the model of Tinto for a better fit for students in contemporary society and the developed world. The use of Facebook is measured by purpose (information, education, social and leisure) and by the use of different pages amongst students. In line with Tinto's theory the different integration or engagement components are sought. Principal component-analysis is conducted to explore these components between the purposes of using Facebook and different pages. Internal consistency is sought and the reliability is tested by Cronbach's alpha and Guttman's lambda-2. Ultimately this paper will provide insight into what kind of influences, the use social media can have upon student success.

Key Words: Social Media, Student Success, Higher Education, Integration

Introduction

The success of students in higher education is the main subject of Tinto's (1975, 1993) integration theory, which he coined some forty years ago. The theory basically states that the more a student feels at home at the institute, the better the success or the less change of attrition. He distinguishes social and academic integration, which was initially not based on survey data. However, many researchers were interested in the theory and tried to empirically test it. Some researchers, after having tested the theory, suggested improvements or an alternative theory. Pascarella (Pascarella, Duby, & Iverson, 1983) showed that, independent of the social or academic integration, the various background of students had a direct effect on students success. Tinto himself pointed in later work (Tinto, 1993) to external forces, as have other studies (Berger, 1999; Cabrera, 1992). A study by Beekhoven (2002) pointed out that these external forces especially have influence on non-residential and urban colleges. This eventually led her to leave the dichotomy of social and academic integration behind and included an element from the rational choice theory by Coleman (Coleman, 1990) 'expected duration'. In her conclusion she found that the latter was a better predictor of student success than integration and found the data from the integration variables too large.

Despite the difficulties found in studies using the integration theory, elements of the theory are still being used in different studies and for different purposes. 'The Dutch government [also] annually monitors rational decisions that can influence students' success, such as 'time spent on study' and 'time spent on work'. Like the government, most institutions, after each semester or trimester, measure these factors along with the degree of satisfaction concerning the courses, teachers and institute and the various background variables which were proven to be of influence in previous studies (Braxton, Milem, & Sullivan, 2000; CBS, 2009; Meeuwisse, Severiens, & Born, 2010; Pascarella et al., 1983; Spady, 1971; Tinto, 1975, 1993; Vogels, 2003; Wesseling, 2011).

Let us now step back to compare the situation of the 1970/80's, when Tinto coined the theory and contemporary society. With the expanding role of the computer, Smartphones, the Internet and refining technology it is easier to share, access and store the increasing amount of information. New ways of communicating have emerged, also bringing new possibilities. The emergence of Smartphones has increased the potential and variety of ways we communicate and the accessibility of information and the way we share this. The necessity of being in the same place to interact, share information and communicate with each other no longer exists. The new media and numerous ways of communication and sharing information enables students to engage in virtual worlds, groups or communities where the students explore, in Tinto's words, integrating activities and share information for all purposes. The line between activities in and outside the school are not so strict anymore. Although Tinto's integration theory tends to reason more in line with the 'dominant discourse' (Foucault, 1979) of the '80/'90's society, wherein 'this discourse functions as "imagined geography" of education, constituting when and where researchers and teachers should expect learning "take place" (Leander, 2010, p. 329). In other words, Tinto's theory focuses more on the activities within the borders of a University or college, whereas I argue that these borders are no longer that rigid and therefore the learning and integrating activities are no longer restricted by geography, time and space. More recent studies on student success have adopted the term 'engagement' to pinpoint this difference as apposed to integration.

Students and Communication

The ways in which students communicate have also gone through some major transformations. A study conducted by the Netherlands Institute for Social Research (SCP) in 2005 already showed that 98% of all households with at least one teenager, owned a computer with access to the Internet (Duimel, 2007). These teenagers are the students currently in higher education. Consequently, they are probably well accustomed to online activities and the possibilities of the new media, especially when you take into account that the higher educated one is, the greater the chance of being an early adopter of new media (Huysmans, 2010). In a previous study I pointed out that Facebook was the most popular tool amongst the students to use to communicate and share information (Wesseling, 2012a, 2013). Furthermore, these studies showed that the students use different Facebook pages and use Facebook for different purposes.

The use of pages can be divided into the use of a) their profile page, b) a project page (6 to 8 students), c) a class page (30 students) and, d) a year page (900 students). The use of Facebook (FB) by purpose is categorized in: a) education, b) information, c) social and d) leisure. In the 2013 study I already discovered that “that students who use Facebook for educational purposes tend to use a specific page rather than share the educational information through their own page [and] students who use Facebook for information sharing do use a separate page more often than their own page for contact with other students. The data even show that the more students use their own page for communicating with other students the less they use this ‘profile page’ for educational purposes or information sharing. [Plus] the less they use Facebook for educational purposes the more they use it for leisure. Furthermore these correlations were stronger in the year (2011-2012) when Facebook was not a mandatory component of the curriculum” (Wesseling, 2013, p. 4067).

In this paper the specific use is examined with principal component analysis to uncover possible latent variables, which can be seen as integrating activities that could possibly influence the success of a student. In this paper the following question will be addressed: Can the use of Facebook be categorized by uncovering latent variables? To answer this question, I want to introduce two possible new latent variables: knowledge engagement and peer engagement.

Method

The data in this study was gathered by using self-report questionnaires. In two consecutive college years (2011-2012 and 2012-2013), all first-year students of the Amsterdam University of Applied Science at the Department of Media, Communication and Information, were given digital surveys. In both years there was a different limited enrolment, respectively 960 and 900. However due to various reasons in both years 904 students were enlisted in the beginning of the year. All were given three surveys during the college year, from September through July.

Although the surveys were part of the career-counseling program, not all students participated. This led to a diminished participation in the course of the year. When taken into account the number of dropouts (voluntarily or mandatory due to insufficient study results) the percentages of participants in 2011-2012 were: 88.6% in September 2011 (801 out of 904 students), 76.5% in January 2012 (599 out of 783 students) and 55.1% in June 2012 (415 out of 744 students). In 2012-2013 the percentages were: 80.0% in September 2012 (724 out of 904 students), 58.9% in January (428 out of 728 students) and 39.9% in April (276 out of the 692 students).

All surveys were sent via email using the students' addresses provided by the Institution. As shown above the first survey was sent in September, the second in January, only the third was distributed in different months. In 2011-2012 the survey was sent in May and a reminder was sent in June. In 2012-2013 it was sent in April with a reminder in May. The digital surveys were distributed using Google docs via the students email addresses, provided by the Institute. The data from all the surveys was downloaded using Microsoft Excel into an SPSS file. After being screened for anomalies¹, the data was analyzed using PASW (formally SPSS) Statistics 23 and SPSS AMOS 23. The internal consistency of the integration item/latent variables are measured using principal component analysis (PCA). And here the KMO, Bartlett's test of sphericity, Cronbach's alpha and Guttman's lambda are also measured (Field, 2009).

Findings

The possible relation between the different usages of FB is explored by conducting principal component analysis (PCA). To explore the different components measured by the purpose of FB use and the use of different pages, the first principal component-analysis is conducted, including all items in 2011-2012. As shown in table 1, all items can be divided into three components.

	Component		
	1	2	3
Facebook own page	-.837	.189	.170
Facebook project page	.736	-.011	-.289
Facebook information	.612	.309	.359
Facebook education	.604	.458	.238
Facebook class page	.586	.007	-.251
Facebook social	-.107	.765	-.288
Facebook leisure	-.323	.674	-.014
Facebook year page	.128	-.028	.802

Table 1. New Factors of Engagement – all items 2011
(Component Matrix^a)

Extraction Method: Principal Component Analysis.

a. 3 components extracted.

The first component includes FB use for education and information together with the use of a class, project and own page. The second includes social, leisure and also education. The third exist only of the year page. In the Figure 7 the components are displayed graphically in a plot, which shows that the use of their own FB page and year page stand out of the rest. The anti-image correlation matrix (see Appendix I) shows that the means of sample adequacy (MSA) for the individual variables (or items) are not all above the bare minimum of .5, which indicate that these items do not contribute to the strength. To inspect the relations between the items more closely, the next two paragraphs show the breakdown into the two, above mentioned, latent variables.

New Factors of Engagement

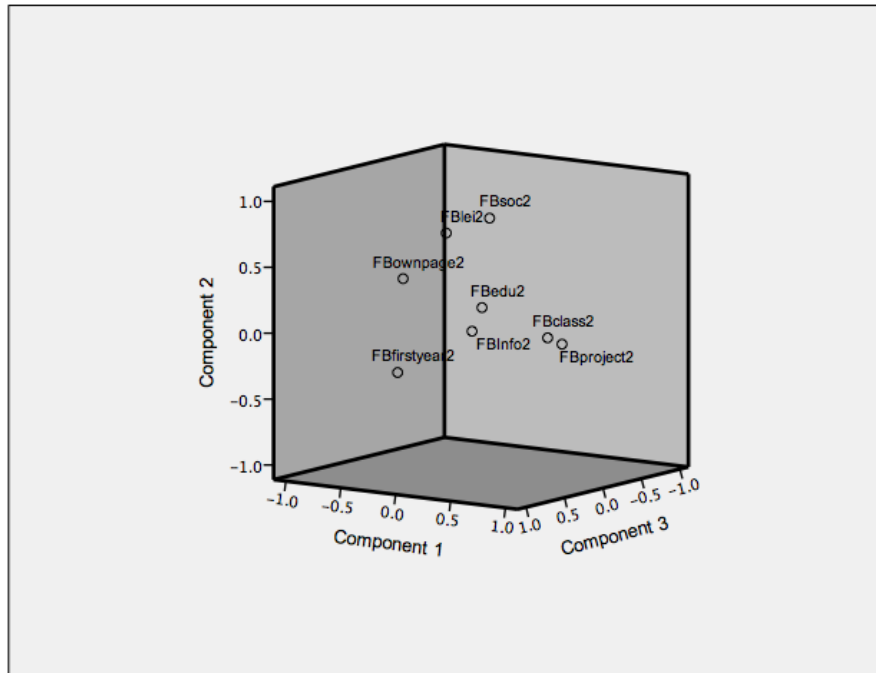


Figure 7. Component Plot in Rotated Space 2011-2012

Principal Component Analysis of Knowledge Engagement

After having established that there are three components involved, the next step is to search for a better fit of the items for each component. Another PCA of the items in the first component was conducted with orthogonal rotation (varimax). In table 2 the rotated

	Component	
	1	2
Facebook own page	-.926	
Facebook project page	.809	
Facebook class page	.601	
Facebook information		.853
Facebook education		.845

Table 2. knowledge engagement – all items 2011

(Rotated Component Matrix^a)

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

component matrix shows that if the items, which had their highest load in the first component, are separated from the rest. They also consist of two components. However, the value of the use of the FB page is negative. When excluding this item in another PCA the result, as shown in table 3, is that the items seem to measure the same component. In appendix II the tables of the Kaiser-Meyer-Olkin measure shows a medium sample adequacy for the analysis, KMO = .65 and the anti-image matrix shows that the individual values are >.61. The Bartlett's test of sphericity $X^2(10) = 245.348$, $p < .001$, indicates that correlations between the item are sufficiently large.

	Component 1
Facebook education	.779
Facebook information	.776
Facebook project page	.595
Facebook class page	.544

Table 3. Knowledge Engagement – 4 items, 2011 (Component Matrix^a)
Extraction Method: Principal Component Analysis.
a. 1 components extracted.

Table 4, 5 and 6 show, respectively, the reliability measured with Cronbach's alpha ($\alpha = .60$), the reliability measures with Guttman's lambda-2 ($\lambda_2 = .65$) and the diminishment

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.602	.607	4

Table 4. Knowledge Engagement – 4 items, 2011
(Reliability Statistics)

Lambda	1	.451
	2	.647
	3	.602
	4	.435
	5	.680
	6	.584
N of Items		4

Table 5. Knowledge Engagement – 4 items, 2011
(Reliability Statistics)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Facebook project page	2.26	2.954	.319	.107	.582
Facebook class page	2.40	3.101	.286	.085	.602
Facebook information	1.41	1.509	.508	.278	.443
Facebook education	1.87	1.932	.521	.282	.408

Table 6. Knowledge Engagement – 4 items, 2011
(Item-Total Statistics)

of reliability if an item is deleted. One item could be deleted without lowering Cronbach's alpha: the use of a class page. The table shows that if the alpha is deleted, Cronbach's alpha would stay the same ($\alpha = .60$). But when deleting the item and a new PCA is conducted, the KMO measure of sampling adequacy decreases to .59 and Guttman's lambda-2 to $\lambda_2 = .60$. Therefore, given the data in 2011-2012, *knowledge engagement* is composed by the variables: use of a project and a class page and the use of FB for education and information.

Knowledge Engagement in 2012-2013

The same steps were conducted for the 2012-2013 data. Table 7 shows that in this year all items can be divided into four components. The first component includes FB use

	Component			
	1	2	3	4
Facebook social	.710			
Facebook education	.685			
Facebook information	.666			
Facebook project page		-.809		
Facebook year page		.787		
Facebook class page			-.778	
Facebook own page			.731	
Facebook leisure				.931

Table. 7. Knowledge Engagement – all items, 2012
(Rotated Component Matrix^a)

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

a. Rotation converged in 5 iterations.

for social, education and information. The second component consists of the use of a project and a year page. However, the influence of the use of a project page is reverse of the use of a year page. The third component consists of the use of their own page and class page. The latter is also negative. At last, the use of FB for leisure is responsible for the fourth component. When several PCA's are conducted by eliminating items one by one and using different combinations of items, the best fit between the several items is found between FB use for education, information and social purposes. When excluding these items in a PCA, the result, shown in table 8, is that these items together explain 48.7% of the variance. In table 9 and 10, respectively the Cronbach's alpha ($\alpha = .47$) and the values of Cronbach's.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.461	48.714	48.714	1.461	48.714	48.714
2	.829	27.619	76.332			
3	.710	23.668	100.000			

Table 8. Knowledge engagement – 3 items, 2012
(Total Variance Explained)

Extraction Method: Principal Component Analysis.

Cronbach's Alpha		
Cronbach's Alpha	Based on Standardized Items	N of Items
.469	.472	3

Table 9. Knowledge Engagement – 3 items, 2012
(Reliability Statistics)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Facebook information	1.92	1.949	.290	.086	.372
Facebook education	2.91	2.343	.265	.072	.422
Facebook social	2.63	1.504	.337	.114	.290

Table 10. Knowledge Engagement – 3 items, 2012
(Item-Total Statistics)

alpha if an item was deleted. Deleting any of the items would not lead to an increase of the alpha. The Guttman's lambda-2 is slightly higher ($\lambda_2 = .48$) as shown in table 11, however still small. That's why the KMO test is also conducted to measure the sample

Lambda	1	.313
	2	.477
	3	.469
	4	.499
	5	.491
	6	.378
N of Items		3

Table 11. Knowledge Engagement – 3 items, 2012
(Reliability Statistics)

adequacy (see table 12). According to Kaiser (1974), a KMO of .5 is the minimum and in this case it's just above with a score of .59. The anti-image matrix (table 13) shows that the individual values are $>.57$ which is sufficient. Furthermore, the Bartlett's test of sphericity $X^2(3) = 64.398$, $p < .001$, indicates that correlations between the items are significant.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.589
Bartlett's Test of Sphericity	Approx. Chi-Square
	64.398
	df
	3
	Sig.
	.000

Table 12. Knowledge Engagement – 3 items, 2012
(KMO and Bartlett's Test)

		Facebook social	Facebook education	Facebook information
Anti-image	Facebook social	.886	-.189	-.216
Covariance	Facebook education	-.189	.928	-.105
	Facebook information	-.216	-.105	.914
Anti-image	Facebook social	.569 ^a	-.208	-.240
Correlation	Facebook education	-.208	.614 ^a	-.115
	Facebook information	-.240	-.115	.595 ^a

Table 13. Knowledge Engagement – 3 items, 2012
(Anti-image Matrices)

a. Measures of Sampling Adequacy(MSA)

Principal Component Analysis of Peer Engagement

As shown above by using PCA, all items involving FB use by purpose and pages in 2011-2012, fell out into three components. After establishing that the four items (use of a FB project and a FB class page and the use of FB for education and information), can be seen as a latent variable, which I named *knowledge engagement*. In this paragraph, the other items are explored also using PCA to uncover a possible other latent variable, which I coined peer engagement.

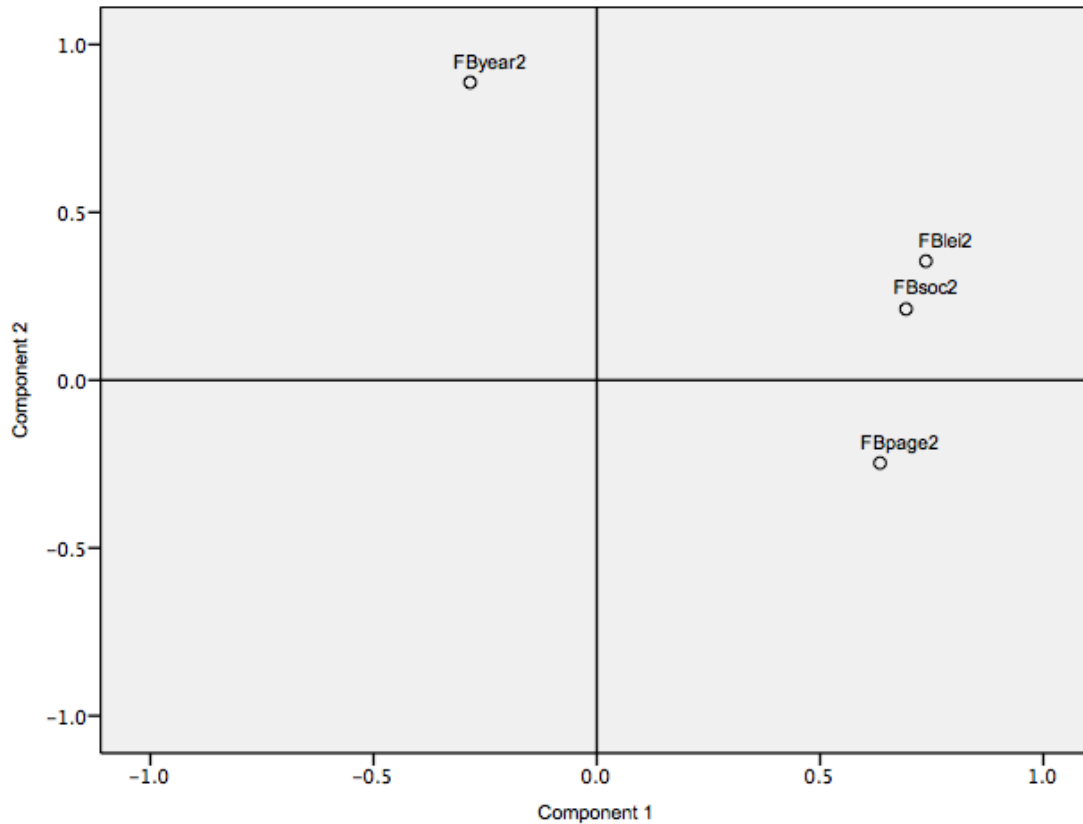


Figure 2. Component plot - 4 items, 2011-2012.

Figure 2 and table 14 show that the remaining four items, as expected, fall into two

	Component	
	1	2
Facebook own page	.634	-.247
Facebook year page	-.284	.887
Facebook social	.693	.212
Facebook leisure	.737	.355

Table 14. Peer Engagement – 4 items, 2011
(Component Matrix^a)

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

components. The use of a year page still stands on its own and has an opposite effect compared to the rest of the items. When another PCA is conducted without the use of a FB the year page, table 15 shows that the three remaining items consists of one component and explain 49.2% of the variance (table 16).

Furthermore, Table 17 and 18 show, respectively Cronbach's alpha ($\alpha = .38$) and Guttman's lambda-2 ($\lambda_2 = .39$). The latter is the reason why FB social isn't deleted as

	Component 1
Facebook leisure	.777
Facebook social	.706
Facebook own page	.612

Table 15. Peer Engagement – 3 items, 2011 (Component Matrix^a)
Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.477	49.225	49.225	1.477	49.225	49.225
2	.859	28.637	77.862			
3	.664	22.138	100.000			

Table 16. Peer Engagement – 3 items, 2011
(Total Variance Explained)

Extraction Method: Principal Component Analysis.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.375	.480	3

Table 17. Peer Engagement – 3 items, 2011
(Reliability Statistics)

suggested in table 19. Although these values are not that high, the KMO test reveals (table 20) that the three items do pass the bar minimum of .5 (.57) and the Bartlett's test of sphericity $X^2(3) = 83.949$, $p < .001$, indicates that the correlations between the items are significant. Furthermore, the anti images matrix (table 21) shows the individual values are $>.55$ which is sufficient.

Lambda	1	.250
	2	.386
	3	.375
	4	.352
	5	.401
	6	.327
N of Items		3

Table 18. Peer Engagement – 3 items, 2011
(Reliability Statistics)

New Factors of Engagement

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Facebook own page	1.55	1.716	.202	.064	.341
Facebook social	.66	.518	.284	.106	.383
Facebook leisure	1.78	1.665	.367	.139	.198

Table 19. Peer Engagement – 3 items, 2011
(Item-Total Statistics)

According to the PCA conducted on the remaining four items, another latent variable is discovered consisting of the use of their own FB page and FB use for social and leisure. These items together form the variable peer engagement in 2011.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.573
Bartlett's Test of Sphericity	Approx. Chi-Square df	83.949 3
	Sig.	.000

Table 20. Peer Engagement – 3 items, 2011
(KMO and Bartlett's Test)

		Facebook own page	Facebook social	Facebook leisure
Anti-image Covariance	Facebook own page	.936	-.071	-.186
	Facebook social	-.071	.894	-.257
	Facebook leisure	-.186	-.257	.861
Anti-image Correlation	Facebook own page	.621 ^a	-.078	-.207
	Facebook social	-.078	.571 ^a	-.292
	Facebook leisure	-.207	-.292	.552 ^a

Table 21. Peer Engagement – 3 items, 2011 Anti-image Matrices
a. Measures of Sampling Adequacy(MSA)

Peer Engagement in 2012-2013

As seen in above, items in 2012-2013 for the latent variable *knowledge engagement* differ from the previous year. Therefore, this paragraph will investigate the remaining items for 2012-2013 and possibly uncover other relations. In 2012-2013 all items together consisted of four components (see table 7). Several PCA's were conducted with all possible combinations of the items. The only combination, which consisted of one component, was found for the same combination of items as in 2011-2012: FB use of their own page and FB use for social and leisure. Although the values are very different as opposed to 2011-2012, the value from the KMO test (table 22) shows a medium sample adequacy and the Bartlett's test of sphericity $X^2(3) = 17.395$, $p < .005$ (not $p < .001$ as in 2011-2012). These items explain 40.4 % (tables 23) of the total variance. However, the Cronbach's alpha and Gutmann's lambda-2 are rather small, respectively .105 and .144 (table 24 and 25). Furthermore, the value of FB own page is negative which could indicate that there would be a better fit without this item (see table 26).

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.513
Bartlett's Test of Sphericity	Approx. Chi-Square	df	17.395
		Sig.	.001

Table 22. Peer Engagement – 3 items, 2012
(KMO and Bartlett's Test)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.212	40.406	40.406	1.212	40.406	40.406
2	.978	32.608	73.014			
3	.810	26.986	100.000			

Table 23. Peer Engagement – 3 items, 2012
(Total Variance Explained)

Extraction Method: Principal Component Analysis.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.105	.076	3

Table 24. PEER ENGAGEMENT – 3 items, 2012
(Reliability Statistics)

Lambda	1	.070
	2	.144
	3	.105
	4	-.029
	5	.155
	6	.106
N of Items		3

Table 25. PEER ENGAGEMENT – 3 items, 2012
(Reliability Statistics)

Another PCA was conducted for the remaining two items and table 27 shows that the two items explain 59.3% of the total variance. Which is almost 20% more than the explained variance by, the above mentioned, three items. The KMO test (table 28) has exactly the value of .5 and the Bartlett's test shows the correlation is significant ($X^2(1) = 14.961, p < .001$).

New Factors of Engagement

	Component 1
Facebook own page	-.304
Facebook social	.621
Facebook leisure	.589

Table 26. PEER ENGAGEMENT – 3 items, 2012
(Component Score Coefficient Matrix)

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser
Normalization.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.186	59.283	59.283	1.186	59.283	59.283
2	.814	40.717	100.000			

Table 27. Peer Engagement – 2 items, 2012 (Total Variance Explained)
Extraction Method: Principal Component Analysis.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.500
Bartlett's Test of Sphericity	Approx. Chi-Square df	14.961 1
	Sig.	.000

Table 28. PEER ENGAGEMENT – 2 items, 2012
(KMO and Bartlett's Test)

Cronbach's alpha and Gutmann's lambda-2 reliability tests show a very weak correlation between the two items. They both have a value of .168 (table 29 and 30), which points to unreliability. However, in case of determining reliability between two items, a better test is the Spearman-Brown (Eisinga, 2013). Table 31 shows that the value is considerably higher (.313), however still questionable.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.168	.313	2

Table 29. PEER ENGAGEMENT – 2 items, 2012
(Reliability Statistics)

Lambda	1	.084
	2	.168
	3	.168
	4	.168
	5	.168
	6	.116
N of Items		2

Table 30. Peer Engagement – 2 items, 2012
(Reliability Statistics)

Cronbach's Alpha	Part 1	Value	1.000
		N of Items	1 ^a
	Part 2	Value	1.000
		N of Items	1 ^b
	Total N of Items		2
Correlation Between Forms			.186
Spearman-Brown Coefficient	Equal Length		.313
	Unequal Length		.313
Guttman Split-Half Coefficient			.168

Table 31. Peer Engagement – 2 items, 2012

(Reliability Statistics)

a. The items are: Facebook leisure 2

b. The items are: Facebook social 2

Conclusion

The two years differ quite a lot when searching for latent variables for FB use. The combination of items for the latent variables *knowledge engagement* and *peer engagement* found in 2012-2013 did not give the same result as in 2011-2012.

If you look at the different items that seem to form the latent variables in 2011-2012, they appear to consist of items, which are more logical to belong to the same latent variable. *Knowledge engagement* is composed by the use of a project and a class page and the use of FB for education and information. All of this points towards the direction of use for education. *Peer engagement* is composed by use of their own FB page and FB use for social and leisure, which points more in the direction of the use for social purposes. In 2012-2013 this distinction is not so clear because the use of FB for information, education and social seem to fall into one latent variable and the latter also correlates with leisure. This overlay of FB for social purposes might also be the cause of a lower score of the reliability tests.

However, in 2012-2013, the membership of a FB class page was mandatory, which was not the case in 2011-2012. This could have led to a different use of FB by the students. As mentioned above, in a previous study (Wesseling, 2013) I already showed that the students use FB more for educational purposes if the teachers do not dictate to join a FB class page. The principal component analysis seems to back this by clearly distinguishing the knowledge engagement and peer engagement in 2011-2012. In the succeeding year the social purpose takes the overhand and burrs this distinction.

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Appendix I

NEW FACTORS OF ENGAGEMENT – all items 2011 (Anti-image Matrices)

		Facebook own page 2	Facebook project page 2	Facebook class page 2	Facebook year page 2	Facebook information 2	Facebook education 2	Facebook social 2	Facebook leisure 2
Anti-image Covariance	Facebook own page 2	.339	.269	.249	.142	-.008	-.001	-.103	-.047
	Facebook project page 2	.269	.434	.165	.129	-.045	-.077	-.112	.040
	Facebook class page 2	.249	.165	.658	.146	-.089	-.056	-.057	-.009
	Facebook year page 2	.142	.129	.146	.909	-.075	-.034	.033	-.055
	Facebook information 2	-.008	-.045	-.089	-.075	.707	-.311	.034	.033
	Facebook education 2	-.001	-.077	-.056	-.034	-.311	.692	-.085	-.021
	Facebook social 2	-.103	-.112	-.057	.033	.034	-.085	.838	-.256
	Facebook leisure 2	-.047	.040	-.009	-.055	.033	-.021	-.256	.850
Anti-image Correlation	Facebook own page 2	.518 ^a	.701	.527	.256	-.016	-.001	-.193	-.087
	Facebook project page 2	.701	.501 ^a	.308	.205	-.082	-.140	-.185	.065
	Facebook class page 2	.527	.308	.472 ^a	.189	-.130	-.083	-.076	-.011
	Facebook year page 2	.256	.205	.189	.213 ^a	-.094	-.043	.038	-.062
	Facebook information 2	-.016	-.082	-.130	-.094	.664 ^a	-.445	.044	.043
	Facebook education 2	-.001	-.140	-.083	-.043	-.445	.667 ^a	-.111	-.028
	Facebook social 2	-.193	-.185	-.076	.038	.044	-.111	.434 ^a	-.303
	Facebook leisure 2	-.087	.065	-.011	-.062	.043	-.028	-.303	.648 ^a

a. Measures of Sampling Adequacy(MSA)

Appendix II

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.650
Bartlett's Test of Sphericity		245.348
	Approx. Chi-Square	
	df	6
	Sig.	.000

Outdoor Education as a Catalyst for Growth: An Anecdotal Reflection and Literature Review

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Abstract

This paper draws on the literature of outdoor education studies to substantiate field observations obtained during a work placement with the Toronto District School Board. During that placement, the author worked with students ranging in age from eleven to eighteen years old who travelled to a nature reserve site in Ontario in order to increase their knowledge of the outdoors, as part of an outdoor education program. Many of these students had never been outside of urban centres, and several had behavioural problems. The students were exposed to a program which taught them about wildlife, flora and fauna, self-sufficiency and respect for the environment. The author observed that exposure to outdoor education benefitted such students. To substantiate these observations, the author conducted an extensive literature review to familiarize herself with the body of research on outdoor education. Drawing on the work of Neill and Richards (1998), Hattie, Marsh, Neill and Richards (1997), Uhls et al. (2014) and many other prominent outdoor education researchers, the author finds that her anecdotal field observations about the psychological and physical benefits of outdoor education are validated by a large body of research. Unlike more traditional papers the author has published, which draw on original research, this paper is written in the first person as a personal exploration that integrates both academic research and the author's experience. It reflects an informal first-person paper delivered to the 21st Century Forum at Harvard in the fall of 2016.

Key Words: Outdoor Education, Psychological Growth, Emotional Growth, Outdoor Education Therapy

Introduction

During the fall 2015 semester, I worked at an outdoor education school with students from the Toronto District School Board's Scarborough district schools. As a way of providing context, many residents of this Toronto suburb face significant challenges. Visiting teachers from the Scarborough schools have often informed me that their students come from disadvantaged socio-economic backgrounds. They are more likely to belong to low-income families, and many times more likely to come from one-parent families. According to these teachers, more students than the board's average are considered to have behavioural problems. These observations were supported by an investigation by the Globe and Mail. The article compared a public school in an affluent Toronto neighbourhood with a school in central Scarborough. At the Scarborough school, the authors found that almost forty percent of families earned between \$20,000 and \$40,000, much below the average income in Toronto. Only twenty percent of grade six students met the province's standard in math. In addition, the Scarborough school had a large special-needs population (Alphonso & Grant, 2013).

The stated goals of the Outdoor Education initiative are to introduce students to the sights and sounds found in nature and to familiarize them with flora and fauna outside of urban settings. But as a psychology student, I observed that the results superseded those relatively modest goals. For example, students who appeared shy or reserved when they first arrived appeared to become more extraverted and comfortable around their peers, and disruptive behaviours seemed to lessen over the course of their three to five day-long stays. In short, the benefits of exposure to nature and outdoor education appeared more profound than I expected.

With this in mind, I was curious about what evidence exists to support what I had anecdotally observed. Over the course of this paper, I will describe the results of a literature review I conducted to explore the benefits of outdoor education. Rather than presenting a merely theoretical exploration of the literature, I will relate and compare the research findings to what I observed among students during my work term. In my conclusion, I will suggest the implications of my findings.

Definitions and Clarifications

It is challenging to find an agreed upon definition of outdoor education as definitions vary among different organizations and researchers. However, the original definition of outdoor education proposed by Donaldson and Donaldson (1958) is still widely used: "education in, for, and about the outdoors." As practised by the Toronto District School Board, outdoor education allows children to discover their natural environment in a number of ways. Students, typically from grades six to twelve, are taught lessons about various aspects of nature, such as the behaviour of wolves and coyotes in Northern Ontario. They also learn about outdoor survival skills through a combination of experiential learning (fire and shelter building) and traditional in-class teachings. Most importantly, students spend ample time in the outdoors, hiking and exploring. Many students have never been outside urban centres prior to their visits, so this is the first time they have the opportunity to discover a relatively natural landscape. In a risk adverse society, as discussed by Tim Gill in his book "No Fear" (2007), this freedom can be both eye opening and exhilarating. Beyond this, however, I was interested in exploring the evidence for measurable benefits of outdoor education. For this I turned to a wide range of scholarly writing on the subject to examine whether the benefits I observed had been researched and corroborated.

Literature Review and Associated Observations

The most apparent benefits of outdoor education were easy to predict. Rios and Brewer (2014) conclude that outdoor learning experiences are helpful in two key areas. Students who are exposed to outdoor education develop more positive attitudes towards preservation of the environment. Slightly less obvious, students in outdoor education programs are also more engaged with science and have higher achievement in science courses.

I cannot speak to the latter as I did not have opportunity to observe the students' progress in their science courses. However, I certainly recognized the first benefit in action – Scarborough Outdoor Education School (SOES) actively promotes more environmentally conscious students. Throughout the students' stays, they are taught about numerous ways they can reduce their ecological footprints and practice environmentally conscious behaviours. These include (but are not limited to) day-to-day choices such as taking shorter showers, shutting water and lights off when not in use, and strictly using reusable water bottles. These simple but effective actions can be easily understood and adopted by younger and older students alike.

Near the end of each school's visit, students were asked to share about their experiences and what they learned. The majority would include a portion about the environmentally friendly actions they plan to take from now on. Of course I have not followed up on this, so I cannot be sure whether students have kept their commitments. However, students certainly indicated an increased awareness of environmental issues.

More recent research also suggests the benefits of outdoor education, whether it is in the wild or even just in a school playground. Nicol, Higgins, Ross and Mannion (2007) summarize research on outdoor education in Scotland, writing that there is growing research evidence that being in natural environments enhances health and well-being. In a 2012 paper, Wilhelmsson explores teachers' goals and learning objectives for outdoor education programs. She observes that when students are outside, all their senses are engaged in building knowledge. This leads to higher order learning. Uhls et al. (2014) conducted research at a program during which pre-teen students spent five days at a nature camp and were compared to a control group that did not. After the experience both groups were shown photographs and silent videos and asked to infer the emotional state of the people shown. The group that had spent time in nature did significantly better at the task. Interestingly, the authors attributed these improvements to time spent away from screens and engaging in face-to-face social interactions, rather than the time spent in nature, per se.

This is unsurprising to me. Visiting students at SOES had to hand over all technology to their teachers the first afternoon of their stays. This was not a punishment – rather, the SOES staff agreed that students learn and benefit more from the education when there are no screens to distract them. Indeed, without the use of technology, they were forced to focus more in class, and to find other means of entertainment during free time periods. Students played outside, initiated in-person conversations, and used their imaginations. I can't say for certain, but I would bet that if students had their phones and the Internet available to them, almost every one would have chosen to spend their time with the screens instead. In my opinion, this would have negatively impacted on their learning and development.

Although most students were initially horrified by the idea of being without their phones or the Internet for a few days, many appeared to truly appreciate the experience in the end. During debriefs with students at the end of their trips, they often shared that being without technology (their phones in particular) turned out to be one of the highlights. One grade eleven student expressed that he almost decided not to come on the trip because his teacher told the class in advance that the use of technology would be forbidden. He shared that this was the first time since

he was ten that he went a full day without his phone. He explained the first day was difficult, but that each day without his phone became easier, and he actually began to enjoy the freedom. He concluded that if he had had access to his phone, he likely would not have made the friends he did, or tried as many new things. His fellow students vocalized their agreement.

One of the most useful studies I found examining the psychological effects of outdoor education was conducted by Neill and Richards (1998). They explain that typical answers to the question of whether outdoor education is effective come in the form of passionate rhetoric and anecdotal examples: "One of the most prevalent claims is that outdoor education programs make a valuable contribution to a person's sense of him or herself. We hear phrases like 'improved self-confidence,' 'increased self-knowledge,' 'better able to work in a team with others,' 'becomes more open and caring,' 'has a new lease on life' and so on" (p. 1). I can understand the temptation to make such claims since I too found myself making mental notes about the ways in which students appeared to be benefitting psychologically. However, my observations and assumptions, like many researchers' on the topic, are not backed by sufficient proof. Neill and Richards set out to explore the empirical evidence for such lofty claims.

Unfortunately, this is not as easy as it would appear at face value. As Richards, Neill and Butters (1997) pointed out, almost eighty percent of outdoor programs evaluate their success using written surveys given to the participants. As a psychology student, I've learned that data derived from self-report methods can be deceptive. For example, a study of an outdoor program for at risk youth showed little correlation between participants' ratings of the effectiveness of the program, staff ratings of the same measure, and participants' self-perceptions (Neill, Richards, & Badenoch, 1997). In fact, Neill and Richards (1998) believe that "little outdoor program research has explored the relationships between what stakeholders, such as staff and participants, say about a program's value and other more 'objective' indicators of program effectiveness" (p. 3).

This is in spite of the fact that several reviews over many decades have attempted to address this issue. These include Barrett and Greenaway (1995), Devlin, Corbett and Peebles (1995), Ewert (1983), Godfrey (1974), Reddrop (1997), and Richards et al. (1997). In addition, several meta-analyses have been conducted such as those by Cason and Gillis (1994), and Hattie, Marsh, Neill and Richards (1997). These studies found that generally, outdoor education programs have a positive impact on participants.

However, several important pieces of the puzzle are missing. First of all, I came across only one analysis (Hattie, Marsh, Neill, & Richards, 1997) that explored whether the benefits of outdoor education are lasting. This study followed participants for up to eighteen months after the conclusion of the program and found that after returning home, participants continued to experience growth and a number of positive changes in self-perception.

Second, as Neill and Richards (1998) note, it is important to assess whether outdoor education programs are effective within a narrow range or within a wider range of areas that relate to behavioural change. Here, research by Hattie et al. (1997) and also by Cason and Gillis (1994) is particularly effective. Some of the best work in this area was done in the 1990s when outdoor education was rising in popularity in a wide range of countries beyond North America, including Australia and New Zealand. Hattie et al. (1997) analyzed results within six categories and concluded that outdoor education has significant instant and lasting effects. Hattie reached a similar conclusion in his more recent book (2012). His work is widely cited and considered to be one of the most important contributions to studies of the psychological effects of outdoor education programs. Hattie found significant effects immediately following outdoor education programs. Impressively, when following up over a year later, he found additional growth in six areas.

First, he found improved leadership traits by measuring conscientiousness, decision-making, leadership qualities, organisational ability, time management, values and goals. He found improved self-concept in the areas of physical ability and appearance, peer relations and friendships, general and academic self-confidence, self-efficacy, family relationships, self-understanding, well-being and independence. Third, academic performances improved. This was measured by grade point average and also by improvements in maths, reading and problem solving. Aspects of personality appeared to improve as well, including motivation, emotional stability, aggression, assertiveness, having a stronger internal locus of control, maturity and neurosis reduction. Interpersonal traits strengthened, such as cooperation, communication, social competence, behaviour, relating skills and recidivism. Finally, and perhaps most predictably, participants became more adventuresome.

These findings were corroborated by Cason and Gillis (1994). Their study used clinical measurement scales to assess outdoor programs for those who have psychological difficulties including emotional and behavioural challenges. The effect sizes measured were even more impressive than those in the Hattie study. This may be in part because participants in these programs had more room for growth than the average outdoor education participant (Neill & Richards, 1998).

During my placement, I believe I witnessed some of these psychological benefits in action. Of course I acknowledge my observations may be influenced by hindsight bias, and that they are based on personal experience rather than empirical research. That said, I have found it useful to use anecdotal reflection to deepen my understanding of and connection to the literature.

I will provide examples of five of Hattie's six listed psychological benefits. (I cannot speak to improved academic performance since I did not have access to the students' grades.) First, students had ample opportunity to develop their leadership skills at SOES. Many outdoor education activities involve teamwork, and often require leaders. For example, a popular activity at SOES is low ropes. Students are split up into groups, and must attempt to work as a team to manoeuvre their way across various challenging low elements. The groups that successfully completed elements had almost always assigned a team leader. In one group, a particularly shy student was randomly chosen by her fellow classmates (using names in a hat) to lead. I had hardly heard her speak prior to this occasion. In short, she demonstrated a side to her that I'm not sure her classmates had even seen before. She confided in me afterwards that she had never before felt so comfortable speaking in front of a group, never mind directing one. For the rest of the trip, she was noticeably more extraverted and confident. Several classmates made comments about how much she came out of her shell during her five-day stay. Had she not been placed in a team setting and novel situation, she wouldn't have had that opportunity, and may not have demonstrated the same willingness to step out of her comfort zone in a familiar in-class setting.

Hattie's (2012) description of self-concept is very similar to what one may typically associate with self-confidence. Therefore, when Hattie describes improved self-concept, I find it helpful to interpret this as increased self-confidence. My students definitely appeared to experience an increase in this area over the course of their stays. I could describe numerous examples of this, but in the hope of remaining concise, I will choose two of the most prevalent illustrations. Physically, many were pushed to their limits. The majority of groups participated in an all-day hike. During each hike, at least one student would self-assign the role of the "slowpoke" and/or the "complainer." These students had apparently never before been so tired, and felt they couldn't go on approximately once every half hour. (I couldn't believe how many kids, high school students included, seemed foreign to physical exertion!) However, there were only two students over the

course of my term who did not complete the hike and were escorted back to site. Otherwise all the students made it with encouragement from staff and fellow classmates. Classes were always very proud at the end of the day. It was clear that, for many, the all-day hike challenged their perceptions of what is possible and what they are capable of.

In a similar vein, I was also very surprised at the low level of independence many of the younger students possessed. The first day of a visiting school's stay, students often asked me to perform surprising tasks such as serving and cutting their food or holding on to and keeping track of their belongings. One grade six student even asked me to help dress her in the morning! My coworkers and I would stress that they were responsible for taking care of themselves. Many of the younger students had never been away from home prior to this fieldtrip, and so there was an evident learning curve when they realized their responsibilities. However, students typically embraced the independence and became increasingly self-sufficient over the course of their trips. By the last day, their behaviour suggested they experienced a rather drastic increase in self-sufficiency over a short period of time. I am confident that many returned home with a renewed self-concept as a more independent and capable individual.

Students also demonstrated improved personality in various ways. Not surprisingly, the most predominant and obvious aspects of personality improvement were in the areas of maturity and the development of an internal locus of control. Again – as many had rarely before been away from their parents and their parents' rules, they were forced to adapt quickly to the independence. This process inevitably included much learning and maturing.

Furthermore, in part due to similar reasons, students appeared to gain more emotional stability over their stays. Aggression and disrespect were not tolerated at SOES. As aforementioned, many students had histories with emotional and behavioural issues. Those who typically relied on "acting out" were forced to find other tactics. They learned quickly through experience that they would be more successful approaching a situation or interaction calmly, maturely and logically. As such, I needed to discipline students much more often on the first day of their trips compared to their last. Teachers would often thank the SOES staff as they too noticed the difference in their students' behaviour.

As well, students had opportunity to develop their interpersonal skills. Teachers chose to bring a mixture of students from varying classes and ages, so many students were previously strangers to one another. SOES assigns groups for activities, so students often had to work with new people. This alone provided ideal circumstances for students to practice initiating conversations and friendships. Additionally, SOES stresses teamwork. There are several activities during which students must practice this skill, such as cooperative games and ropes courses. Thus, cooperation and communication were crucial to students getting the most out of their stays.

Finally, students seemed to become more adventuresome as a result of what they experienced at SOES. They were encouraged to ask questions, try new things and explore all that the outdoors has to offer. This frequently included the challenging of their comfort zones. One of my favourite stories I like to tell about the students I encountered is relevant here. In one of the grade six classes, there was a boy who, by all appearances, was very tough. One evening, we led a night walk with his class. During this activity, students are not allowed to bring flashlights, and we venture off into the forest to enjoy the magic of the woods at night. With this class, we decided to include the "solo walk" portion, during which students walk "alone" down a clearly marked trail (they are sent a few minutes apart). Lo and behold, when I explained this activity to the class, the boy broke down sobbing as he was terrified of the dark. For over ten minutes, I explained to him why it is that people are afraid of darkness (their imaginations), and debunked his theory that

wolves engage in human-killing competitions to determine the alphas. Ultimately, he made it through to the end of the trail uneaten, and proceeded to perform a celebratory dance of the “Whip” and the “Nae Nae,” whilst exclaiming that his mother was “going to be so freaking proud!” The next evening, he asked me if we could go on a night walk again! This is one of numerous examples of students facing their fears and engaging in potentially risky, but educational and worthwhile exploration.

Conclusively, my personal observations support the literature. Outdoor education definitely appears to serve many benefits in the area of personal growth. I should add that I believe I too have improved in Hattie’s (2012) six categories as a result of my work term, as this was an outdoor education program for me as much as it was for the visiting students. I am pleased but unsurprised that the literature supports what I observed during field study, as outdoor education programs offer such evident potential for growth.

Limitations of the Studies

These studies offer heady possibilities for those involved in the fields of psychology and outdoor education. However, several provisos apply. The literature suggests that not all programs are equally effective. Several factors influence outcomes. These include program length, nature of the program (whether wilderness or specific sports activities), participant age, participant gender, participant type (delinquent, management, etc.), gender mix of the group, the organization leading the program, and quality of the study (Neill & Richards, 1998). According to Hattie et al. (1997), a full 36% of outcome variance could be explained by these factors, the most influential of which are the organization leading the program, program length (longer is more effective) and participant age (effect size was greater for adults than adolescents, although both improved).

In addition, the method of evaluating outdoor education programs bears examination. As Neill and Richards (1998) indicate, nearly 80% of programs self-evaluate by using written surveys conducted at the end of the curriculum. This limited assessment immediately following a program may not be valid or reliable.

Some programs rely on surveying participants’ perceptions of themselves before and after completion of the education. Participants are asked to report on a range of measures such as self-esteem and locus of control (Neill & Richards, 1998). However, as mentioned, self-reporting has limitations and relies on each participant to objectively measure his or her growth. This requires a maturity and self-knowledge that may be unreasonable to expect and assume from many populations. Furthermore, few studies include a clinical assessment of participants to measure improvements in an evidence-based way, which goes beyond participants’ self-reporting. Finally, another issue, as highlighted by Lubans, Plotnikoff and Lubans (2012) is that virtually no studies exist which include follow-up with participants after more than one year.

It is useful to keep these potential limitations in mind when assessing outdoor education. However, in spite of the reservations mentioned above, the vast majority of studies have documented beneficial effects of outdoor education initiatives.

Conclusion

Upon a review of the literature, it is safe to conclude that outdoor education programs offer considerable benefits in the area of personal growth. Students become more environmentally conscious as a result of the programs. The education teaches students about how and why to preserve nature, and awakens a respect and passion for the outdoors that was not necessarily present prior to the experience (Rios & Brewer, 2014). Wilhelmsson (2012) found that time spent in nature, specifically away from screens and technology, promotes higher order learning. And Uhls et al. (2014) discovered that outdoor education promotes the development of higher emotional intelligence. Hattie et al. (1997) conducted extensive research and discussed six areas that improve as a result of participation in outdoor education programs: leadership traits, self-concept, academic performance, personality, interpersonal skills, and the desire/ability to be adventuresome.

I believe I witnessed these emotional, physical and psychological benefits among my students. But upon reviewing the fantastic developments discussed above, I do wonder how lasting they may be. Hattie's (2012) research suggests that these positive changes are long term. I'd certainly like to believe so, but of course, I'll never know. As part of this personal reflection I will add that my grade seven trip to an outdoor education site is one of my fondest childhood memories. I still remember the feeling of pride after leading my group through a "Trappers and Traders" fur trade activity and winning the "Leadership Award." More affecting, I recall an overwhelming bittersweet feeling when I realized how much time I had wasted until that point without taking advantage of nature and the outdoors. That year, I asked my parents to enrol me in a leadership program at an overnight canoe tripping camp for the summer. I still think of that outdoor education trip as the event that sparked my love of the outdoors, as well as substantial personal growth in very little time.

As mentioned, it's impossible to know to what extent that experience impacted me long term. Regardless, if such positive outcomes can result from three to five days of outdoor education, it's tempting to consider the possibilities of a mandatory, longer-term outdoor education curriculum. The research suggests that the benefits of outdoor education are unique and that the same benefits cannot be derived from a typical in-class curriculum. Therefore, I, along with many leading outdoor education researchers, believe that outdoor education should be a mandatory part of every student's curriculum and experience.

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The Digital Scholar: Embracing New Media in the Pursuit of Scholarly Excellence

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Abstract

What does “digital scholarship” mean? Can new media improve the way we conduct research and publish our work? As Kathleen Fitzpatrick has pointed out, the principal change wrought by new media is not so much technological, but social. Digital media can fulfill our long-elusive goal of making our research more relevant, not only within our scholarly communities but also within the society we aim to serve. The question is particularly significant since most academic institutions—particularly institutions of higher learning—remain largely indifferent towards digital modalities. This article explores how today's scholars can engage with their peers and with society at large by embracing a range of new media technologies, including e-books, social media and Web-based video.

Key Words: Digital Scholarship, Electronic Publishing, Electronic Peer Review, Digital Academia

Introduction: The Digital Humanities

One of the most important publications of the early Renaissance was *I Quattro Libri dell'Architettura*, “The Four Books of Architecture,” by the Italian architect Andrea Palladio (1508-1580). The book was published in Venice in 1570 by the renowned house of Dominico de’ Franceschi, just 70 years after printing press technology had become widespread in Europe. What’s special about it is that it was one of the first printed books to combine movable-type printed text with detailed illustrations, carved and reproduced by way of woodcuts. As such, books like *I Quattro Libri* set a standard for academic publishing in the humanities that, by and large, has remained valid until today. True, in the intervening centuries woodcut technology changed to copper, and then steel engraving, followed by photographic plates, but the basic concept of narrative text, illustrated with printed visuals, is still the norm by which most of us publish our articles, monographs or books.

In 1996, the New London Group attacked that age-old paradigm by issuing a manifesto entitled “The Pedagogy of Multiliteracies,” first published in the *Harvard Educational Review*. It passionately advocated a move beyond standard forms of written rhetoric towards a new pedagogy and scholarly practice, a *multiliterate* paradigm that must now account for the burgeoning variety of text forms associated with information and multimedia technologies, as well as the culturally and linguistically diverse and increasingly globalized societies brought together by these new media (Cope & Kalantzis, 2000).

Sixteen years later, the catchphrase “digital humanities” is as ubiquitous as ever. Just over the last 18 months, we have seen an explosion of articles and even books on the subject. Few of these publications, however, actually try to come to grips with the “nuts and bolts,” the “hands-on” possibilities created by the digital media revolution. How will—or should—multiliteracy affect our practice as scholars in the social sciences? What have the “digital humanities” changed, and what remains the same?

The answer is nothing and everything. The essential questions that we as scientists try to answer about the enduring role of human creativity remain the same, as do the rigor and clarity with which we are expected to answer these questions. What has changed, however, is *how* we go about these things. As Kathleen Fitzpatrick has pointed out, the principal change is not technological, but social. It goes to the heart of the long-elusive goal of making our research more relevant, more *resonant* within our scholarly community and the society we aim to serve. In short, it is about identifying “new ways of thinking about how academic work might be done in the coming years” (Fitzpatrick, 2012).

In many ways, the true beginning of the digital humanities era was the 1982 release of Herbert von Karajan conducting the Berlin Philharmonic in a performance of Beethoven’s *Ninth Symphony*. What made this recording different is that it replicated the performance in virtually the same pristine quality with which it was mastered—thanks to a new digital encoding/compression process called PCM, or Pulse Code Modulation. Though it is little understood today, virtually all other digital media that emerged in subsequent decades evolved from that first but highly significant leap from the analog into the digital world: the Compact Disc. Indeed, just two years after the introduction of the music CD came CD-ROM, which for the first time gave researchers access to vast databases, years before the rise of the Internet. This was followed in 1992 by a digital standard for images (known as JPEG, today the mainstay of imagery on the Web), followed in turn by a similar standard for digital *video* a year later (MPEG); today, virtually all television signals, including HD, are broadcast using MPEG compression.

Background: The Resistance to Digital Scholarship

With the explosion of all these digital resources, it is difficult to imagine that anyone would resist the use of such a wealth of information. But while primary and secondary education has become increasingly receptive to the concept of a digital classroom (Ohler, 2008), traditional institutes of higher learning have maintained a stubborn resistance to new media (Weller, 2011).

The reasons are complex. Age is certainly a key factor. Usually, older scholars are not, to borrow Marc Prensky's term, "digital natives" and thus lack the natural fluency with digital devices of younger people; they face a steep learning curve when trying to master a software or hardware platform (Prensky, 2001). This learning curve is further complicated by the fact that digital media are changing at a breakneck pace, so that a newly acquired skill must be updated frequently. Some educators in graduate learning fear a loss of control by allowing digital modalities in their classrooms. Others again are concerned about the possibility of plagiarism, or the theft of their ideas, by distributing their research over the Web. And lastly, some scholars emphasize the great durability of the printed book, and wonder whether the storage media of today will still be around tomorrow. They have a point; we only have to remember what happened to VHS, data storage on tape, or the floppy disk—all ubiquitous devices of the 1990's. And how many times have we ~~not~~ run into "broken" URL's, when a Web search abruptly ends with the legend, "page not found?"

Deborah Andersen, writing at the birth of the digital revolution, already recognized that of all the sciences, the social sciences, and particularly the humanities – the oldest of human scientific endeavors—have been "the most resistant" to digital media. The reason, she believes, is that until recently, the organic stuff that humanists are interested in—paintings, sculptures, music scores, Shakespeare quartos—did not lend itself to data quantification as easily as the formulae and calculations of the "hard" sciences. Scientists, psychologists and sociologists, she argues, tend to create their own numeric data, whereas humanists "look at the creation of others" (Andersen, 2004).

Lastly, as Andersen points out, scholars like us do not operate in a vacuum; we function within institutions that judge the effectiveness of our academic performance based on the traditional triad of teaching, research and publishing. A 2016 survey by Gallup and *Inside Higher Ed* found continuing resistance to adopting online technology among faculty in higher education (Jaschik & Lederman, 2016). Indeed, only a small number of universities consider research and publishing in the digital domain as credible and authoritative as print-based rhetoric. This may well reflect the conservative attitude in the trustee rooms of American academe—people who decide on our employment and tenure—because Trustees, Provosts and Deans tend to be senior in age to younger scholars, for whom digital media are a natural extension of their practice.

Methods of Research: A Survey of Digital Publishing

As in any other discipline, change is usually initiated by pioneering individuals who are prepared to ignore established standards and break new ground, to lead by example. This leads to our research question: to what extent are traditional forms of academic publishing moving beyond the peer-reviewed print paradigm into the brave new world of digital media?

Our focus on the publishing aspect of modern scholarship is deliberate. If there is one area of scholarly endeavor that is experiencing an acute crisis, it is academic publishing. The reason is twofold. While universities—including non-traditional, distributed universities—are pumping out PhDs like never before, access to scholarly publishing venues is narrowing at an alarming rate. As early as 1996, Odlyzko warned that this bottleneck reflects the growing

“gatekeeping” role of editorial peer communities, who feel challenged by the *hausse* of new scholarly talent and tend to favor established scholars over aspiring ones (Odlyzko, 1996). The shift by many academic journals from print to PDF, or to on-line publication, has not significantly altered this trend, because the control mechanisms of editorial boards have largely remained the same.

There is also the factor of time. Once an article is submitted to a journal for consideration, it can take many months for the editorial review to actually take place, even though in most cases the author is under “embargo” during this time, prohibited from submitting the same article to other journals. In 2012, *The New York Times* estimated that a journal article submitted for review in Spring 2012 might not be published until sometime in 2014, prompting Luckhurst to quip that some books and journals take longer to complete than large cargo ships (Luckhurst, 2012). At a time when academic research is increasingly competitive, and the originality of an idea can be measured in months if not weeks, such publishing models are clearly no longer in sync with the needs of the modern scholar. In sum, there is a growing disconnect between the publishing needs of the growing scholarly community and traditional practices of academic publishing.

Another reason why it is difficult for newly minted PhDs to be published is that print publishing, including academic publishing, has entered a period of precipitous decline. Printing, stocking, and distribution costs have risen dramatically, whereas print subscriptions and purchases have dropped, and are dropping still. According to the American Association of University Presses, print runs and sales on core academic monographs have dropped from around 800 copies ten years ago to 300, or even 150 (Nicholson, 2016). This trend has affected the entire publishing industry, of course, but particularly scholarly books and journals—including monographs, the favored vehicle of the humanities—since humanities publications typically require a high number of illustrations, preferably in color. Indeed, the high cost of printing has made university presses increasingly reluctant to publish books in non-mainstream subject matter with relatively small audiences, and only with the implied guarantee that the university will purchase such publications as textbooks in sufficient quantities.

Essentially, the book world is following the same downward spiral that first affected the music industry and then the film and video industry. Whether we like it or not, the business model of material scarcity is disintegrating under pressure of the Web, and that includes scholarly books and journals. Yet, most scholar-practitioners, including humanists, need to publish as a vital condition of their academic employment. How, then, to resolve this dilemma?

Findings: Academic Publishing using e-Books

At first glance, e-books would solve much of what is plaguing the academic publishing industry. Books produced in digital format, either directly by the author, online publishers, or traditional publishers, eliminate the high costs associated with the production, stocking, distribution, and retail marketing of printed books. In 2015, ebook sales accounted for 20% of overall trade book revenue (Milliot, 2016). The success of e-books has enabled some authors to forego the traditional business model altogether and decide to publish their works themselves, using book distributors such as Lulu.com, Smashwords.com, or Amazon’s CreateSpace.com, in either electronic or printed form. As an additional incentive, these on-line distributors offer authors a far greater share of the profits, as much as 65%, compared to traditional publishers, who typically offer their authors royalties of 5 to 10%.

The appeal of digital publishing for the academic market becomes even more irresistible when we consider that at Amazon, which is the market leader for electronic books, e-book sales now exceed the sales of printed books. The reason is price: e-books typically sell for half of the cost of a printed version or less, in part because of Amazon's use of a benchmark price of \$9.99 for its Kindle books. Because of Amazon's leadership, many academic e-books are now priced substantially below the level they would have commanded in print.

In addition, e-book technology has given vast amounts of public-domain literature a new lease on life. Project Gutenberg (www.gutenberg.org), for example, offers over 53,000 free e-books, from Aristotle to Shakespeare, that can be downloaded at no cost.

The main objection to self-publishing in academic circles, however, is that such e-books have not undergone any peer review, either by a review board or by a reputable academic publisher. But there are indications that the peer review concept itself is beginning to shift. The first step in that direction was taken by Yale University's Yale Books Unbounded initiative, which made books available on a wiki platform, so as to enable students and faculty to annotate comments in the text (Warren, 2009). In April of 2012, Harvard issued a public statement urging faculty and students to "move prestige to open access." The university acknowledged that the escalating costs of published journals were financially untenable; in 2011 alone, the university paid \$3.75 million for library subscriptions. The open letter urged faculty members to pursue publishing through non-traditional venues, including open-access journals or journals with a reasonable pay-per-use schema (Harvard Library Faculty Advisory Council, 2012).

The movement for free, open-access publishing gained additional impetus when *The Economist* disclosed that the largest academic journal publisher, Elsevier, made a profit of \$1.2 billion at the depths of the Great Recession in 2011, with profit margins of 37%, even as scores of academic institutions are laying off faculty and limiting enrollment in order to cope with the recession (Bohannon, 2014). Elsevier is now being boycotted by more than 9,000 academics, who either provide their research results to publishers for free or choose to publish themselves. They, of course, are a minority—most scholars are still keen to be published by large, respectable academic publishers—but the momentum of open access or individual publishing is growing. In 2013, the Obama Administration ordered Federal agencies with more than \$100 million in annual R&D expenditures to make the published results of federally funded research freely available to the public within one year of publication (Stebbins, 2013). In May of 2016, the European Union announced a new EU policy whereby all scientific articles in Europe must be freely accessible as of 2020 (Hendrikx, 2016).

Nevertheless, there is still considerable resistance to the idea of academics self-publishing their work. Indeed, one challenge is that, as we saw, many institutions do not include self-published monographs or books in their research ratings. While some institutions are slowly changing their attitudes to digital self-publishing, others feel that it undermines academic standards and are set against it. But there are other ways to invite a review by one's peers, by using the collaborative power of today's social media. On the one hand, an author can collaborate with scholars at other institutions to validate his or her findings. Using wikis like the one deployed by Yale, or author pages in Facebook, e-books can also invite a vigorous exchange between the author and his peers, including readers outside the academy. Whereas traditionally, peer reviews occurred *before* the publication, social media empower the scholarly community to render its verdict on the merits of a scholarly work after the publication, and do so far more democratically than the process involving small editorial boards. Joseph Esposito has coined the term "process book" (as distinct from the traditional printed work, the "primal book") to describe

a narrative as part of a networked knowledge base that readers can use as both a portal and a platform for further discussions on the subject (Esposito, 2003). This may sound rather daunting, but in practice, this type of “narrative networking” is already happening.

Discussion: Argumentation in Video

But scholarly argumentation need not be restricted to written rhetoric. Much of the discussion on social media involves the sharing of videos, posted on YouTube, Vimeo or other video sharing services. Indeed, YouTube now ranks as the second largest search engine in the world after Google. The reason is that increasingly, knowledge is not shared in text, but in mediated form. This offers a tremendous opportunity for scholars to share their research on a global basis, which is particularly important in an era that expects its scholars to become more relevant to their immediate community, and society as a whole. The catchphrase in graduate education these days is “scholar-practitioners,” which reflects a desire to ensure that modern researchers not limit themselves to pure research in their field. Rather than acting as mere observers, scholars increasingly feel an obligation to be relevant to their community, and work for the public good.

In that sense, it is virtually impossible to imagine any meaningful human expression in the 21st century that does not involve one or more media forms, rather than the 19th century paradigms of text to which our academic institutions are so deeply beholden. It follows that a newly graduated humanities or sociology scholar must acquire the digital literacy skills to not only understand but also operate with these new media, and thus remain a vital component of the society that he or she is expected to investigate.

A key example is the work of Dr. Gordon Goodman, who published his groundbreaking dissertation on actors’ stage fright in both PDF form via ProQuest, and in video form on YouTube. Whereas the ProQuest site generated only a small number of downloads, his 20-minute YouTube documentary has been seen by thousands (Goodman, 2013).

Conclusion

What this tells us is that scholarship that limits itself exclusively to traditional academic journals will become increasingly marginalized in a world where boundaries between academic theory and modern practice have begun to dissolve. The reason is that scholar/practitioners are called upon to not only investigate but also participate in the quest to improve the human condition. The best way to do that is to use the global media platforms that are available to all of us.

That we live on the cusp of a radical transformation in the way we publish our scholarly research is certain. In Kathleen Fitzpatrick’s words, “the publisher-derived imprimatur declaring selectivity has gradually become less important online than the imprimatur that is conferred by the community” (Fitzpatrick, 2012). It may therefore be only a matter of time before the academic community embraces a digital model for publishing research equitably, accessibly, and globally.

This article includes contributions by Fielding Graduate University doctoral students including Deirdre Bradley, Lawrence Drake II, and Patricia Gingras.

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Issues and Concerns in Overseas Outsourcing from a Human Resource Perspective

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Abstract

Outsourcing is promoted as one of the most powerful trends in modern management. Outsourcing functions or processes include substantial financial economies, increased ability to focus on strategic issues, access to technology and specialized expertise, and an ability to demand measurable and improved service levels. This paper considers a range of core issues related to the establishment of outsourcing partnerships with the participation of companies. Special emphasis is put on the incentives, benefits and risks associated with the realization of outsourcing partnerships with vendor companies. Strategic outsourcing as a main type of such a partnership helps firms to align their competitive priorities, to focus management attention on long-term growth and innovation opportunities, and to target resources to those tasks firms do best. International outsourcing generally has a positive impact on the organizational performance and competitiveness enforcement in the companies within a region. This research aims to assess the issues and concerns of overseas outsourcing from a human resource perspective.

Key Words: outsourcing, strategic outsourcing, organizational performance, offshore outsourcing

Introduction

Outsourcing is a common practice among both private and public organizations and is a major element in business strategy. Perhaps most organizations now outsource some of the functions they used to perform themselves.

Throughout the 1990s a remarkable increase of outsourcing activities by firms has been observed. It has been hypothesized that this increase results from the decline in transaction costs in connection with the intensified use of information technology (Abraham and Taylor, 1996; Groot, 2001). It has also been argued that part of the process of deindustrialization is associated with outsourcing. Today, activities that used to be performed in-house (e.g. auditing, maintenance, repair, transportation, janitorial and legal services) are usually outsourced to firms in the business service sector. Consequently, outsourcing has contributed significantly to the growth of business-related services during the last decade (Fixler & Siegel, 1999). Moreover, manufacturing firms are outsourcing not only services but also internal production. One prominent example is the automotive industry, where some large car manufacturers only perform the final assemblage of major parts whose production is outsourced to external suppliers. Since this type of outsourcing quite often occurs at an international level, it is also closely entwined with the globalization process (Feenstra & Hanson, 1996).

This study is an empirical contribution to the literature on factors that determine firm performance. In particular, we test whether outsourcing is an important determinant for a firm's profitability. In addition, our paper also provides estimates on the relative importance of firm-, market- (i.e. industry-) and location - specific effects, as well as on the impact of organizational structure and human capital input on firm performance.

In general, outsourcing can be related to make-or-buy decisions on intermediate goods, to the hiring of temporary labour, and to the use of external services. The term outsourcing is used here to describe all the subcontracting relationships between firms, and the hiring of external workers. We presume that firms engage in outsourcing activities because they expect a positive impact on firm performance by saving resources in terms of both labour and capital. If, for instance, intermediate goods are no longer internally produced but purchased from an external supplier, this leads to a reduction of both labour costs and capital investments. In the absence of transaction costs, a firm will decide to outsource when the market price for an outsourced activity is lower than internal marginal cost for that activity (Fixler & Siegel, 1999).

However, it is an unresolved empirical issue whether outsourcing actually has a positive influence on a firm's performance as is expected a priori. Some case studies have reported that firms tend to underestimate the transaction costs associated with outsourcing. For instance, it has been documented that some firms have again 'insourced' activities that were previously performed by external firms, because they were dissatisfied with the quality or because they had underestimated the amount of asset specific investments (Benson, 1999; Gornig & Ring, 2000; Young & Macneil, 2000). A few studies have analysed the impact of outsourcing on firm efficiency (for an overview see Heshmati, 2002). Although efficiency is certainly an important aspect of firm performance, it neglects the product market performance of firms. Taking this into account, our study is a novelty to the literature. For instance, even if efficiency of firms remains unchanged after outsourcing of internal production, higher quality of intermediate inputs might result in higher quality of final products and hence higher sales and higher margins. The lack of empirical studies on the link between outsourcing and firm performance might be also due to a limited availability of suitable micro data for analysing this subject. Our study is based on a representative panel data set of about 43,000 German manufacturing firms from the German cost structure survey over the period 1992 to 2000. As an indicator for firm performance we use Gross Operating

Surplus (GOS). We employ several measures for outsourcing activities of firms. We found that in particular outsourcing of internal production had a significant positive impact on firm performance in both the short and the long run, whereas outsourcing of services appeared to have a negative impact in the short run but a positive impact in the long run. Besides this, our findings emphasize the importance of firm-specific characteristics for explaining differences in firm performance

Why do we outsource?

Outsourcing is a complicated decision rooted in the strategic plans of a company. Some of the reasons that companies decide to outsource includes: Mitigate risk, improve quality, faster time to market, obtain new ideas/thinking, rapid expansion of capacity, focus on core competencies, growth with less investment, infuse the company with new technology, leverage the company's assets and capabilities, improved return on investment, better cash flow, reduced cost.

At this point, a reader's response might be, "Hey, I thought this paper is opposed to outsourcing. You just made a compelling case to move my factory offshore."

On the contrary, we are in favour of sustainable strategies that ensure the long-term viability of a company, no matter its location. Economic stability in all countries promotes an environment in which peace is more likely to flourish. Our intention is to examine the rationale for outsourcing and to identify the real-world challenges in obtaining these benefits.

"You outsource because you can get the best talent in a highly specialized area and not have to carry them on your payroll," he said. "If you're installing a new computer system, you might have one IT person and outsource beyond that. The big benefit is it's a contracted price and a predictable cost (Simon, 2010)."

Companies outsource for a reduction in labour costs or efficiency. It may be more efficient to have a valet company who is experienced and knows the business. Valet managers need to know many statistics in order to make this operation successful. They need to be able to price appropriately and know what kinds of discounts to give on groups contracting with the company for events. They need to know the mix of attendees.

If a convention is paying for their attendees to park as a perk for coming to the conference what is a good rate to give them? If they have 500 attendees come to park for the day what kind of a discount can be given without the hotel losing too much revenue on the deal? Is it a perk the hotel may want to give away if the conference promises to spend a certain amount of money on other services? In this case, it may be beneficial for the hotel to give the parking away for free and pay out the valet company so that they don't lose out on too much revenue.

Functions like this would need to be negotiated in contracts in order for a mutually beneficial business deal to work for both parties. There are so many different mixes of business that many bookings have to be dealt with on a group-by-group basis.

A company may decide to offshore outsource for labour reductions. It can be financially beneficial for a company to have a service offered to the public where they are paying some a fraction of the wages they would if the job were located in the U.S. Many companies do not have the financial backing to run their operations fully onshore in the U.S. With minimum wage increases and labour unions it can be hard for a company to face the realization of inflation and competing wages. Some companies have been saved because they were able to produce their goods or services offshore where the wages are cheap. The cost of supplies can also provide significant savings.

Payroll is the largest cost for companies. The average wage of outsourcing someone in India is \$11 versus \$30 in the U.S (Customer Inter@ction Solutions, 2004). This saves companies a lot of money. Large corporations with thousands of employees can save millions

with hourly rate differences of \$11 versus \$30. This may help businesses keep their doors open in order to keep the jobs of the onshore employees.

Why Companies Do Not Outsource

“For those that outsourced to an offshore provider to realize even further cost reductions, they have in many cases found that the degradation in quality of service—language, accent, cultural, etc.—has been a proven cause of loss of business, and therefore the original outsourcing return on investment has been completely overturned,” as -Simon (2010) notes. Quality of service is something that the hospitality industry thrives on. A loss in the quality of service could severely hurt a hotel and its reputation. “When should hotels not outsource? When a function involves direct guest contact at the property, such as bell staff, housekeeping and front desk employees, according to Morone (cited in Simon, 2010).

Some companies do not outsource because they like to have full control over their own operation. Having limited control can cause many problems for a company and result in court proceedings. Many companies do not want issues with another company and possible issues with customer service.

Some companies have had negative experiences with outsourcing and decided to run that portion of their company internally after the contracts had expired. The company hiring needs to have strong backing because there are many companies out there that just want to make a quick buck.

Hotels create so much revenue that a company can make a lot of money for not doing a good job. Some outsourced companies care about the dollar and not the customer service. This may make the hotel lose guests, which can be a major loss of revenue in the long term.

What Areas are Beneficial to Outsource Onshore

Face-to-face - Areas of a business that require face to-face contact are more beneficial to outsource on American soil as well as areas that have a little bit less to do with the expertise of the main operation. A company should perform their own particular expertise internally. It is good for the employees that deal with the guests to be hired internally. Companies train their own employees and it is good to have full control over training for associates who will be interacting with guests. This helps with on the spot coaching, constructive criticism, and progressive discipline.

Local needs - It would be wise to keep services involving local needs onshore. If a guest calls for concierge services, for example, it would be wise to have someone there who knows the area. The guest may want to attend a local church, buy tickets to a ballgame, ask about current exhibits at the museums, or the best restaurants in town. Someone who lives overseas can only give so much information on these services. It would be possible to train them but it would not be the same. It is better when your concierge has experienced the local cuisines, museums, sporting events, etc. It is always nice to hear directly from the source. Someone overseas could only recommend through speaking with others or Internet reviews.

What Areas are Beneficial to Outsource Offshore

Phone related services - Areas that should be outsourced offshore would be call related services. If service takes someone sitting at a desk to help, then offshore outsourcing could be beneficial for a company. Reservations would be a good area to outsource offshore because most people do not meet their reservations agents. Reservation emails are usually sent to confirm the information discussed over the telephone. This is good because if there are accent barriers the customer will still receive confirmation on everything. A lot of the information is

standard and specific, which results in less confusion than from outsourcing other types of services.

Production - It may be beneficial to run production offshore in a country where the cost of production is cheaper. For example, other countries may not have the corporate taxes that the U.S. has. This can help a company save very large sums of money. Maybe a company would want to offshore outsource in an area where the materials they need are cheaper. If a country has a particular abundance of a natural resource it may be cheaper to buy that resource due to readily available quantity.

Advantages of Outsourcing

Swiftness and Expertise: Most of the times tasks are outsourced to vendors who specialize in their field. The outsourced vendors also have specific equipment and technical expertise, most of the times better than the ones at the outsourcing organization. Effectively the tasks can be completed faster and with better quality output.

Concentrating on core process rather than the supporting ones: Outsourcing the supporting processes gives the organization more time to strengthen their core business process.

Risk-sharing: One of the most crucial factors determining the outcome of a campaign is risk-analysis. Outsourcing certain components of your business process helps the organization to shift certain responsibilities to the outsourced vendor. Since the outsourced vendor is a specialist, they plan your risk-mitigating factors better.

Reduced Operational and Recruitment costs: Outsourcing eludes the need to hire individuals in-house; hence recruitment and operational costs can be minimized to a great extent. This is one of the prime advantages of offshore outsourcing.

Disadvantages of Outsourcing

Risk of exposing confidential data: When an organization outsources HR, Payroll and Recruitment services, it involves a risk if exposing confidential company information to a third-party

Synchronizing the deliverables: In case you do not choose a right partner for outsourcing, some of the common problem areas include stretched delivery time frames, sub-standard quality and inappropriate categorization of responsibilities. At times it is easier to regulate these factors inside an organization rather than with an outsourced partner.

Hidden costs: Although outsourcing most of the times is cost-effective at time the hidden costs involved in signing a contract across international boundaries may pose a serious threat.

Lack of customer focus: An outsourced vendor may be catering to the expertise-needs of multiple organizations at a time. In such situations vendors may lack complete focus on your organization's tasks.

Issues in Human Resource Outsourcing

Drawbacks or problems of HRO:

One of the problems with HRO is difficulty in accepting the change by the employees of the organization. There is also anxiety about losing control over the process.

Outsourced employees' reactions generally create difficulty in outsourcing. This resistance will be higher when more scope is added later. Effective communications and change management programs (OD initiatives) are especially crucial at this stage when the new scope involves implementing a self-service platform. Actually such systems are not intuitively obvious. Employees need to be helped to adapt to this new system.

In addition, there are various risks associated with HRO. One of such risk is the business risk which may arise due to cheap outsourcing contracts. There is also spill over risk, i.e. exposing of confidential matters to competitors. A political risk is another issue in outsourcing. One example of this is the controversial issue in the US during the time of elections when the opposition blamed outsourcing for unemployment and wanted it to be banned. Another problem in HRO is that sometimes it brings a threat to the organizational culture and it can get totally out of control in the hands of unsympathetic outsourcers. Also vendor organizations should be well aware of the laws and should act in compliance with laws of their client's country otherwise legal issues may crop up and may adversely affect the organization.

One more problem that arises is the loss of personal touch with the employees. Because an in-house HR person interacts daily with their employees, they will likely have more of an interest in their employees. This is the reason why Morgan and Stanley decided to provide retirement planning services in-house. The loss of talent generated internally, potential redundancies, fear of service providers ceasing to trade, loss of concentration on customers and less focus on the product are other drawbacks or challenges of HRO.

Also, when an organization is using a Professional Employment Organization (PEOs), giving up the right to hire and fire their employees, may not be desirable for their particular business. Mostly, PEOs insist that they should have the final right to hire, fire, and to discipline employees. This may not be healthy for an organization in the long run. If an organization decides to use an E-service, the same issues would remain with any active server pages (ASP). When everything is stored and handled online, there might be concerns about security as well as potential crashes, both of which can be detrimental to any business organization. Common complaints about HR outsourcing range from payroll mix-ups, to payroll not being deposited on time, to denied medical claims. (www.entrepreneur.com/humanresources/employmentlaw/article58222.html). Vendor selection is another major issue in outsourcing HR. If we select the wrong vendor, then we won't be able to enjoy the fruits as expected from HRO. Companies say that one of the important requirements while selecting vendors for outsourcing HR is the vendor's demonstrated HR process expertise, which was the response of 95% of respondents as mentioned in the survey conducted by Hewitt associates in the year 2005. (www.Hewitt.com).

Outsourcing and organizational Performance

First, reduced secondary activities allow organizations to focus on other major activities. This heightened focus on core competencies may greatly enhance organizational performance by allowing the organization to become more innovative and agile in its core domain.

Secondly, outsourcing secondary activities may greatly improve the quality of activities being outsourced. Specialist organizations (service providers), by focusing their attention on a narrow set of functions; perform them much more successfully than outsourcing organizations. This greatly influences the organizational performance of the organization.

Finally, outsourcing peripheral activities to the lowest cost supplier may lead to incremental improvements in an organization's overall cost position.

Conclusions

There are many reasons that a company should not outsource their employees. There can be legal ramifications and bad public relations due to outsourcing on or off American soil. Many companies feel that the cons outweigh the pros and that this type of business practice should not be considered anymore. Many hotels do not like how it impacts on their customer service scores. It also can give the impression that a company is trying to cut corners and costs, which in turn, can look cheap. It can take away from the essence of the feel of a company.

When someone walks into a 'mom and pop' style business, they enjoy seeing similar faces and making relationships with the team. They like knowing they will be helped by someone who works there. Many people want Corporate America to go back to the 'mom and pop' style.

People want the special touch and do not want to be another face in the crowd. Outsourcing adds more distance between the guest and the company.

The early 1990s have witnessed a remarkable increase in outsourcing activities. The starting hypothesis of this study was that firms pursue an outsourcing strategy in order to improve their performance. From the perspective of the firm, the rationale for outsourcing is to save internal resources either in terms of labour costs or capital investments or both. Outsourcing activities have many facets, e.g. cleaning, janitorial, transportation services or intermediate production. Our study provides estimates of the importance of three different types of outsourcing activities.

The first type is increasing intermediate material inputs relative to internal labour costs, which reflects the make-or-buy decision of firms. The second type is farming out production, which subsumes subcontracting between firms. The third type is external services, e.g. consultancy or auditing. The general result is that in the long run, all three types of outsourcing activities have a positive impact on return per employee (RPE), which we interpret as a measure of firm efficiency. Conversely, this does not necessarily imply higher profit margins for firms either in the short run or in the long run. Twelve firms that have increased their material inputs relative to labor costs performed better than firms that did not. Firms that have farmed out internal production or used external services are more efficient but have lower profit margins as a result of outsourcing.

These findings suggest that firms have over-engaged in these two latter types of outsourcing, and thus on average these types of outsourcing are above the optimal level. In sum, our analysis supports the view that firms tend to overestimate the benefits accruing from outsourcing of external services and/or underestimate the associated transaction costs. A prerequisite for successful outsourcing activities is that markets for intermediate inputs really function. Our results suggest that this is the case for material inputs, but not for external

services. One reason could be that it is easier for firms to monitor quality of intermediate products than to monitor the quality of services. As noted by Williamson (1971), if market do not function, then vertical integration will be used by firms as a substitute for market organization. Also, firms might not fully anticipate the search costs of finding a suitable partner that can provide the service functions required.

We have also analyzed other factors that determine firm performance. For instance, we find that the wage level, which we interpret as human capital intensity of production, has a positive impact on efficiency particularly in the long run, but has a negative impact on the mark-up of a firm. This is not unexpected, since the mark-up corresponds to the difference between output and input prices, such that any increase in input prices will lower the mark-up. Another central conclusion of our study is that unobserved firm-specific characteristics, which presumably comprise technological knowledge, marketing or managerial abilities, are very important factors for explaining firm performance. These firm-specific factors turn out to be much more important than industry and location effects together. This finding also suggests that firm performance is quite persistent. Finally, firm size is not a particularly relevant variable for explaining differences in performance. The estimates suggest, however, that small firms tend to perform better than large firms.

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Impact of Terror-Induced Trauma on Psychological Well-Being Among Internally Displaced Persons in Kaduna, Nigeria

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Abstract

The study investigated the impact of terror-induced trauma on the psychological well-being amongst internally displaced persons (IDP's) in Kaduna Metropolis. The study adopted the cross-sectional design. Instruments used to collect data were the Ryff Psychological Well-being Scale, Beck Anxiety Scale, Beck Depression Inventory (BDI), Insomnia Screening Questionnaire (ISQ) and Post-Traumatic Stress Disorder Scale. A total of 129 participants made up of 67(51.5%) males and 61(46.9%) females with ages ranging from 12 – 52 years took part in the research. The study purpose includes examining the impacts of anxiety, depression, insomnia and post-traumatic stress disorder on the psychological well-being of IDP's in Kaduna. The one-way ANOVA was used to test the hypotheses. Results obtained revealed that anxiety, depression, insomnia and post-traumatic stress disorder all have significant impacts on psychological well-being amongst internally displaced persons (IDPs). The study concludes that anxiety, depression, insomnia and post-traumatic stress disorder all significantly impact on the psychological well-being of such persons affected by trauma. Therefore, an important key recommendation proposes that government steps up in protecting its citizens from mental assault by establishing quick and free psychological intervention trauma centers around the country to address whatever trauma internally displaced persons might be experiencing.

Key words: Terror-Induced Trauma, Psychological Well-being, Internally Displaced Persons

Introduction

Psychological well-being as the concept imply, is about lives going well. It is a joint effort of good feeling and optimally functioning. There is a close relationship between psychological well-being and sustainable well-being, which does not exclude painful emotions that result from life happenings such as disappointments, failure, grief, etc., but includes all of these and the ability to manage all the feelings as is needed for long term well-being (Huppert, 2009). However, psychological well-being gets interrupted when negative emotions are extreme and last long, thereby affecting the optimal functioning ability of an individual.

According to World Health Organization (2004) it is expressed that the psychological well-being of an individual has an intrinsic value that is greater than the external responses of that individual in relation to his/her environment as well as the people in it. However, mental health issues are increasing daily which provides a good rationale for more evidence base of common mental health problems. It is in response to clarifying psychological well-being definition that (WHO, 2004) define mental health, as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community. This further gives rise to the definition of health by the WHO as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (Silvana, Andreas, Marianne, Julian, & Norman, 2015).

Therefore, well-being is seen as more than just happiness, well-being means the person is being fulfilled and making a contribution to society. But a lot of things happen when people have no choice against unforeseen manmade and natural disasters such as terrorism and its consequent outcome, which is the major thrust of this research.

Terrorism is one of such manmade disasters and in the last 15 years, its impact has been overwhelming as terrorist activities as well as mortality rates increased by 80% in 2014 to its highest level ever recorded. The death rates rising from 18,111 in 2013 to 32,685 in 2014 (Institute for Economics and Peace: Global Terrorism Index, 2015). This report further provides a detailed analysis of the changing trends in terrorism where the number of deaths increased by nine-fold since the year 2000, in which 162 countries were reported to be affected making terrorism a full global problem.

The report further reveals locations where terrorists’ activities are most concentrated, and five countries accounted for 78% of deaths arising from these acts of terrorism and 57% of all attacks occurred in only five countries: Iraq, Nigeria, Afghanistan, Pakistan and Syria. In spite of the concentration in the five countries, terrorism is spreading to more countries, with the number of countries experiencing more than 500 deaths increasing from 5 to 11, a 120% increase from the previous year. The six new countries with more than 500 deaths are Somalia, Ukraine, Yemen, Central African Republic, South Sudan and Cameroon. Although majority of countries in the world did not have a death from terrorism, but a total of 67 countries in 2014, experienced at least one death increased by eight. Such countries include the Organization for Economic Cooperation and Development (OECD) countries; Austria, Australia, Belgium, Canada and France which experienced high profile terrorist attacks in recent times. The West is not exempt from terrorist attacks, although they are key targets but majority of deaths from terrorism do not occur in the West, notably, the September 11 incident in the United States of America was one of its major experiences of terrorism. The Islamic State of Iraq and the Levant, (ISIL) has continued to advocate for attacks in the United States, Canada, Australia and European countries.

Nigeria is one country in Africa that has experienced major terrorist threat. The country has experienced the largest increase in terrorist deaths ever recorded by any country, increasing by over 300% to 7,512 fatalities. Boko Haram, which operates mainly in Nigeria, has according to reports become the most deadly terrorist groups in the world, and it is for this reason that Nigeria ranks third of the 162 countries that have been worst hit by terrorists attacks (GTI, 2015). Terrorism has traumatized the country and has left smothering of human flesh, broken relationships and twisted minds. Terrorism was once a foreign concept to Nigerians, but in the recent past has become a reality, the worst hit being the North Eastern parts of the country (Okoli & Iortyer, 2014).

Since the emergence of Boko Haram insurgency in 2001, in the North, its activities have claimed close to 5000 lives and destroyed private and public property worth billions of naira (The source, 2014). They also included kidnapping women and school girls since 2013, particularly the abduction of over 200 college girls from Chibok in Borno State on the 15th of May 2014 and subsequently, the use of female suicide bombers in their operations. All these have given rise to agonies of those living in camps such as the Internally Displaced Persons (IDP Camps) (Terwase, Abdul-Talib, Zengeni, and Terwase, 2015; Tonwe, and Eke, (2013). Abducted women and girls have been subjected to rape, early marriage and used as sex slaves. By inflicting collective barrier on women as a social group, these women have been traumatized and dehumanized leading to fear of violence and sexual abuse which leaves women trapped and prevented from living their lives (USAID, 2000).

The acts of terror are intentional and unsolicited, and the perpetrators being terrorists cause great destruction to lives and property as well as issuing threats that leave overwhelming fear in the minds of survivors. The recipients of terror induced acts are also innocent and defenseless group of people; women and children especially. These acts usually politically and religiously motivated, is geared towards terrorizing targets as well as innocent civilians with the aim of causing instability and feelings of fear, confusion, anxiety, nervousness and helplessness. Beyond the physical damage, terror emanating from militancy in the south to terrorist attacks in the north have sent millions to the grave and left countless slowly dying from trauma, which in turn has affected their psychological well-being and way of life. Consequently, according to (Terheggen, Stroebe, & Kleber, 2001; Smith, Perrin, Yule, and Rabe-Hesketh, 2001), individuals going through the psychological experiences of trauma could portray feelings of extreme sadness, fear, guilt, and anger. Issues arising such as depression, anxiety and substance misuse all known as psychological sequelae constitute significant distress or impaired functioning, including intrusive thoughts and emotions about the traumatic events, avoidance, emotional numbing and/or hyper-arousal.

Trauma according to the Advanced English Dictionary is an anxiety disorder associated with serious traumatic events and characterized by such symptoms as survivor guilt, relieving the trauma in dreams, numbness and lack of involvement with reality, or recurrent thoughts and images. Trauma denotes an overwhelming experience which interrupts an individual's ability to be functional and poses a threat to sanity and life in general. It is a state of being mentally stuck and the violent event keeps replaying and the victim is unable to go on with life. From the foregoing conceptual analysis, trauma is any injury which has the ability to cause prolonged disability or death. Tomasella, (2016) does an analysis of trauma and psychological traumatism which is explained as being more related to disasters such as terrorism, involving the barbarous killing of other human beings and other associated psychological issues that this research is hinged on. Trauma can result from a onetime incident as well as repeated experience

of traumatic events. The one time could be incidents such as gun-point robbery, rape, kidnapping accidents, witness of a death or loss of a loved one in a violence setting. On the other hand, repetitive experiences include child abuse, concentration camp, living in a war torn country, incessant acts of terrorism amongst others. This study focuses on terror induced trauma as a result of terrorism, other types include; sexual abuse/assault; unwanted and coercive sexual contact, exposure to sexual material or experiences as well as sexual exploitation through violence or terror based setting.

Studies have found that about 90% of surviving victims have been found to display some adverse psychological reactions in the hours and days following the traumatic event. This was revealed after a national survey was carried out on the stress reactions done after the September 11 terrorist attack (Schlenger, et al. 2002; Schuster et al, 2001). The effect of exposure to terrorism induced traumatic events on the well-being of children have been identified to include signs of depression, anxiety, aggression, activation of dissociate mechanism i.e. staring into space and “freezing-up” in reaction to certain stimuli (Fremaont, 2004; Joshi and O'Donnell, 2003). Some studies reveal some evidence suggesting that traumatic events in children may also lead to abnormal behavior such as conduct disorder and attention deficit hyperactivity disorder (ADHD), (Shaw, Eckstrand, Sharp, Blumenthal, Lerch, & Greenstein 1995). Lyons (1979) implicated unrest, fear of being alone and school refusal as signs of terror induced trauma.

Other studies have shown that above one third of children exposed to community violence suffered from trauma and subsequently post-traumatic stress disorder (PTSD), (Berman, Kurtines, Silverman & Serafini, 1996). Youth exposed to traumatic events can also develop depression, anxiety disorders, substance use and abuse, psychological problems and poor functioning at home and school (Cohen, 1998; Pynoos, Steinberg & Wraith, (1995). Widespread negative psychological effects have been reported following acts of violence. Review of literature has consistently revealed a wide range of adverse outcomes following terrorist attacks (Katz, Pellegrino, Pandya, Ng, & DeLisi, 2002). Results of review of 49 research articles and books conducted by Solomon and Green (1992) revealed that most authors reported negative psychological consequence of disasters. WHO in its estimates suggests that, out of the situation of armed conflicts throughout the world, 10% of the people who experience traumatic events will have serious mental health problems that will hinder their ability to function.

According to UNESCO, Nigeria and other neighboring countries now have the world's highest number of out-of school children due to terrorist activities. The fear of being bombed has discouraged a high number of students from going back to school. The constant threat to life and state of fear has affected their psychological well-being (Oladele, 2014; Ilechukwu, 2014).

Survivors and living victims have become internally displaced in their own country because of the terrorist activities in their town, cities and villages. Nigeria in 2015 was declared the country with the highest number of Internally Displaced Persons with an estimated figure of 2,152,000 Internal Displacement Monitoring Center (IDMC), (2015). It is irrational and unfair to assume that people who have experienced terror either first hand or on television screens would resume their lives like nothing happened. Individuals' existential illusions that help them cope with their daily lives, shortcomings, dreams, and plans for the future with hope for a better future become shattered. It must be recognized that the foremost aim of terrorists and terrorism is to instill fear in the minds of people- the survivors (Adeniji, 2015). In as much as efforts are being made to prevent terror acts and occurrences, it is noteworthy that the battlefield is actually on the minds of survivors, about making ordinary people feel vulnerable, anxious, confused, uncertain, and helpless (Zimbardo, 2003). It affects their will to live, quality of life and psychological well-

being. Most of these victims face sexual abuse, separation from loved ones, torture, witnessing of deaths, starvation which leads to anxiety, depression, irritability, insomnia, stress and post-traumatic stress disorder, etc. Every attack is targeted at the individuals' minds and the functionality of the nation as a whole. (Sharma, 2003). The impact of crisis, bombings, religious killings and insurgency could lead to shutting down of schools, business places, relaxation centers, churches, restriction of individuals' movements and fleeing to unknown areas in search of safety of which in no small way affects social, economic and psychological areas of one's life.

In terms of research done to determine the responses of individuals that have experienced terror, not much has been done in Nigeria going by available body of knowledge especially in the northern part of Nigeria where terrorism has been intense and scars left on the minds of survivors (Omale, 2013). Agreeably, it is gathered that Nigeria currently ranks third most terrorized country in the world (Osundefender, 2013). This ranking makes Nigeria the most terrorism stricken country in Africa alongside Somalia (Institute for Economics & Peace, 2014). This is one of the key reasons why Kaduna being one of the largest States in Northern Nigeria that has experienced series of terrorist acts was systematically selected as the study area. Kaduna state has experienced its own share of terrorist acts and has been rated 6th amongst the 13 states with a number of 36,976 internally displaced persons in 2015 (Internal Displacement Monitoring Center (IDMC), 2015). The survivors have been left with only a memory of what used to be their lives, distorted realities of how to live and heightened sense of insecurity almost to the point of paranoia; therefore it is pertinent to assess the impact of terror-induced trauma on the psychological well-being amongst residents in Kaduna metropolis. In lieu of the above, this study sought to fill the research gap that appropriately represents the geographical location and its cultural factors in this part of the world, by exploring the impact of terror-induced trauma on psychological well-being amongst Internally Displaced Persons (IDPs). Also, it has highlighted the importance of trauma control in the fight against terrorism, bringing to light the gravity or the cost of ill health and how it can be addressed. This study has created an avenue where the psychologically imbalanced due to terror induced trauma, can be identified, diagnosed and properly treated. It has also laid emphasis on the importance of psychology and psychologists in the fight against terrorism. By so doing, the research has filled a gap in literature in order to add to the limited knowledge concerning the study to bring about positive healthy outcomes.

Objectives of the study

Objectives were formulated for the study_ to assess the impacts of anxiety, depression, insomnia (sleeplessness), and post-traumatic stress disorder on psychological well-being of IDPs in Kaduna Metropolis.

Methodology

Design

The study adopted the descriptive and cross sectional designs which aided the researchers to collect responses from the internally displaced persons and to analyze the impact of terror-induced trauma on psychological well-being.

Setting

The setting of the study is founded on the north-western part of Nigeria, in Kaduna state precisely. Kaduna is the state capital of Kaduna State with 23 local government areas. It is one among the 36 States of Nigeria. It is also in the North/Western part of the country. It has an area of 46,053km and a population of 6,006562, latitude 10.3333 N 7.7500E and one international airport. In the absence of Camps, this study was carried out across the host communities in

Kaduna metropolis such as, Kudenden, Tudun Wada, and Hien Damani Kaduna, Kaduna state, Nigeria. The time frame for this research spanned between 2015 to 2016.

Participants

The participants for the study were drawn from the IDP host communities mentioned earlier. Purposive sampling method was used to select participants. This gave room for willingness of the participants to participate in the study; none of them were forced to participate. The sample size for the study was made up of 129 respondents who were within the age range of 12-52 years of age which comprised both male and female, children and adults respectively.

Sampling

The purposive sampling technique was used to select participants from the general population of IDPs in Kaduna State, and in the various host communities. This sampling technique was used to accommodate the unique nature of the participants.

Instruments

The questionnaire was used to collect data for the study and it consisted of five sub-scales which measured all the variables under investigation. The questionnaire is made up of six sections beginning with the demographics. The instruments were reviewed extensively to ensure cultural friendliness and these are as follows: The Ryff scale of Psychological Well-being, Beck Anxiety Scale, Beck Depression Inventory Scale (BDI), Insomnia Screening Questionnaire (ISQ), and Post-Traumatic Stress Disorder Scale (PCL)

1. **The Ryff Scale of Psychological Well-being:** A theoretically grounded instrument, it measures aspects of psychological well-being. It consists of 84 questions (long form), while the short form of 54 questions was adopted for this study. It consists of series of statements reflecting the six areas of psychological well-being; self-acceptance, autonomy, environmental mastery, purpose in life and personal growth. This Ryff scale was taken from Ryff and Keyes (1995), and has a Cronbach value of 0.744.
2. **Beck Anxiety Scale:** This scale was developed by Beck, Epstein, Brown, & Steer, (1988). It is a 21-item checklist developed with large clinical samples to measure anxiety symptoms associated with DSM III-R (APA, 1987) anxiety disorders. Care was taken during scale construction to eliminate items that would be confounded with depression items (Beck et al, 1988). The BAI adequately covers the major cognitive, affective, and physiological symptoms of anxiety. It has a Cronbach value of .85.
3. **Beck Depression Inventory Scale (BDI):** The BDI is a widely utilized 21-item self-report scale in both clinical and research studies (Beck et al, 1996). The scale was originally developed in 1961 as an interviewer-assisted format but has undergone several revisions over the last 35 years from the BDI-1A (1978), to the most recent version The Beck Depression Inventory-II (1996) which is a completely self-administered format. The Beck Depression Inventory-II is a depression rating scale that can be used in individuals to rate symptoms of depression in terms of severity on a scale based on the 21 specific items. Ten items were selected for this study. The scale was assessed from the Beck, A.T, steer, R.A & Garbin, M.G 1988 psychometric properties of the Beck Depression inventory. Cronbach value for the BDI is within 0.89- .93.
4. **Insomnia Screening Questionnaire (ISQ):** This is a widely used instrument in clinical and research practice. It was designed to rate the severity of insomnia amongst individuals. It has 17 items and 11 were selected for this study. The ISQ was gotten from

psychometric evaluation of the insomnia symptom questionnaire by Okun ML et al, (1995). It has a cronbach value of 0.89.

5. **Post-Traumatic Stress Disorder Scale (PCL):** The PCL is a 17-item report measure of post-traumatic stress disorder (PTSD). The scale was got from Blanchad, et al (1996). Respondents indicate the extent to which they have been bothered by each symptom in the past months by rating their responses from strongly agree to strongly disagree on the PCL scale. Ten items were selected for the study. Its Cronbach value ranges from 0.75-0.78.

Data Analysis

The data collected were analyzed using the descriptive statistics and One-way ANOVA which helped to ascertain the impact of each variable on the psychological well-being of the IDPs. The Statistical Package for Social Sciences (SPSS) version 20.0 was used.

Results

Descriptive Results

The descriptive result shows that respondents were aged ranging from 12 to 52 years, while one of the participants did not indicate the age. There were 67(51.5%) male, 61(46.9%) female while 2(1.5) of the participants did not indicate gender. 76(58.5%) of the participants were Christians, 47(36.2%) were Muslims, 1(.8%) was a traditional worshipper, 1(.8%) was from another religion while 5(3.8%) did not indicate their religious affiliation. 6(4.6%) of the participants were in the IDP camp because they lost their way, 110(84.6%) were in the IDP camp because of War/Crisis, and 8(6.2%) were in camp because of immigration, while 6(4.6%) did not indicate the reason for being in an IDP camp.

Results of Hypotheses Tested

Four hypotheses were raised and tested and the results are here presented:

Hypothesis One: Anxiety will have a significant impact on psychological well-being among IDPs in Kaduna metropolis

Levels	SS	df	MS	F	Sig
Between Groups	1926.453	15	128.430	2.253	.009
Within Groups	5986.504	105	57.014		
Total	7912.959	120			

Table 1: Summary table of One-Way ANOVA showing the significant impact of anxiety on psychological well-being. The result in the table above shows that anxiety has a significant impact on psychological well-being $F(15,105) = 2.253, P < .05$. The hypothesis is therefore accepted.

Hypothesis Two: Depression will have a significant impact on psychological well-being amongst IDPs in Kaduna Metropolis.

Levels	SS	df	MS	F	Sig.
Between Groups	2759.753	22	125.443	2.394	.002
Within Groups	4873.557	93	52.404		
Total	7633.310	115			

Table 2: Summary table of One-Way ANOVA showing the significant impact of depression on psychological well-being. The table above shows that depression has a significant impact on the psychological well-being amongst IDPs. $F(22, 93) = 2.394$; $P < .05$. The hypothesis is therefore accepted.

Hypothesis three: Insomnia will have a significant effect on psychological well-being amongst IDPs in Kaduna metropolis.

Levels	SS	df	MS	F	Sig
Between Groups	2742.380	23	119.234	2.193	.004
Within Groups	5055.312	93	54.358		
Total	7797.692	116			

Table 3: Summary table of One-Way ANOVA showing the significant impact of insomnia on psychological well-being. The table shows that insomnia has a significant effect on psychological well-being amongst IDPs $F(23, 93) = 2.193$; $P < .05$. The hypothesis is therefore accepted.

Hypothesis Four: Post traumatic stress disorder will have a significant impact on psychological well-being amongst IDPs in Kaduna Metropolis.

Levels	SS	df	MS	F	Sig
Between Groups	2790.612	22	126.846	2.383	.002
Within Groups	5164.055	97	53.238		
Total	7954.667	119			

Table 4: Summary of One-Way ANOVA showing the significant impact of post-traumatic stress disorder on psychological well-being. The table shows that post-traumatic stress disorder has a significant effect on psychological well-being $F(22, 97) = 2.383$; $P < .05$. Therefore, the hypothesis is accepted.

Discussion

The results arising from hypothesis one found that anxiety affected the psychological well-being of the IDPs in Kaduna metropolis. This means that these internally displaced persons have been found to be anxious as they experience loss of pleasure in hobbies and other activities, decreased energy, presence of fatigue and being slow, restlessness, low appetite and hopelessness. All these affect an individual's ability to make sound decisions regarding self and those around. The result implies that, the IDPs because of their confinement to the initial camps, before they were taken to the host communities, they lacked the comfort of home and had to cope with the reality of being refugees in their own country. The results again imply that the refugees would lack the drive to pursue goals and achieve meaning in life. The impact of this terror-induced trauma has also been indicated in increased disability especially amongst older persons. This can be related to the findings in *Cambridge Journal of Psychological Medicine*, as

anxiety was associated with increased disability and diminished mental functioning and well-being amongst older persons (de Beurs, Beekman, van Balkom, Deeq, van Dyck, & van Tilburg, 1999).

The result arising from the second hypothesis reveals that depression negatively affected the psychological well-being of the IDP's, as exposure to a great deal of terror induced trauma is revealed. A greater number of these persons experienced positive response to feelings of guilt, having no purpose in life, blaming self and having nothing to look forward to. All these will heighten their inability to be self-accepting and prompt further internal distress, all causing more depression. A cross-sectional survey in 2007 in Juba, South Sudan, supports these findings as over 50% of respondents who were victims of wide-spread conflict met the symptom criteria for depression signifying high levels of distress (Roberts, Damundu, Lomoro, & Sondorp, 2009), and another study in Uganda revealed 67% of its respondents being exposed to trauma, also met the symptoms of depression which signified poor mental health and distress in their psychological well-being (Robert, 2008).

The third hypothesis revealed that insomnia was found among these IDPs, thereby further lowering their psychological well-being. This was found to be true as the results indicated a significant impact of terror-induced insomnia on psychological well-being amongst the Internally Displaced Persons (IDPs). This finding indicated that victims of terror who indicated problems with sleep had their well-being significantly affected. The impact of insomnia range from grogginess to irritability, short attention span and slow processing speed of the cognitive processes, all of which affects one's ability to achieve personal growth and attain environmental mastery. These are all components of psychological well-being. A study indicated that insomnia status especially severe insomnia predicted poor psychological well-being even after controlling for other socio-demographic factors (Kao, Huang, Wang & Tsai, 2008).

The result arising from the fourth hypothesis confirmed that PTSD had significant effect on psychological well-being of the IDPs. PTSD has been found to be equally disabling in populations that have witnessed trauma with majority of them reporting mental disorder Silove, Steel, Bauman, & Mcfarlane, (2007). This supports the findings of this project as post-traumatic stress disorder affects one's perception of purpose in life and personal growth. The prevalence of PTSD amongst IDPS suggests restlessness, hyper arousal, flashbacks, mid-day tremors, numbness, avoidance of people suggesting socially defective behaviour, attention deficit and intense and prolonged psychological distress (Roberts, Ocaka, Browne, Oyok, and Sondorp, 2008).

Conclusion

The findings of this research have indicated the significant effects of terror induced trauma on psychological well-being of the internally displaced persons. The results revealed that anxiety, insomnia, depression and post-traumatic stress disorder are significantly affecting the psychological well-being of the IDPs. This finding is empirically supported by the previous research carried out on the variables. The entire results have implication for psychosocial interventions by all related mental health care professionals in order to help these people.

The state of the IDPS well-being especially their psychological well-being is threatened. The result from the study is only a small percentage of the real mental dangers the IDPs are in and so measures could be taken to treat the minds of the survivors. Living in fear, anxiety, depression, insomnia, and post traumatic disorder will soon take an irrevocable toll on the victims except quick appropriate and adequate help is given.

Recommendations

It is recommended that the government could protect the affected citizens from mental assault from the terrorists by establishing trauma centers in parts of the country where terrorists' activities have taken place or is still on-going. This will aid in the smooth administration of treatment on the wounded psyche of the IDPs through programmes and interventions by trained professionals in the relevant fields. Second, through proper monitoring of global trends of the countries on the global terrorism index (GTI), new strategies could be adopted towards providing lasting solutions to the battered psychological well-being of the IDPs. Finally, it is again recommended that emerging resources and references should be sought to support professionals undertake their work of developing new and workable interventions for the effective treatment of psychological wounds of the IDPs towards total recovery from depression, anxiety, insomnia and PTSD arising from terror induced traumas.

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A ‘Breadth’ of Fresh Air: Melbourne University’s Curriculum meets Twenty-first Century needs

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Abstract

The University of Melbourne (UOM) introduced far reaching and controversial changes to its program in 2008, when the Melbourne Model was introduced incorporating New Generation degrees and interdisciplinary Breadth subjects now numbering in their hundreds. The success and popularity of these has varied, and this study was undertaken to investigate student expectations of Breadth and whether these had been met. According to the University of Melbourne (UOM) Handbook, “Breadth subjects allow you to gain knowledge and understanding across a broader range of disciplines, enabling you to develop insight, experience, and new ways of thinking in areas distinct from the main fields of study in your degree” (2015). This paper looks at a small sample of students and the range of Breadth subjects they have taken up to this point in time, including the second-year Breadth subject, Sport and Education in Australia from where the sample was drawn. The aim of the research was to determine whether student expectations matched those outlined by The University of Melbourne, and furthermore, whether these expectations were met and the desired outcomes achieved. The study and related research suggests that Breadth has been successful and has met many of the intended goals of the UOM. Student responses are predominantly positive, with expectations having been met if not surpassed.

Key Words: Breadth, Melbourne Model, Melbourne Curriculum, Bologna Model, Wellbeing, Liberal Arts, Cross curriculum

Introduction

In 2008 the Melbourne Model, now known as the Melbourne Curriculum, was introduced at the University of Melbourne. It was greeted with much fanfare but was also subject to much scrutiny and public controversy. As a result of its implementation the university's 96 undergraduate courses were replaced with six undergraduate degrees. According to the Vice Chancellor, Glyn Davis, the Melbourne Curriculum was designed to align itself "with the best of European and Asian practice and North American traditions" (Growing Esteem, Retrieved 18 September 2014).

The Melbourne Model was based on the Bologna Model, and numerous studies have examined this transformative process in tertiary education and the range of associated costs and benefits (Adelman, 2008; Cardoso, Portelo & Alexandre, 2008; Powell, Bernhard & Graf, 2012). Breadth subjects were a key component of this model and were designed to allow students to "gain knowledge and understanding across a broader range of disciplines, enabling [them] to develop insight, experience, and new ways of thinking" (UOM Handbook, (<http://breadth.unimelb.edu.au>)).

A literature review was undertaken to explain the Melbourne Model, and explore its precursor, the Bologna Model. It examined the influence of internationalization and globalization on higher education, cross-curriculum/interdisciplinary education in this context and the concept of student-centred learning which is integral to the process. It highlighted the strengths and weaknesses of the Bologna Model and its relevance to, and influence on the development of the Melbourne Model at the UOM. It allowed me to determine the gap in knowledge around which to structure my research.

While generalist degrees have long permitted students to study subjects from other faculties, the difference was that at the University of Melbourne in 2008, such subjects became compulsory. Seven years on and educators, the press and the public are yet to agree on the wisdom of this move. (Davies & Devlin, 2007; Gilmore & Marshall, 2014; McCalman & Soeterboek, 2008; Potts, 2012; Simons, 2011).

Methodology

I adopted a mixed methods approach which incorporates elements of both quantitative and qualitative methodologies. I chose a case study design in order to develop a holistic account of the phenomenon under investigation: Breadth. This case study is about establishing and testing assumptions of a specific sample of UOM students: What were your assumptions or expectations regarding Breadth, were these met or exceeded, and were they in keeping with the intentions and expectations of the UOM?

The Sample

The sample consisted of 43 students who were enrolled in the subject SEA in either first or second semester of 2013 and 2014. Enrolments in the subject are typically weighted on the side of males, 70:30, and included many overseas and international students, so while I was guaranteed a degree of homogeneity in terms of a relatively similar group of university-age, mixed gender students, there was also reasonable diversity within that group.

Participants were drawn from a range of faculties and were undertaking a range of New Generation degrees – Biomedicine, Commerce, Environments, Music and Science. Arts was the only omission, as SEA is regarded as an Arts subject and one of the stipulations for taking Breadth is that it must be a subject from studies outside the student's home faculty. This was the one key limitation this choice presented.

The Survey

The survey was the primary method of data collection and was created via Survey Monkey, an online platform which allowed me to customize questions and collect and analyse data in one simple program. It consisted of 30 questions in total and was launched in mid-2014. It was sent to four past cohorts of students, 300 in total, with a response rate of approximately twenty percent. It provided rich data allowing for some basic statistical analysis, and generated quantitative feedback upon which some hypotheses could be tested. However, the emphasis was on the content of individual responses. Results were a combination of quantitative data, using Likert Scale questions/responses, and qualitative data using open-ended questions which required more detailed and extensive written responses. The survey responses helped guide and inform the analysis and was crafted in such a way as to reiterate the aims of the UOM Curriculum Model, drawing directly on mission-statements from the UOM handbook and re-wording these to create questions or statements that would elicit meaningful responses, such as:

Breadth allowed me to develop insight, experience and new ways of thinking in areas distinct from my main field of study.

Answered on a sliding scale from Strongly Disagree to Strongly Agree, these are examples that yielded qualitative data. The responses have been presented in the form of a graph, allowing for some basic, quasi-statistical quantitative analysis. There are then follow up questions that elicit written responses expanding on these initial responses, such as "How have you benefitted intellectually from taking Breadth subjects?"

I formulated and presented a broader series of questions about student experience of Breadth first, before narrowing the questions to my subject area (SEA) as the specific case study in question.

Analysis and Discussion

The open-ended survey questions produced some detailed responses from participants, beginning with an exploration of what students knew of the UOM Melbourne Model and Breadth subjects prior to starting at the UOM. Almost 40% knew very little about the UOM stand-alone model prior to commencing their course, indicating it had nothing to do with their initial selection process. The remaining respondents had some idea that Breadth electives would be from an unrelated field of study:

I didn't know much at all. From what I had heard from people they were the fun subjects. Personally, I originally thought that they may be a waste of time, as I would end up doing a unit that I have no interest in. (#40)

What is most interesting about this response is the hint of a shift in thinking over time, and the remainder of this respondent's survey responses confirm a change in position from their original, somewhat negative perceptions of Breadth:

For someone like me, who is indecisive about what path they want to take, I would recommend the model. It has given me a chance to study a broad range of units, which has made those units that I enjoy the most stand out... It gave me a chance to focus my attention on something different rather than my core subjects that were quite heavy... I am even considering aiming my course more in the direction of my breadth subjects, as it opened all these opportunities and interests that I had never even thought about before. (#40)

Not only is this student a convert, but it has transformed their view of their learning environment and opened options never considered

Another student responded that Breadth subjects were “the "bludge subjects" to space out your course. (#30). Again, this student was a convert with most their responses affirming the UOM model:

I enjoyed it. I expected to be under the pump in my breadth, but the work loads are well dispersed and easy to catch up on if you get behind...The thing I enjoy most about my breadth subjects is the interaction is a main part of the course (#30)

Clearly, respondents saw Breadth as an opportunity to experiment and this was beneficial in the longer term. Almost half of those surveyed would unequivocally recommend Breadth to others based on this.

It gives you a chance to experience a range of subjects in different majors before jumping into a specified major, which is more logical and practical for a wider range of students as many tend to change their ideas about what they want to study in. University of Melbourne gives students the time to decide without feeling rushed. (#32)

The remainder shared these sentiments and were happy to recommend the MM, though also voiced some concerns in equal numbers. Students questioned the model but these responses tended to be pragmatic rather than philosophical in nature. Of the few negative responses, the general theme was of time and money wasted, and these are legitimate concerns for many students:

Breaths (sic) are forced upon you. Though I happen to like a few of them, I'd prefer a choice of my own (#31)

Again, legitimate issues of freedom of choice are raised; while there are a huge range of subjects to choose from, the very fact that students are put in this position and compelled to choose is an irony and anathema for some.

I saw breadths as a way to learn something alternative to my main discipline but now I see it as a bludge subject and a subject I can get free marks in (#18).

However, while s/he was in the minority it was certainly not black and white. What became apparent in reading these responses was not just the range and diversity of Breadth subjects available to students, but the range in content and implied *quality*. It was apparent that Breadths varied widely in terms of their degree of difficulty, the quality of teaching and the range of assessment practices adopted. Inconsistency was one of the key findings, and for some students there was the expectation that these Breadth subjects would be easier than their mainstream subjects. They were often surprised that this was not always the case. There was also the dilemma for students, whether to choose subjects they liked, or subjects they felt would cause them the least inconvenience and offer a ‘free ride’.

This meant that selection criteria determining their choice of Breadth subjects often changed over time:

Once I started with my breadth subject I found myself really enjoying them. My views changed, and I actually found myself interested in so many of the breadth options. There was such a vast collection to choose from, which meant that I could pick something I was interested in (#40).

Generally, responses were favourable:

Now I understand that they are meant to expand the student's academic horizons. The overall goal of Breadth subjects reminds me of the "open curriculum" my own (Grinnell College) and many other institutions utilize back in the US (#36).

I found my breadth studies very interesting. It wasn't just the course work which was drastically different, but the way in which you had to think about things and the way in which my peers thought about things. It was quite an enlightening experience to work and learn from different people who learn and approach tasks from drastically different angles (#16).

Interacting with new people I think is always going to help on a personal level. Breadth subjects forced me to take a broader look at the university rather than just confining myself to one group of people. As a person, I think it showed me that there are many different people, opinions, ways of thinking etc. across the university, allowing me to build new relationships with new people I wouldn't meet (#31).

These responses are important in that they demonstrate that while students often felt 'forced' to do something against their will, end results were generally favorable. This tends to fit with the adage that 'teacher knows best'; we don't know what we don't know! The reflective nature of students' responses indicate that formerly entrenched positions and opinions may have changed over the course of time because of their experience of Breadth.

When asked, what do you see as the advantages of taking Breadth subjects? Some responses were very pragmatic but most emphasized the advantage of being able to diversify:

Complete a minor concurrently with a major. Taste of future study options. Prepare for postgraduate study, i.e. Masters of Education which is not offered as an undergraduate course. (#29).

Expanding academic horizons; exposure to different types of learning; if specialization is in science courses, breadth subjects allow students to continue improve non-scientific writing; allows for connections to be drawn between one's own specialization and the rest of the academic world (#36)

When asked, How have you benefitted **personally** by taking Breadth subjects? Breadth subjects had a profound impact on some of them personally, with implications for future career choices and educational pathways:

I am even considering aiming my course more in the direction of my breadth subjects, as it opened all these opportunities and interests that I had never even thought about before (#40).

My breadth subjects have been my favourite subjects, made me reassess my undergrad Major into possible transfers (#46).

The Melbourne Model was designed to delay entry to professional degrees in the hope that this would promote greater equity, access and diversity (Potts, 2012). The fact that students recognized this was an endorsement of the model. Some students mooted the idea of changing courses, and acknowledged that breadth subjects influenced these decisions. This indicates that the goal of the MM was being achieved to some extent, and that delayed entry was leading some students to rethink their career choices and make more appropriate choices.

Others saw Breadth subjects as having wider and more far-reaching effects in terms of their own personal growth:

I think I have become a more well-rounded person and more interested in a wider range of subjects. (#17)

Greater acceptance and understanding of different viewpoints on social, political, historical and economic principles. (#46)

Interacting with new people I think is always going to help on a personal level. Breadth subjects forced me to take a broader look at the university rather than just confining myself to one group of people. As a person, I think it showed me that there are many different people, opinions, ways of thinking etc. across the university, allowing me to build new relationships with new people I wouldn't meet. (#16)

There was also the social aspect and acknowledgement that these subjects afforded them room for personal growth and emotional wellbeing. This was a thread running through many of the responses:

I could take subjects I enjoyed and study topics I found interesting. I also made some good friends. (#14).

Many subjects were very social and allowed me to meet new people. (#11).

This focus on fun and friendship may seem trivial to some, but in fact is a key to students thriving and succeeding, a core notion of *wellbeing*, something that is fast becoming a key element of many mission statements:

Positive relationships foster connectedness and feelings of belonging and are essential for wellbeing. These relationships are characterised by constructive interactions that provide enthusiastic and genuine support. They are important because they help us to build social and emotional skills and in turn nurture other positive, caring and respectful relationships (p3, NSW Department of Education and Communities, 2014).

While this has become a key focus in secondary schools, it is often forgotten at tertiary institutions where students are left to fend for themselves. One survey response highlighted this in setting out the case for the affirmative:

It is also a wonderful transition for undergraduate students from high school to university. i.e. study broad subjects at high school, specialise at uni. It leaves a small aspect of high school life in university life which is comforting in a world where you are often only a number (#29).

Sheer enjoyment of the classroom experience was an oft-cited response from students as to why they took a Breadth subject. This is another key to students achieving *wellbeing*; having a sense of purpose and feeling a sense of belonging at university:

Enjoyment, or the presence of positive emotion, can increase a student's wellbeing. Learning occurs more effectively in the context of positive emotions. Enjoyment broadens a student's ability to think creatively, be innovative and to problem solve more effectively (Griffin & Care, 2015, p 4).

When asked "*How have you benefitted educationally from taking Breadth subjects?*" A lot of the comments acknowledged the acquisition of new knowledge outside their core disciplines. However, an ongoing theme was the *skills* learned, such as academic essay writing:

As a science student, you learn how to write academic essays as an art student would be required to do (#39).

By far, the most interesting response was the following, which supports the research question regarding students learning complementary ways of thinking:

Studying subjects where there isn't a 'correct' answer has been very beneficial for me. As I am generally a person that likes a definitive answer. So, the breadth subjects I have taken have forced me to learn in different ways. (#16).

While many spoke about Breadth subjects providing relief from stress and boredom, others demonstrated recognition of the more esoteric benefits of diversifying:

I personally would never have ventured outside my course and faculty, and I would be worse off from a purely personal sense and perhaps an educational sense when thinking about how 'rounded' my education would be. (#16).

I would be more close-minded about the world around me (#25)

Sport and Education in Australia

The survey then moves from the general to the specific, looking at the subject *Sport and Education in Australia*, which was one the students all had in common. While 95% responded that they chose it because they '*liked sport*', 89% said the '*content appealed*' to them, almost 50% responded that they chose SEA because it was '*Intellectually stimulating*'.

The latter came as somewhat of a surprise as the previous two responses clearly indicated that their overwhelming interest lay elsewhere. The word-of-mouth recommendations and Handbook outline which approximately 45% of respondents had gone by, had piqued their interest and alerted them to the fact that this subject would be an intellectual pursuit rather than activity-based.

When asked "*Was Sport and Education in Australia what you expected?*", some were unequivocal in their response that the course met their expectations, but the majority said it was different to, but in most cases far exceeded, their expectations:

It was more intellectually stimulating than I thought (#34)

Didn't expect it to be so sociology based (for some reason) but that's the part I liked the most! (#14)

I found the content much more stimulating than I had imagined and I consider this to be my favourite subject that I have studied in my whole degree (#27)

When asked: *What were the most positive outcomes you gained from this subject?*" (SEA), the answers ranged from friendships made, to learning to be a more critical thinker. Some commented on '*easy marks*', others on how the subject was more difficult than they had anticipated. Finch & Gordon (2014) made the very same observation in their Breadth study, describing a similar response to the Math content in their *University-Breadth* subject, *Statistical Literacy for Undergraduates*:

Given the diversity of the student cohort...there is a diversity of feedback; for some students, the subject is challenging, for others it is too light on... (p.94).

The ability to analyse issues in greater depth was another comment that emerged, as did sheer enjoyment of the subject matter. An appreciation of this depth and diversity was reflected in some of the comments made:

Being more critical on how things are portrayed in the media. (#26)

Citing the most *positive outcomes gained* from studying SEA, six people commented on the friendships made, with statements such as:)

I enjoyed being in a class with people I probably would never encounter as everyone is from different courses. (#32)

Some simply put the word "*Friends*" as being the most positive outcome, where one word summed it up.

In response to the question, "What was it about the course that you enjoyed the most?" responses were ranked per the top three-rated responses given by the students. Thinking outside the box (56%) rated very highly as one of the top three. Learning to present (48%), and Hearing the opinions of others (48%) also rated very highly in the top three responses.

However, it was group work and class discussions that were one of the most enjoyable, stimulating and thought provoking aspects of the course according to the written responses in the follow up question, with a great many positive comments and this is a very positive result in the light of desired outcomes of the Breadth model. Inadvertently, students were acquiring new *skills*.

Breadth and Wellbeing

Effective group work, developing friendships and taking enjoyment from subjects might seem superficial outcomes, but in the bigger picture these are very important in terms of the students' overall wellbeing.

Wellbeing is about leading a meaningful, purposeful life with positive relationships (MGSE M-Teach Partnerships Conference, 2015).

Surely this is something we all aspire to, and as educators we would like the same for our students, so it is not surprising that *wellbeing* is such a growth industry in education and psychology. Research by Associate Professor Lea Waters charts the benefits of Positive Psychology within twenty first century schools.

Wellbeing should also be an accepted indicator of school success...Not only schools, but universities need to be thinking strategically about how to embed positive psychology into the culture...to create a positive and productive environment for students (Waters, 2011).

Cumming & Nash (2015) discuss the need for students to have a sense of belonging as a key component in promoting positive learning and a connection to their community. While this study explores these factors at the primary school level, my current research indicates that these factors are just as important at the tertiary level. In March 2014, The Age newspaper reported on university dropout rates:

Almost one in five students leave their studies nationwide by the end of first year... They blame unhappiness with the subjects they chose, financial hardship, failing courses, and class sizes (Gilmore & Marshall, 2014).

Yet in Victoria, The UOM boasted the lowest attrition rate of just 5% and surely Breadth subjects are a contributing factor if they are the defining difference between the UOM and other Australian universities. Cargill & Kalikoff cite evidence linking inter-disciplinarity to a range of benefits which "can be a valuable method to improve student performance, increase student retention and build learning communities" (p.90).

If programs such as Breadth are proven to be a contributing factor in stemming the tide of student drop-outs, and can be linked to increased retention rates in university courses, this may be yet another benefit of the Melbourne Model.

Breadth and Its Place in the Twenty-First Century

This study has called into question the Melbourne Model and the legitimacy of Breadth subjects within the UOM curriculum. The NSW Department of Education's Wellbeing Framework for Secondary Schools rests on three successive pillars: Connect, Succeed and Thrive.

Wellbeing, or the lack of it, can affect a student's engagement and success in learning (NSW Department of Education and Communities, 2014, p2).

Wellbeing can be shaped by several factors, first and foremost, *choice*, something which Breadth aims to provide at the tertiary level:

Choice is important because it impacts positively on a student's learning and engagement in schooling. It contributes to enhanced motivation, interest and commitment to tasks. The provision of choice supports self-regulation, self-discipline and achievement. When students have choice and opportunities to engage in activities that are of interest and value to them, their wellbeing is enhanced (NSW Department of Education and Communities, 2014, p3).

Emeritus Professor Patrick Griffin, founder of the Assessment Research Centre at the MGSE, UOM, describes the three Rs being replaced by the four Cs: Communication, Collaboration, Creativity and Critical thinking. He highlights evidence of changes in the workplace and the emergent 'knowledge economy' requiring changes in the skill set of the workforce:

A recent survey of business executives identified problem solving, team working and communication as top required skills, and predicted that demand for these skills would grow (M-Teach Partnerships Conference, 16/07/15).

The very fact that students are required to take subjects outside their main learning area means they are getting depth and "breadth" in their education. The Melbourne Curriculum is designed to meet the challenges of the twenty-first century and appears to be meeting this part of its brief. SEA/Breadth delivers with its emphasis on weekly reading circles, group work, shared resources and the need to hone communication skills in both small and large group situations. Communication, collaboration and critical thinking are the very foundations of the course and support the goals of the MM:

As a Case Study of Breadth, SEA can be shown to have met not only its brief, but to have gone well beyond that. In teaching broader twenty-first century skills it has furnished students with the skills and autonomy to meet the challenges of a more diverse world and an unpredictable future.

Conclusion

Summing up, I can say with some confidence that the evidence points to Breadth in general, and SEA in particular, as having been a success. Overall, students were satisfied and supportive of the Melbourne Curriculum Model and with the role of Breadth subjects within that. Expectations were met and on many occasions surpassed.

The MM and Breadth as a core component of that provide an area ripe for further research. Questions of modified academic pathways for students, issues of wellbeing and questions about retention rates at University were all raised during this investigation. Naysayers argue that Breadth is a waste of time and a distraction from the real work of universities, but I would argue otherwise. This research indicates that Breadth contributes significantly to students' measures of wellbeing and their overall success at University. It has also raised questions regarding the range and scope of Breadth subjects available to students. Increased regulation and more effective moderation of Breadth subjects may be worth considering, while still retaining the myriad of choices available to students.

The Bologna reforms have set the pace and tone for recent changes and initiatives in higher education across the developed world. A slimmer, trimmer and more streamlined model of education has emerged, with an emphasis on consistency and inter-changeability. Breadth and depth at the undergraduate level are promoted, with specialization taking place at the post-graduate level in line with the North American Model of higher education. The University of Melbourne has followed the trend, adopted the model and modified the program in their unique and aptly titled *Melbourne Model* of higher education.

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Who makes it to upper secondary level in Mexico?

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Abstract

Mexico is a federal republic and, at State level, huge differences can be found in the situation of post-compulsory education systems. The article explores the situation of the Mexican education system and in particular the chances its students have to make it to upper secondary level. The results show that despite the improvements and regulation changes to make upper secondary level compulsory, the system continues to reinforce socioeconomic selection making low-income students progression opportunities lower than their peers.

Key Words: compulsory education, education opportunities, socioeconomic selection

Introduction

There is a general consensus that the longer young people stay in education, the more chances they have to overcome poverty. Remarkable gains have been registered after the World Education Forum in Dakar with governments commitment to provide universal primary education with a focus on equity (UNESCO, 2009). Many countries have accomplished since then universal primary education and in some middle-income countries that achievement has increased demand for post-basic education (UNESCO, 2009). This is the case in Mexico, where those aged 15 and above achieve on average 9 years of schooling (Consejo Nacional de Población, 2010), which is equivalent to completing lower secondary (LS). As a consequence, the demand for upper secondary level (UPS) education has gradually increased in the past 10 years, putting increasing pressure on the post-compulsory education system.

Mexico is a federal republic and, at State level, huge differences can be found in the situation of post-compulsory education systems. Not only are there differences in the proportions of students of official UPS age (15 year-olds willing to continue studying after completing LS), but there is also great discrepancy on the number of schools available to them (Instituto Nacional para la Evaluación de la Educación, 2011). As the demand for UPS education has increased unevenly, public schools have introduced additional mechanisms of selection to allocate scarce spaces in some states. Furthermore, as neither the Federal nor State governments have regulations on the mechanisms and procedures for the transition to UPS, students face different modes of selection and admission that vary according to where they live.

In this article, I explore the situation of the Mexican education system and the chances its students have to make it to upper secondary level. This analysis is particularly relevant now that the UPS level has been made compulsory and the government has committed to make the level universal by 2021. The article is structured as follows: firstly, I present a brief overview of the Mexican education system. Secondly, I revise the main education outcomes in Mexico. Thirdly, I present the situation of the LS level followed by a description of the main results on the transition to UPS. Lastly, I present the conclusions of the analysis.

Brief Review of the Education System in Mexico

The Mexican education system is structured into five levels: first, three years of preschool education (ages 3-5); second, six years of primary at a compulsory starting age of 6 years-old (grade 1 to grade 6); third, three years of LS for children between the ages of 12 to 14 years-old (grade 7 to grade 9); fourth, three years of UPS for young people ideally between the ages of 15 to 18 (grade 10 to grade 12); and finally, higher education (Instituto Nacional para la Evaluación de la Educación 2006). Therefore, a normal school trajectory from basic to higher education without interruptions would last between 16 to 20 years depending on the field of study. Figure 1 shows how the education system is structured and summarises the types of schools provided at each education level as well as the age groups that each level should ideally enrol.

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Figure 1 Structure of the Mexican Education System

Education Structure	Education Level	Type of Schools Available	Age	Duration in Years
	Preschool	CENDI, General Indigenous, and Communitarian	3-5	3
	Primary	General, Indigenous and Communitarian	6-11	6
	Lower Secondary	General, Technical, Communitarian, Distance LS, and LS for Workers	12-14	3
	Upper Secondary and Vocational Education	General Schools, Technical and technological schools	15-17	2-6
	Undergraduate and Postgraduate education	Universities	-	-

The government is officially responsible for providing compulsory basic education, which includes: preschool since 2002, primary since 1867 and LS since 1993 (Instituto Nacional para la Evaluación de la Educación, 2009c). In 2010, the government made UPS part of compulsory education (Camara de Diputados del H. Congreso de la Unión, 2012), but this only came into effect in the 2012-2013 academic year. The Mexican Constitution (Article 3) states that “basic education (pre-primary, primary and LS) shall be free of charge, non-religious, and publicly provided; basic education and UPS education will be compulsory (...) The State will also provide higher education (...) The education provided by the government shall be of good quality and free of charge.”

As we can observe, there is a slight difference between what is considered basic and compulsory education. The constitutional amendment in 2010 suggests that basic education continues to be from pre-primary to LS and adds that UPS level should be considered to be compulsory education. The difference is that basic education is free and as UPS is not part of basic education, the government does not pledge to provide it free of charge.

Education System's Outcomes

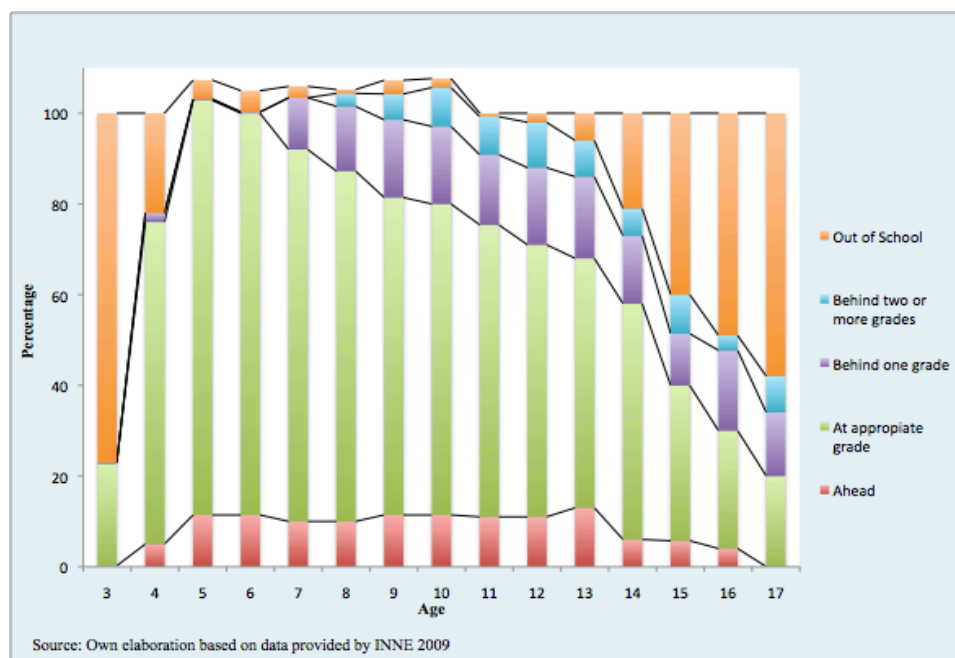
The enrolment rates in the education system vary by age. For example, in 2011, while close to 100 percent of 5-12 year-olds were enrolled at school (OECD, 2011), participation rates remained low for preschool and secondary age students (INEE, 2009). The enrolment rate starts diminishing for children in LS age (13 year-olds) to 98 percent. Moreover, enrolment rates start to rapidly decline for 14 year-old students, decreasing to 69 percent and 49 percent for 17 year olds.

Considering enrolment in terms of appropriate age, the education system has not yet accomplished, at preschool level, its aim to enrol all children of preschool age into first grade. At primary level while 90 percent of 6 year-olds are enrolled at grade 1 in primary

level, 69 percent of 11 year-olds are enrolled in grade 6. This suggests that even though students of primary age remain at school, failure to progress to the next grade is the main reason why they are not enrolled at the appropriate grade for their age (see Graph 1).

At LS the picture is dramatic. While 55 percent of 13 year-olds are enrolled in grade 7, only 34 percent of 15 year-olds are in grade 9. This can be explained by the fact that failure rates increase at LS (almost 30 percent of the population at this level are repeaters). In addition, repetition having accumulated from primary level means LS has the highest percentage of students who are two or more years over age.

Graph 1 Education situation of the school age population (2009)



It can be assumed that repetition, in association with socioeconomic deprivation, pushes students out of school. Starting with 13 year-olds and those of older secondary age, the out of school rates increase progressively, from 6 percent of 13 year-olds, to 21 percent of 15-year-olds. In other words, around 80 percent of the population that should be finishing LS are enrolled in school, but only 34 percent are at the appropriate grade. Furthermore, the striking increase in the number of adolescents out of school is more so at UPS level where 49 percent of 16 year-olds and 52 percent of 17 year-olds are not enrolled in school.

Other important educational indicators to look at include net enrolment rate (NER), survival, completion at appropriate age and transition. Figure 2 shows a summary of the education system's performance by level in each indicator.

Regarding NER, we can confirm the results shown in Graph 1 that at preschool level 20 percent of children between 3 and 5 years old are still not enrolled. The education system has accomplished enrolling all children of relevant age at primary level but still has not reached 18 percent of the LS age population. Lastly, at UPS the system is experiencing the challenge of not reaching 53 percent of the relevant population.

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Regarding the survival rate, we can observe that 12 percent of the students at primary fail to progress to the next grade. This increases at LS to 22 percent of students, and at UPS rises dramatically, where 41 percent of students fail to survive.

It is worth mentioning that at primary level the main reason why students do not survive their grade rate is repetition, while at secondary level the explanation includes not only failure but dropout, especially at UPS level.

Regarding the transition between levels, the analysis of the probability of making the transition at normative age¹ suggests that a student has a 71 percent chance of completing the transition from primary to secondary at the official age. The chance of completing the transition from LS to UPS is 65 percent. In both transitions, girls have on average 5 percent more chance of completing the transition at a normative age, according to information provided by INNE in 2009.

In addition, using enrolment data from 2009 and 2010, we can see that 76 percent of the students enrolled in grade 9 in 2009 completed the transition and enrolled in grade 10 (UPS). Finally, of those that complete primary education at the appropriate age, 95 percent continue studying LS; and from those who complete LS at the appropriate age, 95 percent complete the transition to UPS.

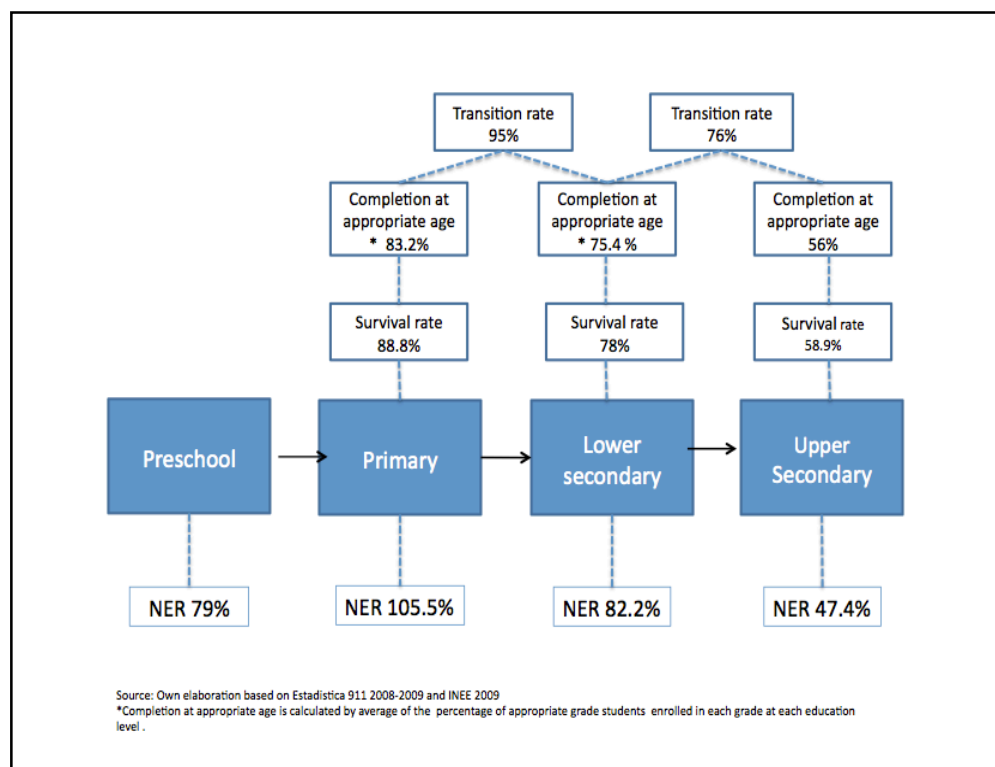


Figure 2 Mexican Education System's indicators of enrolment

1 Calculated with information of the school years 2002/2003, 2005/2006 y 2008/2009 provided by INNE 2009

The increased dropout at LS is worrying because, as pointed out by the OECD in 2011, a significant proportion of young Mexicans remain inactive in education or employment. The data suggests that 18 percent of the population between 15 to 19 years old are not in education or employment. For the same age group, women are 3.6 times more likely to not be in education or in employment compared to men of the same age.

Mexico has been trying to reverse the problem of adolescents and youths dropping out of school. Since the 1990s, a series of education reforms have focused on changing the structure and content of the curriculum, as well as making secondary education accessible and universal. Nevertheless, LS still faces several general problems, which will be further discussed in the following section, alongside the opportunities for access to LS.

Lower Secondary Education

This section focuses on the opportunities to access and stay at the LS level. Despite the improvement in LS school provision discussed previously, the goal of having the total population of 12 to 15 year-olds enrolled at school has not yet been accomplished. The access opportunities to LS are still unequally distributed among States.

To obtain a general picture of the situation of the LS age population, I performed an analysis of progression opportunities by examining a school generation that started the primary level in 2004 and who should be enrolling in LS in 2010. Only 4.6 percent of students that started school in 2004 did not complete primary in 2009. Therefore, the generation showed a 0.77 chance of completing primary in a normal 6-year cycle.² Once students got to grade 6, 99 percent of them completed the academic year and were ready to progress to UPS.

In the 2010 academic year, 2,229,998 students had a primary certificate and 93 percent of them completed the transition to LS. It is not surprising to find out that the probability of continuing to study LS varies across States. In the Federal District, only 1 percent of 15 year-olds did not attend school and from this group, 38 percent have never attended LS. In Chiapas, 30 percent of 15 year-olds are out of school and 65 percent of them were never enrolled in LS.³

The probability of transition to LS at an appropriate age varies across States and the differences among States are very much related to each State's level of marginalisation⁴. Graph 2 shows the probability of continuing to study LS level at the appropriate age, arranged by the States' marginalization index from CONAPO in 2010. As we can see, students in States with very high rates of marginalisation show lower probabilities of reaching LS at the appropriate age in a range of 0.59 to 0.63. Conversely, students in States with very low marginalisation levels show on average a 93 percent chance of continuing studying at the appropriate age (own calculations based on 911 SEP 2004-2011).

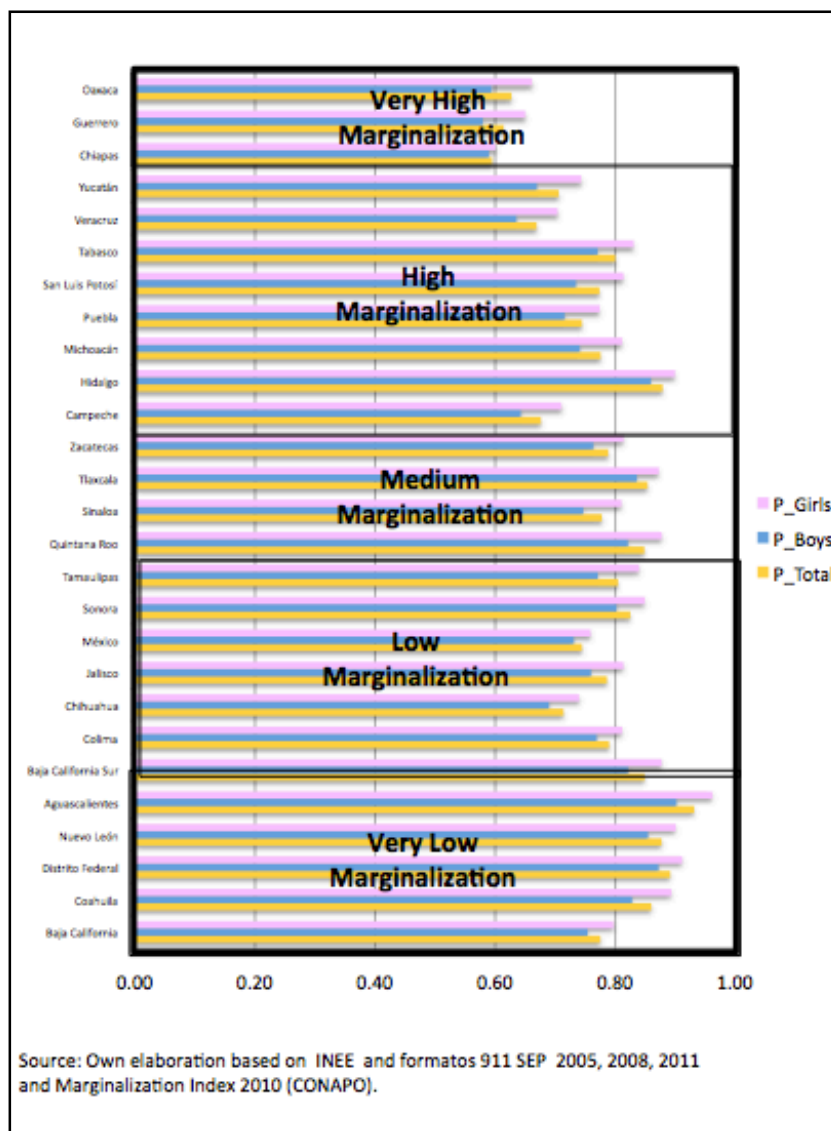
² The probability of the generation to complete primary in 6 years was calculated using the Formatos Estadísticos 911 from SEP in the period 2004-2009.

³ Calculations based on formato 911 (2010/2011) and Censo de Población y Vivienda 2010, Inegi.

⁴ Marginalisation is seen as a structural phenomenon constructed by multiple dimensions, shapes and intensities of exclusion in the development process (CONAPO, 2011). CONAPO constructed a marginalisation index by municipality and State level in 2010. This takes into consideration the following dimensions: education (illiterate population and population without primary education), dwelling (drainage system, electricity, level of overcrowding, drinking water, and housing flooring) population distribution and income.

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Graph 2 Probability of continuing to study Upper Secondary at appropriate age



Considering that the lack of LS offer is no longer an issue, students' personal, schooling and context conditions must be the reasons for the discrepancies in transition probabilities. These conditions include the fact that in very highly marginalised States, the quality of education is well-known to be below standard. In particular, States with very high levels of marginalisation have been associated with low-quality schooling, either because the teachers are not qualified or trained, or because the school infrastructure and climate are poor (Reimers, 2000). Poor schooling experiences often mean that students do not learn what they are expected, fail or have low educational motivation. These characteristics are associated with repetition, which at primary level is a significant reason for students not completing the transition at the appropriate age.

The different characteristics of the States in terms of their education system, education quality and the progression opportunities provided are believed to affect who gets to grade 9 with a good chance of making a successful transition to UPS level. In the following section, I further explore issues related to UPS level transition.

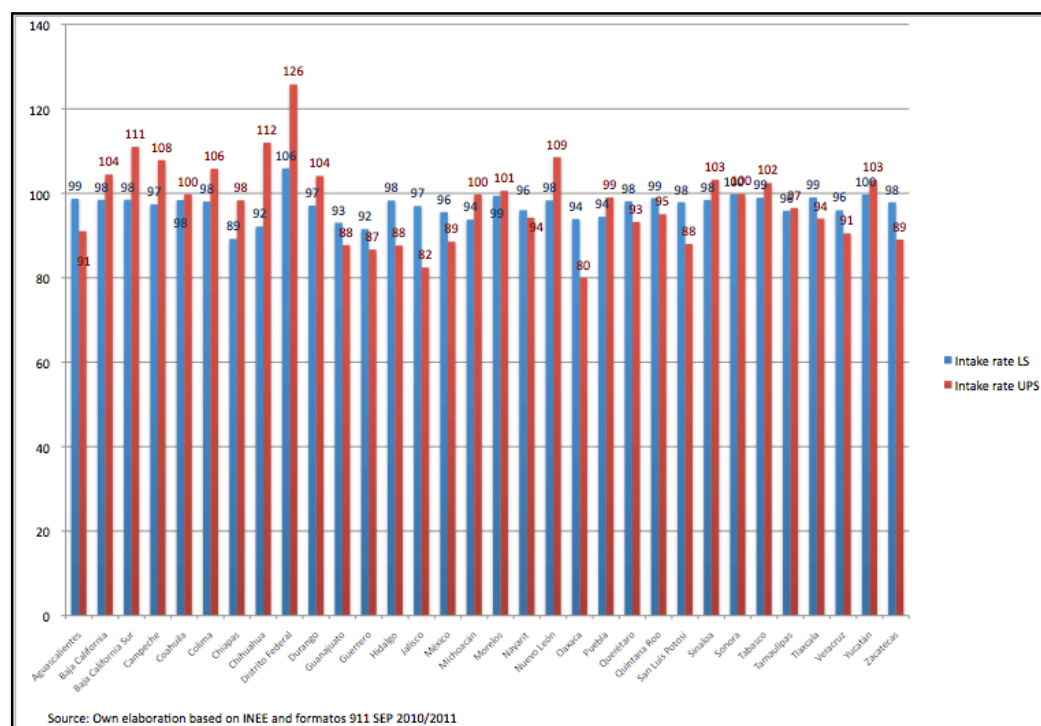
Transition to Upper Secondary

UPS schools have three core options: general, technological and technical professional. It is important to highlight that there are a wide variety of options available and each institution has its own normative framework and curriculum plan but despite this it appears that there are similarities between them (Instituto Nacional para la Evaluación de la Educación, 2011). Interestingly, they do not have any sort of link either at an informal communication level, or through application processes or planning. There are a total of 14,427 UPS schools in Mexico that are expected to ideally enrol 6,710,948 adolescents from the ages of 15 to 17 years old (Censo de Población y Vivienda, 2010).

That suggests that each UPS school would need to enrol 465 students, which explains the lack of capacity (UPS schools in Mexico have the capacity to enrol 320 students on average). If we consider the number of students that graduated from LS in 2011 (1,775,728 students), each school would have to enrol 123 students in grade 10. However, based on my calculations, I estimate that UPS level schools have 100 places for each freshman year. That suggests that if all LS graduates want to continue studying, there are not enough places to enrol everyone. This has an impact on the application and selection processes that schools will use, which translates into an increase in the competition for a place in schools with high demand.

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Graph 3 Net Intake Rate (NIR) at LS and UPS by State

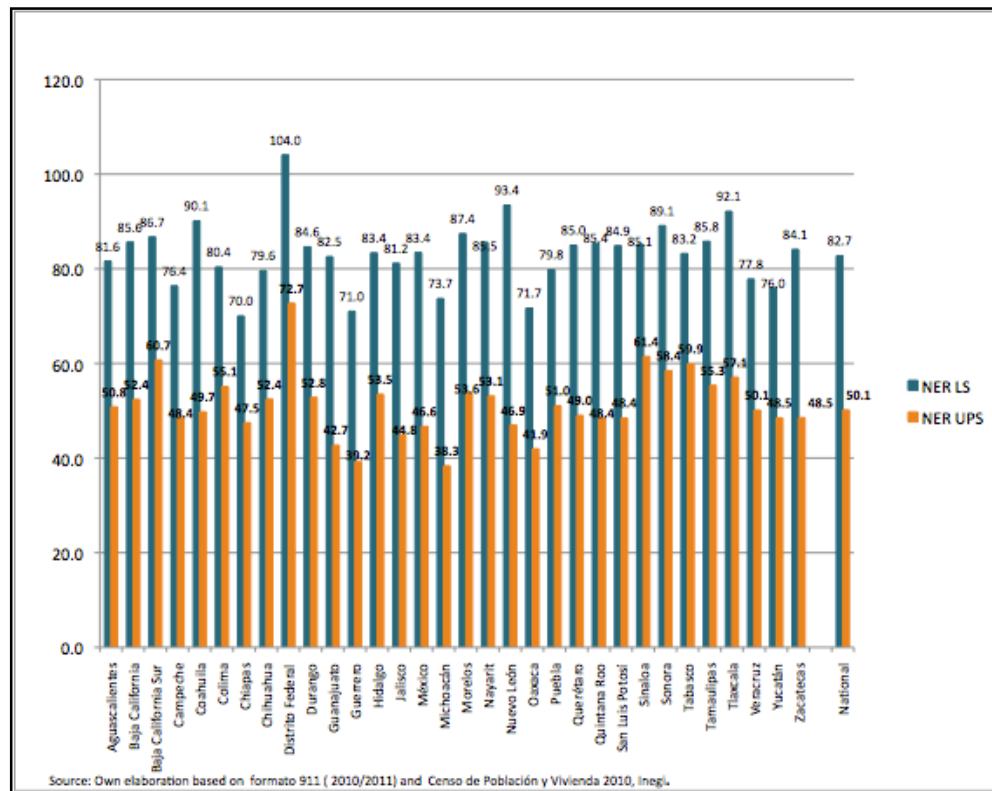


Transition rates would be a key measurement of enrolment opportunities at UPS; nevertheless, in the absence of available longitudinal data in Mexico I can only calculate the intake rate. In Graph 3, I compare the Net Intake Rate (NIR) at LS and UPS by States, as it shows the differences in selection ratios among the education levels. It is important to keep in mind that NIR measures new entrants who are at the official age (12 and 15 years-old at LS and UPS respectively), expressed as a proportion of the relevant age groups. Therefore, the results observed measure the proportion of students that have made the transition to LS and UPS at the appropriate age. This measurement is limited as it cannot track how many of them are returning to education after a gap or how many are students repeating the freshman year.

The graph above highlights that the NIR at UPS of some States such as Federal District, Baja California, Baja California Sur, Chihuahua and Nuevo León show values of over 100 percent. This should be interpreted with care as more than simply being an overrepresentation of students; the NIR suggests a mobility of students within those States that are considered to have better quality in their education provision. For the rest of the States, the NIR shows better figures at LS than at UPS, which suggests that the population that make it to LS at the appropriate age is greater than at the LS level.

At a national level, it is estimated that 96 of every 100 15 year olds are enrolled at UPS, while LS has the same representation. The lowest NIR at UPS is recorded in Oaxaca (80 percent), Jalisco (82.4 percent) and Guerrero (87 percent) and it is in these states that the largest differences between LS and UPS NIR are found, not to mention Hidalgo and San Luis Potosí.

Graph 4 Net Enrolment Rate (NER) at LS and UPS by States



Furthermore, enrolment rates at LS and UPS levels are dramatically different as Graph 4 shows. The national average net enrolment in LS is 82.7 while at UPS it is 50.1, a difference of 32 percentage points (significant at 95%). The Federal District is the one that shows the highest enrolment at both levels with over 100 percent attending LS and 72 percent at UPS level.⁵ Guerrero is the State that shows the lowest enrolment rate at both LS and UPS level (71 and 39 percent, respectively) with a difference between levels of 44 percentage points.⁶

In Graph 4, it can be observed that the States with the largest enrolment differences are Michoacán, Guanajuato and Nuevo León (in descending order). They each have very interesting characteristics and no evident similarities. Michoacán shows low enrolment rates at both levels (73.7 and 38.3 at LS and UPS, respectively) with a difference of 48 percentage points between levels. Michoacán, which has a high level of marginalisation, has generally been seen as a State with low education outcomes; therefore, low levels of

⁵ The Federal District has the capacity to enroll 92 percent of the relevant population that completed LS in 2010.

⁶ For analysis purposes it is relevant to observe the lowest and greatest enrolment differences between LS and UPS level. The States with the lowest enrolment differences between LS and UPS are listed as follows in descending order: Tabasco, Sinaloa and Baja California. In Tabasco State the UPS NER is 60 percent with a difference of 28 percent points more at UPS; in Sinaloa UPS NER is 59 with a difference of 27.8 percent points; in Baja California UPS NER is 61.4 with a difference of 30 percent points. A similarity between all three is that they are States with medium level enrolment with an average of 86 LS NER and 60 percent at UPS; although with different levels of marginalisation

enrolment and a large gap between levels is not surprising. Guanajuato has an enrolment rate of 82 percent at LS and 43 percent at UPS, with a difference of 48 percentage points. Guanajuato is usually located above the mean in education results with medium levels of marginalisation.

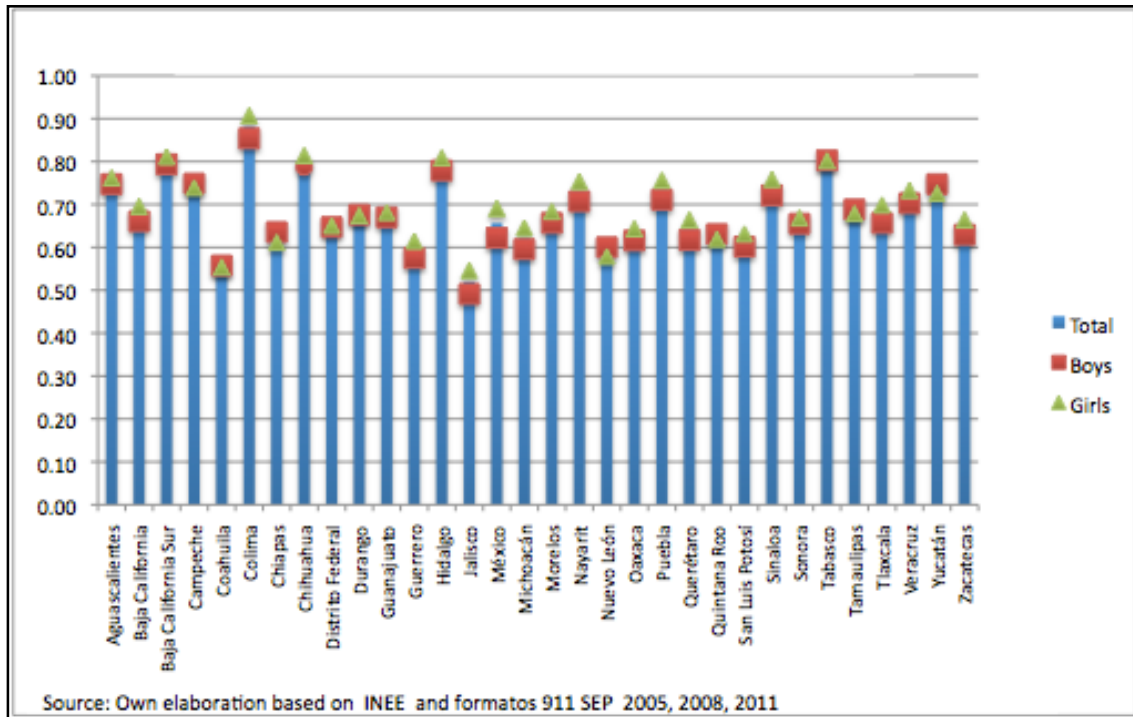
Conversely, Nuevo León has the highest difference between levels (48 percent points), very low levels of marginalisation and in general is located at the top of education indicators. The enrolment at LS is 93.4, percent which positions the State in second place at the national level but, at UPS, the State only enrolls 47 percent of the relevant population, despite having an infrastructure capacity to enrol 83 percent. Why such different States report such large gaps in enrolment at secondary level is a question that needs more in-depth analysis. What the data seems to suggest is that enrolment at UPS is not related to States' development, education capacity in terms of infrastructure⁷ or education outcomes in basic education.

With respect to the probability of students continuing studying UPS at the appropriate age, Graph 5 shows that on average students have 0.66 chance of starting UPS at the age of 16. That is 11 percent less when compared to LS. Girls have 0.68 chance of continuing to study at the appropriate age compared to 0.67 of boys. The gender gap in the probability of starting UPS at the relevant age has narrowed compared to LS, where the difference is 6 percentage points. This fact can mean that once students graduate from LS (when girls show better results), the chances are similar for boys and girls. Also, it can be inferred that the gap narrows because when a boy manages to stay in education and complete LS, he is more likely to continue studying and that girls who finish LS (basic education) have more chances of not continuing their studies.

The UPS enrolment is also influenced by socioeconomic and cultural conditions. INNE's study in 2011 found that 24 percent of the population of 15 to 17 year-olds with LS degrees are not enrolled at school (1.2 million people). Referring to socioeconomic conditions, the number of adolescents aged between 15 to 17 years old who have LS degree enrolment at UPS is as follows: 64 percent of those live in rural areas, 61 percent come from indigenous households, 60 percent live in poverty and 67 percent live in highly marginalised communities. Therefore, only 40 percent of disadvantaged adolescents have the opportunity to enrol at UPS level.

⁷ Michoacan has the capacity to enroll 86 percent of the population that completed LS in 2010; Guanajuato has the capacity to enroll 81 percent and Nuevo Leon has the capacity to enroll 85 percent.

Graph 5 Probability of continuing studying Upper Secondary at the appropriate age



Overall, the data presented confirms that the transition to UPS appears to be an important bottle-neck for students' progression. This bottleneck appears to be related to differences in States marginalisation levels and general characteristics. The results also suggest that gender differences do not appear to be important in defining who makes it to UPS level.

Final Remarks

The article described the general characteristics of the Mexican education system, in particular at the LS and UPS levels. It highlights that despite the accomplishment of universal enrolment by the Mexican education system a basic education level, there are problems worth noting, as they are relevant to the transition to UPS level. Moreover, as the UPS level has only very recently been incorporated as part of compulsory education, issues of dropout and overage progression in LS acquire more relevance as they define whether UPS school age adolescents will be able to access UPS. It is also relevant to keep in mind the issues of States' inequalities, not only in terms of education outcomes but also in terms of the States' educational capacity to provide UPS services. Therefore, it is important to highlight the differences in the transition processes by State level, as well as how students are selected into UPS because it is likely that this would affect students' chances to make a successful transition, especially in those States where UPS access and enrolment remain low.

Overall, this article shows an education system that is making progress and where gender gaps are virtually non-existent, but which still struggles to keep young adolescents in education. It is also an education system where students' social inequalities (and context inequalities) seem to define their chances of progression, and, where capacity and outcomes are highly unequal among States.

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Thai as a Foreign Language Learning in the Facebook Era: Go Beyond Brick-and-Mortar

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Abstract

Social media are currently the most influent technologies in Thailand making social interaction through a variety of formats. Participation through them provides many opportunities for learners to interact socially by communicating with each other in new contexts, not limited to just in school, at home, at Internet cafés, or at a specified time. Social media can be for promoting the higher quality of learning by adopting as communication supports of the foreign learners. This article aims to present the new instructional model for teaching Thai as a foreign language using 21st Century technology or social media for enhancing language skills. It presents a new learning strategy to use technology with modern teaching methods in classroom, offline, and online. The researchers designed and proposed the blended learning model for Thai language skill development of non-native Thai learners. The study additionally provides a synthesis of the Communicative Approach, Instructional Model, and Social Media to expand the understanding of the model's origin. The result of the primary study showed that the model consisted of three main phases, P.1 Presentation (online), P.2 Practice (in-class), and P.3 Production (offline and online), and fourteen learning steps.

Key Words: Thai as Foreign Language Learning, Communicative Approach, Social Media, Blended Learning Model

Introduction

At present, each country recognizes the importance of foreign languages teaching. This is why the number of foreigners interested in studying Thai as a foreign language is increasing in order to communicate with each other in various fields, whether political, social, economic, commercial, or educational. Teaching Thai as a foreign language today has many institutions both public and private increasingly open the Thai for foreigner courses. However, the educators only developed Thai language or Thai studies curriculums for foreign learners, they do not develop the Thai as a foreign language ones preparing to produce a qualified instructor with great knowledge, skills and high expertise in the design of teaching Thai for foreign learners directly. Mostly curriculum is developed for undergraduates and have opened in few universities such as Srinakharinwirot University, Dhonburi Rajabhat Univerisity, or Huachiew Chalermprakiet University.

Students who graduated from the field of teaching Thai as a foreign language curriculum are not enough. There was a shortage of teachers who have expertise in teaching this field. According to Ponmanee (2009), although teaching Thai as a foreign language is now more important, teachers lack the knowledge and skills. The pre-service teacher production system has not realized the importance of education in this field seriously, only added in the course of only a few universities.

Apart from the problem of shortage of qualified teachers, the restrictions on the time and location of both learners and teachers are another problem. Yuwanich (2007) discussed the problems of teaching Thai as a foreign language from the experiences as a care taker of foreign students in international programs, Chiang Mai University and from the interview with Associate Professor Sriwilai Ponmanee, Ms.Mayuree Anukamol, and Ms.Suthalee Thongmee, she has found a consistent problem of staff shortages in the issue of teaching, or a shortage of teachers. Foreign learners had not enough time to study or duration of the course between the teachers and learners did not match. The learners did not study in full time, no free time for practice, no efficient instructional media which are flexible and able to use anywhere at any time.

In conclusion, the issue of Thai as a foreign language teaching is the old teacher-centered instruction, and none of technology in classroom. The findings of literature review related to the use of technology in Thai classroom for foreigners revealed that these researches were developed computer-assisted instruction, e-Lessons and various e-media (Ritthisorn, 2003; Yuwanich, 2007; Dissorn, 2009; Thanunchai, 2009), but found none of Thai research to develop new instructional strategies with the use of technology in Thai as a foreign language teaching, so the researchers developed the new instruction model applying social media to enhance language skills of foreign learners.

However, besides the shortage of effective teachers, the old style of teaching and learning, and restrictions on the time and place, it has found the problems of the language used in the classroom as not consistent with the real language used in social context. As Hiranpradit (2002) has studied the status of Thai language learning and teaching for foreigners in Thailand showed that teaching Thai for foreigners in the class did not respond to the use of Thai language in the real situation because they study grammar or formal language, not for social communication. Teaching Thai as a foreign language should be taught the language to be used for communication or conversation, should not be taught specific format or language structure. According to the nature of human language learning, it should begin with developing the listen and speak ability to be well enough, then coaching read and write ability respectively in accordance with Tuaycharoen (2004) discussed how children learn language that they would hear those intimate talked. Although he initially did not catch the meaning, when heard and saw repeatedly with different poses, then he understands the meaning, imitate simple speech, learn to read and write at school.

According to the opinion of Wilkins (1973 cited in Lonkhleng, 1993), said that listening and speaking skills are used more than reading and writing. In one day, we might read a book, newspaper ads, and may write letters depending on the activity or work. Listening and speaking is meaningful communication that receivers get feedback immediately. The importance of teaching Thai as a foreign language should take into the development of listening and speaking skill first because the primary function of language is to communicate and interact. As a result, communicative approach is the importance of teaching Thai as a foreign language. The approach is to teach a foreign language that aims to provide learners with interaction between one student and another or a student and a teacher, practice the target language as given situations appropriately with the social context in which the students are involved, allows them use language to communicate as a social condition (Angwattanakul, 1988), be confident and courage to use the language outside the classroom with native speakers. It is the language used to communicate in daily life rather than memorizing grammar or structure and develop language proficiency efficient as the nature of language learning. Students appreciate and have positive attitude towards learning goals at a higher level.

With the importance and necessity of such problems, the researchers therefore aim to develop the Thai as a foreign language instructional model based on communicative approach on social media to enhance language skills of foreign learners. This developed instructional model will be useful for teaching Thai as a foreign language teaching in the 21st century curriculum of higher education.

Research Objectives

To develop the instructional model based on communicative approach on social media to enhance Thai language skills of foreign learners.

Theoretical Framework

To strengthen the skills of listening and speaking, learners should have opportunities to learn the language as freely as possible. The class is truly a community where they must be familiar with working in pairs or small groups. The instructor must not watch or control too much but serves only to clarify what each work comprises of and the time that should be used. The teacher needs to plan in advance. There is a practice in pairs or in group (Finocchiaro & Brumfit, 1983) and learners should be taught to use the language to communicate or chat but should not be taught specific format or structure of languages. According to the nature of human language learning, it should start from developing the ability to listen and speak well enough before. Then learners practice the skills of reading and writing, respectively. Using the language for communication to develop, the students will have the ability to communicate using language or language interpretation correctly when they are connecting with others in society and will always know what to say to whom, where, when and how. In addition, learners focus on the concepts taught in the language interaction between teachers and students and between the student and learner centered and on encouraging students to express language to convey their ideas as a spoken language which will allow students to practice listening and speaking skills, including the use of body language, gestures and facial expressions. Language development will be effective and natural while the instructor serves as a trainer for the students, to create a friendly conversation, let them react to each other in several skills, and facilitate pair work or group work. Teachers may assess learners based on the expression of which is involved in various activities and may be evaluated as official results by writing.

However, the current state of teaching Thai as a foreign language found that teachers have mainly used traditional instruction emphasis on teacher-centered and had restrictions on the time and place of both learners and instructors (Yuwanich, 2007), and a shortage of teachers with the knowledge and skills in teaching Thai as a foreign language (Ponmanee, 2009). In reducing the problems and these limitations, it should have developed an instructional model that reasonable and effective, combined with the use of social media for teaching anywhere at any time via the internet. Students are taught according to their abilities and interests. All classmates can consult and exchange ideas with each other as well as students in regular classes (Malithong, 2005; Thepduangkaew, 2008) by using social media as tools to communicate through web browser to encourage everyone to take action and make a real common solution and to be responsible and involved in their learning, able to develop the skills and requirements in a real environment.

From theoretical framework above, it can be constructed and shown below.

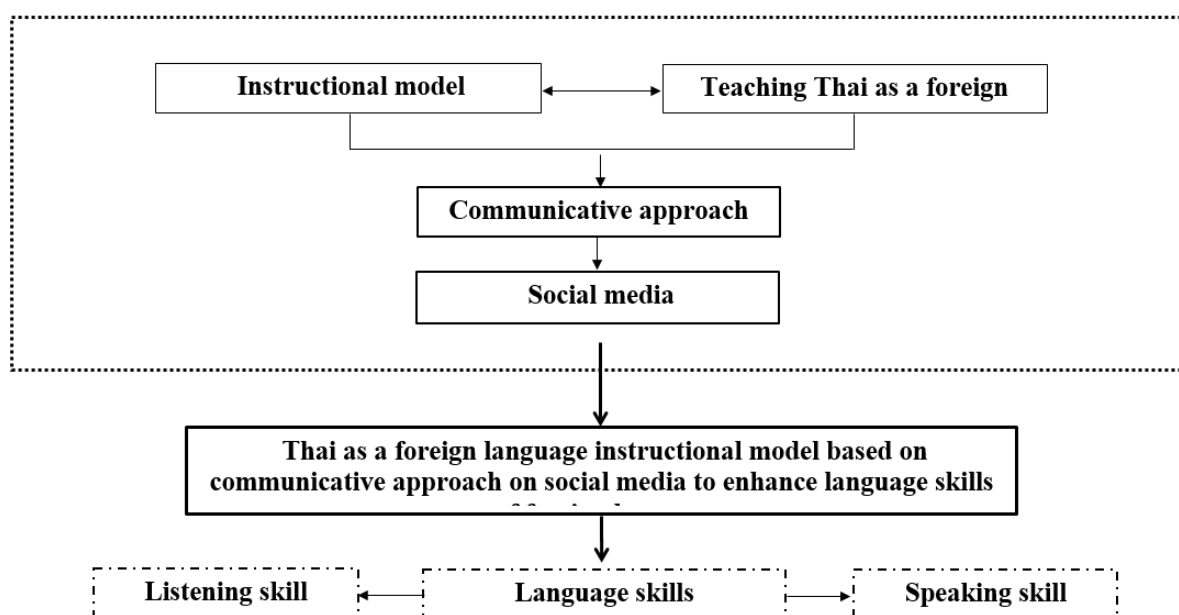


Figure 1 the Framework of Language Skills Enhancement through Social Media

Research Results

The results from gathering and integrating theoretical framework of Language Skills Enhancement through Social Media can be developed instructional model as detailed: 1) Orientate course, purposes, teaching methods, activities, and evaluation. 2) Get learners into pairs. 3) Introduce social media such as social networking, content communities, and etc. as well as train to operate it manually. 4) Teach reading phonetic alphabets to those classes and allow them to practice reading with couples. 5) Distribute Basic Thai conversation textbook and blog (<http://learnthai4u.wordpress.com>) and assign learners to study the content of each chapter before at least one week. 6) Do the pretest to measure the skills of listening and speaking.

Phrase 1 Presentation

1. Learners listen to word pronunciation related to the conversation situation from video clip on blog, then pronounce them.
2. Study the conversation situation from video on blog.
3. Describe grammar structure, additional vocabulary, language remark, and cultural remark related to the conversation.

Phrase 2 Practice

5. Study the conversation in textbook and practice speaking along the conversation but change to their own information.
6. Call a pair of learners to speak out on the topic. When finished, call another pair to conclude the former pair about speaking, then speak out on their topic, do this until the last pair.
9. Summarize listening and speaking results of learners and give advices as a whole.

Phrase 3 Production

10. Each pair use language in real-life situations by choosing only one situation in textbook (part 3 of exercise) and establish a dialogue on the situation from grammar structure and additional vocabulary as important guidelines with self-practice.
11. Inform learners to know that there will be the test before the start of class next week, each pair will have a conversation on the chosen situation.
12. Assess and score the conversation and provide feedback for each couple to know.

Note: according to the instructional model, Student must study all situation in textbook before the start of 7).

- 7) Provide an opportunity for students to ask questions on various issues.
- 8) Do a posttest to measure the skills of listening and speaking.

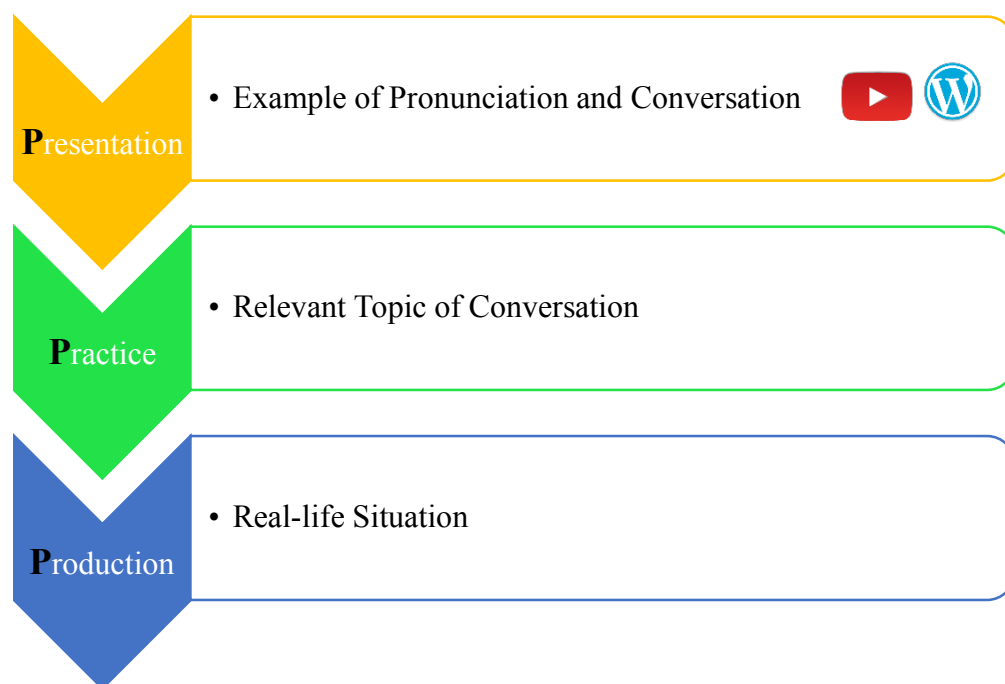


Figure 2 the briefly Thai as a foreign language instructional model

Conclusion

Social media especially Facebook and YouTube are the current technology that can make social interaction through a variety of formats. Interacting through social media can occur in many ways such as surfing to the internet via web browser using a computer or mobile phone. The engagement through social media provides an opportunity for foreign students to take part in social interaction by communicating with each other in Thailand context, which is not limited just in university, at home or at a specified time as we can say it goes beyond brick-and-mortar. Participation "to" and "through" Social media is not only no restrictions on building relationships, but also be driven by the specific interests of each users. The learning today can use social media to manage teaching to promote the learning of the students. In particular, adoption of communication support of the foreign students which contributes to the development of language skills as well. It can be said that the introduction of social media use in teaching learners can be linked together, lower the gap and the barriers of time and place, as a result, learning is not confined to the classroom anymore. Moreover, social media application is consistent and in accordance with the National Education Act B.E.2542 (1999) and Amendments (Second National Education Act. B.E. 2545 (2002) of Thailand, chapter 9 on Technology for Education in Article 65, the importance of human resource development in both the manufacturer and the users of technology in education that should have knowledge, ability, and skill to produce appropriate technology with quality and performance.

The teacher, hence, must be the person of knowledge, capacities, and skills in manufacturing educational technology with efficiency and students must know how to use the technology appropriately. It is the mission of one of the Thai instructors in the allocation of quality technology for teaching in Thailand. The language learning process for all foreign students must take action, make a real common solution, study on their self-paced, encourage to be responsible, participate in their own learning, and those considered to be most important.

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A Learning Model for Grouping Learners and Encouraging Participation for MOOC Environments

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Abstract

Massive Open Online Courses (MOOC) have the potential of bringing quality education to the doorsteps of everybody irrespective of geographical location. However, evidence suggests that only a small percentage of enrolled participants complete their courses partly due to the lack of adequate social presence and timely support when learning impasse occurs. Class size, knowledge gap and the digital divide that exists among participants contribute immensely to the challenges in implementing an appropriate instructional model and online learning collaboration in MOOC. In a MOOC environment, there are less resourceful learners who could drop out easily, and more resourceful learners who could support their peers when provided with an adequate environment. Therefore, this paper proposes an amalgamated learning model that uses online dynamic rewarding and ad-hoc grouping mechanisms to sustain learning in MOOC. Previous experiments in blended learning contexts show that affect and social factors, such as the joy of achieving a higher social status, peer presence, and also peers supports sustained learning, which in turn improves learning outcomes.

Key Words: MOOC, CSCL, Learner Motivation, Amalgamated Learning

Introduction

The rapid advancement of ICT and educational technology have led to the proliferation of information across the globe. This changed paradigm in knowledge dissemination contributed to the growth of Massive Open Online Courses (MOOC). According to McAuley, Stewart, Siemens and Cormier (2010), a MOOC is an online learning environment that integrates the connectivity of social networking, the facilitation of an acknowledged expert in a field of study, and a collection of freely accessible online resources. Additionally, MOOCs build on the engagement of several to thousands of learners who self-organize their participation according to their learning goals, prior knowledge and skills, and common interests. They may share some characteristics with conventional (traditional) platforms where courses are organized in a predefined timeline with weekly or periodical topics. On the other hand, MOOCs are mostly fee-free and without predefined expectations apart from Internet access and interest for participation, and usually, they have no formal accreditation and prerequisites.

MOOCs have the potential of giving educational opportunities to a global audience, though studies show that only a small percentage of enrolled participants complete their courses (Wang, 2014). Some of the reasons for the dropout include the lack of support when learning impasse occurs and inadequate online social presence (Hone & El Said, 2016). Consequently, learners do not enjoy adequate affective and social benefits of learning. On the other hand, studies have also shown that online learning collaboration improves motivation and learning outcomes (Wenger, 1998; Heinze & Procter, 2006). However, the implementation of online learning collaboration in MOOC environments is challenging, especially when the class is large and participants are from different parts of a world with a digital and information divide.

Therefore, this paper proposes a social learning model that uses online pairing and rewarding mechanisms for MOOCs. Learning activities in this model are divided into three constructs. These include learn, understand and facilitate, which enable learners to be rewarded with points. The accumulated points are used to assign social statuses to learners, where the learners with the highest status play the role of facilitators. To improve social presence and support, the pairing mechanism enables a learner in an impasse to find resourceful peers, or vice versa, for collaboration in order to solve the encountered difficulties. A previous experiment in a blended learning context showed that this game feature in collaboration triggered affect and social factors such as the joy of having a higher social status and cooperative competition among the group. In addition, the peer presence and support sustained learning, which in turn improved learning outcomes.

Background

Information technology and social innovation have become the panacea of knowledge in the 21st century. This has paved the way for the development of MOOCs (McAuley et al., 2010; Wang, 2014; Hone & El Said, 2016), which have become promising tools for education across the globe, despite debate among several stakeholders concerning their sustainability. Furthermore, many candidates with varying backgrounds from across the globe have taken advantage of the many courses that are offered as MOOCs. In spite of these benefits, there is still a persistent need to sustain learners to the end of their enrolled courses. In MOOC environments, there are more resourceful learners such as teachers, professionals and advanced learners who usually have higher metacognitive skills and in-depth knowledge, and less resourceful ones such as beginners and “laypersons” who have lower metacognitive skills. Moreover, there are lurkers who fall under both categories. Therefore, the lack of standard instructional and collaboration models for MOOC environments to sustain learning has led to many learners focusing mainly on their individual

interests and curiosities, and only in some cases are they able to interact with their instructors and some peers.

In the meantime, emphasis has been placed on social constructivism, which encourages community or social learning. The notion of community learning can be traced back to the work of Vygotsky and Piaget which found learning to be essentially social (Ravenscroft, 2003). The activities in a learning community environment promote learners' mental functioning in the creation of ideas, sharing of experiences and evaluating acquired knowledge and processes through higher order thinking. The learner, as a member of a community, participates in actual practice and, as such, gradually learns how to think and act as a community member (Wenger, 1998). Additionally, such environments trigger Learning by Teaching (LbT) (Grzega & Schoner, 2008) where learners improve their knowledge and metacognitive skills by teaching their peers. Furthermore, learners usually have internal and external motivations for learning through which they complement each other. And game theory is one of the means to encourage learning in the absence of external stimuli such as certificates, physical instructors, and so on. Game theory shows that people do what they believe is in their best interest, and therefore pay attention to how others might react if they choose to do one thing or another (Bruce, 2010). Game theory has sustained learning among both young and adult learners as it encourages healthy competition when implemented adequately.

Therefore, implementing appropriate MOOC instructional models that blend some social psychology tools to motivate learners' affective participation, and narrow the knowledge gap between the less resourceful learners and their more resourceful peers, is the focus of this article.

Method

The Learning Model

Amalgamated Learning combines sociocultural and behaviorist theories. This is to ensure effective participation among learners, observing and rewarding learners' efforts as they engage in learning in their community of practice. In Amalgamated Learning, learners combine different modes of learning to achieve their learning goals, which is similar to our physical social environment. Their learning is influenced by an instructor's facilitation and their learner-centered activities, including individual, collaborative and learning-by-teaching. In Amalgamated Learning, a learner's activities in the community are modeled as LEARN, UNDERSTAND and FACILITATE states or constructs.

LEARN is mapped to cognition. In this state learners interact with online content through self-regulation to create their own mental model of the context. In self-regulation, learners take an active role in their learning - mostly in context - in response to a demand, or solve a particular problem by using appropriate tools. Thus, when a learning impasse occurs, they are supported to consult a resourceful learner or their instructor, or are identified and helped in order to sustain their learning. This underpins the need for pairing and incentive mechanisms that will enable easy and effective contacts and rewards to the resourceful learners.

UNDERSTAND is also mapped to cognition and affective factors. Understanding is the fundamental goal of teaching because learning with understanding is a sense-making, meaning-making, or knowledge building activity. This underpins a need for a knowledge progress and confidence evaluation mechanism that ensures formative, summative and diagnostic evaluations (Table 1). Function A is linked to an online multiple choice quiz (OMQ) that uses the knowledge and comprehension levels of Blooms' cognitive taxonomy. Function B is linked to a Knowledge Confidence Discrepancy check, which uses the values "Skip", S, "Understood", U, "Not Clear",

\underline{C} , and “Not Understood”, \underline{N} available on each topic, and every learner must select one before proceeding to the next topic. When a learner selects “Skip”, “Understood”, and “Not Clear,” they have to answer an OMQ that has 10 questions that have been carefully designed to cover the entire topic to aid in ascertaining learners’ understanding of the topic.

FACILITATE is mapped to collaborative or social learning. It occurs when a learner has gained knowledge and skills to support other peers. This enables a learning-by-teaching situation (Table 2). The learner in the facilitate mode is able to create learning objects by sharing ideas and their understanding of a topic, download and recommend documents.

Function A			Function B	
Score Range	Reward Point		Knowledge Confidence	Reward Point
Highest	a_n		\underline{S}	b_n
\vdots	\vdots		\underline{U}	b_3
Lower	a_2		\underline{C}	b_2
Lowest	a_1		\underline{N}	b_1

Table 1. Knowledge Progress and Confidence Check

Function C	
Facilitating Activity	Reward Point
\vdots	c_n
Search and help	\vdots
Share ideas and understanding	\vdots
Recommend online info	c_3
Download and Bookmarking	c_2
\vdots	c_1

Table 2. Facilitation

The Learner Model

The Learner Model represents structured information about the learner’s learning process, and this structure contains some values of the learner’s characteristics that allow the learning system to take appropriate actions (Van Rosmalen, Sloep, Brouns, Kester, Berlanga, Bitter, & Koper, 2008). The following parameters are considered in this proposal with some example values.

Learn Activity - This consists of learning and collaborative activities that a learner engages in. The parameters used are:

$Learn_Mode \ll 0 = Self\ Learning, 1 = Discussion$

$Collab_Mode \ll 0 = Receiving\ Support, 1 = Giving\ support, 3 = None$

$TopicID \ll Pi \in \{Current\ and\ Completed\ Topics\ (i.e.\ P_1...P_m)\}$

$PageID \ll p \in Pi = \{Current\ and\ Visited\ Pages\}$

Problem - Consists of information about anticipated problems a learner can have during learning. It helps in diagnostic and formative feedback, and parameters used are:

$Problem_Mode \ll 1 = Problem; 0 = Solved$

$1 \Rightarrow when\ difficulty\ occurred\ or\ Confidence-Check = \underline{N}\ or\ Quiz\ failed$

$ProblemID = TopicID + PageID + (difficulty\ or\ Confidence-Check = \underline{N}\ or\ Quiz\ failed\ and\ Time)$

Problem Familiarity - This helps the system to identify if a learner is familiar with the current difficulty that another learner has. It has the following parameters:

$Familiarity\ (F) \ll 3 = Offered\ support\ on\ the\ current\ difficulty\ before;$

$2 = Received\ support\ on\ the\ current\ difficulty\ before; 1 =$

$Currently\ has\ same\ difficulty; 0 = No\ familiarity.$

Competence - Consists of a learner’s (ID) knowledge progress and confidence and the facilitation activities per a topic (pi). It has the following parameters:

$A_{ID,pi} + B_{ID,pi} + C_{ID,pi}$

$Minimum\ competence\ per\ topic\ (MnS_{pi}) = A_{1,pi} + B_{1,pi} + C_{1,pi}$

$$\text{Maximum total reward scores per topic } (MxS_{pi}) = A_{n,pi} + B_{n,pi} + C_{n,pi}$$

Social Label - This stores the social status and facilitating role code of a learner. It has the following parameters:

$$\text{Social-Status} = \Phi_1, \Phi_2, \dots, \Phi_\beta$$

$$\text{Facilitating Role } (R) < 1 = \text{Facilitating Role}; 0 = \text{No Facilitating Role}$$

Learning Time - This has different parameters that store the time spent on a page, topic and the entire course.

Amalgamated Learning

The learning allows self-efficacy building through learner-content interaction, and social speech through synchronous and asynchronous human interactions. It has five stages that form “a learning cycle.” The respective stages are as follow:

Goal Setting: This is the beginning of the learning where the instructor explains the goal of the course, the topics involved, and how to achieve the learning goals. All learners start learning with the lowest social status, and are informed that their participation effort will be recognized for promotion, which then will affect their course credits. The goal-setting narrows learners’ attention and directs their efforts to mainly goal-relevant activities, and it influences their persistence towards goals, especially if the ultimate goal is divided into sub-goals (Miner, 2005).

Content Exploration: This is the stage where individual learners interact with online content from the first topic through to the last topic, inside and outside the classroom, within a set goal to master self-regulation (Pintrich, 1995), and to create their own mental schema of the topics. The *Learn_Mode*=0 at this stage. In addition, the learners’ previous knowledge, topic comprehension and knowledge confidence are tracked by the functions $A_{ID,p}$ and $B_{ID,p}$. When a learner selects a confidence check on a topic then the following algorithm will be executed:

If a learner selects U or C or S, then learner will take the OMQ to confirm the choice.

If the learner passes the OMQ, points are awarded, through $A_{ID,p}$ and $B_{ID,p}$, and the learner continues to the next topic.

Learning Impasse/ Difficulty Situation: This is a situation in the exploration stage where learners encounter content or cognitive difficulties, and may not know the next action to take (Bolman, Tattersall, Waterink, Janssen, van den Berg, van Es & Koper, 2007), which could lead to drop-out (Willging & Johnson, 2004). This difficulty could be an item or object on a page, selection of N or failing the OMQ after the learning the topic.

If the learner fails the OMQ then the learner will be considered as selecting N. Then, the *Problem_Mode* is set to 1, and the learner has to select one of the following actions in order to continue learning:

- i- Collaborate with Peers Immediately (for Synchronous).
- ii- Read discussions already held on topic’s difficulty items.
- iii- Post difficulty items to a bulleting board system or send mail to instructor (for Asynchronous).
- iv- Learn the current topic again.

When the *Problem_Mode* is set to 1, it enables a resourceful peer with a facilitation role or the instructor to locate and help that learner. On the other hand, when a learner is idle, a timer-agent compares the learner's average learning rate with that of the group. Then, if the elapsed time is "big," it sends help messages to the learner to enable that learner to select an appropriate action to continue learning.

Learning Socialization: This is the human interaction stage. It occurs when *Problem_Mode* =1 and *Collab_Mode* = 3. The social learning occurs when the learner in difficulty (X) is assigned an online resourceful learner (RL), or is located by a RL or instructor for a synchronous dialogue. If X has posted a question to the community, any RL or instructor can respond asynchronously. Any dialogue and the IDs of learners involved are stored for future use, and the RL is rewarded through the function $C_{ID,p}$ after X has passed the OMQ. To select an appropriate resourceful peer for X, the following parameters and algorithm, shown in table 3, are used as the pairing mechanism.

Parameters	Conditions	Selection Priority
Problem Familiarity	$F=3, F=2, F=1, F=0$	$F=3 \& 2$, then $F=3$, then $F=2$, then $F=1$, and then $F=0$
Social Status Gap	$\Phi_X < \Phi_Y, \Phi_X = \Phi_Y, \Phi_X > \Phi_Y$	$\Phi_X = \Phi_Y$, then $\Phi_X < \Phi_Y$, and then $\Phi_X > \Phi_Y$
Topic Distance	$D = P_Y - P_X$ $D \in I$	Min (D) where $P_Y \geq P_X$ Max (D) where $P_Y < P_X$
Availability	<i>Collab-Mode</i> =3	<i>Collab-Mode</i> =3

Table 3. Conditions and Priorities for Selecting Resourceful Peer

Suppose, X, on a social status, Φ_X , has a problem with an ID *ProblemID* and *Problem_Mode*=1, on topic P_X , an appropriate RL, Y, on a position, Φ_Y and topic P_Y , will be selected to collaborate with X.

If a learner contacts a friend or any peer directly, bypassing the system, both learners would be assigned appropriate F values after the challenged learner has passed the quiz on that topic.

Evaluation: Evaluation is in two phases. One is individual learner evaluation through the OMQ at the exploration stage for the formative and diagnostic assessment. The other is the summative assessment where online social statuses are considered in addition to scores of exams or other activities, if any, which could use the third to sixth levels of the Bloom's Taxonomy.

Rewards and Social Status Promotion

The learning environment used for this study is the AL system whose design, functions and implementation have been discussed by Farouck and Watanabe (2009). However, some important features that are relevant to this article will be discussed. These are the social incentive and pairing mechanisms that are used to improve learners' sense of community.

The social incentive mechanism (SIM) is used to determine a learners' social label parameter. This parameter stores a learner's social status, which is determined by the competence parameter. It also stores a learner's facilitating role, which is assigned when a learner attains the highest social status.

The social status of a learner is determined by the Competence parameter, which is calculated as follows:

$$TRS(ID) = \sum_{p=1}^m (A_{p,ID} + B_{p,ID} + C_{p,ID})$$

Where $TRS(ID)$ is the learner's total reward score for all completed topics m . Anytime a learner completes any topic, learners' activity log data will be checked automatically and the current positions are computed and displayed, which may promote or demote a learner. If a learner reaches the highest position, i.e Φ_β , a facilitating role will be assigned automatically (figure 1).

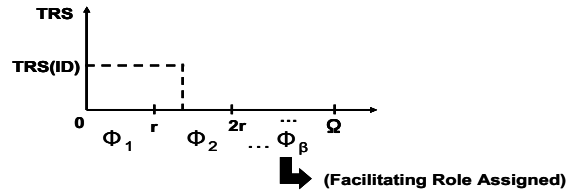


Figure 1. Learner Promotion

The Ω = Maximum ($TRS(ID)$), $\forall ID \in V$, where V is the classroom community. Its value changes when a new learner's or same learner's TRS is greater than the current Ω value. The Ω value is then divided by β (number of social statuses) to get a range magnitude, say r , which is distributed as follows, $\Phi_1 = r$, $\Phi_2 = 2r$, ..., $\Phi_\beta = \beta r$. Learners can also upgrade their competences by doing any of the following actions:

- Learn topics again to improve knowledge comprehension to better their $A_{ID,p}$ score.
- Select an appropriate or better knowledge confidence check after (re)learning topics to improve their $B_{ID,p}$ score.
- Support challenged learners who have made contact for help, or have posted questions on BBS to better their $C_{ID,p}$ score.
- Search and support learners in difficulty to better their $C_{ID,p}$ score - for learners with a facilitating role.

Experiment

A focus group of 23 university students were the subjects of a one-week experiment. The subjects were enrolled in an Introduction to Java programming course.

The subjects were from Africa, America, Asia and Europe, and were familiar with computer learning. Some of them already knew other programming languages. The one-week course covered four main topics such as Introduction to Object Oriented Programming, Identifiers, Operators, and Input/Output, although the aim of the research was to propose a generic environment that ensures social, cognitive and affective factors of learning. Java programming language was chosen for the experiment for various reasons. According to Jenkins (2002), pedagogical suitability and affection are of greater importance to motivate learners in programming class, not necessarily the choice of programming language. Additionally, the learning style in programming can be classified into "Surface" and "Deep" levels. The surface level involves remembering details of general orientation, notation, syntax, operator's precedence, and so on, while the deep level involves the skills of planning, developing, testing, debugging, and so on. Additionally, the surface level conforms to the knowledge and comprehension levels of Bloom's cognitive taxonomy as discussed earlier. The deep level falls within the fourth to sixth levels of bloom's cognitive taxonomy where learners' ability to program can be tested. The social statuses used in this experiment are Beginner, Assistant and Master. Furthermore, all the learners began learning with the Beginner status. Data

collection was done through observing learners' online activities, interviews, a questionnaire that used a Likert scale, and by extracting from the system's log data after the one-week course.

Data and Findings

The summary of the findings is presented in percentages as follows. The “%age” in the tables means percentage of total learners who responded to the given questions.

Effects of the Social Incentive Mechanism

Table 4 shows how the learners felt, and to what extent the incentive mechanism affected their cooperative learning.

Category	Response		%age
Higher Status OR If Promoted	Felt proud and helped my peers.		48%
	Felt proud and relaxed from learning.		20%
Lower Status OR If Demoted	Studied much harder.		49%
	Contacted my peers for help.		36%
	Felt unhappy		4%
Personality Issue	When I found some of my peers that I perceived I was better than, but found them on higher position:	I made effort to rise.	40%
		I did not care.	40%
		Learning became boring.	12%
Satisfaction	Learning was more interesting and fun.		52%

Table 4. Effects of the Social Incentive Mechanism

Some learners also added the following noteworthy comments if they had perceived that they had better knowledge than someone but found them to be in higher positions:

“I might quit the course if it gives others the opportunity to take advantage of me.”

“The social status put too much pressure on me as I have to work harder to rise, especially when demoted.”

“I will not like anybody to see my position apart from my teacher, if they like me because they perceived me to be smart and I got demoted it may change their impression about me. And that might destroy our relationship.”

However, two learners also commented that “I may not worry if I find myself on a lower position because the system scores according to knowledge progress but also how much you help others, then a ‘low score’ does not necessary mean that you don’t know. Maybe your knowledge progress is good but you don’t help anybody;” “Some of my friends were calling me Master in the class and that was fun.”

Effects of the Role Assignment

Table 5 shows how the learners felt, and to what extent the facilitating role affected their cooperative learning.

Category	Response Item	%age
Social Affinity	Gave me better sense of community.	92%
	Took the opportunity to make more friends.	72%
	Strengthened my relationship with my peers.	72%
	Happy to search for peers in difficulty to help them.	68%
	Used my free time to help others.	52%
Knowledge Evaluation	Understood the topics better.	92%
	Got more confident on what I knew about the topics.	68%
Solution	Solved some difficulties that I could not solve by myself.	84%

Table 5. Effect of Role Assignment

Two learners added the following noteworthy comments on the facilitating role: “I may not want to help anybody, so if the system assigns me a facilitating role, I don’t think I feel comfortable”. This comment could have come from a learner who has an external responsibility, such as family or work, and will only focus on the topic knowledge.

General Outcome and Impression

At the end of the experimental course, 56.5% ended up in a Master position and 43.5% in an Assistant position. None remained in the Beginner position. Table 6 shows the learners’ responses to the question, “If you were a teacher would you use such an online environment to support your students?”

Response	Yes	No	Don’t Know
%age	62%	21%	17 %
Reasons according to some learners	“It will make the students do their effort to study and solve the problems by themselves. If they couldn’t do it, they can ask each other for help. Otherwise, they can contact to me (as the teacher) to get some hints.”	“I don’t want to classify the students to make them feel that he/she is better or worse than the others. This is not friendly. In contrast, they have to race to reach a better position....”	“It depends on how well the online learning is compared to traditional classroom. Can my students understand the content better using the online or face-to-face environment?”

Table 6. Learners’ General Impression

Some learners also gave the following noteworthy comments, “As I am not talkative in the classroom, the system made me more active in the brainstorming activities”; “The online allowed me to think and concentrate better and this made me to contribute effectively in the class.” Additionally, language and technological barriers affected some students. English language was used for the experiment but only a few learners were first language speakers while the majority were foreign speakers while the rest were second language speakers. 64% indicated that they were affected by the use of English language, while 50% were affected by their ability to competently use a computer and internet environment to learn. However, they took the following actions to address their problems. 73% contacted their peers for help with computer and internet skills. 64% studied using materials in their native languages on the same topic. 59% used online language

translators and dictionaries.

Discussion and Conclusion

This study examined the effect of social and affective factors on effective knowledge construction and participation in MOOC environments. Previous work on this study has shown that learners' knowledge outcomes were statistically significant (Farouck & Watanabe, 2009). The learners' performance could be attributed to their higher sense of community, which was influenced by the social and affective factors of learning (Rovai & Jordan, 2004; Jones & Issroff, 2005). Online social factors, such as social status, facilitating role, and social presence, were dynamically used online through an incentive mechanism and a pairing mechanism to motivate learners.

The results show that even though the incentive mechanism has had a positive impact on the majority of learners in the class, it also affected some learners negatively. Most learners showed that when they were promoted to a higher social status they were encouraged to learn better and also support their peers more. However, the majority of such learners indicated that they were challenged to study harder or seek support from their peers to raise their social status again. Learners were also motivated to study harder when they found out that the peers they had perceived "knowledgeably weaker" than them were in a higher position than themselves. However, a few learners found learning boring because they were not encouraged when demoted, which might have led to drop-out. Such learners may need additional support to maintain their participation in a future study. A similar result can be found in Vassileva and Sun (2007) where social status was used in a peer-to-peer system. In their study it was found that there was a decrease in learner participation among few learners, especially the higher achievers.

Therefore, the facilitating role implemented in this study has the prospect of keeping such learners busy, which will improve their social presence and human assistance in the community. Learners who used the facilitating role in this study indicated that they did not only utilize it to search and help their peers who were in difficulty. In addition, it gave them the opportunity to understand and cooperate with their peers better, make more friends, further understand the topics, and also use the opportunity to cross-check their knowledge with others. This can be a good tool to influence friendships in MOOC environments, because by assigning roles and rewarding learners dynamically based on their competencies, learners will learn how to cooperate with each other, and eventually become friends. However, a limitation that needs further study in the future is how to handle learners with more external commitments who would not be able to support their peers.

Learners showed that they were satisfied with their community as it was easier to contact others for help or to give help. This social presence was stimulated by the pairing mechanism that enabled resourceful peers to locate and support their peers in difficulty, and also challenged learners to see and consult more resourceful peers in the community. From a psychological point of view, people become happy with their community if they can find the right people to solve their problems in difficult times (Unger & Wandersman, 1985; Jones & Issroff, 2005). However, learners would not like to collaborate with "just anybody" in their learning community (Heinze & Procter, 2006). From the results of this study, learners' preferences of a collaboration partner are in the following order: any peer who has solution to their problems, any peer who had solved the problem before, any peer who currently has a similar problem, any peer who can recommend a document to solve their problem, and any peer who is in a higher social position. Interestingly, the results show that friendship does not really count when there is a problem at stake unless that friend

falls within the order mentioned above. This could not be generalized as other contexts might give different results, especially in traditional settings.

In conclusion, previous researchers have cited many factors that can be used to encourage participation among learners in an online community. Since a community consists of human players whose actions are mostly driven by their emotions and cognitive thinking, this study shows that by ensuring social factors such as dynamically recognizing learners' effort and rewarding them as they progress with their learning, such as assigning social status and providing a facilitating role based on learner competence, and increase social presence with an ad hoc pairing of resourceful learners with learners in difficulty for collaboration, learners' motivation would be stimulated to sustain participation in MOOC environment, which will help develop their cognitive thinking through learning and understanding, and also develop online facilitating skills.

However, a longer implementation time and larger learner size in different contexts would be necessary for determining real dynamics of this learning model.

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Abhyudaya School: Inclusion of Agro-Centric Primary Education in Rural India

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Abstract

Indian civilization has an illustrious past in the domains of education, culture, and arts. However, the current education system in the country is largely a mirror of the colonial period. This has resulted in a gaping difference between rural and urban education systems as far as their relevance is concerned. India being an agrarian economy, the major occupation was agriculture. After the ‘mixed economy’ policy of the first prime minister of independent India, agriculture and farming have taken a backseat. We have experienced that higher education and professional degrees leading to good jobs in industry and services have not persuaded young people to consider agriculture as an occupation or profession. In addition, the complete dependence of the farmers on environmental variables has brought hardship in their lives. Currently, none of the primary schools teach agriculture or farming as a subject. This has created indifference to these subjects amongst students except for those who intend to pursue agriculture for graduate and post-graduate studies. This qualitative research aims to understand and discuss an innovative idea that is being nurtured in the field of agro-centric primary education called *Abhyudaya* Global Village School (AGVS). Situated in the city of Nagpur, in the state of Maharashtra in India, the school has initiated this endeavor for the children of farmers and farm laborers. AGVS integrates a study of effective agricultural practices in a scientific manner to build a positive attitude towards agriculture and envisions a generation of financially sustainable ‘agripreneurs’ in the future.

Key Words: Agro-centric school, Rural India, Primary education, Agripreneurs

Introduction

Ancient India is known for its rich academic pursuits. Nalanda, Taxshashila, and Ujjaini were names of famous Indian universities, which stand testimony to the fact, where thousands of students from all over the world came to study. Mention of these is found in the writings of the various ancient travelers to India.

However, the education system today in the country is a reflection of colonial times. As Vasavi et al. (1997) explain:

The British administrative approach to education focused on supply-side factors like increasing the number of schools, establishing pre-service training centers, control through the inspection system, and so on. The limitations of this approach have been exposed by the persistence of the problems of illiteracy, poor grade completion rates, and high proportion of girls in the category of the 'never-enrolled' and weak participation of social groups that had traditionally been outside the formal education system (p. 3181).

Despite these educational shortcomings, India has made tremendous economic progress in the last 20 years. There has been an increase in job opportunities and disposable income which has led to a higher standard of living. However, much of the development is skewed in favor of the urban areas. Rural regions have not seen a proportionate increase in career opportunities or standard of living. As a result, there is a constant exodus of rural youth to nearby cities, leaving their families and agricultural land abandoned. However, in most cases, cities fail to offer any meaningful and dignified job opportunities to the rural migrants. This leads to a large number of disappointed young people who struggle to make ends meet and lead a dignified life. Another problem for rural youth is that the current education system in India is largely theory-based and is irrelevant to life in rural areas. In order to solve the problem, the migration of youth from rural to urban areas has to be controlled. One of the ways in which this can be achieved is by educating children in the villages, developing their skill-sets and abilities to help them realize the vast opportunities and possibilities they have within a stone's throw of their homes in and around their very own agricultural fields.

This case study is about sowing the seeds of hope to bring about a solution to these problems through an innovative means of agro-centric primary education being carried out by a school called *Abhyudaya* Global Village School (AGVS) in rural Nagpur, a city in the state of Maharashtra in India. It is an endeavor initiated especially for the children of farmers and farm labourers.

Background

Before globalization, which took place in the late twentieth century, India was agrarian in nature, and 70 % of the people lived in villages. Globalisation accelerated the decline of agriculture and paved the path to the rise in service and industry sectors. The focus in this case study is the Nagpur region in Vidarbha in Maharashtra. (Vidarbha is one of the five administrative divisions of Maharashtra.) According to data compiled by Mallapur (2016),

As many as 3,228 farmers committed suicide in Maharashtra in 2015, the highest number since 2001, according to data tabled in the Rajya Sabha on March 4, 2016 – that is almost nine farmers every day. Vidarbha and Marathwada, with 5.7 million farmers, accounted for 83% of all farmer suicides in Maharashtra in 2015. The top five major causes of farmer suicides in 2014 were bankruptcy or indebtedness (1,163), family problems

(1,135), farming-related issues (969) -- such as failure of crops, distress due to natural calamities, inability to sell produce -- illness (745) and drug abuse and/or alcoholic addiction (250). Bankruptcy or indebtedness was also a major cause for farmer suicides (857) in Maharashtra in 2014. (p.1)

Method of Research

This qualitative study has been conducted by in-depth interviews and case-study method. The sample used for these interviews were the founders, students and staff of AGVS.

Findings

Famous for its sweet oranges, Nagpur, in recent years, is in the news for thousands of farmer suicides. While bankruptcies and lack of sufficient rainfall have been blamed for this disaster, lack of education is also a contributing factor. If farmers had been educated, they would have been able to turn to other meaningful occupations for financial stability, rather than opting for suicide. This study offers an interpretive perspective on an endeavor of agro-centric rural primary education, initiated in Nagpur by the members of a local family.

On 10 acres of agricultural land nestled amidst hills 45 kilometers from Nagpur near a village named Khapa, an innovative idea in primary education has taken shape. The founders of this initiative are Dr. Prakash K. Gandhi (Founder Director), his wife, Mrs. Madhuri P. Gandhi (Founder), their daughter, Mrs. Bhagyashree Gandhi Deshpande (Director Academics), and her husband, Mr. Sachin D. Deshpande (Director Administration). An idea based on the need of the hour, initiated by Dr. Prakash Gandhi, is being enthusiastically implemented by this entire family. In 2010, Dr. Gandhi thought about beginning a school where an entirely new generation would be taught in a way that the change in attitudes about farming would be steady but effective and permanent. He was aware that agriculture as a separate subject is not taught in schools in India until the graduate level. Engineers get inputs in terms of physics, chemistry, and math during secondary school education, but there are no studies that teach students to become good farmers. Moreover, how can anyone suddenly develop a passion for studying farming and agriculture when it is introduced at such a late stage of education? This realization led him to establish a school for the children of the farmers and farm labourers where agriculture and entrepreneurship are taught as part of the regular syllabus. This, he envisioned, would nurture the future agri-prenuers and enable them to understand agriculture in a more scientific manner than their parents, and would thereby assist them in becoming financially stable. Thus was born AGVS.

The school caters to the children of the farmers and farm labourers living within 15 kilometers of the school in the villages of Khubala, Risala, Hingna, Badegaon, Kothulna, Nimtalai, Khapa, Khairee, Kochchi, Temburdoh, Khardula, Gadmi, Kirnapur, Dafai, and Dakara. The annual family income of this community of farmers and farm labourers is between \$1,500 and \$2,000 (approximately 1 lakh in INR) (as of 2015).

Significance and Vision of *Abhyudaya*

The meaning of *Abhyudaya* is rising Sun or Prosperity. The founders' goal is that the children of AGVS will be able to think globally and yet be rooted in Indian culture. Further, if they move out to cities for either jobs or entrepreneurial opportunities, the hope is that they will think of the development of the villages of the country. Hence the name *Abhyudaya* Global Village School. The vision is to create a global rural school where future agri-prenuers will be nurtured in an inclusive learning-friendly environment.

Journey of AGVS

During 2010, two teachers taught 28 children, boys and girls, all in one grade. Eventually, more teachers were recruited. As financial sustainability was the priority, Dr. Gandhi found it difficult to be physically present in the school. Most of his time was spent in pursuit of raising funds; thus, the growth was slow but steady. In the fifth year of its operation, 2015, the school actively included agriculture and entrepreneurship in the daily course of study. Today, it can be called a truly agro-centric school with 14 teachers and 244 students.

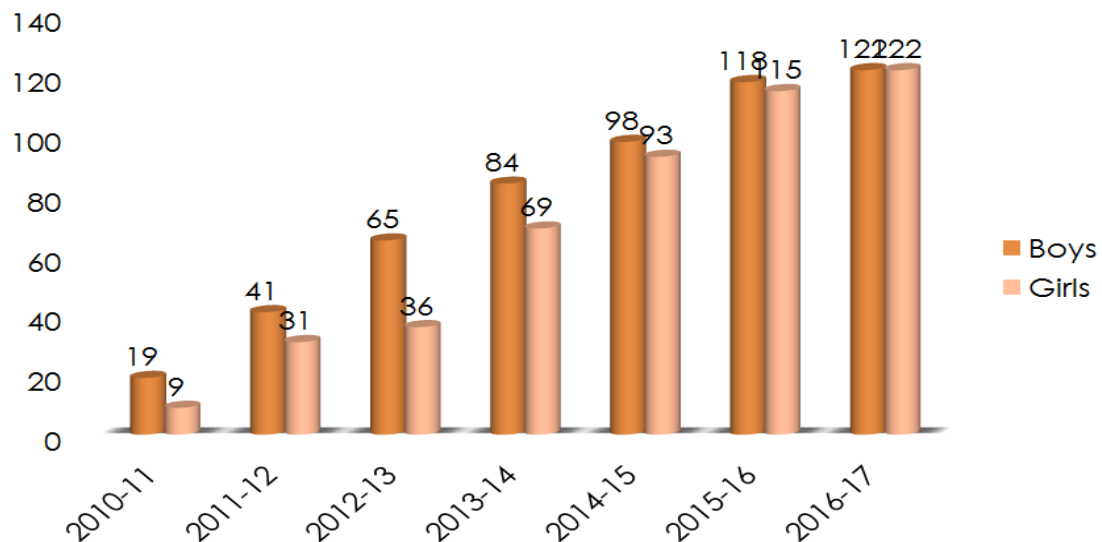


Figure 1: Increase in AGVS student enrollment, AGVS records, 2010-2017

The school has classes from nursery to the fifth standard. AGVS follows the Maharashtra State Board Syllabus. AGVS is an educational model for the development of rural India registered under Vikalpa, as a non-profit organization with 80G and FCRA.

Innovative Pedagogies at AGVS

One hour each day is devoted to the study of agricultural practices or actual work in the fields. Every student has to engage in working the soil, removing weeds, sowing seeds, and watering saplings, making fertilizer from compost, and pesticides in the traditional manner (i.e., grinding medicinal herbs and leaves on a stone crusher). Such hands-on activity leads to students' engagement with their work: 'This is my tree,' they proudly proclaim.

Various chapters in the students' textbooks, wherever possible, demonstrate other practical skills, such as in "Baswa's Farm," a chapter in the English text which illustrates preparation of South Indian delicacies and other foods.

To teach fundamentals of entrepreneurship, the school held a fair. This fair was different from fairs held in other schools because, here, the students were guided by the teachers to make a list of crafts they wished to create and a list of the materials needed for the creation. They then visited various shops where they practiced handling money and dealing with vendors. Having done this, the students created many artifacts from pen-stand holders and bags to wall-hangings. Two hundred and fifty visitors from the villages and 250 from Nagpur city visited the stalls created by the students. These are some of the experiential learning activities carried out at AGVS.

In recognition of the success of these pedagogies, the school has been featured in the daily newspaper *Hitwaad* and has also received the Vasundhara Mitra Award in the Vasundhara Kirloskar International Film Festival for a short documentary about AGVS.

Unique Features of AGVS

- Agro-centric school – This is the only school having agriculture as a formal course of study beginning in first grade in Nagpur.
- Free education for girls - In the villages, parents deny their daughters the basic right to education. Educating a girl (who is a prospective homemaker and a progressive woman entrepreneur) is the need of the hour. Hence, keeping in sync with the Indian Government policy, AGVS has zero tuition fees for girls and highly subsidized education for boys (\$60 per boy annually).
- Emphasis on skill development.
- Other priorities – Emphasis is placed on enhancing the emotional quotient (EQ) and spiritual quotient (SQ) in addition to the intelligence quotient (IQ) of each child.

Challenges at AGVS

- Teachers: Good quality teachers for a non-profit school are difficult to come across. Most current teachers come from a rural background, and very few have a passion for the profession. There is a general casual approach to this crucial element of nation building.
- Sustainability: The founders dream of making the school self-sustaining, but that will take a few more years. Until then, they need to raise and manage the funds themselves.
- Mind-set of parents and teachers: There is a need to generate awareness about the difference between conventional education and AGVS's unconventional curriculum and its significance.
- Curriculum development: This has to be implemented as a continuous process with the ever-changing needs of the larger society as well as the local farming community.
- Academic framework: Integrating agriculture and entrepreneurship with the regular syllabus is a continuing challenge.
- Parents: Most parents expect to see quick results and are sometimes not cooperative with the developmental process. Like most parents in conventional schools, many focus on marks and grades rather than learning.
- Remote location: Since the school is located on agricultural land, having a good infrastructure and procuring labour is difficult. The shuttle bus service to villages to bring children from their homes is costly.

Discussion

Method of Addressing the Challenges

AGVS selects teachers who are passionate about teaching. Teachers residing in the same villages as the students are preferred to ensure greater interaction outside the classroom and to enable the children to establish personal relationships with their teachers. In addition, to initiate a change in the mindset of the teachers, continuous training takes place throughout the year. The directors conduct health check-up camps to ensure families are healthy and regularly hold parent-teacher meetings to resolve issues.

To achieve sustainability, the school plans to generate income through school-run enterprises such as the fair mentioned above, a cooperative store, sale of handmade paper

products, and sale of agricultural products such as pickles, vegetables, and cotton. Seeing the enthusiasm of the students and teachers at the initial fair, many parents volunteered to offer their time to help in institution-building.

In contrast to the success of AGVS, a similar endeavor was carried out in Kenya for the pastoral community, with free primary education, school feeding programs, and construction of boarding schools. However, these measures have had little impact on increasing access to education and participation of the pastoral communities (Sifuna, 2005). Although slow, AGVS has had steady growth beginning with 28 students in 2010 growing to a current enrollment of 244 students, 122 boys and 122 girls. The fee waiver for girls in 2012 resulted in doubling the enrolment of girls in AGVS from the 2013-2014 academic year. Currently the management of the school is engaged in research on the best practices of schooling and curriculum development and is trying to implement strategies suitable for the needs of the children from this particular community and rural backgrounds.

Whilst bankruptcy, indebtedness, climatic conditions, illness, and drug and alcohol abuse have been cited as reasons for farmers' suicides, educating the children of the community and training them with diverse skill-sets to enable them to seek other employment in times of crisis, have been overlooked. In this regard, the concept of AGVS comes as a welcome initiative, proposing education as a solution to societal problems. AGVS functions as an NGO with the singular goal of service to society; the school's motto or philosophy, expressed in Sanskrit, *Idam na mama*, or "This isn't mine," means everything we do is for the greater good.

Conclusion

The rural issues in India are very different from issues faced by cities, and therefore things which produce good results in an urban model cannot be replicated in the rural framework. The success of rural India should be gauged keeping in view rural problems and challenges and not taking urban India as a yardstick. The founders of AGVS have diagnosed the problems of farmers and farm labourers in Nagpur and have found a thoughtful solution through a well-defined, rational means of educating their children. They understand the realities of the different needs and requirements of rural education. Their understanding has influenced the viability of AGVS. A revolution in educational practices like that at AGVS will assist in restoring the balance in the emerging Indian economy by aligning the education structure with the importance of agriculture.

There will be four major outcomes if this dream comes true. Firstly, farming will again be considered a prestigious occupation. This will help in building the dignity of the farmers and their profession. Secondly, an educated and skilled workforce will be created. Thirdly, some students will become entrepreneurs and agri-preneurs. Fourthly, students of AGVS will become active decision-makers in the rural economy. Though it is too early to predict the ultimate success of this dream, as students are yet in class six, this paper presents the details of the initiative. As stated by Dr. Gandhi (Personal communication):

Even if 1% of our students return to agriculture or allied activities, it will help in nurturing effective agricultural practices and building an optimistic attitude and pride in agriculture as a profession. A generation of agri-preneurs will blossom, who will be able to think of solutions in difficult times, get to work with dignity, and secure equal opportunities. He believes AGVS is the powerful beginning of achieving this dream.

After conducting this research, the authors believe that apart from the urban and rural divide, India has diverse concerns in the field of primary education which vary according to the various States, regions, cultures and occupations of the citizens. Hence, it is imperative that the curriculum, pattern and pedagogy are anchored and framed in the respective diversity as mentioned above. This approach will result in reducing the imbalance caused from the foundation years and will assist in the making of a relevant educated youth.

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Analysis of a Soft-skill Learning Throughout Life

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Abstract

"Soft-skill" is often a problem for social researchers. Though it is widely used in different media, there is no exhaustive definition of the term in scientific papers. While the majority of authors distinguishing "soft-skill" from "hard-skill", a few others determine "soft-skills" by listing some features "that everyone has, more or less consciously: education, creativity, stress management, listening, adaptability, empathy etc." (Bouret, Hoarau & Mauleon, p.1, 2014). In this article, the author takes activity analysis approach and does not try to make any definition. Rather, she focuses on managers' soft-skill learning process and uses managerial attitude shaping as an example. The main research question is how managers learn managerial attitude from recalling certain life event. By answering to this question, the author hopes that this study will allow scholars in adult education to better understand the process and the components involved in the soft-skill learning of the managers.

Key Words: Activity, Attitude, Experience, Soft-skills Learning

Introduction

In business, we often hear that managers have to face more human and relational issues than technical problems. In the past, every manager had authority over his subordinates. Now, a transversal manager does not necessarily have authority over his team members. Moreover, even if the authority is formally attached to the manager's position, an appropriate managerial attitude may not be automatically adopted overnight. This issue leads us to the question: how do managers shape their managerial attitude and how do they learn making others take action? In order to answer to this question, we have conducted a study, based on observations and interviews with managers on the subject. During an interview conducted in 2012, the interviewee replied that the biggest challenge for an expert, when he became a manager, was "to make the others work on something, which we could easily handle ourselves". In another recent interview, our interlocutor, an international project manager shared: "It was very difficult, because I should be authoritarian with someone. He is a strong heavy man, a guy who has worked for international projects all his life, and that 'mirrored wardrobe'¹ was in tears on the phone. It was a Saturday night and there was no one...and I had no direct management whom I could ask for advice". The responses reflect the feelings these managers experienced while adopting a new attitude. They also show the evolution in general understanding of the word "manager" in France.

About two centuries ago, the word 'manager' appeared in French language as a term borrowed from English language, meaning the head of a company or an institution. Nowadays, the word "manager" can also refer to a job. In the meantime, beside the classic stream, which sees manager's activities always in strict link with "authority", there exists now another mode of thinking, in which the manager's job is considered less hierarchical and more transversal. The authors of this stream highlight the process of self-transforming of an individual in interaction with the others (Barbier, 2011). They also believe that becoming manager is a result of a long process of "fabrication", but not just of an appointment decision (Cristol, 2013).

By "coupling" the activities of manager and the others (managed people), by focusing on the interaction between them, by analyzing managers' narratives about their reflections before, during and after making the others act, we may go deeper into the learning process of both entities. Moreover, the discourses of the manager about their experience can be analyzed this time, not only as messages addressed to the others, but rather as a particular way of speaking to oneself or acting on oneself before making the others take action. For the first time, we consider attitude shaping as an activity and we use "activity coupling" (Barbier) as a new prism to look differently at the role of experiences in manager's soft-skill learning. Before presenting the result of our analysis, let's take a very brief look at what can be said in the literature.

Literatures about attitudes at work

Our literature review showed that there were very few scientific papers about managers' activities and even fewer about their attitude shaping activity. Besides, most of papers focused on manager's roles rather than on their activities. According to Mintzberg (1999) manager's job was composed of different roles. That is why he was neglecting the learning from reflection of managers. He even argued that managers rarely had time to think about anything.

Employee's attitudes

In order to prove that shaping attitude is a real existing activity, we start this subsection by listing the different studies on employees' attitudes, which were observed and

¹ French idiom, which means a: strong and heavy person (Author's note).

categorized by researchers both in and outside France. In France, according to Dujarier (2006), there are four different types of attitudes of the employees toward the “standardized ideal”. In the manager-managed interaction, if the instructions given by a manager are considered as “standardized ideal”, Dujarier states that employees can adopt following attitudes: 1) to be in total agreement with the order of the manager; 2) to maintain a way of acting at the ‘minimum required level; 3) to distance themselves from the order of the manager; and 4) in the extreme case, to protest against the orders of the manager.

In the United States, another type of research (Oechsle, 1989) has been ordered by Shell Oil Co., to explore employee’s attitude towards their job. The results showed that people generally fit into one of following six categories including 1) Fulfillment seekers, who are satisfied with their jobs, see themselves more as team players than leaders. 2) High achievers, who plan on laying out a career path, take initiatives and hold managerial positions 3) Clock punchers, who are the least satisfied with their jobs 4) Risk takers, who go where the money is, like to change employers 5) Ladder climbers, who choose stability by staying with the same employer for a long time 6) Paycheck cashers are mixed between those, who say they will take risks for a chance at achieving great financial success and those, who want the security of staying with one employer for a long time.

In Asia, culture and traditional values hold very important places in people’s mindset. These elements also influence employees’ attitudes in business². The observations show those who ban themselves from any kind of protests against a hierarchical decision. These employees may think about disagreement, but do not express their opinions. Another category of employees leaves everything to be managed and controlled by the procedures.

Manager’s attitudes

Given the variety of profiles of people, whom a manager has to work with, it is expected that the researches on the attitudes of managers are much more complex and the findings may generate many different interpretations or conclusions. In this subsection, we highlight only the works, which are most related to the topic of the study. Firstly, the analyses previously made on managerial activities already indicate that some manager do not limit their job to communication, planning, organization, coordination or control (Mintzberg, 1989). Secondly, the research program on the activity of the managers conducted by CRF³ of the Cnam shows that “managers have essentially intangible, reflexive activity, which is not carried out only in working time but which often extends into the private world where the researcher has no access” (Ulmann, 2009). Finally, in his book Milspelblom (2010) notes that managers must have different work attitudes “According to the moments, the places and people, the manager should be sometimes relaxed and able to make concessions, or on the contrary, to put up a front and bang his fist on the table”.

Methods of research and findings

Inspired by the book *Leading: as a job* (Barbier, 2011) about the work of managers and based on the concept of ‘activity coupling’, we conducted a field survey by realizing twelve interviews at the Cnam⁴. The interviewees included engineers, specialists,

² Source : <http://www.marketing-professionnel.fr/secteur/management-asiatique-autoritaire.html>

³ Research center on training – a Research laboratory of the Cnam (Author’s note)

⁴ The Cnam (Conservatoire National des Arts et Métiers) is a public institution characterized by a scientific, cultural and professional focus. The school was founded in 1794 under the Convention, at the urging of Abbot Henri Gregoire. The Cnam has earned the status of a « grand établissement », and is under the authority of the National Ministry of higher education and research.

(Source : http://ressources.campusfrance.org/guides_etab/etablisements/en/ing_cnam_en.pdf)

accountants, businessmen, scientists, lawyers, consultants, teachers, etc. By meeting with and listening to these people, it is worth noting that they all share more or less a common point, a desire to gain necessary “soft-skills” in order to manage the human aspects in their work. For them, it is much more difficult than managing the technical aspects, because it is a very complex task, involving not only professional, but also personal life.

Nondirective Interviews

During the observation of managers’ work, we do perceive different ways of acting as among several different managers as in one and the same manager. For example, we notice the difference between those who are preparing long to take action and those who react almost spontaneously in parallel. We experienced a situation, in which the general director, who usually deals with only abstract issues as defining the vision or the policies of the company, suddenly became involved in details and even gave orders to prepare a simple invoice. In another case, we met a very dynamic manager, a person of action, who mentioned about “sleepless nights” or “dead time” without any concrete action before making an important decision. Occasionally, while discussing a business problem, his look and his words could become momentarily distracted.

All this gave us the desire to question the managers, in order to understand, what is involved in their reflection or in their attitude shaping process before, during and after the moment of “making the others act”. However, the difficulty is that unlike the other activity, the object of reflection can only be expressed through the narratives of the managers produced after the fact. In order to establish a sufficient corpus for analysis and to ensure the feasibility of this research, we have conducted during the past two years, several nondirective interviews or, more precisely, short conversations, but discreetly oriented to the object of our research: the roles of reflection about significant experience on their attitude change. The interviews were conducted with people we met at the Cnam including managers and professionals having very diverse educational and professional backgrounds. Nevertheless, we found many common points in the discourse of those, who were on the way to become managers, or were entering a new kind of professional relation with the other collaborators. It is interesting to note that when some managers expressed their thoughts about the sense of responsibility or about promotion, our attention was rather attracted by the expressions of those who planned to change job, such as from a “pilot”, an “engineer” or an “artist” etc. to a “manager”. Within the limits of this paper, we will describe three interviews to illustrate the work realized.

The first interview is that with a former airline pilot who decided to become a company manager. In one of her narratives about the reflection before making that decision, the word “incompatibility” has emerged as the key word. The situations used to illustrate the incompatibility include contrasts occurred between the number of working hours and family responsibilities, her professional passion and health, her sense of safety and technical defects of the air companies. The interviewee considered the obligation to accept that her job as pilot was no longer compatible with family life as a “failure. She recalled the days and nights on mission without any opportunity to attend family events. She also told us that she once refused to carry out a mission order, which, according to her, did not meet safety requirements. Through all of this, we find that the reflections during that period have triggered her intention to change working attitude towards the others. As indicated in the last sentence of her narrative: “The next stage of my professional life begins.”

Findings from these narratives are that there exists the intention to learn a new way of doing things in the reflection of this individual. After having accumulated enough experience and expertise in the “non-human” interaction, instead of acting alone and directly on the object of the work her intention now turns to a more sophisticated level. She wants to learn

how to influence the others, to do things through the others, take responsibility for the work of the others and therefore to maintain much more complex interactions with interdependent people.

In the second one the interviewee is a young Hong Kong salesman. He was hired for a management position and sent to China for the first time. The individual has an atypical profile compared to other MBA participants in general. In terms of academic profile, his degree was neither in the field of economy nor business. Besides, this was a degree of 3-year bachelor level (lower than the general level required for an MBA, which should be a 4th university year degree or an engineer degree). In terms of professional experience, he worked for 5 years before entering the MBA program, specialized in fashion business development. Regarding his personality, he revealed himself as reserved and observant person. The situation presented below was chosen by the interviewee himself as his first experience as a manager, and moreover, of a team, whose members belong to another culture. Before this experience, he had already made several trips to China. However, only at this time, he officially had the opportunity to meet a new local Chinese team and give them the directives (orders) as a manager. During his first contact with employees he knew nobody and nobody knew him. Local employees were very polite and treated him as a manager – foreigner: What he shared was the thoughts about the image of himself as a “real manager” seen through the reaction of local staff. He commented: “It's exciting and at the same time “funny”, because they are very polite and they have a lot of respect for me. They treat me like a real manager.”

Through his narrative, we can explore how the reflection on significant experience could promote the outreach process of the manager with local employees. This was also what helped him to take action and at the same time to shape the attitude in accordance with his new image. He said: “Among these new employees, some are younger and some are older than me. I am new, the market is new. I have to come up with a plan after the market study conducted by myself. I have to restructure and re-branding the products.”

At the end of this conversation, we can make two remarks:

Firstly, the fact of becoming manager of a team, whose members have a different culture, puts the person in a new situation with new relationships. Strong feelings such as “exciting”, “shocked” marked the awareness of the person of a gap between his “ancient knowledge” and “reality”, which motivated him to pursue the acquisition of other attitudes through involvement in multicultural confrontations.

Secondly, important transformations of the person result from a process of production and transformation of knowledge that refers to language learning, attitudes, behaviors, and potential conflicts of interests, the working methods and the personalities of individuals from different cultures.

The third interview demonstrated clearly how an unconscious process of reflection could impact on manager's attitude. The traces of this process can be identified through the links existing between a very old experience and a present event in one's life. The manager in this case was not among the list of target population of the research. However we decided to conduct a special interview with the manager after observing his sudden change of attitude in a real meeting⁵. The main topic of the meeting was a project, the deadline of which was approaching and there was a huge risk that the delivery date would be delayed. To solve this problem, the manager in question wanted all team members to follow his emergency plan dividing the job "point by point". However, throughout the two-hour long meeting, he could not impose his plan to his team. It lasted only until he lost patience and suddenly raised his voice on his team. The meeting ended without any concrete results.

⁵ A meeting of the management board of a project, in which the subject in question has participated as one of project leaders and the researcher - as a secretary in charge of taking notes in order to establish meeting minutes.

Regarding the interview, which took place in the afternoon of the same day, we tried to intervene as little as possible and allow maximum flexibility to the interviewee so that he could express his feelings and comment on what had happened during the meeting. In addition, we hoped that by remaining "passive", we could observe the spontaneous occurrence of new elements, which could help us to test our hypothesis in a more objective and convincing manner. At the beginning of this interview, despite our efforts to help the person to get in evocation about one of his significant experience, the only answer we got was:

"Give an order. No, no ... words are too strong ... I never do that. I prefer to ask gently the person to do things rather than give orders."

Only when the voice recorder was stopped, because it ran out of battery, the interviewee started talking about another stage of his life in which the notion of "respect" was unfortunately associated with a great disappointment:

"I'll tell you one thing that happened to me when I was young. [Long pause] I had a Director. He did me an honor to accept me in his team. He was like a father to me, perhaps more than a father. [...] Then once, while I was working with him, he suddenly changed. He did not criticize my work, but he said he did not understand what I had done ... After a while, I was told he published what I wrote. The disappointment was huge. I felt like ... the father's death. You understand ... For some years after that, I refused to have any leader".

Just like previous interviews, the last interview also confirms our main hypothesis that there is an implicit but strong enough connection between what is expressed by the interviewees as significant lived experience and the change in his attitudes. Moreover, during the last interview, we were very impressed by the occurrence of negative emotions: disappointment, the anger in expressions of that person and, above all, by the impact of the experience on the attitudes of the latter. The refusal to have any leader shows the loss of confidence in human interaction between manager and managed ones, or even faith in his own ability to become a manager. The person did not say a word about what happened at the meeting in the morning. However, disappointment and anger are the only similarities between the critical stage of the meeting we observed and the lived experience which he mentioned. Moreover, we noticed that, compared to other forms of interaction, it seems impossible to isolate the manager from the managed ones and vice versa.

During our research, all interviewed managers expressed their reflections by putting themselves in different human interactions and comparing themselves with different "subjects". This shows that the subject and the others, the manager and the managed ones, the example and counter example are forming the "parallelism" in their reflection. Therefore, in their narratives, there are many examples, carefully selected expressions and metaphors and anecdotes. These elements often provoke many emotions. We believe that not only the manager and the managed ones can influence each other but they may even reverse their roles.

Activity coupling analysis

In his book, Barbier (2011) defined: "to manage is to act on the commitment of activity of others" (p.59). In this part, we aim at analyzing the answers of interviewed managers on: how do individuals learn managerial attitudes while becoming managers? Is it true that to lead without just simply giving an order, managers often mobilize reflection on lived experience? Is the return on experience the process that leads to the development or even to the heterogeneity of ways of acting and being?

Indeed, through the prism of “activity coupling” between manager and managed people, we found that the way to make others act without using the power cannot be learned in isolated conditions, without interaction with others. However, the findings drawn from the narratives of our interlocutors, show that learning through reflection on experience is not following the same process as learning scientific concepts. It is interesting to note that in most of cases, the manager reveals that he or she modifies his behavior on the managed ones following a process of reflection on the virtues and the faults he finds in the different situations of human interaction. There are also thinking processes, which allow concerned people to adopt a way of acting or being, even if sometimes it does not correspond entirely to his nature.

The permanent presence of comparisons between different ways to act in each narrative has shown us clearly that the effects of similarities and especially of the contrasts contribute enormously to the reflection dynamics of the manager. In particular, thinking about interaction with others is an important factor that encourages the movement of a managed person from “peripheral participation” zone to the “central participation” zone of a manager.

In the narratives of the managers-participants in our research, we found that instead of the information on the procedural action itself, managers focus more particularly on the “satellite information” of the action (judgments, declarative and intentions). In their stories, there are many images of close relatives (father, mother, brother, sister, children ...), carefully selected adjectives, metaphors and anecdotes, provoking many emotions. In addition, our field survey data also show that learning through reflection on significant experience is not the same form of learning like the others, which can be undertaken in the dedicated spaces. The links between different themes in the narratives about the reflection of managers show that this is an implicit learning process, spontaneous and accidental. Unlike a procedural action, learning through reflection on significant experience brings together several cognitive actions. Managers can feel and remember, reflect and consider, compare and generalize. As these are cognitive actions, the concept of time seems to lose its value. In our study, the narratives of the interviewees show that the dimension of time and chronological order in their thinking are not significant. The managers can simultaneously think about various topics, regardless of when these themes have emerged in their life. Another important remark is that the most memorable experience is often the oldest one. Moreover, some of them have been perceived as the “open wound”, which can link with many other similar events. In a situation like this, the person in question could not handle frustration or his inner conflict immediately. For the person, the problem seems to be too new to be discussed: what causes a dilemma between lack of reflection for effective resolution and the inability to accept what had happened.

Conclusion

Finally, it becomes clearer that all managers participated in the survey demonstrate a very high level in their ability to learn in the interaction with others and in their reflection on significant experience. Unlike studies that show learning as an “annex effect” of the situation offered by life, in this study, the managers confirm the central place of the learning process that builds on several thoughts about significant situations in life. In their thinking, the managers act on themselves before, during and after, making other to act.

Mintzberg stated that “The manager’s job is not ordered, continuous, sequential; it is neither uniform nor homogenous. It is otherwise highly fragmented, irregular, changing and variable. It is also marked by its brevity, he has just finished an activity then he must move to another” (1989, p.71). Now, thanks to the research conducted, we can add that manager’s job is not always made of purely logical and rational actions as in many other professions. It may consist of processes that are sometimes difficult to name and are connected to each other by

indirect and complex relationships. When direct relationships only link several occupations in a time or a specific place, indirect relationships can involve different activities, grouped around the meaning of his work, throughout time, space and even different cultures. In this perspective, the most important element for our research is the fact that learning process of the manager should not be considered as an isolated action, but certainly as a combination of changing activities produced by the parallelism between two forms of thinking, a rational one and an emotional one, which accompanies the manager in each of the interactions between himself and the employees.

In conclusion, the prism of activity coupling has allowed us to see that manager in transversal position learns to break free from his dependence on the authority or hierarchical power while remaining interdependent in the manager-managed interaction. For him, lead the others no longer means acting or making decision alone. By linking his significant experiences in the past or in the present with the new attitudes that he may accept to adopt in the future, the manager of the XXI century is now able to act on himself throughout life: before, during and after acting on the activity of the others. Shaping managerial attitude is also learning to create constantly a desire to transform the others and to transform oneself in a changing world.

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Good Governance, Ethics and Religion

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Abstract

Governance is a sophisticated system of interactions between structures, customs, responsibilities and actions which can be discussed through three variables of transparency, accountability, and co-operation. In good governance, a complex of values, processes, and moral institutions are utilized to satisfy human needs, resolve conflicts, and develop the society. Besides various criteria by which good governance is evaluated, the word “good” carries a sense of right and wrong or just and unjust, the very core of religious teachings that basically endeavor to bring individuals, societies, and rulers under the discipline of moral ethics, one of its fundamental elements. So abiding by moral values, as also persuaded by religion, will result in equality, efficiency, clarity, and other attributes of positive variety in the way the society is governed and the result of such governance, many of which can be named as defining criteria regarding good governance observed by administrations such as the World Bank. This paper aims to elaborate on the term “good” in religious teachings and recognize what constitutes good governance in response to main questions of the discussion regarding the position of good governance in religion as well as its relation to moral ethics through a descriptive-analytic method. As expected, the results show that the innate righteousness of religion when applied to human life will realize the notion of good, and, in the case of the rulers, good governance where prime obligations such as transparency, accountability and co-operation, attention to public interest, and facilitating development can be fulfilled.

Key Words: Good governance, Ethics, Responsiveness, Public Interest

Introduction

The Greek word “kubernan” (to leadership and guidance), mentioned by Plato to describe a governance system, is the root of good governance. In the Middle Ages, it was converted into “gubernane”. It meant governance and illustrated ruling practice (Garcia, 2007). In the 1980s, the issue of good governance entered the literature of development and demanded the infrastructure to move from the government towards good governance. Indicators such as law orientation, consensus orientation, participation, human rights, accountability, responsiveness, and clarity were presented as the foundations.

Good governance is based on the collaborative management and challenges the authoritative policy of the central government, providing a condition where appropriate decisions are not made to manage the affairs of people, government and governors, and all stakeholders playing a role in decision-making (Midri & Kheirkhahan, 2004).

There are two paradigms in managing public affairs. In the first, government is the main foundation of the society that and is responsible for everything. As such, it is to provide comprehensive public service and implement policies and programs to address all public demands, whereas in the second paradigm, where good governance is discussed, the task is assigned to government, civil society, and the private sector, and advances in a collaborative manner through constructive interaction between the mentioned three sectors on one hand, and between the above sectors and people influenced by their practices and procedures on the other.

These three institutions (government, civil society, and the private sector) are considered among requirements of human development and their relationship is to be in a way that excessive weakness or strength cannot disrupt social balance. This is why vast and continuous interaction and the division of tasks would provide people in a community with an optimal environment (Razmi & Sedighi, 2012).

Good communication and constructive interaction between elements of good governance prepare the grounds to protect the public interest. In good governance, means and measures are equally as important as objectives. Despite their being vast with various aspects, all objectives concentrate on priority of human, human rights, and achieving sustainable development in favor of the public interest. To achieve the objectives, any society tries to elect appropriate methods to meet the public demands (Araee, 2009). Civil society is seen as the public domain between government and economy where volunteer associations can discuss public or private subjects that are of interest and try to establish connections between them. This means civil society enables an active public domain. (Nash & Scott, 2009b).

Public domain is the basic framework of democracy and this is followed by a governor able to meet equality, freedom and liberty, the needs of citizens, defense of the public interest, and moral development to other governors. The possibility to make effective decisions is provided in a way that the benefits of all sectors of the community are exercised (Giddens, 2008). Civil society as an undeniable part of good governance considers the main criteria of good governance, including accountability, participation, clarity, and accountability. For Habermas, public domain is very important because by power the population is free from political and economically profit-driven pressures. He believed the domain relationship as public is based on a type of inter-subjective rationality (Nash & Scott, 2009a). Christians' important attitude on rational recognition is based on moral principles. The attitude obliges man to abide by moral principles and is completed and not contradicted by additions through revelation (Motahari, 2003).

Thomas Aquinas, a Catholic philosopher, believed that to achieve salvation, the fundamental issue is human behavior and action originated entirely from ethics. In theory, the attitude is examined carefully, for humans becoming worthy of attaining the absolute good should do actions through which human nature can flourish. The important issue is that

essentially there is no distinction between divine and nature rule because the nature is an expression of God's will, and actions done by humans to achieve absolute good are compatible with nature (Zagal, 2007).

Moral system has a deep connection with the religious system, religion is a way of life providing useful guidance to mankind's conduct in three fields of belief, ethics and practice. Practical and ethical ideas provided by prophets to guide mankind provide human happiness in the two worlds (Tabatabaei, 1984a).

According to the above, all three sectors of good governance are aimed at mankind's happiness and public interest, using ethics as one of the most important religious guidance to satisfy good governance indicators in the national and international world.

Literature Review

Good Governance

The idea of good governance was implicitly presented by the onset of United Nations cooperation programs in the field of Human Rights (1955) aiming to present programs to strengthening institutions involved in ruling practice. However, clearly when it became widespread in the 1980s, this happened by leveraging some powerful international institutions. Actually, it was emphasized in the process of development assistance in the form of financial and technical assistance, bilateral and multilateral cooperation on development projects and loans, and so on.

Good governance includes individual-institutional and public-private measures and performance for public affairs' planning and administration, an ongoing process for creating understanding between conflicting and different people interests, including formal and informal institutions (UN Habitat, 2002).

The concept of good governance was raised in the UN Charter and international law and under the support of the United Nations. This concept was widely welcomed in 1990 against the government model. Government imposed costs to executive countries' economy and the global economy, and many political units faced with poverty, inequality and inflation (Midri, 2006). It was confirmed that those governments had no ability to provide optimal conditions for the people. To consider the public interest and improve their lives, governments would need a set of policies which might differ from one country to another.

Four basic issues for good governance include:

Participation: Participation is the cornerstone of good governance that, directly and indirectly through legitimate institutions, plays an essential role in good governance between the government and elected representatives. Of course, here organized participation by civil institutions is concerned.

Transparency: Easy access to information and flow of information through press freedom are needed for clarity through which press freedom leads to knowledge of people of decisions made by executors and helps the people participation in the programs and development by analyzing the decisions and policies by the administrative system of the country. Clarity of decisions and implantation according to rules affect easy access of people to information, providing them with meaningful information.

Responsibility: In good governance, organizations and institutions should serve stakeholders and be responsible for duties. Any problem with the crisis at the community level should be managed by the related organization and there is no problem that someone is not in charge for it. Projection and conspiracy are always used to evade the responsibility.

Accountability: Institutions and organizations are accountable for their actions and procedures for people who are affected by them. People have the ability to hold those who are responsible for public affairs. Things such as political and social freedom and equitable distribution of wealth and power, governor of social class and the like are evaluated under the above title. Accountability is a main criterion for good governance. Not only governmental institutions but also the private sector, civil society organizations and institutions and NGOs should be accountable to the public and stakeholders, varying according to the type of decisions and activities of organizations and individuals. However, any organization or institution is accountable for those affected by their activities or programs. It should be noted that accountability is implemented through clarity and the rule of law. (Azghandi, 2001, p.119-155)

World Bank defined good governance with six indicators and based on these indicators evaluated good governance status during 1996-2006 every two years in different countries and since 2002 annually. These indicators include: (Kaufman, Karry & Mastruzzi, 2006)

Effectiveness and efficiency: Good governance means that processes and institutions act in line with the community needs and make the best use of their resources. This means the proper use of natural resources for sustainable development and also the environment preserve and not only the technical meaning is considered (World Bank, 1994) Here, the use of technical skills and bureaucracy efficiency are important. Government revenue is from taxes and other government's revenues, national political innovation implementation, timely annual budget and solve domestic problems are evaluated.

Inclusion and equality: Health and welfare are achieved in a community when all members have a sense of belonging to the community, understand and affect the development, this is achieved only by creating a proper opportunity for vulnerable groups to improve living conditions and welfare (UN Habitat, 2006).

Political stability and absence of violence: The index examines continuity of political life of political system over time, internal and external stress, changing leadership, political consistency and lack of violence provide a proper environment for economic growth. Political consistency is obtained when equality and justice are dominant, strong and cultural contradictions are reduced and political protests and social unrest are minimized as possible. Leadership should be changed through peaceful and legal measures.

Rule of law: a fair legal framework is a requirement of good governance. Supporting the rights of individuals and various minorities is imperative, hence, the inevitable need for a fair and independent justice system accompanied by an incorruptible executive force.

Quality of regulation: Rules and regulations are required for success in the field of development, and economic and political reforms for a good governor. Work rules, financial, tax, commerce and trade should be consistent with economic activities growth.

Control of Corruption: There are many factors in this regard. The level of corruption in the country is using power to benefit friends, family and relatives, expand bureaucracy for its misuse, payments made to influence legislation process, the use of public resources by government officials and personnel, eroded trust in the performance of government officials, illegal payments and monopolies to the detriment of other businesses is what good governance endeavors to reduce or eliminate. UN economic and social commission in Asia

and Oceania defined the principles of good governance as well as factors strengthening those principles and announced that by applying the principles governments can take effective steps toward sustainable development. Accountability, clarity, rule of law, consensus oriented, efficiency and effectiveness, inclusion and equality, since between consensus oriented, equity, and inclusion indicators to World Bank there is a little difference, the Commission explained that the purpose of the consensus oriented in a community is that good governance mediates among different types of actors and views in the community for the best interest and greatest for the community and to access a maximum consensus agreed. In the inclusion and equity index it is argued that the welfare of the community depends on its members feeling of being included in division of resources and interest in the society and not being rejected from the main current. This is where most unfortunate and vulnerable groups have the opportunity to access welfare and contribute to its expansion and growth.

Governance, Civil Society and Development

Although different in concept, civil society and public domain are in total collection in contemporary theories, especially the ones stemmed from Habermas's work.

Civil society refers to the processes of social distinction in European societies the political power had been separated from other activities the political power had been separated from other activities in a way that distinguished government's domain from others. Political philosophy of the seventh century recognized civil society as the basis of good governance (Nash, 2001)

Since public domain constitutes the main framework of democracy, common democratic practices which consist of parliament and parties fail to provide sufficient grounds for collective decision-making. Therefore, amends can be made to incorporate stable participation of the pillars of society and other local groups and bring new life to society (Giddens, 2008).

The concept of civil society in development deals with human connections and interactions and follows the mutual co-operation between the members of a society as well as political, social, and economic structures. Development policy makers recognize that engaging citizens and civil society can complement government's efforts to promote good governance. (Bhargava, 2015)

According to Mary Robinson, senior commissar of human rights, good governance is the process through which governmental institutions handle public affairs, manage resources and guarantee human rights. She believes goods governance is the flawless law-oriented application of these activities (Alizadeh, 2008)

Considering the change in the role of government, a new paradigm was introduced to development where the prospect of sustainable development was achievable through interaction and co-operation between all sections of civil society.

The above mentioned model is a response to new global conditions and aims to achieve sustainable development while emphasizing human rights and supporting privacy against vast public or political domains who challenge public interests. (Monavarian, 2005)

In three decades from 1950, development paradigms failed to address the needs in developing countries, and economic models collapsed one after another all over the world with no discrimination between east and west. Eventually, a new approach was presented in which legal, structural, and ethical aspects preceded the economic one, yet the social-economic chapter was bolder (Midri & Kheirhahan, 2004).

Sustainable development is the main axis of plans devised by international institutions. Preserving the environment, abolishing poverty, incising literacy, knowledge, awareness, and health cannot be realized by industrial age development models. Therefore,

measures are needed to protect public interests while providing for the private sector (Razmi & Sedighi, 2012).

Development is a multi-dimensional process implemented by man to optimize all aspects of their social and individual life. It requires fundamental transformation in socially built national institutions, and general perception to improve basic demands and needs of individuals and social groups within a system from undesirable conditions to anything better in materialistic, spiritual, legal, and ethical terms.

The theory of consultative democracy and the theory of radical democracy by Laclao and Moofe testify to the importance of politics being understood outside of formal government institutions and offer thoughts on how to channel such potential in favor of greater democratic participation. Both rhetoricians view social powers and their activities as modern forces in contemporary politics who provide possibilities for new forms of cohesion and participation. It's especially important because further advancements of evolution and fairness in social life occur only when materialism and bureaucratic structures spread more responsibly in terms of democracy. Such goals are achieved when modern forms of social cohesion are realized (Nash, 2001). The United Nations Development Program (UNDP) in 1997 defined good governance as utilizing political, economic, and bureaucratic power to manage a country's public affairs on every level via which citizens and various assemblies in society express their interests, claim their legal rights, perform their assignments and obligations, and resolve their issues through mediation.

Also in 2002, the United Nations Economic, Social and Cultural Organization (UNESCO) emphasized that interactions between the pillars of good governance enables citizens, groups, and social institutions to pursue their public interests and put their legal rights into practice while concentrating on decisions being made and implemented by official or unofficial players. (Gholipoor, 2004)

As a main principle in democracy, people reserve the right to rule, meaning their decisions cannot be scrutinized, as their will is determining, their choice is commanding, and their opinion is to be respected, so the ultimate power belongs to the people (Bashiriye, 2002).

Civil society and the private sector are another foundation of good governance. Government prepares political and legal environments, the private sector provides jobs and income, and civil society facilitates social and political interaction between parties participating in social-economic activities and social matters. Good governance is not only a new narration of concepts such as democracy, human rights, accountability, participation, and low orientation but also offers a framework for all of these goals and values so that human development prospects including economic, political, social, and cultural development can be realized with people at its center. A good governor is the narrator of human-oriented development (Monavarian, 2005).

Basic Theory

Governors' Ethics from Scholars' Perspective

A government that wants to make a community prosperous its first objective should be creating an environment where ethics and knowledge, and in a word, philosophy, are able to grow, otherwise any other objective is subsidiary and worthless.

According to Plato, training a person cannot be done in a community if political and social achievements cannot, firstly, be a model for people and, secondly, provide the possibility to train them, and the family training would be useless. Hence, when life is based on an incorrect basis there is no hope that people can enjoy proper training. Therefore, the

government (political community) is the only national factor able to provide the means for good victory (Plato, 1974).

Plato desired to be involved in politics, but due to unfair behavior of governors and the trial of Socrates, quit it. According to him, the governors should be of legal scholars and practically aware of the secrets of human existence (Plato, 1974). He also believed a government that intends to lead a community to prosperity should be creating an environment where ethics and knowledge, or, in short, philosophy, are able to grow.

Al Farabi followed the Greek paradigm and the highest rank of happiness was allocated to his ideal sovereign. Walzer reminds us that both Plato and Aristotle hold that supreme happiness was only to be gained by those who philosophized in the right manner. For him, four things found in the community provide this world and other world welfare, theoretical virtues, intellectual virtues, moral virtues, and practical figures. He considered intellectual virtues related to social and political domains that play a role in enacting rules. The relationship between ethics, policy, and political power positioned in his teachings can be found from discussions on the balance (Enayat, 1982).

Imam Ali said: "Divine orders are the basis of morality and being close to God is the end of ethics, this policy provides the ground for all welfare, moral policy includes right orientation, considering human dignity, piety of policy makers, denying the power, faithfulness and numerous other issues."

Policy is a part of ethics and, if it deviates morality, has gone out. Any action that will lead to human happiness is good and bad otherwise. This is dominant in all political, social, and individual areas of human life (Jafari, 2000).

People play an important role in maintaining political systems. In Naseri ethics, a book regarding religion by Khaje Nasir Al-din Tousi, there is a dedicated chapter on people duties to the government, indicating that people are a part of the government and if people participate in it, it is efficient and consensus is governance origin (Rezvani, 2010).

The relations of religion, morality and reason

The Protestant Ethic and the Spirit of Capitalism of Max are the best evidence on the relationship between religion and morality. No thinker and student before and after Weber conducted a study in this field. For Weber, religions that have attracted large masses of followers had a decisive effect on world history (Weber, 1992).

Weber wrote a lot about the effect of Christianity on the history of the West, but the study of Islam was not completed (Giddens, 2008).

Weber considered Christianity as the religion of salvation meaning that, if men accept the religious beliefs and follow moral principles, they can be saved and blessed. Here, the concept of sin and being saved from sin by the grace of God is important and can provoke revolt against the existing order. Religious leaders like Jesus upraised and interpreted the teachings in a way that challenged the dominant power structure (Ibid. p.781).

Weber considered efforts of the believer as contentment and eastern seeking and considered worship as a way to salvation and contentment to be a sign of faith of the believer, leading to the accumulation of capital. In his view, the Protestant ethics caused capitalism (Weber, 1994).

Kant's considered ethics as the principle of reasoning and self-determination in a way that denied any dominion other than the will, meaning emotion, fear, hope, and authority of the natural and supernatural affairs for will. For this reason, Kant did not consider ethics as based on the religion but since the law makes ethics to consider the best goodness as a link between virtue and happiness, meaning through ethics' channel, we are forced to assume God and immortality of the soul, therefore ethics inevitably leads to the religion. This does not confirm the claim of anti-religious thinkers of Enlightenment. Kant in his later years entered

religion only to satisfy the servant. Reviewing Kant's works shows that, despite his disagreement with emotion orientation, he still believed in God as protecting his creatures. Friedrich Poulsen beyond this stated that the real objective of Kant's philosophy is to show the consistency between faith and practice, showing a person can be a realist thinker and a true one. Kant in the second introduction of Critique of Pure Reason wrote such criticism more than anything else is useful for religion and ethics in a way like Socrates, by proving ignorance of protesters ends all demonstrations (e.g. ethics, religion) and elsewhere he stated that I remove recognition for faith. (Mohammadrezaei, 1960).

Ki Berklor extracted the most important and ethical aspects in existence schools. He wrote to free people from illusion. He considered the religion as ethics' support. The conflict between the two is not confirmed and he believed that, if there is a conflict, we should consider the religion. The most important thing in the religion is God, like goodness or beauty, justice and freedom as the most important moral discussions, God beauty description is a moral discussion clarifying the mutual relationship between the religion and ethics. Good deeds and sayings agree with the wisdom. In fact, the perfection of God is based on reason (Tabatabaei, 1984b).

Good human life from the beginning has been the most important ideal of humans. People with a different tendency in belief and culture try to reach happiness and fight with any risk. The human experience proved the need of ethics as an important factor. In this way, the role of religion with moral orders as its most important element is still clear so elevation is considered as the most important objective of prophets (Garcia, 2003).

Plato considered a moral act belongs to the aesthetic field, on which the philosophy of religion is emphasized. So ethics is originated from a beautiful soul and this is seen in human tendency. Here we can say ethics belongs to an aesthetic field for the soul beauty is from human power (Sobhani, 1999). According to Plato, ethics comes down to two basic elements; Eudaimonia or Arête (arête:excellence) and Eudaimonia or well-being which are the virtues that Plato teaches to aim towards.

Zoroaster said: "The Lord I can be like those cause the world development and prosperity and your faithful man, the Lord of life and wisdom I can have your support when in doubt just consider you" (Azargashasb, 1972).

The pious and those who follow the divine goodness principle are close to God and try to advance the world and human. These have Good support as Zoroaster said or in other words those who help science advance provide others with welfare by their innovation and in a way cause the world advance and they are faithful servants of God and (Azargashasb, 1972). He stated that Asha is the law immutable, the law eternal, the cosmic law of order and harmony on which the entire universe is based.

In the view of Allameh Tabatabaei, ethical system is related to the religious system. God creates the world in such a way that leads to human happiness. Meanwhile, there are rules for humans to achieve this, and religious rules are based on the nature (Tabatabaei, 1984c).

Ethics is a part of the religion. Religion tells us to look for good qualities in life, and avoid evil (Tabatabaei, 1984a).

Allama divided the religion into three parts: beliefs, ethics, and practice, and wrote the religion creates a relationship between social life and obedience to God.

Human evil and perfection

Human beings are created weak and imperfect so that he himself forms his existence. And by the power of his thought and will flourish his talents and achieve his worthy perfection. A part of the human talents and aspects of existence which is precisely what man

should acquire is ethics, the innate talent within man that guides him to excellence. This aspect should be nurtured and this type of perfection is realized through a moral system.

There are two different applications for ethics: ethics as a set of virtues and vices in personal, social, political and other walks of life, or, ethics as a set of propositions that label voluntary actions or virtues, with a good or bad, and correct or incorrect. (Motahari, 2003)

Conclusion

Minimal government was unable to meet the public interest in these communities. A new paradigm considers governance beyond government institution and emphasizes the significant role of civil institutions, NGOs, and the private sector in the management of public affairs and interests of the people. Constructive interaction and proper relationship between the above three areas are the basis for human happiness and community development. Important components are considered in this case by authorities such as “responsibility, clarity, participation and accountability, which are considered by all three elements of good governance.”

The government creates a proper political environment, civil society provides an interaction between social, political, and economic groups. Forces for active participation of the people and private institutions consider employment and people's income and their material well-being and comfort. In practice, good governance actually creates a constructive interaction between the three sectors.

Clear and responsive democracy, governance, and management based on responsibility in all sectors of the community are essential to realize sustainable development. Achieving human and social development objectives of the third millennium is not possible without applying good governance.

Developmental objectives were presented in the form of eight indicators including eliminating poverty and hunger, primary public training, gender equality and empowering women, reducing child mortality, maternal health, combating AIDS, malaria and other deadly diseases, environmental protection, and developing a global partnership. One of the most important objectives of good governance is development and democracy in its new concept, man's status, respect for nature, patience, and so on.

The institutionalization of the main components of good governance in the elements makes governance enable to focus on indices of achieving public demands and interests.

Good extensions in this type of governance is true, correct, right, pious and just that all are moral indicators. Enhancing ethics and moral values will cause legitimacy of governance efforts and activities among people. Ethics is the fundamental religious doctrine originating from the actions and paves the way for prosperity and happiness of individuals and community.

Establishing justice as the basis for religious teachings plays a prominent role in good governance. All communities have a legislation system to bring justice so that they can prevent people unfair behaviors and practices to their fellows, community and the environment and even in relation to animals. The legal systems are based upon opinions and beliefs of humankind and form moral beliefs and explain the meaning of life.

So we can say that good governance can achieve the demands of the people using ethics in a way that is equipped with the following facilities: Strengthening democratic structures in the community, establishing appropriate economic mechanisms to facilitate the development, respect for human rights, rule of law, effectiveness and efficiency of activities and performance, participation and consensus orientation, political stability, efficiency, impartiality and clarity of the judicial system and impartial arbitration process, reduced corruption and the use of power and public facilities for private interests, and national and international conflict resolution.

One of the Muslim religious rituals is to speak the phrase: “blessings be upon Muhammad and his descendants” and in most cases the same for all 124,000 prophets of God. Scholars in the matters of religion say that if 123,999 other prophets were contemporary to Mohammad, in the field of human conduct towards happiness and salvation through honesty, integrity, virtue, and justice-oriented behaviors and practices would have no disagreement with him. Bernard Shaw said today's world faces severe crises, widespread conflict, and injustice, if Muhammad was present, able to solve all human problems and disputes today and could provide peace and justice.

It is expected 124,000 prophets, owned by one of the headquarters of good governance, could fulfill their responsibilities and play a leading role in increasing awareness and explaining ethics as inseparable part of religion, in order to eliminate discrimination, poverty, inequality and injustice and contribute to restoration of human rights and institutionalization and implementation of all criteria of good governance that are entirely moral.

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Women's Education and Patriarchal System in Iran

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Abstract

It is the change in rules, rituals and customs that determines mankind's destiny. If change is to be considered regarding human development and freedom, especially for women, the intellectual collective of the society will have to steer their attitude away from economy oriented boundaries toward the dynamics of such changes and the manner they might influence ideas, whose particulars within the Iranian society are this paper's primary objective. The patriarchal order, changing of social attitude in adaptation to modernization; processes where rational approach and scientific outlook are involved, are examined through an analytic-descriptive study to elaborate on the above mentioned issues so as to answer the main questions of this discussion regarding the changes domination of men over women has been subjected to, along with the magnitude women's education has contributed to the demise of the patriarchal order. A description of past and present conditions, as well as an analysis of the research data, will indicate that women's education and their successful presence in society instigated the deterioration of the patriarchal order and facilitated institutionalization of modernity in the Iranian society. Iranian women still have a long journey ahead toward realization of their dreams. However, a great deal is hoped to be achieved in the not very distant future.

Keywords: Education, Patriarchy, Modernization.

Introduction

In the traditional societies of the past, the patriarchal system existed in its extreme form and the absolute domination of the male section over the female section was an established reality. The traditional usages and customs deprived the female section of many privileges and just rights. Social liberty was denied to them in most societies. In certain societies, women were treated as commodities and were destined to obey the dictates of the male patriarchs. Their movements were restricted; they were mostly confined to their residence and were not expected to participate in outdoor activities. Their ideal roles were to bear and rear children and to look after the male members of the family. Education was not even considered a desirability, let alone a necessity.

Describing the present position of woman in human society, in general, August Bebel writes "today things wear some different aspect. Circumstances have meanwhile undergone an enormous change and the position of women has changed at the same time. Whether married or unmarried, the existing social and political conditions concern her more closely than, at any former period" (Bebel, 1379, pp11-12).

In Iran's traditional social order, the Islamic sanctions were also traditionalized and distorted in actual practice by traditional and customary usages and interpretations. Before the 1900s, the priestly class of the country did not mind the suppression of Islamic spirit under the heavy pressure of traditionalism (Janjua, pp. 772-773). Although this describes centuries ago, a contemporary variation is still in effect today. Women face no obstacle acquiring higher education or certain elaborate skills, yet the jobs requiring those are hard to reach and the way still passes through the same old biases. It took 31 years for an educated woman to be appointed minister or 35 years to become an ambassador. The presidential position is being seriously challenged and a good number of women are adamant participate in the election, even as far as having tried, well- aware that their being deemed illegible or under qualified by the Guardian Council is a virtual certainty,

The facilities for female education and the institution of co-education at higher levels on one hand developed self-awareness and self-confidence among Iranian woman and on the other helped them achieve economic independence, which allowed them to become elements of influence on their own destiny as well as the society. This fact of history cannot be denied that the literacy campaign and the educational program developed under the impact of westernization played a vital role in breaking the binds and weakening the constraints of tradition over the society in Iran. One may dispute the policy of unveiling Iranian woman or introducing system of co-education, but nobody can deny this fact that education proved significantly instrumental in the rationalization of attitudes and outlooks. The improvement in the condition of female education definitely helped them come out of the traditional clutches and customary bandages. Objectives such as freedom, equality and civil society are included in the ideology of every woman endeavoring to step up in social hierarchy (Bashiriye, 2004, p.41).

These transitions provided the foundation for a change in attitude that in turn instigated the change in women's condition, while greatly contributing to the deterioration of the patriarchal order and presented new challenges in making old and new ideas compatible.

Modernity refers to a specific outlook, approach and a system of specific ideas and values of a particular type. Modernization in this context refers to the growth of rationality and secularism and a process by which men broke away from the constraints of tyrannical regimes as well as the constraints of superstition" (Weiner, 1966).

Theories

Patriarchal Order

The chief advocate of the patriarchal theory is Henry Main (Farooq, 2013). He defines it as theory of origin of society in separate families, held together by the authority and protection of the eldest male descendent. The patriarchal theory traces the origin of the state in a patriarchal family.

The theory is further supported by historical evidence and scriptural accounts such as First Father Jacob or Patria potestas. A patriarchal family is one in which descent is traced through males. Father of the patriarch occupies a dominant position in the family. All the members of the family pay him the due homage. His authority is recognized by all. A patriarchal Family according to this theory is the most ancient organization (Farooq, 2013). Elaborating on the position of Iranian women in traditional social order, Reza Arasteh (1969) explains that:

"... the male members of the family acquire a protective attitude toward the women of the household, a father or a son frequently escorts the young girl to social gatherings, for most families still consider it improper for girls to go unattended or with an outsider. A young man considers his duty to vigorously defend the honor of his sister or if she is widowed and he is the head of the family, he unquestioningly takes the responsibility for her and the children she may have." (pp. 48-49).

Social Change and Modernization:

Social change is a universal reality. There is no society that may claim to be static and stationary. The change may be rapid or slow, but change itself is inevitable. In the words of Anderson and Parker, "Social change occurs in all societies. This is true of society as it is of any phenomenon. Like all phenomena, societies are influenced by forces that inevitably cause them to change". The human compositions of societies change over time, technologies expand, material equipment changes, ideologies and values take on new components as well as institutional functions which cause structures to undergo reshaping. No society remains completely static because it exists in a universe of dynamic influences, the reaches of which become steadily greater. Of course, the tempo and extent of change vary from one society to another. Some experience rapid transformations, whereas others go through long periods of insignificant alteration. (1966, p. 384). It is evident from the above stated fact that social change exists in all societies, though the rate and the direction of change may vary. According to some, social change means change in social relationship, while some others view it as a change in social structure or the form of societal life. Anderson and parker hold that "social change involves alternation in the structure or functioning of societal forms" (1966, p. 385). They also believe that "social change shows a chain reaction sequence" (1966, p. 385). It means that all the aspects of societal life are inter-related and change in any one aspect brings about change in the others, making social change a complex.

Many thinkers and scholar like Ebne khaldon, Mottahary and weiner believes that, the process of social change has existed from the very beginning in human society. However, in the post-industrial era and particularly in the present century, the process of social change has been accelerated. Along with it, the realization of the need of education has become a feature of not only the developed nations but also of developing societies. These factors and forces have raised social awakening and social awareness in different sections and classes of human society, though definitely in varying extents. The weaker and exploited sections of traditional society have also developed a degree of consciousness and consequently change in human societies is taking place at different levels and in different forms (Weiner, 1966). It appears from the above viewpoint of Weiner that modernity involves rationality and it is in fact the core element of this modern spirit. In other words, modernity relates to the ideology, attitudes

and values of man. So, first comes intellectual modernization; in other sense, modernization at personal level. The elements of rationality and mental attributes have been emphasized in this concept of modernization, which is widely accepted among social scientists. As expressed by Weiner (1966): "Modernization involves the emergence of a new behavioral system with certain destination characteristics, such a system implies considerable value change." (p. preface).

Raghuvanshi (1984) also states, "Thanks to its omnibus nature, different social scientists delve into various aspects of this process and focus on different elements in accordance with their training and perspective" (p.30).

The revolution of modernization involves the transformation of political, social, economic, intellectual, religious and psychological; or in short all systems by which man organizes his society (Halpern, 1974, p. 174). Raghuvanshi also presents the same viewpoint, suggesting numerous dimensions for modernization. According to him, the term "modernization" refers to total transfer changes in personality, culture and society. It covers the whole variety of institutional areas such as family, politics, economy, religion, education, etc.

Review of the Literature

Iranian Women's Education:

Pre 19th Century Iranian Educational Expectations for Women

In the traditional days of pre 1500s, the importance of education was not realized in general and female education was not considered an important issue. Before the recognition of the importance of female education, the female section in traditional Iranian society was completely dominated by the male population. An elementary religious system of education was developed mainly so male members were imparted a school called Maktab. In very few selective cases the high level Maktab or Madrasa education was given to prospering male youths. Girls were also allowed to participate, but only to learn to read and not write; presumably to prevent them from engaging in unethical conducts such as writing love letters. Lack of any evidence in religious scripts regarding such precautions and the very existence of the mentioned notion until even a few decades ago strongly suggests traditional influence. In the old days, parents were expected to pay whatever they could afford for the tuition of each of their children. Sometimes the teacher/ principle called maktab-dar gave preferential treatment to the children whose parents paid him best (Arasthe, p. 23). Stories passed on from mothers to daughters unanimously report that however affluent or influential, the girls' parents were never the ones who paid best. This speaks volumes regarding the status of Iranian women during this period. Even the Islamic sanctions in respect of women had become ideals not to be practiced. The traditional norms and values were dominant and these traditional sanctions violated even the justified fundamental rights and privileges for women.

Western Influences on Education for Iranian Women and Post 20th Century Opportunities.

In the late nineteenth and early twentieth century, western influences became practical. The introduction of female education system in 1886 facilitated the young girls' studying in educational institutions meant for them and more importantly their leaving home, presenting them the opportunity to be exposed to a totally different socio-cultural climate where they interacted with each other as well as with their teachers. Similar to all others, the system of education was sacred and authoritarian in the beginning. But under the western system of education, secular subjects were taught and education was not considered a monopoly of a particular class. Afterwards, a secular and democratic system of education was introduced which broadened the outlook and the canvas of ambitious and aspirations. Rational outlook started replacing the traditional one and social awareness was stimulated. Thus female

education itself became a vital instrument contributing to the enhancement of the status of women in Iranian society. A great emphasis was laid on female education. The system of co-education at a higher level was also introduced. The women living in urban areas got the chance to receive western education, which was secular and democratic. These educated women did not remain confined to family life and their participation extended beyond that. They started taking up white collar jobs as school and college teachers, doctors, nurses and administrators. Some even entered politics and in this way their participation in economic and political spheres outside family developed under the impact of westernization.

Structural change

It is important to point out that the relative positions of men and women in a society reflect the organization and structure of the society concerned. Hence, change in social organization, social structure and social institution means a change in the relative positions of men and women of that society.

Two main institutions whose change greatly influenced women's condition in Iran were family and education. Family moved from extended ones where there were many rules and customs to be observed, many of which suppressing women confining them to the sanctity of home and encouraging a life in the service of the family to nuclear ones where the few members exercised greater compassion and actual concern for each other. Schools also transformed from their rudimentary form into an educational system mostly imported from Europe and hence known as Western Education which not only facilitated women's education but also enabled them to learn new social and vocational skills.

This view point is substantiated by the following remark by Herskovits (1974): "social organization designates the institutions that determine the position of men and women in society and thus channel their personal relation" (p.166). It is evident from this remark that the institutions determining the relative position of men and women and their social relationships is basically defined by the organization or order of the society.

Cultural factors play a defining role in women's behavior. Women's marginal attendance in social political scene stems mostly from gender oriented clichés and the chauvinistic theme of culture which has always inspired conventional, in other word patriarchal, attitude (Shaditalab, 2005).

There is a discipline in the relevance of these social relations to social organization and social structure. These relationships may be characterized both in terms of the individuals or groups represented and by the type of relations involved. These social relations between individuals and groups form a network, which can be called social structure, the organizational or configurationally aspect of society (Eggan, 1950). Institutions partake of both aspects: they are composed of individuals organized in a social structure, with a set of attributes and behavior patterns through which the structure is exemplified and the institutional ends are achieved.

In light of the above stated views, it transpires that institutional and structural changes in a society are bound to transform the relationship between the two sex groups and the relative positions of men and women. On the other hand, if the relative positions of men and women change, the corresponding changes in social institutions, social structure and social organization will occur.

Supported by the family values and ambiance, the new generation of women who were educated, job qualified and more self-aware rose against the traditional patriarchal system and endeavored to find their footing in social of life and assume more socially critical roles than being homemakers.

Women's condition in the past

In traditional Iranian society girls and women were dependent upon men not only for their economic needs but also for their protection. In such a situation the status of women was much inferior to men who were their guards and masters. Within the family, husbands and wives frequently exhibit a close and affectionate relationship which is not displayed to outsiders. Women take most of the responsibility for household affairs. It is, however, not unusual for a husband to consult his wife about personal or business matters, nevertheless, he reserves the right to make the final decisions (Arasteh, 1970, p. 49).

Describing the position and status of women in traditional Iranian society, Reza Arasteh observes; in the traditional setting authority, respect and affection closely bind family members together. As the undisputed head of the house-hold, the father, yields considerable authority over his wife, children and grandchildren. He generally remains aloof and makes decisions which are arbitrary and cannot be questioned. Even middle aged children are reluctant to initiate any activity of which their father might disapprove. In such family, the mother never openly contradicts her husband, although she may ask relatives to intervene on her behalf. She is compelled to recognize her husband's power over her and her children and must unquestionably accept whatever decisions are handed down.

In a society where women are kept uneducated they will always be dominated and exploited by men and would be deprived of their just rights and privileges.

Social Activities

The proportion of illiterate women is one of the main obstacles for their social presence (Mosaffa, 1994, p.71)

Increasing literacy and education among women has advanced their activities outside home. Hailed as one of the most outstanding modern literary figures in Iran, the poetess Parvin Etesami wrote on social issues and championed women's rights in the 1930s. Presenting Iran (1965) holds that:

"In more recent years urban women have increasingly sought outside employment, either to satisfy their desire for a career or to supplement the family income. In 1958 there were about 150 women physicians, surgeons and dentists in Iran, about 600 professional nurses and about 400 midwives and practical nurses. For the same year over 5,000 women were employed as teachers or administrative personnel in elementary and secondary schools throughout the country and some taught in colleges and universities. A few even held administrative positions in various governmental agencies or business firms." (p.146).

Education has been of vital significance in changing the role and status of Iranian women. However, these changes haven't been spread all over the country. In suburban and rural areas these changes are of much lower degree and not very significant and obvious. In addition to it, even in urban areas these changes do not suggest that traditional values have lost their significance. In spite of these rational developments, the importance of traditional values continued to persist.

Women's condition at present

Under the impact of modernization, not only the women of upper and middle classes are receiving education, but are also working outside. Moreover, extended families are less favorable and nuclear families have become a preference. This change in family type and structure brought about considerable changes in the role and status of women in family as well as in society. A greater degree of liberty is enjoyed by women in nuclear families than in extended families. They are more effective in influencing the decisions of their husbands and

have a greater say in respect of education, careers and marriage negotiation of their children, particularly when they are educated and employed. Consequently, the impact of education and modern culture gave a poet to the tradition bound Iranian society and trend of break away from traditional bondage appeared at least in that section of urban community which remained exposed to modernization and in which women received western education and took up white collar jobs either to supplement family income or to utilize their education or to have a greater degree of economic independence for raising their status in family as well as in society (Arasteh, p. 140-150)

With the end of centuries old monarchy and setting up of the theocratic state of Islamic republic, a new phase of life has appeared in Iran. This new phase is reflected not only in the political order, but also in the economic sphere, socio-cultural life of the community as well as in the family. The behavior and life-style of individuals and groups are changing in accordance with Islamic sanctions and Islamic teachings, upon which the constitution of the Islamic republic of Iran is based, firmly advocating social justice.

. In some ways women have enjoyed significant gains under the Islamic Republic of Iran. Nowhere is this truer than in education. In 1976, on the eve of the revolution, the female literacy rate was a mere 35 percent. Despite the turmoil of the revolution and the war with Iraq, by 1986, this rate had risen to 52 percent (Samanian, 2013).

The following table is according to the latest census, which happens every 10 years in Iran, showing female and male share of total enrollment by fields of study in a number of public and private universities in the academic year 2006/07:

Fields of Study	Female Students			Male Students		
	Public Universities and Higher Education Institutes (1)	Islamic Azad University	Total University Female Students	Public Universities and Higher Education Institutes (1)	Islamic Azad University	Total University Male Students
Medical Sciences	7.30	6.54	6.99	5.08	0.75	2.84
Humanities	56.87	53.61	55.57	43.51	33.73	38.45
Basic Sciences	14.70	13.36	14.16	10.23	3.85	6.93
Technical and Engineering	12.11	16.93	14.04	31.39	52.22	42.16
Agricultural and Veterinary Sciences	4.60	5.45	4.94	5.21	7.36	6.32
Arts	4.42	4.10	4.29	4.60	2.09	3.30
Total	100.00	100.00	100.00	100.00	100.00	100.00

Includes Payam-Noor University students (distance learning university)
Source: Ministry of Science and Higher Education, and Islamic Azad University

These statistics indicate that women constitute about 70% of university students in medical sciences and basic sciences, about 60% of students in humanities and arts and 47% of students in agricultural and veterinary sciences. The proportion of women in universities is low only in technical and engineering fields. The table suggests that Iranian policy-makers should focus their attention on increasing male enrollment at universities and improving female labor market opportunities lest the human capital gathered at universities not be wasted (MilaElmi, 2009, p.1).

Ansary writes: "The inconvenient truth is that, owing to the rules that many western women and men may consider archaic and sexist, girl in Iran became educated and liberated" the educated Iranian women to question their ruler and the patriarchy under which they lives. She rightly observes that, this is very important message that as women we have to do our due diligence and just accept the face of someone's rhetoric. (Ansari, 2015)

Conclusion

In conclusion, analyzing the collected bibliographical material on observations and viewpoints of different scholars, this article has come to the concludes that the patriarchal order deprived women of their very basic rights, kept them illiterate, confined them to quarters, treated them unjustly and merely as means to serve men and raise children.

Everything is subject to change except the law of change itself. The oppressive traditions against women which was arrived to the inevitable point, also changed. It is important to point out that, with the rise in literacy and education, courtesy of the western educational system, social awareness and political consciousness developed among women. Those who received decent education and obtained practical abilities regarding jobs other than home making started experiencing change in their attitude and outlook and developed a sense of dignity and self-reliance. They actively participated in various fields and undertook outdoor responsibilities with a sense of confidence. These were further enhanced by their ability to earn a living, hence at least the prospect of financial independence. Contributing to the already in progress trend, the change in family structure and the preference of nuclear families over traditionally extended one stimulated stronger sense of concern and support among family members rather than a large number of opinions expressed by plenty of observers.

It is noteworthy that, after the Islamic Revolution of 1979, craze for education of women in the Islamic Republic of Iran took a new direction and purpose. It stressed on raising awareness among the uneducated women of their just rights and privileges granted to them by God Almighty.

The last census in academic year 2006-07 shows that educational attainment has improved considerably, especially for women, in the Islamic Republic of Iran and the literacy gap between women and men has narrowed. Before 1978, over 60% of the Iranian female population was illiterate. In the post-revolutionary years, women have shown an increasing willingness and effort to become literate and highly educated. Currently, more than 55% percent of first-year university students are women. It means rational outlook developed and women in Iran are preparing to have more crucial roles.

There is little doubt that women will face more obstacles going forward, but there is even less doubt that they will yet again prevail.

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