



كليات التقنية العليا
HIGHER COLLEGES OF TECHNOLOGY

APRIL 4 – 6, 2017

HIGHER COLLEGES OF TECHNOLOGY
ABU DHABI WOMEN'S COLLEGE
ABU DHABI, UAE



INTERNATIONAL CONFERENCE ON EDUCATION
AND WORKFORCE DEVELOPMENT 2017

ICEWD'17

CONFERENCE PROCEEDING

VOL. 14, NO. 1 ISSN: 2330-1235



21ST CENTURY
ACADEMIC FORUM

International Conference on Education and Workplace Development
21st Century Academic Forum
ICEWD 2017 Conference Proceedings

Editor

MARIA HABBOUSHI: Azm University, Fouad Chehab Boulevard
Tripoli, Lebanon
Tel: (+961) 71 949 249; Email: mhabboushi@azmuniversity.edu.lb

Conference Proceedings Editorial Board Members

OMAR ADRA, University of Balamand, Lebanon
FARAH ARAB, University of Montreal, Université Paris 8
ELIZABETH FINOCCHIARO, Saint Louis University, MO, USA
HENK HUIJSER, Xi'an Jiaotong-Liverpool University, China
WHITNEY LINSENMEYER, Saint Louis University, MO, USA
ALEX MONCEAUX, Lamar University, TX, USA
TOMMY LUCAS, Saint Louis University, MO, USA
ROEHL SYBING, Nanzan University
GENNY VILLA, Université Montreal, Quebec, Canada

Impressum:

The papers included in this volume were part of an international conference, the International Conference on Education and Workplace Development 2017. Papers were selected and subject to review by the editors and conference program committee. The papers published in these proceedings reflect the work and thoughts of the authors and are published herein as submitted.

Please use the following format to cite material from this book: Author(s), (2016) "Title of the Paper" in Education and Workplace Development, Vol. 14, No. 1, edited by Maria Habboushi, 21st Century Academic Forum Harvard Conference Proceedings, Bozeman, Montana (ISSN: 2330-1236)

Copyright © 2016, 21st Century Academic Forum

Publisher: *Facilitating, Fostering and Harnessing Innovation to Meet Key Challenges of the 21st Century* is published by 21st Century Academic Forum, 141 Discovery Drive, Suite 107, Bozeman, MT, 59718, USA. Email contact address is: publications@21caf.org.

Production Editor: Maria Habboushi (mhabboushi@azmuniversity.edu.lb)

Copyright and photocopying: ©21CAF Publishing. All rights reserved. No part of this publication may be reproduced, stored or transmitted in any form or by any means without the prior permission in writing from the copyright holder. Authorization to photocopy items for internal or personal use is granted by 21CAF Publishing. The articles in this conference proceeding remain in ownership of the authors.

Disclaimer: The publishers and editors cannot be held responsible for errors or any consequences arising from the use of information contained in this conference proceedings journal. The opinions expressed do not necessarily reflect those of the Publisher or Editors.

Mission: 21 Century Academic Forum is a global group of researchers and educators dedicated to supporting research that has the potential to influence the shaping of educational policy and practices to more effectively prepare students for the unique challenges of the 21st century.

Table of Contents

New Words for Old: Continuity of Language and Perspective in the United Arab Emirates <i>Elizabeth Rainy</i>	1
Entrepreneurial Motivations as Determinants of Youth Entrepreneurship Challenges: A Case of Business College in UAE <i>Almaz Sandybayer</i>	14
Measuring the Efficiency of Colleges Using Data Envelopment Analysis <i>Teg Alam</i>	29
Strategic Utilization of Student-Selected Media to Encourage Reflection in general Education Science Classes <i>Eddia Solas</i>	37

New Words for Old: Continuity of Language and Perspective in the United Arab Emirates

Elizabeth Rainey

General Education Department
Abu Dhabi Men's College

Abstract

In *The courage to teach: Exploring the inner landscape of a teacher's life*, Palmer laments, 'Mesmerized by technology.....we dismissed the inner world' (2017). Yet technology (*Tech rhetoric*) as its etymology shows and Ong reminds us, encourages vibrant forms of expression, not least in a 21st Century Emirati context (1982). The combination of a digitized voice to communicate an ancient poetic form with a modern twist is present in the Emirates in the form of the transmission of *al Nabati*. This is one medium that has straddled the centuries through its oral tradition. Pre-Islamic in composition, it has survived, indeed benefited from tribal sparring, as a vibrant art form today. This debating tradition, despite migratory diffusion, language contacts and generational leveling has circumvented what Steiner in 'Human Literacy' called for- a reconstitution of the 'great discourse with the living dead which we call reading' (1967). Using partially literate sources to stay alive in hearts and minds, the technical, ideological and political difficulties identified by Steiner are diminished. Complemented by modern digitization, the live voice in 21st century communication, therefore, assists continuity with traditional educational methods and enhances their efficacy. Situating the curriculum in socio-cultural practices reduces barriers, increases participation and makes students and staff happier. It also brings in variety, movement and an extra-curricular dimension to study and to the workplace. Emiratis are today effective bilingual communicators, and the community co-translation of this oral medium bridges many cultures and may yet see its wider adoption in the West. In the UAE, despite some local language loss, partly due to the assimilation of Emirati dialects and the adoption of English, this genre has experienced renewed interest through televised, public and private gatherings. Consequently, both traditional and innovative forms of vernacular *al Nabati* survive, through networks that produce inter-cultural dialogue in World Englishes and Arabics. As a result, internal landscapes are not 'dismissed', but rather global education gives all a voice and shows how popular a cultural 'not merely a linguistic artefact' such poetry is (Sowayan, 2009).

Keywords: Exemplarity, *al Nabati*, Cultural Bridging, Pedagogy.

Introduction

The aspirations of employees in the workplace include a desire to be inspired by leadership and through such exempla empowered. In creating a Ministry of Happiness, the UAE government have squarely challenged both the public and private sectors to live up to the ideals of the Founding Father of the United Arab Emirates, to facilitate this end. This paper reveals how one employee and alumnus has given voice to her own thoughts on leadership in the workplace, combining an ancient debate medium with 21st century methods of recording to mediate her message to the world through co-translation. This action shows continuity with the past with an effective description of the present day. Nada Salem Thaabit, composed *Office Buzz* (2015) in praise of her former boss, prior to Dr. Al Roumi's appointment to her current position. Both have kindly approved the co-translation.

Literature Review

Drivers and Challenges in a Global and Emirati Workplace

The prioritization of Happiness in the workplace is a key driver in the UAE. According to the Minister: 'The role of the government is to create an environment where people can flourish – can reach their potential – and choose to be happy. For us in the UAE, happiness is very important' (al Roumi, 2016). By providing the correct social conditions, people are more productive because they are happy and valued. This results in heightened creativity, which takes the form of poetry in the Emirates of a traditional kind. Such indigenous poetry assists cultural expression in a global business world and places the local as an ideal form of behavior to challenge the many buy-ins from abroad and from the global marketplace. As Emiritization takes hold, this is an affirmative statement out of Dubai, based on Gulf Arab linguistic and behavioural aesthetics. This is by no means at variance with a modern global perspective, since the UAE is a modern, affluent and cosmopolitan country, strategically placed at a geographical and cultural crossroads between East and West.

In describing her relationship with the workplace, Nada positions the Emirates as looking to best practice from political and religious tradition, using past and present models of leadership to present itself both domestically and in the current global economy. She evokes the knights of old, the expertise of Zayed, of the Prophet and of Sheikh Maktoum and of their impact on the decision-making of the current government. Such rainmaking allows, "the decision making process projected in this art form" to be reconciled through form and content (Rainey, 2015). The resulting (*mitayil*) (exempla, guiding principles, parables, allegories) show continuity of practice and efficacy of the *al Nabati* tradition (Sowayan, 1985, p124).

Indeed, Noyes has claimed that such "Exemplarity is a special kind of tradition" (2016, p92). Speaking of the poetry of Shamsa al Falahi, she views the past and present as "reconciled" through the use of this poetic medium. In fact Noyes asserts, 'audience uptake on the performer's intention' allows for a bridge to form of 'shared inherited forms' (2016, p82). Such a view is underscored by the findings of the noted Emirati scholar al Amimi, who maintains how performing *al Nabati*, 'bridges the generations as part of the story' (Clark, 2008). Noyes adds that 'the moral force of the performance' is lessened by the 'social distance' and so inclusion in a smaller more intimate audience allows the message to be more heightened (2016, p81). Hence social negotiation created an essential empathetic link between transmitter and audience to augment performance. Thus the *al adab* tradition is maintained through continuity of behavior and performance into the 21st century workplace documented by a female voice.

Orality and Literacy

In addition, Nada's combination of oral and written techniques is also typical of *al Nabati* in the region according to Sawayan. He has highlighted that there was a vigorous and "constant interplay between the literary and vernacular traditions" (1985, p169). Indeed, Ong advised to approach oral culture synchronically, maintaining how writing in many respects 'enhances' orality. Early printing type scripts tended to be sound related, and all poems were read out loud to be co-translated (1982). Therefore, the use of the digitized readings is an authentic use of technology to imitate the spoken voice, if at a less heightened volume. In respect of her transcription, according to Khatabi and Sijelmassi (1996):

Calligraphic art, operating at the edge of language, makes systematic use of the laws of rhetoric and in particular the *al-Adab*, a very subtle concept which acts upon the whole range of the Arabic language and its linguistic theory. *Al-Adab* combines the logical and the imaginative approach (p. 23).

This respect for writing in *belles lettres* encompasses a degree of social refinement and correct moral living represented in an elaborate written form. Nada's level of education allows her to produce her text in a seemingly manner that shows a respect for detail.

Such a harmonious attitude towards cultural continuity counters arguments from some Western scaremongers on the efficacy of politics of preservation in recent times:

Loss of resources, cultural depletion, negative social and environmental effects, reduction of quality of life –these ills can all be taking place, an entire region can be in decline, yet they can be negated by a simplistic economic figure that says economic life is good (McDonagh & Braungart, 2002, p.37).

This is not to say that hard economic realities do not inform change and progress in the UAE, but rather that they do so with an eye on past, present and future and with a tradition of both trade in cultural commodities as well as goods and linguistic artefacts. Mediating Nada's poem to a larger audience permits both secondary and tertiary judgments to be reached on her work, the values it contains and its inspirations.

Methodology

Office Buzz (2015). Demographic Background

Nada Salem Thaabit (1982-) was born in Dubai and is a local entrepreneur. She previously worked in the Dubai government and has many artistic leanings, including composing poetry and creative endeavours and she shares an interest in cultural bridging and Emirati culture. Nada's outlined the context of her poem in a traditional contextualization known as a *salfah*. She explained it was inspired for her former boss, the current Minister of Happiness, Ohood al Roumi in 2015. It is, therefore, a tribute to her positive personal impact on the staff and her role in government. Nada explained how the down to earth, ingenuous character of Ohood motivated her to be inspired to work and to write about the experience. The Minister has kindly approved the co-translation and use of the poem. The poem therefore, augments government policy as well as conforming to a standard praise form of leader. Consequently, while a very

modern version of an *al Nabati* poem, Nada's work to reflect the traditional praise genre attributed to sponsors or ancestors.

Further, Sheikh Mohammed al Maktoum views the empowering of women as adding to the security of the country through safeguarding the overall Happiness of the citizen: 'We want to achieve greater progress towards the future while maintaining the balance between development, technology and sustainable prosperity, and the happiness and well-being of the society for the good of our country and to make the UAE an influential and vibrant country in the world' (2017). Additionally, Sheikha Fatima has also made a series of similar statements expressing her belief in the importance of the contribution of women to the development and well-being of the country. Queen Elizabeth II has also recognized the improvement in the status of women in the United Arab Emirates due to such support and kindly endorsed the Sheikha's efforts. Therefore, Nada's work seems to authenticate both public policy and the extent to which women can assist in describing and implementing it.

Nada recorded the poem to music, providing a working translation from which the rhyming couplets or *bayt* were formed. We met up later to discuss the translation and she asked for a single change. In older forms of Arabic, the male and female forms could be inter-changed and so her intention was to use the female voice. *Office Buzz* is included both to show a modern form of *al Nabati* and as also is the only example from Dubai emirate in the corpus. The different approaches to poetry translation of rhyming couplets indicate the debt to Holes and the late Abu Atheera, who have published an extensive collection of Emirati co-translated poetry with audio (2011). There was a degree of "stuffing" required to reach the couple and this meant that my usual translation methodology, which employed Robinson's abduction, induction and deduction process, was modified. (1997). Older co-translations use Robinson, working on traditional themes such as hunting (*ganas*), separation, (*kaluj*), war (*madih*), pastoral, love of the homeland (*fakr*) love (*ghazal*) and religious poetry (Rainey, 2015; 2016; 2017a; 2017b). In the first stage below, instead of collaborating on the co-translation, the author supplied the text and a rough draft together. This was then transformed directly into couplets. A final edit occurred after further consultation and a transliteration was also collaborated on. This was then validated by Arabists Dine Lancen and Ula Zeir.

The resulting effect gave the poetry an edging modern feel that reflects the modern cosmopolitan feel of a city like Dubai, yet maintain the continuity of practice all the while from what is thought by Holes to be Sumerian antiquity (Ahmed, 2014). Noyes' *corpora ethnographa* approach advocated attempts to reconcile archiving digitalizing records that are subject to loss, in a way that is generally accepted as ethically defensible, among practitioners. Describing traditional culture as a kind of "slow open- source", where too strict codification of the genre stultifies the product, "freezing the form", required a more improvisary approach. Therefore, a flexible theoretical framework, avoiding exploitation, over- packaging, or "adapting a practice to market conditions", so as not to abuse the power relationship between the subject and those researchers along for "the ride" was adopted (Noyes, 2010, p. 46).

ضجة مكتبية

حَيٍّ مِنْ يَانِي مَبَادِرِ	بِالسَّلَامِ وَبِالتَّحِيَّةِ
صَافِي النِّيَّةِ وَطَاهِرِ	تَابَعَ لِسِنَةِ نَبِيِّهِ
بَسْمَتِهِ جَبْرُ الْخَوَاطِرِ	وَالْحَكِي بِهِ جَازِبِيَّةِ
وَالْفِكْرَ وَاعِي وَحَاضِرِ	دِقَّةً مَعَ مَنْهَجِيَّةِ
بِالصَّفَا وَالْوُدِّ جَاهِرِ	حَسَنَ أَسْوَةِ لِلْبَقِيَّةِ
وَالتَّوَاضَعِ فِيهِ ظَاهِرِ	ذَاكَ مِنْ خَيْرِ الْبَرِيَّةِ
عِنْدَنَا يُعْطَى أَوْامِرِ	وَيَتَلَحَّمُ مَعَ خَوِيهِ
طَاقَةَ الْإِيجَابِ نَاشِرِ	صَاحِبُ النَّفْسِ الرَّكِيَّةِ
طَاقِمِ الْأَعْمَالِ مَاهِرِ	أَنْجَزَ حُكُومَةَ ذَكِيَّةِ
لِلرَّئَاسَةِ بَاتَ سَاهِرِ	وَلِلشَّعْبِ نَفْسَهُ وَفِيَّةِ
لِي خَلْفَ زَايِدَ وَآخِرِ	فَارَسَ مِنَ الْيَعْرُبِيَّةِ
إِبْنَ مَكْتُومِ الْمُعَاصِرِ	أَوْصَلَ بِنَا الْعَالَمِيَّةِ
بِالْمَحَبَّةِ مَرَّ عَابِرِ	وَسَطَ ضَجَّةَ مَكْتَبِيَّةِ
قَلَّتْ طَلَبُهُ قَالَ تَامِرِ	« كَثُرَ الْجِيَّةُ عَلَيْهِ »

Elizabeth Rainey

hello you, oh who rushed to
me with greetings and welcoming
pure with sincere intentions
following the prophet way of living
his smile takes away all pain
and attractively speaks!
and intellect with share present conscious
strategic and pressed
Professing purity and kindness
an idol for the rest
humbleness and modest is apparent
oh he is on of a kind
authorive and gives order to us
yet he is close to his fellow brothers..
spreading positive energy
that of a good righteous self
his skillful team
archives the smart government
for the presidential affairs, he stays up all night
with a sincere heart for the citizens.
that who succeeded Zayed and another one.
a knight from Arabia
current Maktoum ruler
took us to the international world scene
with so much love he passed
during a busy buzzy office day
I kindly request him.. and he said go ahead?
I say
“please come more often”

The transliteration below was produced from the recording in 2017.

Hai minyanie mubader
Bi salama bi tahya
Safi niyah ou taher
Tabaah lisana nabiya
Besmateh jabber el khawater
Wel haki bihi jadhbiya
Wel fikr, wa'ee
Daqa ma'ee minhasjiyah
Bel safa wal wadi jaher
Hasina eswa lil baqiya
Wal tawadho feh dhahir
Thak men khair al bariya
'indina ya't' awamer
Wa yetalaham ma'a khawiya
Taqem al amal maaher
Erjez hukuma dhakiya
Liriaasa baata saaher
Wa eshaabu nefsah wafiya
Li khalaf Zayed wa akher
Fares min el ya'zabiya
Ayna Maktoum el mo'asser
Awsel bina el 'alamiya
Bil mahaba marra 'abir
Qultu talabeh qaala tamur
Kathir el jiya 'Aliya

To you who rushed to greet me
With welcomes and hello,
Intent sincere Upon Us Be
As the Prophet would bestow.

Her Smile becomes our Remedy,
Her voice rich placebo.
A mind the best strategy
In today's world, to sow.
Yet selfless in her modesty
With friends *sympathico*.
Good vibes abound and energy,
A Very Righteous soul!
She Heads the Skilful Party-
Smart governance, we know.
All night for the Presidency,
And all the way she'll go
For Zayed and his Deputy,
And an Arabian Knight -see lo!
State- of -the- art Diplomacy,
Maktoum farms a global Furrow.
She Past through the Office lovingly,
With Daily Buzz Aglow.
'Come again', I ask her kindly,
And give the Green to Go.

(Trans. Nada Salem Thaabit and Elizabeth Rainey 2015)

Findings

The Domestic and Global relevance of *al Nabati* as a pedagogical tool

There are a number of interesting issues that arise from this co-translation exercise. Firstly, in respect of dialectology, the cultural flowering of *al Nabati* poetry often meant each tribe used its own micro-dialect, isolated from others, so the usage of some words was not always inter-changeable with the condensed forms of spoken Bedouin Arabic today. There is some form of continuity, but at the same time, some linguistic shift. The living sources of tradition contribute to a strategic cultural exchange which is symbiotic, life-enhancing and vigorous. Therefore, the dialect used reflects that of Dubai via the modern medium of digital recording, and so the regional tongue in which Nada's work was composed can reach a pan-Emirate audience and beyond, through co-translation to an Anglophone public. Furthermore, the social role of the genre, guided by McDowell's work on commemorative practice, shows how that the live delivery of the poetry is still an active form of social cohesion (1992).

Additionally, using *al Nabati* compositions in class has had a positive effect on pedagogy in that through the participation of students with less developed English, affective barriers were lessened. Situating the curriculum in socio-cultural practices also mean there were less of the power distance associated with learning English in some quarters. The combination of listening to poetry aloud, what Dore has called combining the psychological or "perlocutionary effect" and the narrative or "illocutionary effect" made class discipline easier and students more relaxed (1977). This usage acted as an assist to the students' research, as they conducted interviews and used the material to supplement secondary sources gathered through the catalogues. It also made the staff involved in the cultural bridging, which has made a positive contribution to the voices of moderation and to community relations at a time of global security concerns.

Discussion

The Domestic and Global relevance of *al Nabati* as a pedagogical tool.

Nor are there any shortage of comparisons that can be made with Western exemplarity. In an effort to assist cultural bridging in an age of extremism, comparative literature has proven a helpful tool. Cognizant of how information travelled along the Silk Road, highlights again how the digital medium can help forge a positive image of the arts of Arabia, using French and English examples (Rainey, 2016; 2017b). For instance, in the General Prologue of the *Canterbury Tales*, Chaucer describes the Clerk of Oxford thus:

Noght a word spak he more than was neede,
And that was seyð in forme and reverence,
And short, and quyk, and full of hy sentence.
Sownynge in moral vertu was his speche,
And gladly wolde he lerne and gladly teche.
(Pollard, 1967, 11,304-308)

Such a portrait of the intellectual leaders of his day highlights the relationship between words and deeds that *al Nabati* represents. Chaucer's use of such modelling would have resulted in wide recognition and this continues in the present. Indeed, the tradition is thought to have originated in the Middle East and nor is such exemplarity restricted to poetry. Cautionary tales

such as the *fabliaux* of Voltaire are modeled on the *Fables of Bidai: the Morall Philosophie of Doni* (1570), which were translated from Sanskrit into Pahlavi and later Arabic as *Kalila and Dimma or Kelileh va Demmah*. The first known collection of *belles lettres* in Arabic were originally 3rd century Indian tales collected by Sharma. The *Panchatantra* or *Five Principles*, cover loss and gaining of friends, crows and owls and loss of gains. Translated by Ibn Muqaffa from Pahlavi two jackals characters, Karataka and Damanaka, narrate the animal stories that resonant through the ages (Weiss and Green, 1985). As they traversed the globe, an 8th century Greek translation was used for a Hebrew and Persian version in the twelve century while de Bezier translated the work from Castilian into Latin (O’Kane, 2003). Indeed, it has been suggested by Lessing that they inspired Machiavelli’s *The Prince* (1999). However, Aarne’s classification of the tales occurred much later (Khouri, 1992).

A similar route was taken by *The Hezar Afsann*, also of Indian origin, and adapted by the Persians into *The Thousand Myths*. Known as *Elf Leyla wa Leyla* in the Arabic version it became *The Thousand and One Nights* (Vakilian, 2012). However, this text was mentioned in *The Filrist of Al Nadim*, a 10th century Handbook of 'the books of all nations compiled in Baghdad' in less than glowing terms (1907, p363). The author, a scribe and book seller, writing on a broad range of topics, including fables, poetry, alchemy, grammar, religion and chess, mentioned the *Tales* in a dismissive aside, rejecting the collection as of any serious literary note. In Ch VIII on Story Tellers, he speaks of this ‘vulgar, insipid book’ (Nicholson, 1993, p454). Later the collection was augmented in Baghdad and Cairo to include a broader range of materials. As the fable genre became popularized throughout France via Syria and Spain, and other tales like *Antar* were circulated as a result of invasion (Heath, 1996). While such hybrids are more familiar to the West than *al Nabati*, their popularity does reflect the cultural complexity and nuances of much of the *al Nabati* tradition. Co-translation is poised to change this dynamic and this has a strategic importance for both intangible and material culture.

English literature continues to be punctuated by such use of exemplarity. Swift, always on the cutting- edge, was careful to point out in *Some Thought on Free Thinking* how that: “...in the great multiplicity of ideas which one’s mind is apt to form, there is nothing more difficult than to select those, which are the most proper for the conduct of life” (2017). Indeed, Nada’s poem is less a deontic appeal for a better world than a description of what is happening on the ground. Intricately woven into the fabric of the poems, often culminating in the coda Ingham also has suggested that moral behavior is often modelled in *al Nabati* (1993). Witnessing *al Nabati* in its natural environment, and observing those in it, especially their sociocultural and linguistic profile has additional support from Brenneis’ observations on social reinforcement and aesthetics (1987; Niles, 1999). Furthermore, Sheikh Mohammed has linked Happiness to Tolerance, security and sustainable development, following the UN efforts to promote global peace (Wam). He has stated: “We have 200 million Arab youth and they have to choose between two ways: either they lose hope for a better future and fall prey to extremist ideas and sectarian conflicts, or they have a great confidence in a better life and a positive power to create a better country,” (Gulf News, 2017). Such a laudable goal has the support of this research.

Conclusion

It can be seen that creativity, innovation and productivity in the workplace not simply aid government policy, but also pedagogy and community relations. Emiratis continue to use the consultation process (*majilis*) for decision making and poetry often marks these occasions. Thus the extent to which Arabs still equate social occasions, poetry to reflect private and public morality is still very deep rooted in Bedouin society, with the *Sheikh* as tribal spokesperson settling disputes (Armstrong, 2000). While many perform in public others limit the poetry to an inner circle. It is safe to say that poetry is used as an active means of evocating exemplary conduct and as a form of conflict resolution to this day. The mediation of *al Nabati* to the world helps break down barriers between East and West at a time of heightened tensions while showing the vibrancy of Emirati culture (Rainey, 2017b).

Moreover, while most public performers of *al Nabati* are predominantly male in the UAE women contribute vigorously to the genre and it is not merely limited to Sheikhs or high status community members, it is a much more democratic and widespread continuity of practice. Indeed, the cultural exchanges arising from co-translation have a myriad of uses in teaching, cultural bridging, exemplarity and personal and economic well-being. The place for creativity, innovation and sustainability in an increasingly globalized economy are not at all at odds with Emiratization and traditional practices in the UAE. They are in fact discretely intertwined and acknowledged. Such continuity is set to continue, with Tolerance and Happiness not merely a means to an end, but also an end in itself as the century progresses.

Consequently, the preference of Emirati society for oral register needs to be emphasized and examples of this delightful medium preserved in both in Arabic and in English, with as much of the original character kept as possible, through careful transcription by an Emirati scribe. However, while Arabic remains the language of social identity, the Emiratis are increasingly comfortable with the transmutation of many of their cultural materials and performative techniques to a wider cosmopolitan arena.

References

- Ahmed, A. (2014, November 4). Arabic debate-poetry translated into English on its way into schools in Britain and the UAE. *The National*. Retrieved <http://www.thenational.ae/arts-lifestyle/writers/arabic-debate-poetry-translated-into-english-on-its-way-into-schools-in-britain-and-the-uae>
- Armstrong, K. (2000). *Islam*. London, UK: Phoenix Press.
- Brenneis, D. (1987) Performing passions: Aesthetics and politics in an occasionally egalitarian society. *American Ethnologist*, 14. 9236-250.
- Clark, G. (2008, August 1). Party of the People. *Time Out, Abu Dhabi*. Retrieved 29th March, 2016 from <http://www.timeoutabudhabi.com/art/features/5293-party-of-the-people>
- Dore, J. (1977). Children's illocutionary acts. In Freddle (ed.), *Discourse production and comprehension*. New Jersey, N.J: Ablex.
- Heath, P. (1996). *The Thirsty Sword: Sirat Antar and the Arabic Popular Culture*. Salt Lake City, USA: University of Utah Press.
- Holes, C. and Abu Atheera, (2011). *The Nabati Poetry of the United Arab Emirates*. Reading, UK: Ithaca Press.
- Khaishgi, A.E.(2016, March 20). Happiness is a serious job': UAE's Minister of Happiness embraces new role. *The National* . Retrieved <http://www.thenational.ae/uae/government/happiness-is-a-serious-job-uaes-minister-of-happiness-embraces-new-role>
- Khoury, M. (1992) Literature in J. Hayes, (1992). *The Genius of Arab Civilization*. New York, NY: New York University Press.
- Lessing, D.(1999). Problems, Myths and Stories. London: *Institute for Cultural Research Monograph Series No. 36*.
- McDowell, J.(1992). Folklore as Commemorative Discourse in *Journal of American Folklore* 105(418) pp403-423.
- Nicholson, R.A.(1993). *A Literary History of the Arabs*. Richmond, UK: Curzon Press.
- Niles, J. (1999). *Homo narrans: The Poetics and Anthropology of Oral Literature*. Philadelphia, PA: University of Pennsylvania.
- Noyes, D. (2016). Gesturing Towards Utopia: Toward a Theory of Exemplarity. In *Narodna Umjetnost (53) 1*, 75-95.
- Noyes, D. (2010). Traditional Culture: How does it work? *Concepts and Institutions in Cultural Property*. (1) Gottingen, Germany: Gottingen Interdisciplinary Research Group on Cultural Property.
- O'Kane, B.(2003). *Early Persian Paintings: "Kalila and Dimma", Manuscripts of the late fourteenth century*. London, UK: I.B.Tauris.
- Ong, W.J. (1982). *Orality and Literacy: The Technologizing of the Word*. London: Methuen.
- Palmer, P. J. (2007). *The courage to teach: Exploring the inner landscape of a teacher's life*. San Francisco: Jossey-Bass
- Pollard, A. W. (1967). (Ed.). *Chaucer The Prologue*. Macmillan: London, UK.
- Rainey, E. (2015). Domestic Utopias: Emirati *al Nabati* poetry as an agent of personal, social and national transformation. Paper delivered at SIEF, Zagreb, Croatia. 22th June, 2015.
- Rainey, E. (2016). Nuance, Change, Challenge and Networks in the Translation of Religious Poetry. In *Perspectives*. 24 (1).
- Rainey, E. (2017a.). The Art of Storytelling in Bedouin Society: A 21st-Century Ethnographic Collection of Poems from the United Arab Emirates. *Material Culture Review* 83-84, 143- 159
- Rainey, E (2017b). The Twa Literatures- a Tale: the role of occasional actors in the co- translation, celebration and dissemination of Emirati *al Nabati* to World Poetry.. In Elsheikh, A., Elnimeiri, A., & Riddlebarger, J. (Eds.). (2017). *Proceedings of the 1st International Conference on Literature and English Language Teaching (ICLELT)*. *The Victorian*. 5(2).37-49.

- Robinson, D.(1997). *Becoming a Translator*. London, U.K.: Routledge.
- Staff Reporter. (2017, March 4) ‘ Positivity is a way of thinking while happiness is a lifestyle’. *Gulf News*. Retrieved from <http://gulfnews.com/news/uae/government/positivity-is-a-way-of-thinking-while-happiness-is-a-lifestyle-1.1988228>
- Steiner, G.(1967).*Language and Silence: Essays 1958-1966*. London: Faber &Faber.
- Some thoughts on free-thinking. (2017). Retrieved from http://jonathanswiftarchive.org.uk/browse/year/text_2_8_1.html
- Sowayan, S. (1985). *Nabati Poetry: The oral poetry of Arabia*. Berkeley: University of California.
- Staff Reporter. (20217, February 5). Mohammad attends graduation of Chief Happiness and Positivity Officers. *Gulf News*. Retrieved from <http://gulfnews.com/news/uae/government/mohammad-attends-graduation-of-chief-happiness-and-positivity-officers-1.1973700>
- Vakilian, S.A.(2012) Summoning voices, silencing vices: The story of Persian folktales. *Tehran Times*. February 11.
- WAM. (2016, March 3). On International Day of Happiness, UAE maintains its leads regionally, plans to score high globally. Retrieved from <http://wam.ae/en/details/1395293114763>
- Weiss, B. and Green, A. (1985) *A survey of arab history*.Cairo, Egypt: The American University in Cairo.

Entrepreneurial Motivations as Determinants of Youth Entrepreneurship Challenges: A Case of Business College in UAE

Almaz Sandybayev

Faculty of Business
Higher Colleges of Technology,
Abu Dhabi Men's College, United Arab Emirates

Abstract

The research paper aims to investigate the main approaches on how to attract young people to the development of entrepreneurial activities through the factors of motivation. The study focused on youth groups (19-25 years) to motivate them to start up own business considering that youth entrepreneurship is a significant way to reduce unemployment rate in the future in a country where employability becomes an emerging issue in the nearest decade. The research was organized based on discussion cycles with the purpose of creating focus groups to find out what young people think and feel regarding doing business in the United Arab Emirates. For this reason, a qualitative approach has been adopted by conducting in-depth interviews with five focus groups. The study has identified the most important conditions of effective entrepreneurial activity.

Keywords: Youth, Entrepreneurship, Motivation, United Arab Emirates.

Introduction

In recent years, the concepts of innovation and entrepreneurship have become a common subject of scientific interest of a number of researchers. Numerous publications have discussed the dynamics of the sector, its role and advantages in the national economies and the need for state support. However, there is no final determination in defining entrepreneurship and business as well as the finding the roots of problem for the evaluation criteria of business success.

From one side, a modern UAE society focuses on responsible citizens building a career on self-initiative and self-realization of youth in the field of entrepreneurship. Indeed, some of the young people at the early stages of a career are already oriented on the basis of their own business. This fact demonstrates the coincidence of public demonstration and personally important values which attract the attention of researchers to study the internal controls of business activity. From another side, not everyone can and want to become an entrepreneur.

A division of the UAE national population by the level of their involvement in economic activity mirrors that about 55% of the UAE national population is economically inactive (Statistics 2016). Statistics reflects that 25% of the UAE nationals are students will adhere to the job market. From another perspective, 70% of UAE citizens age 35 and younger have a tendency to entrepreneurship (The Economics, 2013).

A number of studies found that the efficiency of business activity depends on the following psychological characteristics: the installation, motivation, risk, endurance and stamina, strategy of behavior in the case of failure, competitiveness and other personal characteristics. These characteristics determine whether a person has entrepreneurial abilities in the future or not. These studies suggest that mere economic competence is not enough to describe the phenomenon of entrepreneurship, identified and psychological criteria for a successful business (Hisrich, 1990; Chell, 1991; Cromie and Johns, 1983).

An important impetus for the business activity is the motivation of the individual. The problem of motivation of entrepreneurial has been largely discussed by Bosma (2012) and Kelley (2012). The studies compared the levels of entrepreneurial activity between countries and identified the factors that influence the level of entrepreneurial activity (Kelly, 2011).

Involving youth in entrepreneurship is one of the important tasks for the formation of the country's economy, as well as employment and solving numerous socio-economic issues of society. In the current environment, youth in the business has some advantages. Firstly, young people today opening a business, can get assistance and advice from the previous generation of entrepreneurs, the role of which can act as family and friends. Secondly, young people have the possibility of obtaining special knowledge which will give a significant advantage in the starting up of the business. Thirdly, a number of significant programs have been developed to support programs at the local and regional levels. State policy to support young entrepreneurs has been carried by the Government and private sector entities.

It needs to be admitted however, that in the national psychology of today, there are no practical studies concerning the internal controls of business and the specific activities of young people in doing business. Young people with an adequate level of education, pronounced organizational abilities, motivation, personal and professional growth, ready to take risk, today, are perhaps the most adventurous and creative part of the tomorrow's society. The extent to which young people will be motivated to entrepreneurship, determines the further development of society. In this regard, the important focus of the study is to research the level of motivation of business graduate students.

Literature Review

Definition of Entrepreneurship

The term "entrepreneurship" originated in France in the 17-18 centuries. Its introduction is mainly associated with the name of the French economist R. Cantillon. In his understanding, business is related to the risky nature of the gainful activity that can potentially stimulate economic progress by finding new and better ways to realize their business (Cantillon, 1952). Another scholar Jean-Baptiste Say (1996) pointed to the economic efficiency of the entrepreneur that takes the economic resources from the low to high performance. A true classic theory of entrepreneurship is considered by Joseph Schumpeter. In his book "The Theory of Economic Development" written in 1911, he argues that the main function of the entrepreneur is to be an innovator, to innovate and thus be a vehicle for economic development. "Produce - means to combine existing things in our field and power ... to make ... - then create other combinations of these things and forces" (Schumpeter, 1982). Unlike its predecessors for Schumpeterian entrepreneurship yield was insufficient to do with personal gain entrepreneur, but rather served as a mean of assessing the results. Thus, unlike a business, entrepreneurship was not closely associated with income and profit. Schumpeter's approach was developed by Peter Drucker (1985). He argued that "entrepreneurship involves managing which is different from existing". Thus Drucker does not consider any business development to be entrepreneurship. Expansion can be a routine process, is not paired with the transformation and innovation.

Herrington et al. (2009) discussed that an entrepreneur is one who may change a situation from low capacity into the higher productivity. Sathiabama (2010) defines entrepreneurship as a process related to creating wealth by individuals or groups. The term small business owner is often used as a synonym for an entrepreneur (Aaltonen and Akola, 2014).

Thus, it is seen that the economists were the first to become interested in the phenomenon of entrepreneurship. For the most part, they sought to determine the role of the entrepreneur in the economic system and its influence on the economy. That is why the most common reproach against them is the reluctance to go beyond the functional approach in order to integrate their theory of the behavioral component of the entrepreneurial phenomenon. This, however, does not detract from their scientific contributions and this despite the fact that economists have been unable to come to a common definition of the entrepreneurial function. Some see entrepreneur «the one who takes the risk" (Cantillon, Say), "innovator" (Schumpeter, Drucker), "the one who finds opportunities for bargains", "distributor of limited enterprise limited resources (Casson).

Youth Entrepreneurship

Youth entrepreneurship plays an important role in solving economic and social problems, such as the creation of new jobs and reducing unemployment among young people. Worldwide, the rate of unemployment among young people is a major challenge for economic and social prosperity of the country. According to the World Economic Forum, young people count for 40% of the unemployed population of the world (Brister, 2013). Chigunta (2002) defines youth entrepreneurship as "the practical application of enterprising qualities, such as initiative, innovation, creativity and risk-taking into the work environment (either in self-employment or employment in small start-up firms), using the appropriate skills necessary for success in that environment and culture". In Europe, in 2013, the youth unemployment rate exceeded 24%, as

for example in Poland and Bulgaria the unemployment rate of young people was 28.4% and 27.1%, respectively. In other countries, the rate of unemployment particularly in Greece (57.6%), Spain (56.5%), Portugal (38.7%), Italy (37.1%), Slovakia (35.8 %). The lowest levels of about 5% are in Austria and Germany. Therefore, the shortage of jobs created a phenomena of forcing young people to move to self-employment and become "entrepreneurs by necessity" rather than "employers of choice" (Cleand, 2010).

An important problem is the definition of age limits for the description of a young entrepreneur. Studies carried out in different countries show that youth entrepreneurship varies depending on age. Chigunta (2002) proposes the following categorization of three (transitional) youth entrepreneurship phases:

Pre entrepreneurs. Young people aged 15-19 years preparing for entrepreneurship. Young people are going through a transitional period when they have to choose between home, work and training. As suggested by the Curtain (2000), this period includes several stages and is not limited to the issue of the educational institution and the device to work.

Budding entrepreneurs. Prospective entrepreneurs aged 20-25 years. These are young people who have some experience, business skills, earned the initial capital to open their own business. Thus, this group has 3 ways: 1) engage by generating a small income; 2) give up; 3) open the successfully functioning business. A key challenge for these young people is to increase the survival rates of new businesses.

Emergent entrepreneurs. Novice entrepreneurs aged 26-29 years. Such entrepreneurs already have significant entrepreneurial experience. This is their advantage over the budding entrepreneurs, enabling them to open a very viable business. The main challenge faced by these young people is to transform their businesses into commercial viability and competitiveness of small businesses.

In order to get a more extensive view of the potential entrepreneurs, scientists from New Zealand, Lewis and Massey (2003) conducted a study of the future of young entrepreneurs. Depending on the level of preparedness of young people and the level of intention to engage in entrepreneurial activity, the authors identify four different groups of potential young entrepreneurs (Lewis, 2003).

In 2013, the Global Entrepreneurship Monitor report (GEM) devoted to the problem of the status of global youth entrepreneurship. The researchers found that 9.5% of young people aged 18-24 years intend to set up their own business, 3.6% of young people already have their own business. UN Secretary General Ban Ki-moon recently stressed the need to solve the problem of rising unemployment among young people, in connection with the need to encourage and train young people to become entrepreneurs (Kew, 2013).

Key Motivational Characteristics of Entrepreneurial Success. Literature Observation.

A significant place in business psychology are occupied by publications on psychological characteristics of an entrepreneur. An analysis of the literature identifies those personality characteristics that are fundamental to entrepreneurial success. These include: motivational traits such as "motivation to achieve", "internal locus of control", "activity" and "self-sufficiency; cognitive skills, such as "focus on problem-solving", "uncertainty avoidance" and "risk appetite"; and social skills, such as "interpersonal reactivity", "confidence" (Caliendo, 2008).

Entrepreneurial Motivations as Determinants of Youth Entrepreneurship Challenges: A Case of Business College in UAE

Authors	Results
Boone, Debrabander и Van Witteloostujin (1999)	Internal locus of control is an important feature of the entrepreneurship.
Brockhaus R. и Gasse (1985)	Most entrepreneurs have internal locus of control than the general population.
Brockhaus R. (1980)	Successful entrepreneurs have internal locus of control, and their families should prevail favorable relations.
Hansemark (1998)	The young people who participated in the entrepreneurial program have internal locus of control.

Table 1: Key findings of the study of locus of control in a group of entrepreneurs

Authors	Results
Kihlstrom and Laffont (1979)	Entrepreneurs tend to be more risk averse than others.
Iyigun and Owen (1998)	People are risk-averse, less likely to become entrepreneurs.
Stewart and Roth (2001)	Risk appetite is a sign of the individual, which should remain stable over time.
Begley and Boyd, Sexton and Bowman (1985, 1987)	High risk tolerance characteristic of entrepreneurs compared to non-entrepreneurs.
Wottawa and Gluminski (1992)	Risk appetite is an important and significant personality characteristics for successful entrepreneurship.
Smith and Miner (1983)	Have not revealed the difference between entrepreneurs and mom entrepreneurs.

Table 2: Key findings from risk appetite in the group of entrepreneurs

Authors	Results
Hansemark (1998)	Young people have a high motivation to achieve.
Babb and Babb (1992)	Motivation to achieve is one of the features that differentiate entrepreneurs from non-entrepreneurs
Rissal (1992)	Motivation to achieve is one of the seven most important factors in choosing a business career
Shaver and Scott (1991)	Motivation to achieve is really a measure of entrepreneurial behavior.
Johnson (1990)	Found a positive relationship between achievement motivation and entrepreneurship
Bonnett and Furnham (1991)	Young entrepreneurs have an internal locus of control and a strong belief in hard work than non-entrepreneurs, but no difference was found between groups in achievement motivation
Low and MacMillan (1988)	Have not set the differences in achievement motivation between entrepreneurs and non - entrepreneurs.

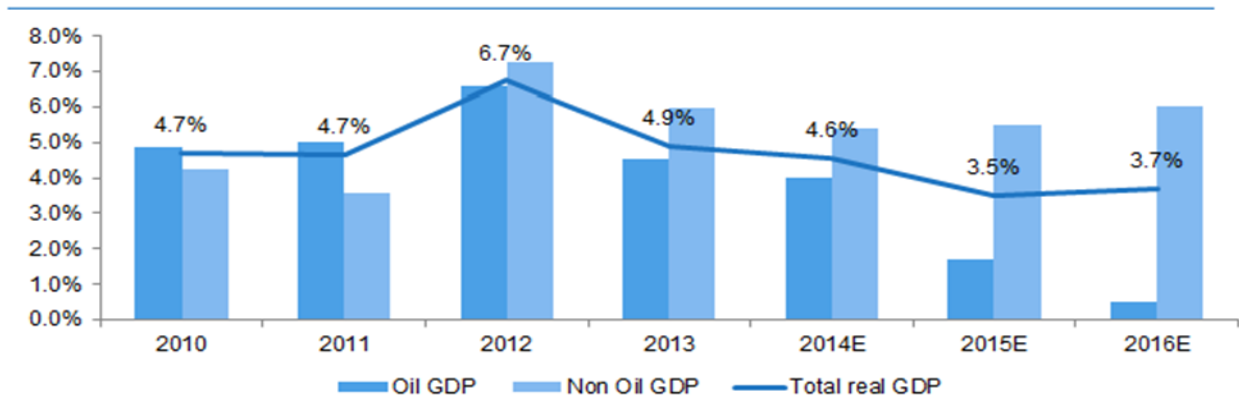
Table 3: Key findings of achievement motivation among entrepreneurs

United Arab Emirates: Innovation Ecosystem

The economy of the United Arab Emirates (UAE) has quickly gone from an economy based on oil to an innovative economy based on knowledge. In fact, high-tech industries and services now make up most of the UAE's GDP than the oil revenues, an increase from 32.1% in 2001 to 37.5% in 2012. Turning to the economy based on knowledge, and its diversified UAE positioning itself as a key player in the real estate, renewable energy and aviation; the country has also become a global center of trade and logistics, financial services and tourism. This was done at the expense of innovation and the pursuit of new developments.

Entrepreneurial Motivations as Determinants of Youth Entrepreneurship Challenges: A Case of Business College in UAE

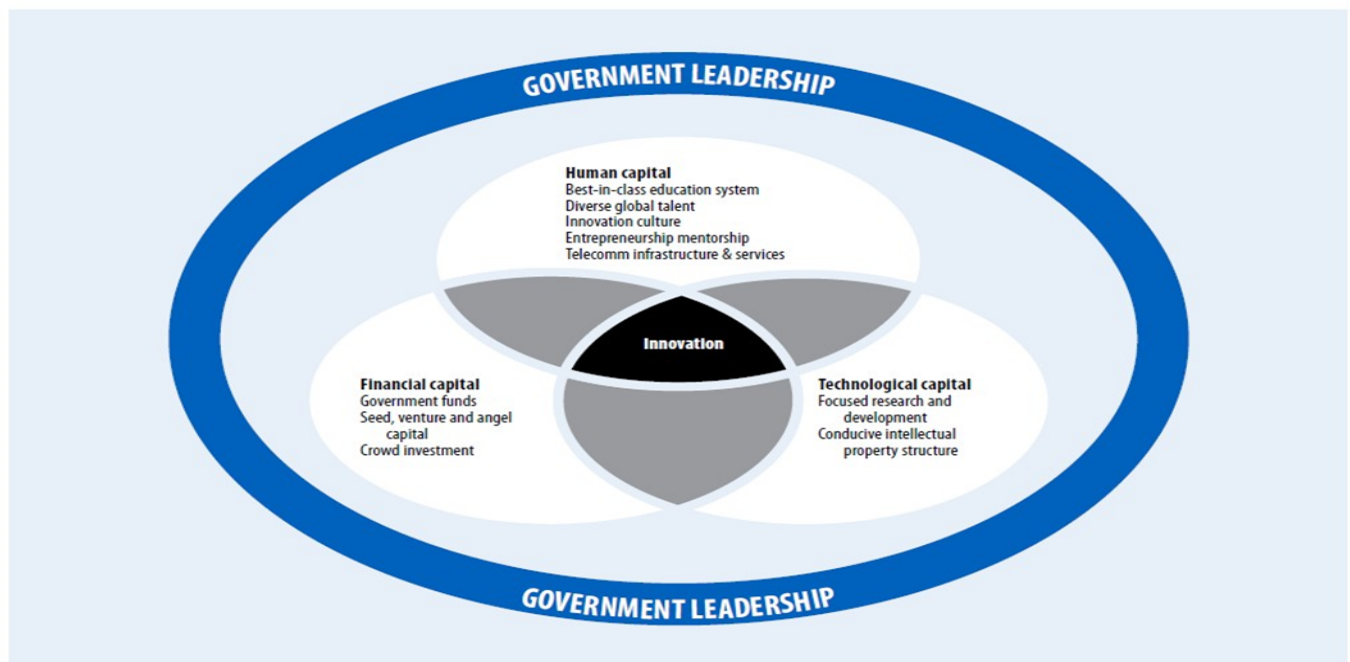
UAE's Real GDP Growth (% YoY)



Sources: IMF World Economic Report, October 2015, UAE National Bureau of Statistics, Aranca Research

The three pillars of the innovation ecosystem - it is human capital, financial capital and technological capital (Figure 1). UAE is actively working to promote innovation by means of targeted policies and initiatives aimed at the development of the human factor of the ecosystem, as well as key components of the human factor: the requirements of financial and technological capital.

Figure 1: The pillars of innovation in the UAE



Source: Strategy& analysis.

The government encourages innovation and cultural barriers to innovation, such as the fear of failure and unwillingness to take risks, can present serious difficulties. The number of such barriers in the UAE starts to decrease. Although, the work for government has historically been preferred by the native employment for UAE nationals, 71% of citizens of the United Arab Emirates age 35 years or younger at the moment tend to entrepreneurship (DIC, 2012). Women, in particular prefer entrepreneurship due of flexible working hours and the opportunity to work from home. In fact, the number of women entrepreneurs in the UAE involved in technology is higher than in other countries: women consist 35% of all such businesses in the region, compared to the global average of 10% (The Economist, 2013). The demographics of UAE reflects that the youth (age group 15 to 34 years of age) accounts for 42% of the total UAE national population, leading to a ‘youth bulge’ with a pool of approximately 400,000 young UAE nationals. Women account for approximately 50% of the UAE national youth population (National Bureau of Statistics, 2015).

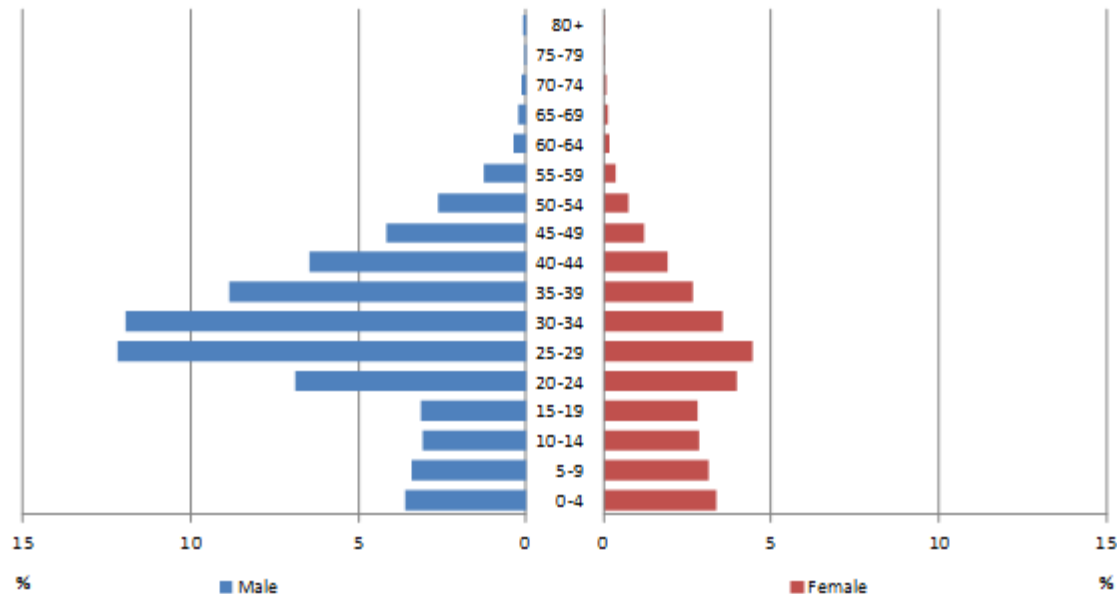


Diagram 1: Population pyramid for United Arab Emirates, 2010.

The presence of a large youth group in the demographic structure reflects a thesis that youth is an essential part of economy’s development now and in the future. This is directly related to UAE and GCC region where youth considers to be a significant section of population. UAE nationals account for 20% of the total population of the country and represent a size of approximately 1 million in the country (Statistics Agency, 2015).

Entrepreneurial Motivations as Determinants of Youth Entrepreneurship Challenges: A Case of Business College in UAE



In this context, supporting entrepreneurship and employability among youth is becoming a critically important to meeting government strategic aims.

Methodology

The research objectives are to identify the major motivators of the focus groups (graduates of College of Business at Zayed University, UAE) to be future active participators in the business; ascertaining the presence or absence of motivation; determination of the main reasons that respondents contribute to the successful development of business in UAE.

Focus groups are commonly known as less structured interviews, but there is more to them than merely collecting similar data from many participants at once. A focus group is a group discussion on a particular topic organized for research purposes (Kitzinger, 1994). Focus groups are used for generating information on collective views, and the meanings that lie behind those views. They are also useful in generating a rich understanding of participants' experiences and beliefs (Morgan, 1998).

The research was conducted in December 2016 covering the sample of 60 students from College of Business. By organizing this study, the key aim was to get at the quantitative and qualitative indicators on the subject, i.e. identify those words, the parameters that the respondents use in relation to the entrepreneurship; what are the main problems in entrepreneurial activity, how motivated they are and whether they focus on environmental and economic orientation. That is why the method of focus groups has been identified as the most productive in order to achieve this goal. The group in-depth interview is one of the so-called "flexible" or qualitative research methods. Its task is to form a list of so-called "hypothesis of existence", i.e. a list of opinions, estimates or statements that exist in society and have a non-zero degree of proliferation.

The study in nature was a carefully planned action which included successive discussions cycle. The purpose of the focus group was to help open up the participants and to find out what young people think and feel about entrepreneurship in UAE. For this purpose 5 focus groups have been formed and conducted. Participants in the focus group data have become the face of adolescents who study in higher educational institution in Abu Dhabi mainly on economic specialties.

Results

This study proved that entrepreneurial activity is allowed (or at least, is not excluded) by young people from the horizon of their own life plans. 81% of young people agree that the creation of their own business deserves a consideration and do not exclude the possibility in the future to engage in it. However, only 28% of recipients clearly bind the next life and career plans with a business. Among them, 19% are family members of the existing "fathers entrepreneurs" - young people who want to continue the work of their parents and have the opportunity to use the parent capital to start business; 9% are the initiative, young people from the middle class which focused on business "as a profession."

51% of respondents expressed a positive attitude towards entrepreneurship but do not connect it directly to real life plans. As can be seen from the results of the study, specification of the issue of opening their own business reduces the number of people willing to engage into entrepreneurial activities. Among life's problems, to start own company is only on the third place. Employment is in first place, security and marriage on the second. To the question "How likely is it that you become an entrepreneur in the near future?" Only 26% of respondents pointed that as a high, 36% - the average, and 38% - low. These results reflect the real willingness of young people to engage in their own business. In general, the results allow to distinguish three groups of young people on the degree of relevance of entrepreneurship as a life perspective. The first group - "outsiders". These include the number of young people (38%) which showed a low relevance to their business prospects. With great certainty we can assert that these people do not become entrepreneurs. The second group includes "not clearly defined", i.e. this category (36%) includes young people who in principle do not exclude the likelihood to do business. We can assume that these respondents, having no alternative and inner intentions, willing to engage in business activities at a favorable socio-economic conditions.

"Advanced" should be attributed to the third group. It includes those young people (28%), which connect the next life and career plans with entrepreneurship. We can likely argue that this number is the most accurate reflection of the actual state of affairs.

In the study, the percentage of respondents who want to start their own entrepreneurial activity was analyzed in the context of different social characteristics. For a start it should be noted that during the analysis of the readiness to engage in entrepreneurial activity in the context of factors, marital status and education level of respondents that affect the probability of choosing entrepreneurship as a short life perspective has been discovered. At the same time it was found that gender differences affect the willingness of young people to engage in entrepreneurial activities.

The results show that males are more inclined towards entrepreneurship. This can be explained by the widespread social gender expectations. The role of "breadwinner" encourages male representatives to entrepreneurship. It was also revealed that the mere fact of living in the city or in rural areas does not affect the presence or absence of the respondent's willingness to entrepreneurship. However, the presence of entrepreneurs in the immediate environment (including relatives and friends) acts as a serious additional factor of motivation for entrepreneurial activity. Moreover, if the presence of entrepreneurs among friends or relatives plays the role of a positive example, the ownership of the company by parents provide live coverage of their own business from generation to generation.

Determine the level and degree of readiness of young people to engage in their own business case, let us proceed to specify the content of entrepreneurial activity were the respondents willing to engage. The results of the focus groups indicate that the most readily

Entrepreneurial Motivations as Determinants of Youth Entrepreneurship Challenges: A Case of Business College in UAE

available niches for small and medium-sized businesses are trade (35%), maintenance services (27%) and real estate (21%). The last positions are occupied by organizing entertainment activities (9%), health care (5%) and industrial production (3%). Respondents quite realistic to note the types of business where they can earn fast capital and most importantly provide the possibility of entering into business without a large initial investments. It is important to indicate that potential young entrepreneurs offer a fairly traditional list of the desired types of entrepreneurial activity. This list is not visible youth specifics of business caused by the innovative potential respondents and the environmental and economic situation in the country.

The analysis revealed that potentially attractive quality sides of business associated by youth are not only inherent to entrepreneurship. Thus, the positions not directly related to the specifics of a particular business activity and lifestyle have been raised by the participants. Positions as "regular income" (35%) and "the possibility of self-realization" (20%) can also be obtained in other professional niches. The main attractive aspect inherent to the actual business activities, most of the respondents called "work for themselves and independence" (19%). Factor of labor freedom and independence is far ahead of other "pluses" of entrepreneurship. In addition, entrepreneurship is not bound by most of the respondents with the ability to get rich quick (only 9%). Sufficiently low rating (10%) has been received for the position of "social recognition" (prestige of the work, respect of others). It should be noted that only 7% of respondents noted "usefulness to society" as an attractive factor of entrepreneurship. This fact indicates the need for a focused and comprehensive work on the sharp increase in social prestige of entrepreneurship as a key resource of innovative and economic development of society. This may indicate a low social prestige of small and medium-sized businesses in spite of respectful attitude toward entrepreneurship by the majority of young people especially when compared, for example to a top management position in a large company.

The analysis of respondents' feedbacks made it possible to distinguish two groups of factors that contribute to the successful start of their own business activities: Environmental factors- These are the positions that are in relation to the subject of the nature of the external determination. In this case, the "real prospects of development of the country" (31%), support from the government "(28%) and Personal potential factors- It is included in the scope of capabilities and resources of the person, "the opening of a promising niche business development" (23%), "help from relatives, friends" (18%).

Another aspect that the study revealed is a significant difference of opinion between "not clearly defined" and "advanced" respondents regarding the basic conditions of the first steps in business. For the group "not clearly defined" respondents that are potentially ready to start their own entrepreneurial business, the actual problem is "how to start". They especially point to the need for support from the environment (the authorities, relatives, banks, etc.). For "advanced", i.e. those who are uniquely defined with a desire to do business, it is important to have the presence of "opening a promising niche of doing business" and "realistic prospect of development of the country." According to the respondents, the main reason which can negatively affect their decision to engage in their own business activities is the lack of finance for the "start". As noted by respondents, insufficient finance resources is a deterrent, while others do not go beyond external constraints and the "biographical situation." As a result, the problem of start-up capital is leading to a limited contingent of young entrepreneurs. Young people who have the ability and desire to engage in entrepreneurial activity face with insurmountable financial barriers.

The respondents specify some obstacles to entry to the market as economic unpredictability, high competition, and lack of development of entrepreneurial education. The evaluative aspect of entrepreneurship is not considered by young people as a way to get rich quick, as well as the achievement of social prestige. The main attraction side of the entrepreneurship by youth is called freedom - the possibility of autonomy in decision-making, creativity and lack of dependence on the owner. In general, all of the above suggests that the youth of UAE today has a certain attraction to entrepreneurship, to create their own business and actively engaged into. With the help of their own entrepreneurial activity, the youth plans to provide a decent financial situation and implement existing ideas and ambitions. Most of young people clearly distinguish those branches of knowledge that they need in the future to lead business activity. One of the questions in the focus group asked for those personal qualities that should have by a successful entrepreneur. The most important, according to the respondents is a systematic way of thinking; high creativity; availability of management skills and leadership qualities; high efficiency; the presence of positive attitudes; positive motivation; combination of social roles; adequate self-esteem; a high degree of self-control, organization and concentration; high resistance to stress.

According to the survey participants, not every young person who plans to engage in entrepreneurial activity has a full set of these properties and qualities. Therefore, to achieve the effect of involving young people in business, it is advisable within the framework of the educational environment to ensure the process of their formation and development. Among the facts that drive to become an entrepreneur, the following examples been noted: successful business activity (31%); targeted development of entrepreneurial thinking (25%); practical experience and knowledge (22%); the focus of training courses on the practical application (17%); other factors (5%), among which respondents noted: motivation of teachers to the practical orientation of their courses, interviews with the "experienced and successful entrepreneurs". Therefore, the respondents confirm the importance and necessity of inclusion in the educational process of all stages of the formation of entrepreneurial behavior.

Conclusions

Youth entrepreneurship in UAE is one of the key directions in the development of small business. Entrepreneurship and particularly entrepreneurship of young people in any society is a sign of progress. Youth entrepreneurship has an impact on the social, cultural and economic progress of any society.

The aim of the study was to examine the factors that motivate youth for being entrepreneurs and to start own business in the United Arab Emirates. The survey mainly focused on youth group representing business college graduates.

During the survey, entrepreneurship has been recognized as one of the most effective tools that accelerates the transition process of the country, especially the economy and socio-oriented sectors of modern UAE to an innovative way of development. A qualitatively new characteristics of the young business community: creativity, innovative thinking, social responsibility, creativity, independence, education are becoming the basic requirements of the time.

Youth entrepreneurship generates a significant impact on economy especially considering the fact of new jobs formation. The results indicate that the largest part of respondents agree that the creation of their own business. Among most important motivating factors are to have a self-

Entrepreneurial Motivations as Determinants of Youth Entrepreneurship Challenges: A Case of Business College in UAE

realization, independent work and a possibility to increase income. It has been concluded that entrepreneurship is due to four components:

Risk taking: the entrepreneur should be prepared to assess the risk that threatens its business activities and take it for themselves. Taking risk also confirms the fact to start a new activity. The reward for the risk is its revenue.

Identification of market opportunities: the entrepreneur must be able to perceive and realize personal capabilities that were previously unnoticed by others;

Implementation of innovation: the introduction of new ideas, products or services, the management process to be developed in business models and introduced on the market;

Finding and making use of resources: the identification of potential and effective use of available key resources (financial, social and human) will allow the entrepreneur to create competitive advantages in the market.

The study concluded that the current state of development of motivation to engage youth entrepreneurship is characterized by a focus on the identification of socio-cultural and socio-economic factors contributing to the successful implementation of this process. The model of formation of youth motivation to engage into business activities is disclosed in the socio-cultural context that is specified on three complementary levels: family and relatives, government and public, and finally education and academia. Summarizing, it is possible to assume that higher education institutions and colleges first in the row to create the necessary social and cultural conditions in preparation for entrepreneurial activity. This model opens up the prospect of empirical studies aspects of pedagogical management of the process of motivation formation to engage in entrepreneurial activity of youth population.

Thus, modern education is represented as an essential tool to actualize a young person to focus on entrepreneurial and creative sources that give the opportunity of finding unique individuality, spiritual and creative freedom.

A dominant limitation of the study is the relatively small number of participants in the study considering the case of data and findings interpretation but a large avenue for the future research of this increasing phenomena.

References

- Aaltonen S. and Akola, E. (2014), Lack of trust: the main obstacle for immigrant entrepreneurship? Retrieved from <http://pyk2.aalto.fi/ncsb2012/Aaltonen.pdf>
- Bosma, N., Hessels, J., Schutjens, V., Van Praag, M., & Verheul, I. (2012). Entrepreneurship and role models. *Journal of Economic Psychology*, 33(2), 410-424.
- Brister M. (2013). How to support youth entrepreneurship. Cipe development blog.
- Boone, B., Debrabander, B., & Witteloostuijn, V. (1999). The impact of personality on behavior in five Prisoner's Dilemma games. *Journal of Economic Psychology* 20(3), 343-377.
- Brockhaus, R. H. (1982). The psychology of entrepreneur. In C. A. Kent, D. L. Sexton, & K. H. Vesper (Eds.), *Encyclopedia of Entrepreneurship*: pp.39-71. Englewood Cliffs, NJ: Prentice Hall.
- Brockhaus, R. H. (1980). Risk-taking propensity of entrepreneurs. *Academy of Management Journal*, 23(3), 509-520.
- Begley, T. M., & Boyd, D. P. (1987). Psychological characteristics of associated with performance in entrepreneurial firms and small businesses. *Journal of Business Venturing*, 2, 79-83.
- Babb, E. M., & Babb, S.V. (1992). Psychological traits of rural entrepreneurs, *Journal of Socio-Economics*, 21(4), 353-362.
- Bonnet, C., & Furnham, A. (1991). Who wants to be an entrepreneur? A study of adolescents interested in a young enterprise scheme. *Journal of Economic Psychology*, 12, 465-478.
- Cantillon R. (1952). *Essai sur la nature du commerce en général*. Paris: réédition INED.
- Casson M. (1991). *L'entrepreneur*. Paris: Economica.
- Chell, E., Haworth, J., & Brearley, S. (1991). *The entrepreneurial personality: Concepts, cases, and categories*. London, New York: Routledge.
- Cromie, S., & Johns, S. (1983). Irish entrepreneurs: Some personal characteristics. *Journal of Occupational Behavior*, 4, 317-324.
- Chigunta, F. (2002). Youth Entrepreneurship: Meeting the key policy challenges. Retrieved from yesweb.org/gkr/res/bg.entrep.ta.doc
- Caliendo M., & Kritikos A. (2008). Is entrepreneurial success predictable? An ex- ante analysis of the character-based approach. *Kyklos*, 61, 189-214.
- Cleand M., & Jens, D.C. (2010). How to build an enabling environment for youth entrepreneurship and sustainable enterprises. Paper for the knowledge sharing event on Integrated Youth Employment Strategies, Moscow 17-19 February.
- Drucker P. F. (1985). *Innovation and Entrepreneurship*. London: Pan Books Ltd.
- DIC (Dubai Internet City) in collaboration with Frost & Sullivan. 2012. The role of entrepreneurship and small and medium enterprises (SME) in the Development of the ICT Industry. Dubai: DIC. Retrieved from <http://www.in5.ae/resources/download/dic.pdf>.
- Hansemark, O. C. (1998). The Effects of an entrepreneurship programme on need for achievement and locus of control of reinforcement. *International Journal of Entrepreneurial Behavior and Research*, 4(1), 28-29.
- Hisrich, R. D. (1990). Entrepreneurship/ Intrapreneurship. *American Psychologist*, 45(2), 209-222.
- Herrington, M., Kew, J., & Kew, P. (2009), Global Entrepreneurship Monitor. South African Report. Retrieved from <http://www.gbs.nct.ac.za/gbswebb/userfiles/gemsouthafrica2000pdf>
- Iyigun, M. & Owen, A. L. (1998). Risk, entrepreneurship and human capital accumulation. *AEA Papers and Proceedings*, 88(2), 454-457.
- Kelley, D. J., Ali, A., Brush, C., Corbett, A. C., Majbouri, M., & Rogoff, E. G. (2012). Global Entrepreneurship Monitor (GEM). United States Report, GEM Consortium.
- Kelly D., Bosma N., & Amoros J. E. (2010). Global Entrepreneurship Monitor. Global Report. GERA, 2011.

Entrepreneurial Motivations as Determinants of Youth Entrepreneurship Challenges: A Case of Business College in UAE

- Kelley, D. J., Singer S., & Harrington, M. (2011). Global Entrepreneurship Monitor. Global Report
- Kew J., Herrington M., & Litovsky Y. (2013). Generation Entrepreneur? The state of global youth entrepreneurship.
- Kitzinger J. (1994). The methodology of focus groups: the importance of interaction between research participants. *Social Health Illn.* 16, 103-21.
- Kihlstrom, R. & Laffont, J. J. (1979). A general equilibrium entrepreneurial theory of firm formation based on risk aversion. *Journal of Political Economy*, 719-748.
- Lewis, K., & Massey, C. (2003). Youth entrepreneurship and government policy. New Zealand Centre for SME Research, Massey University.
- Low, M. & MacMillan, I. (1988). Entrepreneurship: Past research and future challenges. *Journal of Management*, 35, 139-161.
- Morgan, D. L. (1998). *The focus group guide book*. London: Sage Publications.
- Rissal, R. (1992). A study of the characteristics of entrepreneurs in Indonesia. Dissertation, George Washington University, EDD 1988 DAI-A 49/06 P.1516
- Say J. B. (1996). *Cours d'économie politique*. Paris: Flammarion.
- Sathiabama, K. (2010). Rural women empowerment and entrepreneurship development. Retrieved from <http://www.microfinancegateway.org/ga>
- Schumpeter, J.A. (1934). *The Theory of economic development*. Cambridge, Mass.: Harvard University Press.
- Sexton, D. L., & Bowman, N. (1985). The entrepreneur: A capable executive and more. *Journal of Business Venturing*, 1, 129-140.
- Shaver, K. G., Williams, S. L., & Scott, L. R. (1990). Entrepreneurial beliefs, creativity, and risk-taking: Personality or situation? Unpublished manuscript. College of William & Mary.
- Smith, N. R., & Miner, J. B. (1983). Type of entrepreneur, type of firm, and managerial motivation: Implications for organizational life circle theory. *Strategic Management Journal*, 4, 325-340.
- Stewart, W. H., & Roth, P. L. (2004). Data quality affects meta-analytic conclusions: A response to Miner and Raju (2004) concerning entrepreneurial risk propensity. *Journal of Applied Psychology*, 89, 14-21.
- The Economist (2013). Arab Women Entrepreneurs, Untraditional Choice: The Middle East Beats the West in Female Tech Founders'. Retrieved from <http://www.economist.com/news/business/21581740-middle-east-beatswest-female-tech-founders>.
- UAE National Bureau of Statistics. Retrieved from <http://www.uaestatistics.gov.ae>
- Wottawa, H. & Gluminski, I. (1992). Quantitative Methoden anwendungsorientierter Forschung. In: L. v. Rosenstiel, C.M. Hockel und W. Molt (Hrsg.). Handbuch der angewandten Psychologie: Grundlagen Methoden - Praxis, S. 1-15. Landsberg/Lech: Ecomed.

Measuring the Efficiency of Colleges Using Data Envelopment Analysis

Teg Alam

College of Business Administration,
Prince Sattam Bin Abdulaziz University, Al Kharj
Kingdom of Saudi Arabia

Abstract

Universities play a significant role in the development of a community and the nations as well as being hubs for producing systematic and scientific knowledge which supports the development of quality life and economy of the nation. This paper illustrates the application of Data Envelopment Analysis (DEA) to measure the efficiency of 20 colleges of Prince Sattam bin Abdulaziz University (PSAU). The input variables used in this study are the registered students and the academic staff. The output variables are graduates and research papers. The data for this study was collected for the year 2014-2015 and the data was obtained from the University Statistics Department. In this paper, we evaluate the efficiency scores of all colleges based on the Scale Efficiency Measurement (output oriented) model. The DEA tool assists academics and administrators to identify the inefficiencies and develop the optimal strategies to eliminate them.

Keywords: Data Envelopments Analysis, Academic Colleges, Efficiency, Al Kharj

Introduction

The key task of the university is to explore and communicate knowledge and awareness. The present Prince Sattam Bin Abdulaziz University, formerly known as Al-Kharj University, was established in 1430 HC by transferring the different colleges of King Saud University, which existed in five governorates of Riyadh region (Al-Kharj, Hootah bani Tamim, Al-Aflaj, Al-sulail and Wadi Al-Dawasir) to an independent university.

The diversified approaches have been used to estimate the performance of colleges. Data Envelopment Analysis (DEA) is the most common and well-known tool for measuring the efficiencies of schools, hospitals, and universities etc.

DEA was developed by Charnes, Cooper and Rhodes (1978) to evaluate the efficiencies of nonprofit and public sector organizations. Applications of the DEA tool have been used in the context of university's colleges or courses for measuring efficiency (Abbott, 2003; Agha, Kuhail, Abdul Nabi, Salem, & Ghanim, 2011; Johnes & Johnes, 1995; Johnes, 2006; Johnes, 1996).

Also DEA techniques are used to evaluate the relative efficiencies among universities (Kao & Hung, 2008; Köksal & Nalçaci, 2006; Bougnol & Dula, 2006; Moreno & Tadepalli, 2002).

General DEA Model

Suppose that there are 'n' Decision making units (DMUs), where, m inputs and s outputs, the efficiency of DMU_r is achieved by solving the following model:

(A. Charnes, W. W. Cooper, and E. L. Rhodes ,1978).

$$\begin{aligned} \max \quad w_r &= \frac{\sum_{k=1}^s v_k y_{kr}}{\sum_{j=1}^m u_j x_{jr}} \\ \text{s. t} \quad &\frac{\sum_{k=1}^s v_k y_{ki}}{\sum_{j=1}^m u_j x_{ji}} \leq 1 \quad ; \quad \forall i; \quad i = 1, 2, 3, \dots, n \\ \text{and} \quad &v_k, u_j \geq 0 \quad ; \quad \text{for all } k, j \end{aligned}$$

Where

y_{ki} = quantity of output 'k' formed by DMU_i

x_{ji} = quantity of input j consumed by DMU_i

v_k = weight for output k,

u_j = weight for input j.

The aforementioned fractional program can be converted to a linear program (A. Charnes, W. W. Cooper, and E. L. Rhodes, 1978) as given below.

$$\begin{aligned} \max \quad w_r &= \sum_{k=1}^s v_k y_{kr} \\ \text{s. t.,} \quad &\sum_{j=1}^m u_j x_{jr} = 1 \\ &\sum_{k=1}^s v_k y_{ki} - \sum_{j=1}^m u_j x_{ji} \leq 0 \quad ; \quad \text{for all } i \\ &\text{and } v_k, u_j \geq 0 \quad ; \quad \text{for all } k, j \end{aligned}$$

If, $w_r = 1$, then DMU_r is efficient relative to other units. If, $w_r < 1$, then the DMU is inefficient. Later, the BCC model (Banker, R.D., Charnes, A., Cooper, W.W., 1984) modified the original CCR linear programming by adding a convexity constraint.

A measure of Technical efficiency (TE) for a DMU_r defined as $\theta_r^{output} = \text{Actual output}_r / \text{Maximum possible output}_r$ in output-oriented model. The scale efficiency (SE) measurements achieved by comparing the ‘technical efficiency measurements’ formulated under the assumptions of CRS (constant returns to scale) and VRS (variable returns to scale). As aforementioned, the technical efficiency measurement associated with CRS assumption, represents overall technical efficiency (OTE). The technical efficiency measurement associated with VRS assumption represents pure technical efficiency (PTE). The term “OTE / PTE” brings a scale efficiency measurement.

Data

The sample used in this study covers twenty colleges of the university. The data for this study was collected for the year 2014-2015 and was obtained from the University Statistics Department. In this research, we used DEA Software (DEAOS) to calculate the efficiency scores of all colleges based on the Scale Efficiency Measurement (output oriented) model.

Results and Discussion

The data given in Table-1 is known as Descriptive Statistics.

	Number of Students enrolled	Number of teaching staff	Number of graduates	Number of researches
Minimum	164	12	7	1
Maximum	4177	232	525	35
Mean	1319	104	173	11
Standard Derivation	1134	57	157	10

Table: 1 Descriptive Statistics

The efficiency scores obtained by different colleges are displayed in Table 2.

DMUs	Colleges	Efficiency Scores
DMU1	College of Education, Al kharj	92%
DMU2	College of Business Administration, Al kharj	99%
DMU3	College of Science & Humanities, Al kharj	85%
DMU4	Community College, Al kharj	100%
DMU5	College of Applied Medical Science , Al kharj	92%
DMU6	College of Pharmecy	100%
DMU7	College of Engineering & Computer Science, Al kharj	100%
DMU8	College of Engineering , Al kharj	98%
DMU9	Medical College	100%
DMU10	Dental College	87%
DMU11	College of Education, Al Delam	100%
DMU12	College of Science & Humanities, Huta	100%
DMU13	College of Business Administration, Huta	84%
DMU14	College of Science & Humanities, Aflaj	95%
DMU15	Community College, Aflaj	43%
DMU16	College of Science & Humanities, Al Sulel	99%
DMU17	College of education, Wadi Al Dawasir	100%
DMU18	College of Arts and Science , Wadi Al Dawasir	87%
DMU19	College of Engineering , Wadi Al Dawasir	85%
DMU20	College of Applied Medical Science , Wadi Al Dawasir	42%

Table 2: Efficiency Score of the Colleges

Measure the Efficiency of Colleges Using Data Envelopment

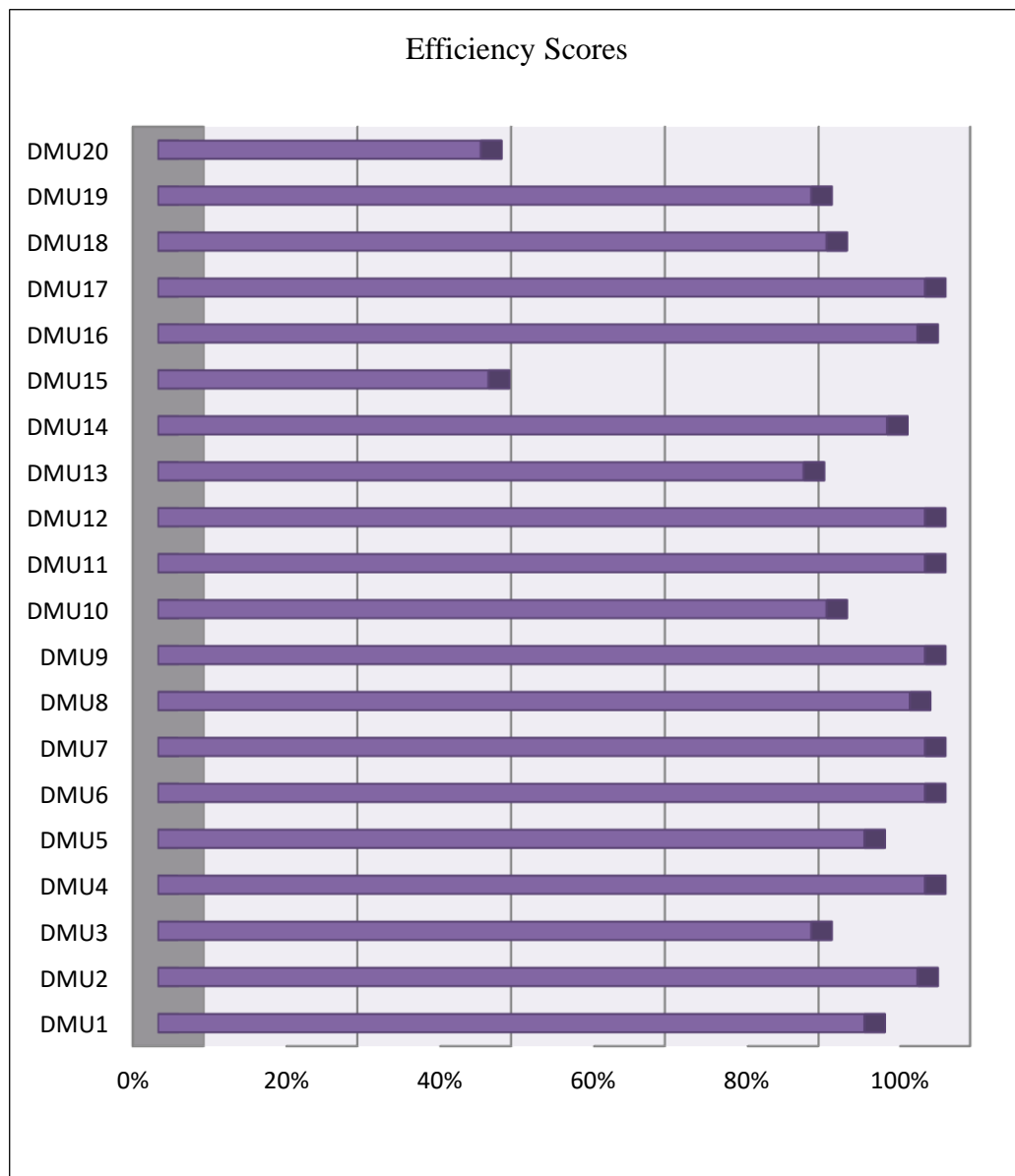


Figure 1: Efficiency Score of the Colleges

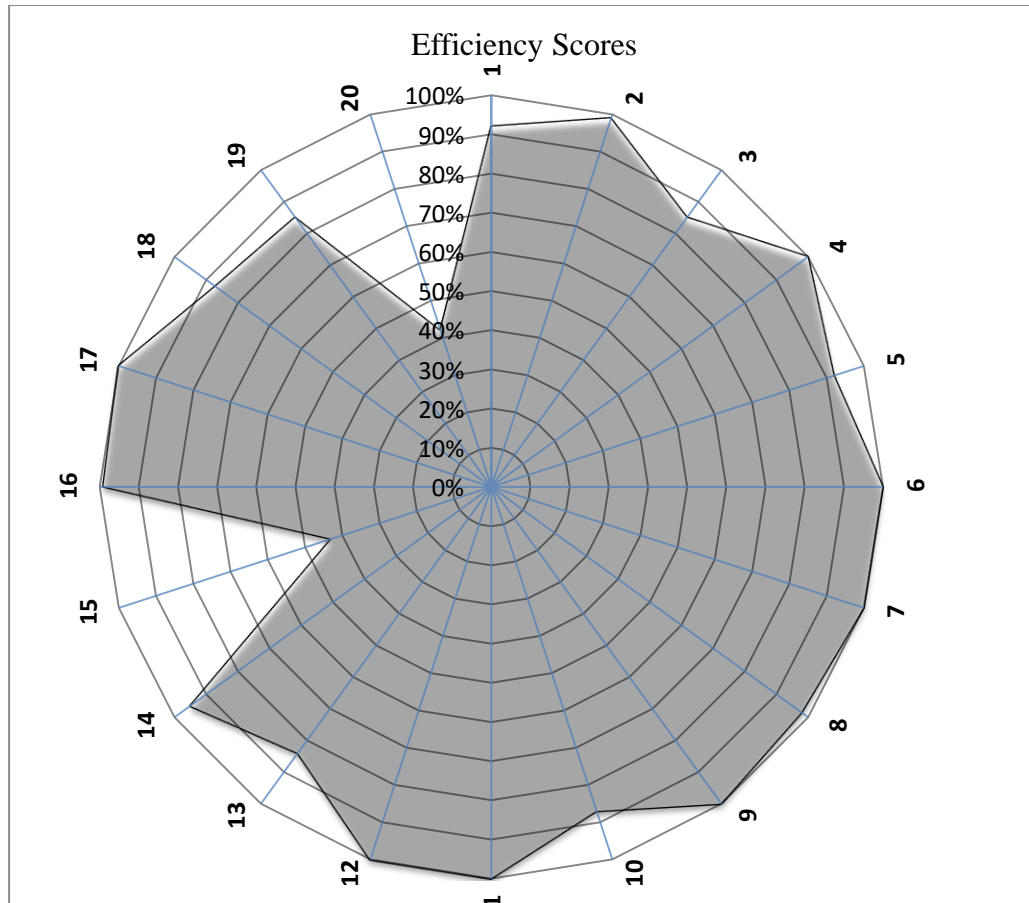


Figure 2: Efficiency Score of the Colleges

The colleges that achieved coefficient scores equal to 100%, were regarded as efficient ones. It means that they are efficient in utilizing their resources to produce all the defined outputs. Most of the colleges are nearest to 100% which shows that all the colleges will become efficient very soon. The results reveal that only two colleges achieved scores below fifty percent which requires them to focus more attention to reallocation of the resources to utilize them efficiently. This paper suggests that almost all colleges utilize their resources efficiently in producing graduates as well as research outputs. The findings of the paper are useful and important for the university administrators and policy makers which can help them in making decisions and managing their resources. The efficient colleges can be regarded as the model and benchmark for the other colleges.

Conclusion

The Ministry of Education in the Kingdom of Saudi Arabia is making all efforts towards the growth of the Nation regarding education and producing the best qualified cadres who can contribute to the development of the country and can compete successfully in this era of the competitive environment.

This study uses the DEA techniques to assess the efficiency of 20 colleges at Prince Sattam bin Abdulaziz University for the academic year 2014-2015. The results showed that approximately fifty percentage colleges are efficient in term of scale efficiency measurement (output Oriented) models. This means that the colleges are efficient in utilizing their resources to produce all the defined outputs. The efficiency scores indicate that which college needs improvement. The enhancements can be reached by either decreasing the inputs or increasing the outputs.

Most of the colleges have reached the range between 90% - 100% scores. Since some colleges are inefficient, the university administration is advised to be focused on them and develop the strategies to minimize their inadequacies. Despite the PSAU is a recently established university, it is growing and developing very fast. From the analysis, it was observed that the PSAU administrators are capable to identify the colleges that are inefficient in utilizing their resources. Also, it is recommended to reallocation of resources as it can increase the average efficiency score of the colleges.

Overall, we conclude that PSAU is growing rapidly in terms of production of graduates, teaching excellency, scientific research, efficiency of employees and infrastructure.

References

- Abbott, M. (2003). The efficiency of Australian universities: a data envelopment analysis. *Economics of Education Review*, 22(1), 89-97. doi:10.1016/s0272-7757(01)00068-1.
- Agasisti, T., Catalano, G., Landoni, P., & Verganti, R. (2012). Evaluating the performance of academic departments: an analysis of research related output efficiency. *Research Evaluation*, 21(1), 2-14.
- Agha, S. R., Kuhail, I., Abdul Nabi, N., Salem, M., & Ghanim, A. (2011). Assessment of academic departments efficiency using data envelopment analysis. *Journal of Industrial Engineering and Management*, 4(2), 301-325.
- Banker, R. D., Charnes, A., & Cooper, W.W. (1984). Some models for the estimation of technical and scale inefficiencies in Data Envelopment Analysis. *Management Science*, 30, 1078–1092.
- Bougnol, M. L., & Dulá, J. (2006). Validating DEA as a Ranking Tool: An Application of DEA to Assess Performance in Higher Education. *Annals of Operations Research* 145, 339-365.
- Charnes, A., Cooper, W. W., & Rhodes, E. L. (1978). Measuring the Efficiency of Decision Making Units. *European Journal of Operational Research* 2, 429–444.
- Johnes, J., & Johnes, G. (1995). Research Funding and Performance in U.K. University Departments of Economics: A Frontier Analysis. *Economics of Education Review* 14, 301-314.
- Johnes, J. (2006). Measuring Teaching Efficiency in Higher Education: An Application of Data Envelopment Analysis to Economics Graduates from UK Universities 1993. *European Journal of Operational Research* 174, 443-456.
- Johnes, J. (1996). Performance Assessment in Higher Education in Britain. *European Journal of Operational Research* 89, 18–33.
- Kao, C., & Hung, H. T. (2008). Efficiency analysis of university departments: An empirical study. *Omega*, 36(4), 653-664.
- Köksal, G., & Naçacı, B. (2006). The relative efficiency of departments at a Turkish engineering college: a data envelopment analysis. *Higher Education*, 51(2), 173-189.
- Moreno, A. A., & Tadeipalli, R. (2002). Assessing academic department efficiency at a public university. *Managerial and Decision Economics*, 23(7), 385-397.

Strategic Utilization of Student-Selected Media to Encourage Reflection in General Education Science Classes

Eddia Solas

Abu Dhabi Men's College
Higher Colleges of Technology
General Studies Dept.
Abu Dhabi, UAE

Abstract

Allowing students to participate in their assessment has been known to increase student motivation and achievement. Students may be involved in their assessment by choosing the time, type, weight, number, area and criteria. Student autonomy in one or more of these assessment factors makes assessment student-centered and moves away from the one-size-fits-all paradigm. This shared autonomy of assessments empowers students, and it has the potential to increase self-efficacy, engagement with course content and positive behavioral changes. This paper relates the results of encouraging students' reflections on the role of social, economic and environmental sustainability in their society. Students were allowed to choose the medium of expression for their reflection, though they were assessed based on teacher-formulated rubric criteria. Media utilized by students included art, music, video, infographics, physical models and essays. The results showed that allowing students' autonomy over the means of expression of their cognitive models encouraged deeper engagement with content material and reflection on science in their personal space, which may later translate to positive environmental behavior changes.

Keywords: Assessment, General Science Education, Student Autonomy

Introduction

General Education Science classes are normally taken by non-science majors in the early years of their university academic careers. Many of these students, though highly talented in other areas, exhibit little or no interest in science as a subject. They resort to memorizing a few facts in order to obtain a passing grade in the course(s), and it is doubtful that the information gathered results in meaningful behavioral changes or attitudes towards current global scientific issues. This mindset defeats the aims of most General Education Science programs, which include widening students' interest and understanding of the world around them, and increasing students' awareness and knowledge of global scientific issues (McConnell, Steer, & Owens, 2003; Solas & Wilson, 2015).

One of the ways in which teachers can motivate students to learn science is to allow them to participate in how they are assessed. The ability to express oneself according to one's strength is enabling. Traditionally students who do well at logical-mathematical thinking and linguistic intelligence are successful in scholastic activities, probably because these skills are easily tested using multiple choice and short answer responses.

...the ability to fashion a product – to write a symphony, execute a painting, stage a play, build up and manage an organization, carry out an experiment – is not included... (Gardner & Hatch, 1989)

Allowing students to participate in their assessment has been shown to increase student motivation and achievement. Students may be involved in their assessment by choosing the time, type, weight, number, area and criteria. Student autonomy in one or more of these assessment factors makes assessment student-centered and moves away from the one-size-fits-all paradigm.

Just because one standardized test is fair for all, does that make it the right thing to do for all? Different students have different abilities and those types of things cannot be standardized. How is it fair to measure performance of a student if they do not perform well in that way? (Fleet, 2016)

The rationale behind students having a choice in how they are assessed stems from having each individual learner's needs being met. According to the theory of multiple intelligences (Gardner & Hatch, 1989) we all have different cognitive strengths and weaknesses and this influences how we learn, how much we learn and how we showcase what we learn. If we learn differently then we also communicate our knowledge and understanding in different ways, based on our experience, culture and natural abilities. We should therefore be assessed on our learning using different methods. Equity in assessment does not mean that we all are assessed in exactly the same way. As figure 1 suggests, using standardized tests in order to ensure equity in assessment may result in alienating those who do not possess particular skills (Fleet, 2016). As such, instructors who are interested in having a holistic picture of student learning, need to allow students to illustrate their cognitive models in ways that are comfortable and reflective of the intelligence of the student. This shared autonomy of assessments empowers students, and has the potential to increase self-efficacy, engagement with course content and positive behavioral changes.

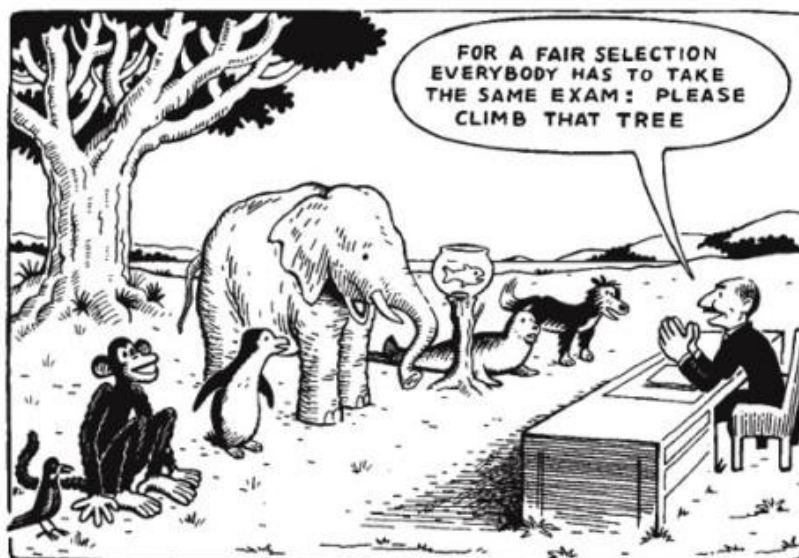


Figure 1: https://breakthestandard.files.wordpress.com/2012/05/testing_cartoon.jpg?w=479

This paper describes the deliberate use of student input in the selection of assessment media in order to accomplish what Gardner and Hatch (1989) describe as “intelligence fair” assessment – assessment which endeavors to give credence to the different modes of thinking and performance which differentiates each intelligence.

Method

A class of twenty (20) male students majoring in information technology and applied communications were invited to choose their most comfortable medium to reflect on the content of a sustainability course. This assessment comprised 30 % of the total course grade. The grading rubric was common to all students and selected by the teacher. Submissions were graded according to the following categories: Reflection- management of learning through reflection; Organization- organization, structure and style; Subject knowledge- understanding and application of subject knowledge and underlying principles; Explanation, description, and/or justification- logical reasoning, supported backup and critical thinking; compare and contrast.

Each student was invited to reflect on what he considered the most salient aspects of the course, using either videography, photography, infographics, physical models, music, essay, art, animation or mixed media. In creating the exercise, the instructor hoped answers to the following questions would be revealed: 1. What knowledge have students gained from the course on Sustainability? 2. How much of this knowledge results in change of attitudes towards environmental concerns? 3. How can students’ cognitive models best be represented? 4. How can critical thinking and innovation be encouraged using the subject matter? 5. How can student centered assessment be incorporated into student-centered teaching/learning?

Results

The projects collected from the students included videos, physical models, infographics, essays and a song with both original music and lyrics. Although almost half the class submitted videos, the videos ranged in type from time lapse drawings to animations, documentary films and news reports. Despite the fact that no quantitative study was made of the data, it was noticed that students who were more detailed and had higher quiz scores produced better quality projects. Students obviously enjoyed doing their projects and were eager to see their scores. Most students saw the project as a reflection of their individual capability and were proud of their achievements. The instructor noticed that the final exam scores, which came in after the projects were submitted, were significantly better than the midterm scores, before the project. This was unusual as most classes do better on coursework exams than on final exams. It is possible that student understanding of the material increased after carrying out the reflective assignment. Figures 2 and 3 provide examples of students' work.

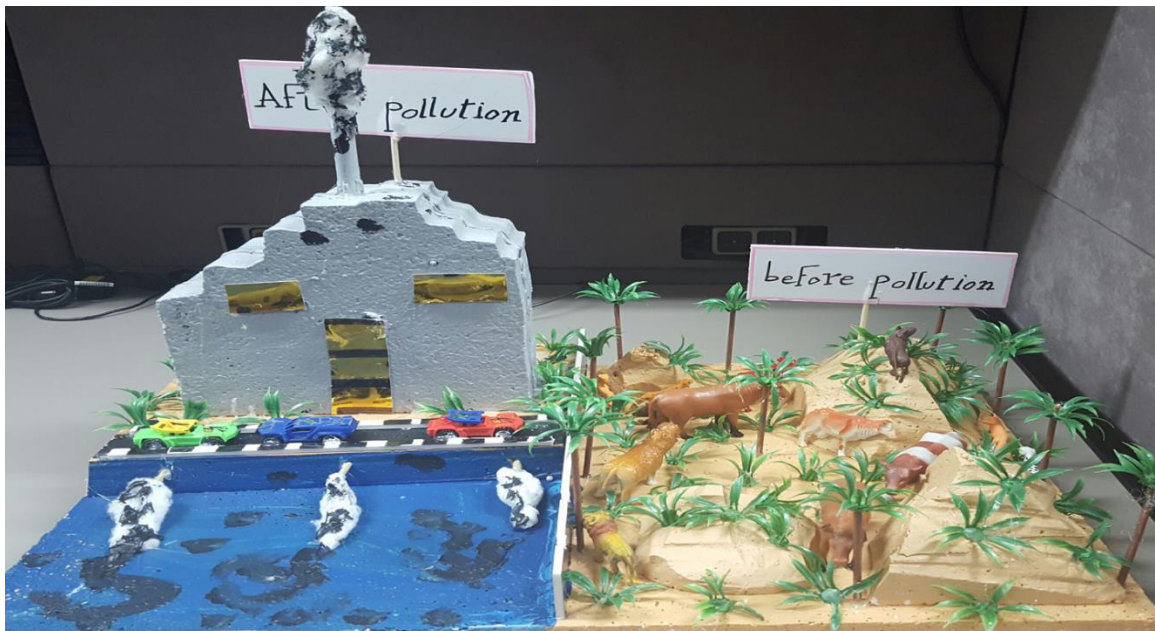


Figure 2: Sample of student model

Verse 1

Money, power, greed, words contradicting sustainability
Our world's depleting, resources are finite
We've become poison just like cyanide
Listen just picture this
Most of us living not knowing s**t
7 billion people on this planet you don't need to be calculating its obvious man
how all we just keep consuming, with the media looking for a bigger audience
man I'm calling this out
Let me explain in more detail put it in frame for you to inhale
With three pillars turned upside down... I've been thinking now
I've been thinking how we've been living how we keep on taking but not giving
They extract, obliterate the environment, pollute and annihilate while we're
sitting in silence
Produce the chemicals and who's to tell them no?
Refuse? Unacceptable. Consume and just let it go
And consume we do leaving our lives screwed
We abuse our world, our people and thus the economy
And it bothers me

Chorus

Have you seen what life can be?
Have you seen it from my eyes?
Oh have you seen what life can be?
Oh can't you see it with your mind?

Verse 2

The statistics are clear, our world is troubled
Leaving many of us confused, worried and puzzled
But there ain't no problem that can't be solved
This is our home and we're all involved
The answer is quite simple; we turn a linear system into a cycle
Changing our ways is vital here's the answer if you're asking me how though
Don't kill for no reason or hunt out of season
Recycle the pieces of paper don't leave it
Reduce the pollution the air that we breathe in
Not wasting no water no power till feeling
We give rights to the people till divers and equal
It sucks to be treated unfairly of evil
Its time to wake up raise our voice now we're screaming
Together for a better world we believe in

Figure 3: Student sample – lyrics to song

Conclusion

The instructor noticed several benefits as a result of the exercise. These included 1. Students exhibit greater self-efficacy when expressing themselves through a medium they select and feel comfortable with. 2. Students relish the opportunity to make a contribution towards their method of assessment. 3. Organization and deep reflection on main ideas that is, proper planning and critical thinking, needs to take place for a student to properly represent his cognitive model. The assignment encouraged more and deeper reflection on content rather than regular lectures. Students were forced to engage the content fully to express themselves through the chosen medium properly. 4. External representations of students' mental models made formative assessment easier for the instructor, in assisting in the evaluation of the quality of student learning. 5. Students' level of engagement with course material was reflected in their output (more engaged students expressed greater content knowledge, synthesis of ideas and knowledge application). 6. Students were forced to engage the content to fully express themselves which resulted in increased effort on tasks and greater focus on the significant points of the course.

References

- Fleet, B. (2016). What is right, and what is fair.... Retrieved from <https://againstthetest.wordpress.com/>
- Gardner, H., & Hatch, T. (1989). Educational implications of the theory of multiple intelligences. *Educational researcher*, 18(8), 4-10.
- McConnell, D. A., Steer, D. N., & Owens, K. D. (2003). Assessment and active learning strategies for introductory geology courses. *Journal of Geoscience Education*, 51(2), 205-216.
- Solas, E. C., & Wilson, K. (2015). Lessons Learned and Strategies Used While Teaching Core-Curriculum Science Courses To English Language Learners At A Middle Eastern University. *Journal of Turkish Science Education*, 12(2).