An alternative pedagogical approach to traditional teaching in Higher Education in the UAE: Student Engagement

Submitted by Racquel Warner to the University of Exeter as a thesis for the degree of Doctor of Education in TESOL, April 2016

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"Knowledge is power for those who can use it to change their conditions." Ira Shor

Racquel Warner

Abstract

Low student achievement and decreasing student engagement have provoked a call for pedagogical change in the UAE. In an attempt to address these challenges an intervention was introduced that consisted of an alternate pedagogical approach in the form of standards-focused project-based learning which is an active-learning approach where students drive their own learning through the completion of a project(s) that promotes inquiry, standards alignment, and collaborative research. This action research study sought to analyse the effectiveness of this alternate approach by answering two research questions using by collecting and analysing both quantitative and qualitative data. The first research question was: what kind of change can be brought about by engaging students in a student-focused and active learning environment by the design and implementation of a standards-focused project-based learning model? The second research question was: what is the difference in exam scores between students in a lecture-based class and students in an active-learning class that utilizes a standards-focused project-based learning curriculum? In response to these research questions, statistical significance was found in the difference between the mean examination scores of the Foundation course experimental section and the Foundation course control section. No significance was found when comparing the mean examination scores of the First year education experimental section with the first year education control section. Four primary themes were identified through thematic content analysis of the feedback shared by the participants during the focus groups. The four themes were (a) connection between teaching style and performance, (b) students' preparedness for exam, (c) positive influence of peer pressure and (d) students driven by an external locus of control

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Chapter 1: Introduction

1.1 Nature of the Problem

Tertiary Education in the UAE has consistently been cited by the Ministry of Education as the driving force of economic growth and the source of social development. However, a common misperception at the macro level is to regard tertiary education as simply a continuation of secondary level education. Research about education in the United Arab Emirates (UAE) over the past decade has repeatedly shown that traditional pedagogical approaches do not adequately cater to the needs of university students in this country (Ridge, 2010). I have observed that the philosophy and curriculum that guide the interaction between students and lecturers establishes distance, confines learning to the classroom and fails to stimulate and engage students. This seems to be a carryover from the secondary school system which does not adequately prepare students for tertiary education, so students enter university through a deficit model labeled as foundation or bridge programme. In my interactions over the past 10 years with some university students in the UAE, they view their education as boring or they take a minimalist approach to their learning and expend just enough effort to get a passing grade. Others attend classes physically, but mentally they do not become engaged and fail to become involved in the learning process. Scholarly articles and media reports alike, seem to indicate that a common reason some students dropped out of school was because of boredom with what was being done in the classroom, dissatisfaction with the way teachers taught or with the school system in general. The dropout rate among 20-24 year olds in Dubai is 24% when compared to OECD countries which have a rate of 15% (Al Marri and Al Helal, 2011). There is increasing concern among faculty at some Higher Education campuses, about the escalating levels of students who feel disconnected, alienated and undervalued by the institutions which they attend. In response to this challenge Al Sulayti (1998) advocated an educational context in the UAE where "materials are flexible and relevant enough to stimulate students" to become engaged in the learning process (cited in ECSSR, 1999). Despite many efforts since the 1990's to address the disengagement among students, for various reason, a sustained flexible and stimulating approach to student engagement has not been implemented. Some of these reasons will be presented in chapter 2.

1.2 Defining Student Engagement

An operational definition of student engagement is difficult to find. Some researchers posit that educators know it when they see it and they know when it is absent from a student's experience (Newmann, 1992). Kuh (2009) suggests that engagement refers to the quality of effort and participation students expend in authentic learning activities. This might manifest in different ways depending on the context and the task. A more theoretical definition grounded in socio-educational theory is posited by Vibert and Shields (2003), who state that student engagement is a continuum ranging from relatively rational and technical approaches to those that are more constructivist, to those reflecting critical democratic worldview. They go on to propose that student engagement is a descriptive continuum which progresses from the rational through the interpretive, to a more critical understanding. This view of student engagement suggests active learning. Schlechty (2002) supports this notion as he suggests that the necessary variables for engagement are

students' attention, commitment to the task, enthusiasm and diligence. These characteristics will result in students finding inherent value in what they are doing (p.64).

Although definitions of student engagement vary considerably within the literature, Skinner and Belmont (1993) posit the following:

> The opposite of engagement is disaffection. Disaffected [students] are passive, do not try hard, and give up easily in the face of challenges… [they can] be bored, depressed, anxious, or even angry about their presence in the classroom; they can be withdrawn from learning opportunities or even rebellious towards teachers and classmates (p. 572).

It can then be assumed that engagement and disengagement are the polar opposites on the engagement continuum with engagement being positively correlated to academic achievement, active learning and critical thinking and disengagement with non -performance, boredom and inactivity (Bryson, et al, 2009). If students are not engaged when participating in an academic task, they may not acquire sufficient knowledge. Conversely, engaged students are usually prepared to take a personal interest in learning and going the extra mile to acquire sufficient knowledge (Alvarez, 2002).

1.3 Aligning education with national expectations

Educational reform which can bring about a change in students' attitude toward learning has become a topical issue in the UAE. According to Abu Rmaileh "it is imperative that everyone involved in the education process do something about those students who drop out of schools, and who waste their talent because of one thing or another" (2006, p.1). Improving the schools will require immediate and comprehensive action "A piecemeal approach to each of these areas is not going to succeed in any efficient education reform (Al Helal, cited in The National, 2009) This clarion call is also being echoed from governmental bodies who view education as an investment enterprise where the dividends come in the form of a highly skilled and educated labour force. Today, there is a palpable sense of urgency in the Middle East to improve employment levels and job options for the region's young, growing populations. In fact, half of the Middle East's population is under the age of 25, and a quarter of those between 15 and 24 are currently unemployed. While regional unrest is one major cause for this, regrettably another major reason for widespread unemployment is a mismatch between the needs of the market and the skills being developed in schools (Ataya, 2014 cited in Huffington Post, 2014).

One place Higher Education institutions in the UAE can start is in the classrooms. By switching from traditional, teacher centered to more student centered approaches, where inquiry, critical thinking, creativity, self-directed learning, problem-solving abilities, and active engagement are promoted. Improved grades, retention, enjoyment and critical thinking skills are some of the benefits of a pedagogy of engagement (Ebert-May, *et a*l 1997; Magnussen, *et al*, 2000; Lake, 2001). According to Al Khaili, Director General of Abu Dhabi Education Council's (ADEC) "our mission is to produce world-class learners who embody a strong sense of culture and heritage and are prepared to meet global challenges" (2001). In line with this, the Ministry of education released Vision 2020 fifteen years ago, which was a plan to implement the latest teaching techniques with a crucial element being the shift to student-centred learning approaches (The National, Feb.2010). However, regardless of all reform efforts, most of the current courses are still taught using a traditional approach. A UNESCO sponsored research found that some UAE institutions were still using rote learning and memorization as the approach to student education (UNESO, 2005). According

to the director of the Sharjah Higher Colleges of Technology, "the reforms have not taken place at the rate we would want" (Ohan, cited in The National, 2010).

1.4. Rationale

Practices incorporating active learning increase student retention, motivation, and achievement (Boylan, 2002). Extant literature has shown that creating a productive and enriching learning experience for Private Higher Education Institutions (PHEI) students requires a willingness to incorporate productive teaching methods. The Vygotskian theory that knowledge is socially constructed is an important factor to consider when planning for students' success. Thus, lecturers should approach their profession as enthusiastic educators but also as willing learners. They should also provide a non-threatening and comfortable learning environment in which all students are given equal opportunity to participate and contribute to learning in the classroom. As Kuh (2003) states, "The very act of being engaged also adds to the foundational skills and dispositions that is essential to live a productive, satisfying life after college" (p. 25). Strategies such as active learning, collaborative learning, learning communities, problem solving, experiential learning, critical thinking, self-regulation, and authentic assessment inherently promote student and faculty engagement. This study, which revolves around student engagement as an alternative to traditional pedagogical approaches being used in PHEI in the UAE, is concerned with enriching and reforming the approach and quality of education that students receive UAE universities.

This critical research into student engagement as an alternative pedagogical approach to teaching in the UAE is motivated by my desire for reform in the approach to teaching in higher education in the UAE, but it is also hoped that this reform will precipitate empowerment of students through the enhancement of the learning environment. The mandate for educational institutions in the UAE is vast, therefore efficient and successful strategies have to be implemented in order for private universities to fulfill their roles in the society.

1.5 Significance of the Study

This critical education study is significant to the reform of the UAE private tertiary institutions, and perhaps even to public universities, as it will have pedagogical and theoretical implications on teaching and learning. The empirical evidence from this research could empower both teachers and students to have more social significance in the society they live in. Although the UAE has achieved much in the field of Higher Education, there is a real awareness that constant updating of policy and continuous review of pedagogical approaches is required to ensure that graduates are properly equipped to enter the work force and assist in the country's development. The PHEI curricula in the UAE have undergone revision to target content and assessments but still missing from this restructuring, is a sustainable approach toward lifelong learning and student engagement. Educational reforms that only targets materials and assessments have failed to acknowledge the influences students' disengagement and alienation have on their learning experience in universities. If after curriculum reform, the role of education continues to be the uniform reproduction of the economic, social and cultural imbalances displayed in the society, then in fact, no reform has actually taken place. Ohan (2010) opined "the evidence that we've not made the progress we should be making in education reform is that we talk about it in the same we did 12 years ago" (cited in The National, 2010).

Positive reform must lead to retention, satisfaction and better performance among the student population. It must further lead to the development of a transdisciplinary and interdisciplinary citizenry who are able to function innovatively and creatively in high speed, knowledge-driven, competitive world. This study will provide empirical data to support meaningful reforms within the higher education landscape of the UAE.

According to a paper published by Emirates Centre for Strategic Studies and Research "the education system must be rearranged to expand without any limitations on students' potential to advance. Various pathways have to be provided in which students can excel.… There should be possibilities of transfer to promote individual talent instead of causing failures and drop outs" (Badran, 1999, cited in the Emirates Centre for Strategic Studies and Research ECSSR, 1999, p.112). Christenson et al (1999) posit that to teach is to engage. The art and practice of pedagogy is engagement. Students who are engaged

> …show sustained behavioural involvement in learning activities accompanied by a positive emotional tone. They select tasks at the border of their competencies, initiate action when given the opportunity, and exert intense effort and concentration in the implementation of learning tasks; they show generally positive emotions during ongoing action, including enthusiasm, optimism, curiosity, and interest (Skinner and Belmont, 1993 p. 573).

From personal observation, instructional strategies employed in some UAE private universities have not consistently embraced this essential component of pedagogy and have become instead, a method of simply delivering lectures which cover the content of the course. Students are usually assessed for content knowledge through the use of multiple choice exams. In English Language, learning assessment is done using standardized test such as IELTS or TOEFL. Passive learning through teacher -centered approaches in some sectors of HE in the UAE has been documented in research (Shaw et al., 1995; Mawgood, 2000; Rugh, 2002). With calls from academics, educators and researchers to introduce *pedagogies of engagement*, some strides have been made in raising the awareness about the reforms that are required, but there have been few successful advocates of critical reform in the pedagogical approach toward education in the UAE.

1.6 Contribution to Knowledge

International trends in education have indicated that a serious review and reform of the *status quo* in Higher Education is needed (Caldwell, 2003). A good education is fundamental in building a strong workforce of any country (Cuban, et al, 2001) and there is a major role for educational researchers and practitioners to provide and maintain a high quality of relevant information that can positively impact the learning environment, and ultimately improve the quality of education provided to the citizens. Educational research plays a significant role in building and sustaining a country. This research which aims to effect change in the pedagogical approach to teaching in private HEIs in the UAE will advance the understanding of student engagement by including the voices of key stakeholders (students and teachers) in the conversation about effective reforms that are needed. In addition, another contribution of this study will be to illustrate that a pedagogy of engagement can be a vehicle for advancing the vision of the Ministry of Higher Education in the UAE. As this paper explores student engagement and its possible links to satisfaction and performance, it might provide evidence of strategies to address pertinent educational issues from the perspective of PHEIs in the UAE and the stakeholders in that community.

1.7 Research Goals and Questions

This study investigated student engagement in PHEIs in the UAE as an alternative pedagogical approach. The major goals of this study were to:

- explore a pedagogy of engagement through the use of standards focused project based learning as a viable example of an alternative to traditional teaching methods
- determine if student engagement approaches increase student achievement.

Some of the recognized alternative pedagogical approach to the current traditional way of teaching and learning suggested by researchers include project based learning, active learning, collaborative learning, representing-to-learn, problem solving, experiential learning, critical thinking, self-regulated learning, and authentic assessment (Boylan, 2002; Daniels, 2001). The research questions that guided the study are:

1. What is the difference in exam scores between students in a lecture-based class and students in an active-learning class that utilizes a standards-focused project-based learning curriculum? *For this quantitative question, the dependent variable is the exam scores and the null hypothesis is that there is no significant difference in exam scores between students in a lecture-based class and students in an active-learning class.*
2. What kind of change can be brought about by engaging students in a student-focused and active learning environment by the design and implementation of a standards-focused project-based learning model?

1.8 Structure and Organization

This thesis will have 6 chapters. The first chapter is the introduction which establishes the significance of this research and the contribution to the body of knowledge about effective pedagogical approaches in private universities in the UAE.

Chapter 2 will be a contextual chapter. It outlines the educational, economic, cultural, social, and political context of the UAE society in which the research is conducted. It was necessary to create a discrete chapter for this information as it is a precursor to understanding the importance and the rationale for this study.

Chapter 3 is the literature review which will provide a background to the concept of student engagement as an alternative pedagogical approach in education and will explore a pedagogy of engagement (PoE) as a transformational approach to education in the UAE which is in line with the expectations of the government. This chapter will also outline the theoretical justification of this critical agenda.

Chapter 4 explains the convergent framework that guides this study. The transformative potential of this research dictated the use of an approach that couples and gives primacy to what Green and Caracelli call "the value–based and action–oriented dimensions" (1997 p.24) of the study. Green and Caracelli (1997) point out that the use of multiple research methods can strengthen and increase understanding as this approach allows for the collection of valuable contextualized information. A description of the participatory action research (PAR) protocol is given along with the ethical dimensions, challenges and limitations of this research.

Chapter 5 provides an analysis of the data and a discussion of the findings for each research question will be provided. Where the findings corroborate existing research and provide evidence of the hypothesis, this chapter will explain and interpret them.

Chapter 6 will discuss the main findings and outline their implications for practice and the key stakeholders in private universities in Dubai. Recommendations on how to implement PoE will be provided and suggestions for further research in this area will be made.

Chapter 2: Context

In educational research it has become accepted that all phenomena are contextually understood and hence should be explicated and evaluated within their context. While there are copious numbers of contextual studies, the theoretical construct of "context" remains elusive as the notion is commonly used informally to refer to the explanatory situation or conditions and consequences of a phenomenon. In this thesis the educational and socio economic context of Private Higher Educational Institutions (PHEIs) also referred to as International Branch Campuses (IBCs), in the UAE, provide the macro context for a better understanding of the significance of the pedagogy of engagement as an alternative approach to education. The marketization of education that opened the door for PHEIs in the UAE provides the educational micro context for a better understanding of the significance of student engagement as an alternative pedagogical approach to be explored in UAE PHEIs.

2.1 Educational Context

In a global, interdependent and competitive world, education is seen as a means of remaining productive and competitive. The UAE was the first country in the Gulf Cooperation Council (GCC) to invite private higher education institutions mostly from the United States and the United Kingdom to its shores (Coffman, 2003). Joint ventures between educational institutions and banks, oil companies or other major businesses became a common feature in educational landscape. Many western universities were the primary benefactors of this development in education in the Gulf region, as private businesses sought to forge alliances with existing overseas universities who were willing to open off-shore campuses or IBCs. As tight fiscal policies in education were imposed especially on the US and UK, the international spread of campuses from these countries in UAE was marketed as a boost for the local education product.

In the 1990s, over 30 prestigious universities were welcomed by the government because they contributed to raising the profile of a fledgling system of education. Today there are 68 private higher education institutions in the UAE (MOE, 2014). The higher education sector in the UAE has grown significantly, with the confirmed enrolment figure of 128,279 for the academic year 2013-2014. Figure 1 below shows the distribution across different types of post-secondary institutions. Students availing of tertiary institutions come from 161 nationalities and faculty originate from 118 nationalities. To promote the economic competiveness of the graduates from UAE universities, tertiary education needs to move away from the restrictive environment of fixed results, and standardized testing and they must embrace the key indicators of economic competiveness such as risk taking, creativity and flexibility. These provide educators with the liberty to interpret curriculum and teach in a manner that promotes learning which will create a competitive and productive labour force.

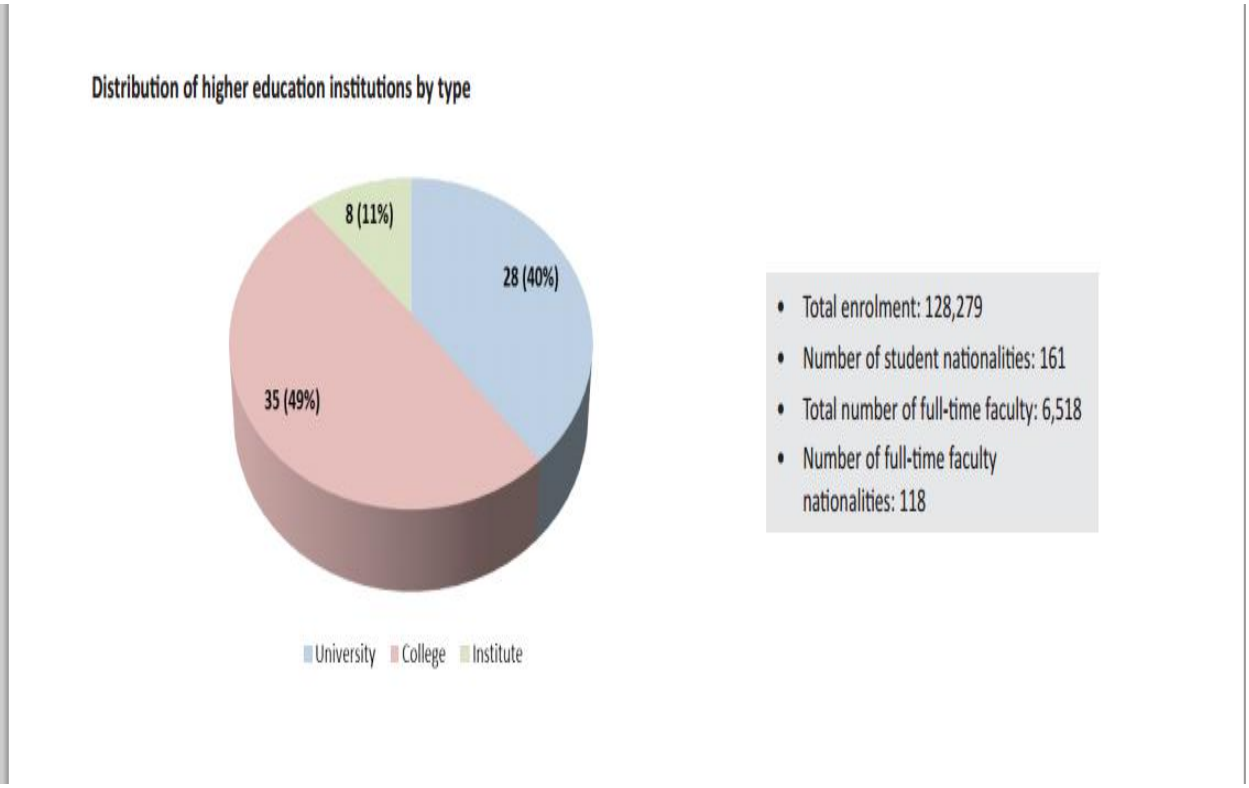


FIGURE 1: STUDENTS & FACULTY DISTRIBUTION IN HEIS IN THE UAE **(SOURCE: MOHESR, 2014)**

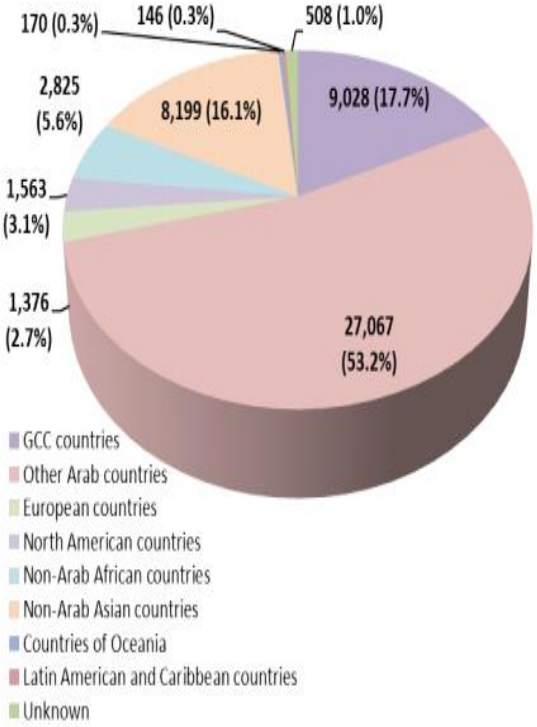
Figure 2 below shows the breakdown of nationalities from which students originate. It can be concluded from this data that the university environment in the UAE is reasonably diverse and multicultural.

DISTRIBUTION OF EXPATRIATE STUDENTS BY NATIONALITY AND COUNTRY OF BIRTH

Expatriate students come from 160 different countries.

- All five GCC countries: 9,028 students
- 13 other Arab countries: 27,067 students
- 41 European countries: 1,376 students
- 2 North American countries: 1,563 students
- 25 Latin American and Caribbean countries: 146 students
- 38 Non-Arab African countries: 2,825 students
- 32 Non-Arab Asian countries: 8,199 students
- 4 countries of Oceania: 170 students

Distribution of expatriate students by nationality



Distribution of expatriate students by country of birth

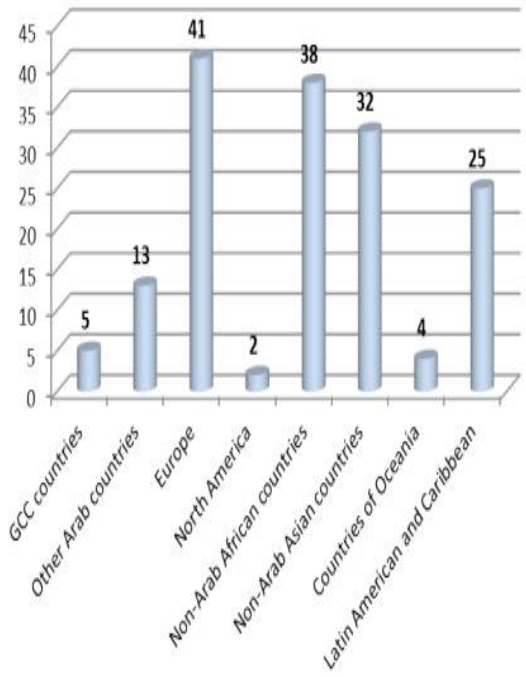


FIGURE 2: DISTRIBUTION OF STUDENTS BY NATIONALITY **(SOURCE: MOHESR,2014)**

It can be seen in figure 3 below that the trend since 2008 has been for higher enrolments in non- federal (private) institutions than federal (government funded)

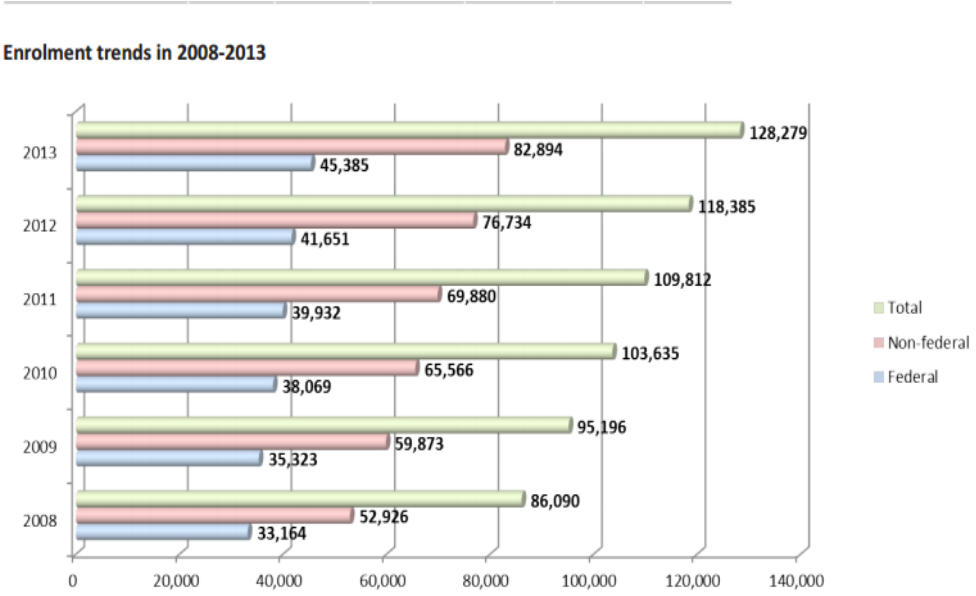


FIGURE 3: STUDENT ENROLMENT PATTERN IN THE UAE 2008-13 (SOURCE: MOHESR,2014)

These students are registered in 71 universities in the UAE. There are only 4 Federal institutions which is about 6% and all the others (94%) are private universities as seen in figure 4 below (UAE Higher Education Fact book 2013/14).

DISTRIBUTION OF HIGHER EDUCATION INSTITUTIONS BY TYPE AND EMIRATE

Higher education institutions in 2013

Emirate	Non-federal institutions			Federal institutions			Total
	Institute	College	University	Institute	College	University	
Abu Dhabi	6	13	7	0	2	2	**30**
Dubai	3	14	12	0	1	1	**31**
Sharjah	1	2	3	0	1	0	**7**
Ajman	0	2	2	0	0	0	**4**
Umm Al Quwain	0	1	0	0	0	0	**1**
Ras Al Khaimah	0	0	3	0	1	0	**4**
Fujairah	0	1	1	0	1	0	**3**
Total	8	33	26	0	2	2	71

Operational higher education institutions in the UAE:

- 2 federal universities
- 2 federal colleges
- 25 non-federal universities
- 33 non-federal colleges
- 10 non-federal institutes

Licensed international branch campuses

Emirate	Non-federal institutions			Total
	Institute	College	University	
Abu Dhabi	2	0	3	**5**
Dubai	1	1	3	**5**
Sharjah / Ajman / Umm Al Quwain / Ras Al Khaimah / Fujairah	0	0	0	**0**
Total	3	1	6	10

Licensed operational international branch campuses in the UAE:

- 6 universities
- 1 college
- 3 institutes
- All operational licensed international branch campuses are located in Abu Dhabi or Dubai.

TABLE 1:DISTRIBUTION OF HEIS IN THE UAE **(SOURCE: MOHESR, 2014)**

Private institutions are viewed in the UAE society as healthy competition (Cerny, 1995; Wade 1996), and as being in tune with the needs of the private sector and international workforce standards (Coffman, 2003). This view is shared by the state regulatory bodies such as the Knowledge and Human Development Authority (KHDA), who are continually expanding the access for private universities to set up in the UAE. The uptake of higher education has increased dramatically with 95 per cent of all female secondary school leavers and 73 per cent of all male secondary school leavers, embarking upon college courses of study (MOE, 2011). The nation's intellectual capital is seen as the driving force for future wealth and development (Edvinsson and Stenfelt, 1999). This increased demand for higher education has driven the development of knowledge free zones in Dubai and Abu Dhabi which have provided the infrastructure and acceptable regulatory terms to attract PHEIs or IBCs. Data from the KHDA indicates that 60% of all private HEIs in Dubai are presently located in either Knowledge Village or Dubai Academic City. (See figure 4 below).

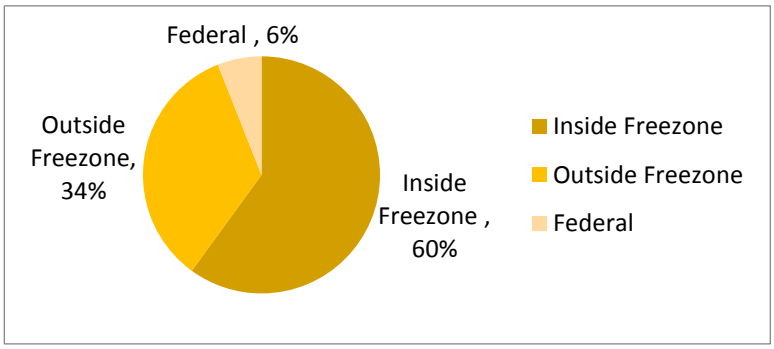


FIGURE 4: LOCATION OF PRIVATE UNIVERSITIES **(SOURCE: MOHESR, 2014)**

The rate of growth of HEIs in Dubai has been particularly remarkable as shown in figure 5 below. From 5 institutions in 1993 to 31 in 2014. This growth has in turn attracted more international students from Gulf countries and Africa.

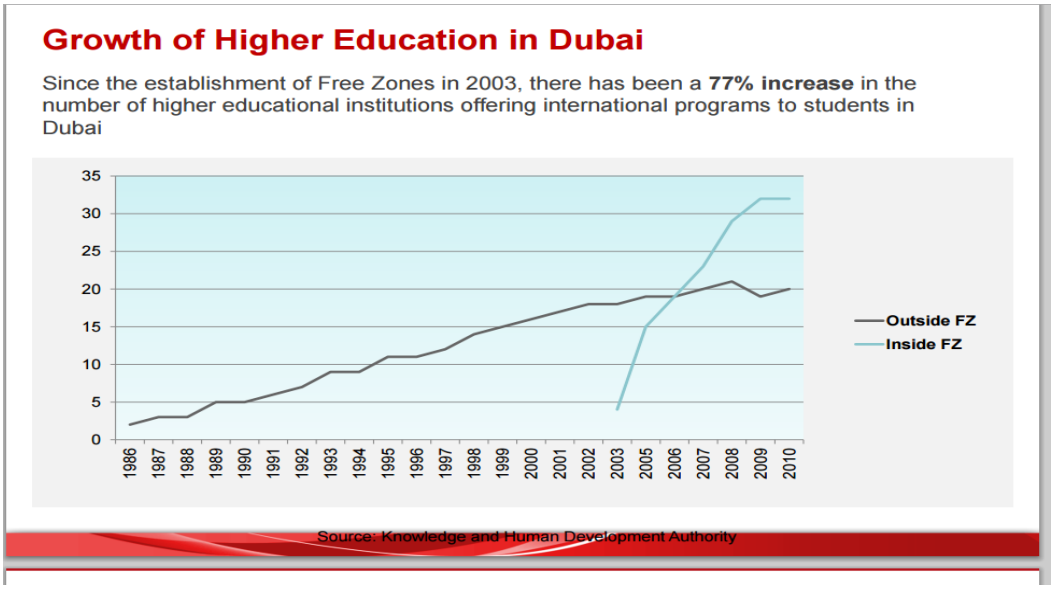


FIGURE 5: GROWTH TREND IN HEIS IN DUBAI **(SOURCE: MOHESR, 2014)**

The students who graduate from these private institutions will have a degree from an international university which usually opens up more career opportunities. There are 265 programme choices for students in Dubai. (See table 2 below). For the majority of expatriates who might return to seek employment in their home countries, this is very useful. Additionally, expatriate children are not allowed to study in government funded universities. They either enroll in IBCs or go back to their home countries after completing secondary education. The fact that these students can now earn a UK or US accredited degree without leaving the UAE is a primary factor in the success of IBCs.

Programs offered in Dubai

Area of specialisation	Diploma	Higher diploma	Bachelor's	Graduate diploma	Master's	Doctorate
Arts and Design	1	0	9	0	0	0
Engineering	1	2	18	0	5	0
Information Technology	4	1	21	0	7	0
Business Administration	10	1	60	0	44	4
Education	0	0	6	0	6	2
Foreign Languages	1	0	0	0	0	0
Environment and Health Sciences	0	0	8	0	3	0
Medical Sciences	0	0	1	1	1	0
Mass Communication and Public Relations	0	0	18	0	2	0
Sciences	0	0	0	0	0	0
Law and Sharia	0	0	6	0	3	1
Humanities and Social Sciences	0	0	11	0	6	1
Agriculture	0	0	0	0	0	0

TOTAL NUMBER OF PROGRAMS: 265

Most covered areas of specialisation:

- 119 programs in Business studies
- 33 programs in Information Technology
- 26 programs in Engineering

TABLE 2: DEGREES OFFERED IN DUBAI **(SOURCE: MOHESR, 2014)**

The enrolment of students in HEIs is greater among UAE nationals than expatriates. Despite the presence of these IBCs, many expat parents opt to send their children to more traditional and mature educational contexts in USA, UK, Canada and Australia. This is an interesting part of the contextual details relevant for this study as parents still feel that if their children study abroad they will get a better quality tertiary education. Figure 6 below indicates the distribution of students across the Emirates. There are over 25,000 more Emiratis studying in HEIs in the UAE than expats. This is also remarkable because it is evident that more Emiratis are opting to study at home.

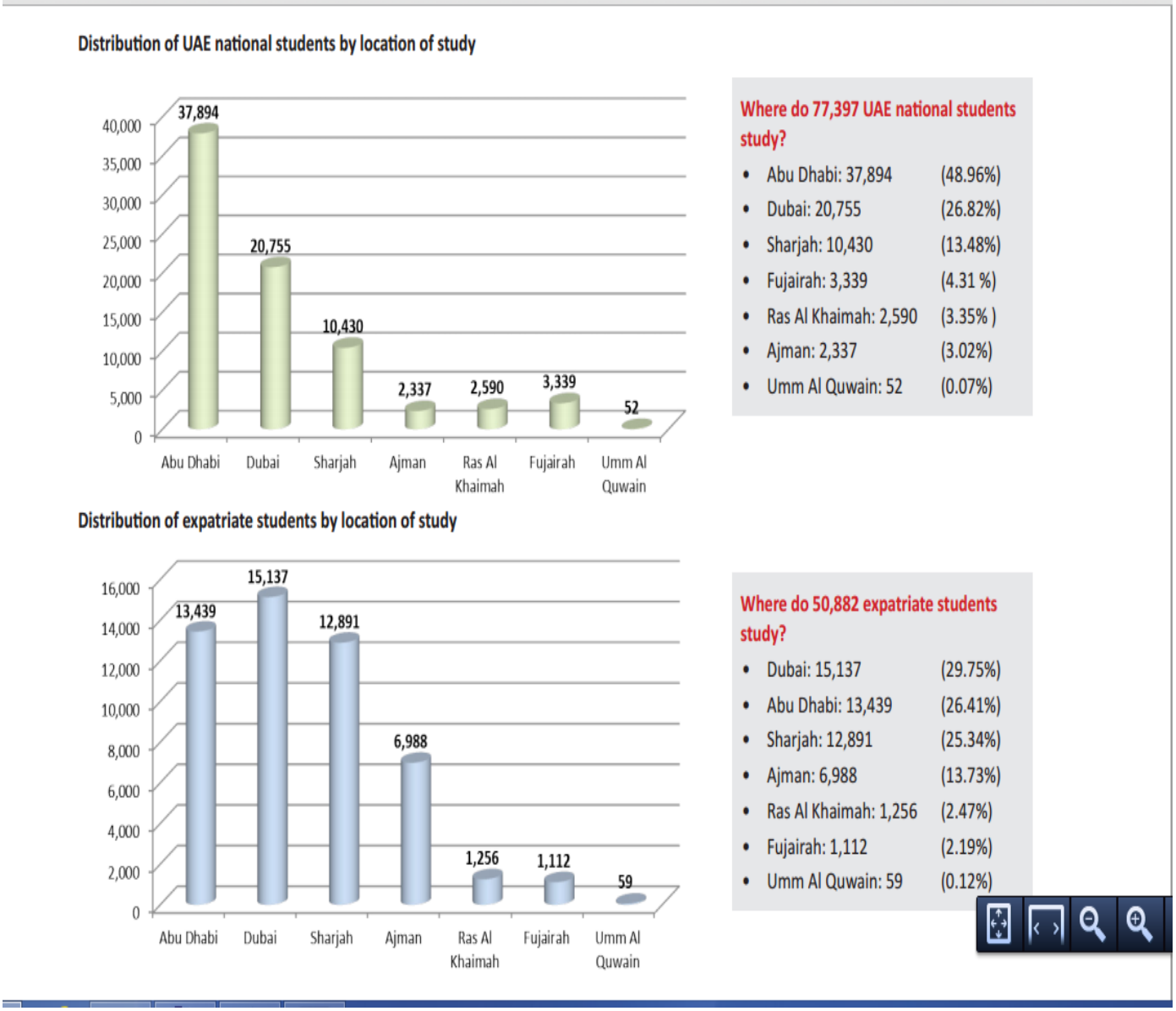


FIGURE 6: DISTRIBUTION OF EMIRATI & EXPAT STUDENTS **(SOURCE: MOHESR, 2014)**

A common misperception in the western world about the UAE educational context is that women are marginalized and do not have access to education on the same scale as their male counterparts. It is important for this researcher to point out that this is not the case in the UAE. On the contrary as shown in figure 7 below. Among both expat and Emiratis there are more female students attending post- secondary institutions than males.

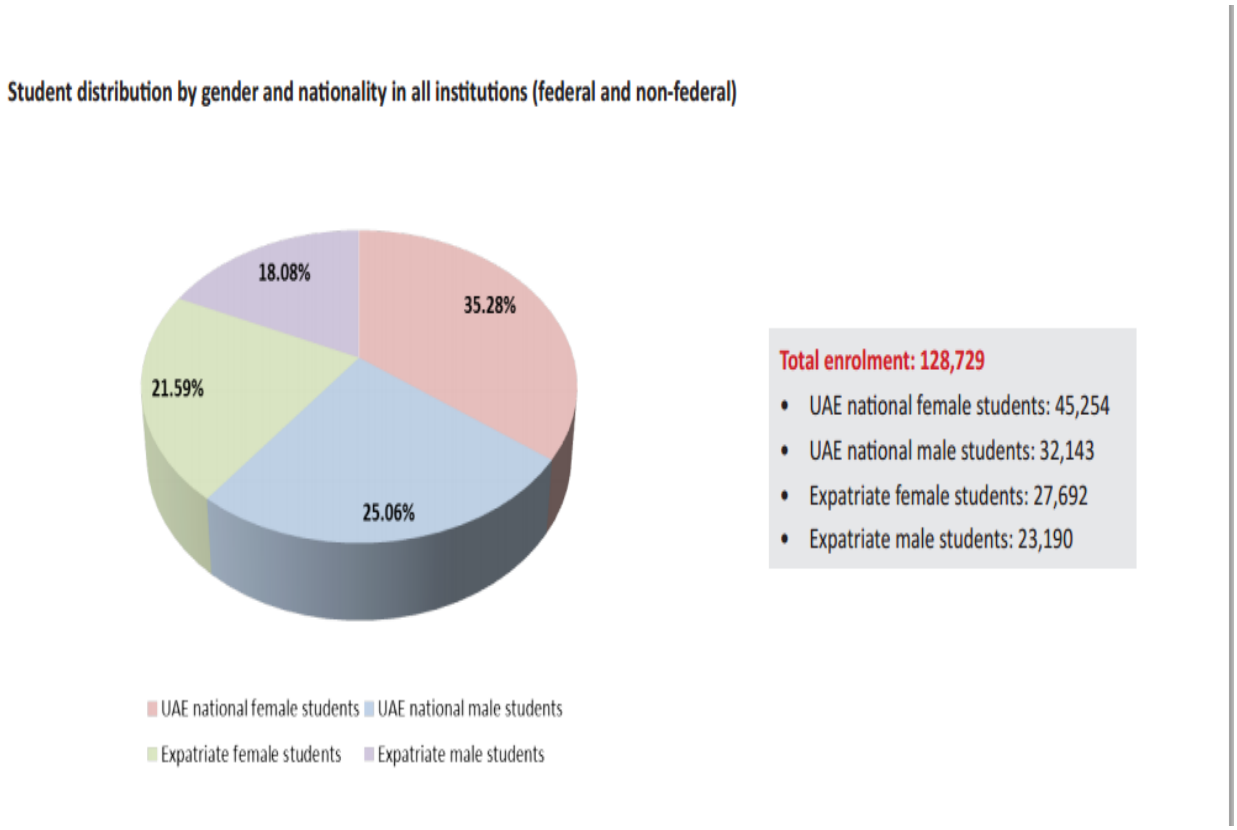


FIGURE 7: GENDER DISTRIBUTION IN UAE UNIVERSITIES **(SOURCE: MOHESR, 2014)**

In this research, one group of participants are in the foundation programme. This level of education is a very important part of most universities as students who initially do not qualify for direct entry into undergraduate programmes are allowed entry in a pre-university, bridge or foundation programme. This is the second largest group of students enrolled in UAE universities as seen in figure 8 below. The foundation programmes provide language development and university readiness courses for school leavers.

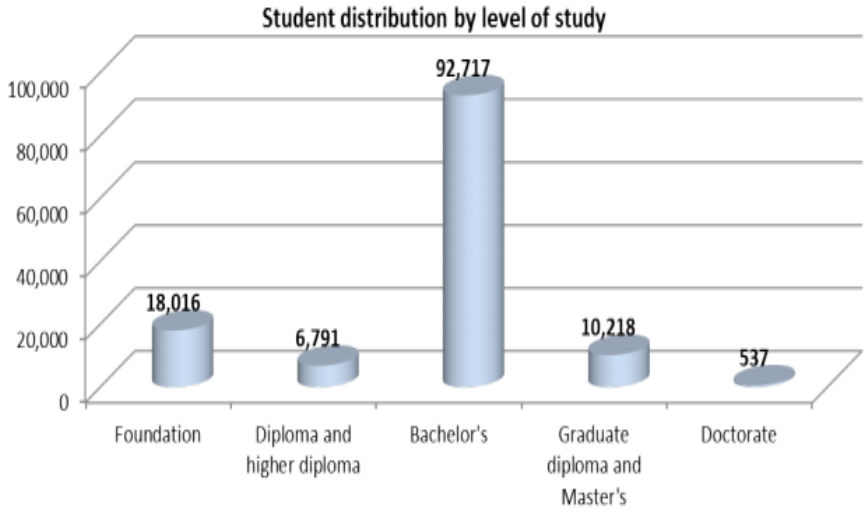


FIGURE 8: DISTRIBUTION OF STUDENTS BY LEVELS IN UAE UNIVERSITIES

(SOURCE: MOHESR, 2014)

2.2 Market Driven Education

In the past decade the UAE has experienced unprecedented economic growth, with its national income per capita reaching one of the highest levels in the world. This rapid growth was accompanied by an equally high proliferation of PhEIs, which raised concerns about the ability of government's socio-economic policy to keep up with some of the consequences of the marketized system of education. One of the primary questions that the government sought to answer was whether or not the returns on education in the UAE were meeting the expectation of the country in terms of providing human capital. Human capital is defined as a "productive investment embodied in human resources" (Todaro, 1997 p. 697). Improved skills are the returns from expenditure on education and training programmes. As indicated by Chatterji (1994), the skill level of the workforce in any economy is a factor that has an important bearing on economic performance.

According to Shihab (1996) a positive relationship between education and economic growth is well established. Education and training are viewed as major determinants of increasing productivity and as a factor for diffusing growth. The role of education in growth and development is stressed by Hanushek and Wōβmann (2007) who suggests that education could be considered as a process of accumulating capital, which could increase a worker's productivity and income. They referred to this investment in education as an investment in '*human capital*'. Ozturk (2008) concluded that education and income are highly correlated at both the individual and social levels. It is believed by many residents that the more education and qualifications one can accrue, the better will be the chances of obtaining secure and better-paid jobs. Citizens, who become aware of this fact, seek to gain higher educational qualifications. Essentially, the desire for well-paid jobs creates a demand for education as a means of economic improvement.

The fact that the UAE was the largest importer of private higher education branch institutions in the past decade has been the main indicator for the marketization of education in this region (Lane, 2010). These private universities offer an indispensable opportunity of education to both Emiratis and expatriates in a very competitive environment. Being able to attract and compete for students is a reality for these private educational institutions. The CFO of Michigan State University Dubai said that the term "marketised" means allowing higher education to be marketed to the masses as opposed to the elite (Bhayan, 2010). In the UAE the purposes of marketisation include providing academic institutions with incentives to improve the quality of teaching and research, to enhance academic productivity, and to stimulate innovations in academic programs and mainly to benefit the larger society. The large demographic imbalances between Emiratis and expatriates has been a source of major socio economic concern for UAE government, but PHEIs which operate as IBCs, provide a ready solution for both demographic groups. Expatriates who are prevented from attending state universities can be educated in PHEIs and later be employed in industries and citizens who avail of PHEIs become competitive both at home and abroad, will potentially generate—after large initial investments—non-oil revenue.

The marketization of education is generally regarded by some western academics as being negative, and they lament the contemporary commoditization of higher education, part of which is measured by the increasingly globalized nature of universities and the transnational curricula which are increasingly neoliberal in their orientation. In addition, I have observed in public discourse that there has been an increase in "market" rhetoric used to speak about the university; students are considered "clients" or "consumers"," educational offerings "products," and extracurricular and other options "value-added." The World Trade Organization negotiations to expand and liberalize the General Agreement on Trade in Services (GATS) in 1994 specifically include higher education as a commodity or service. This unwittingly proliferates the trend for the HEI to be regarded as profit-making enterprises. According to Macede (2010, cited in the Gulf News), overall consumer expenditure on education in the UAE rose from $1.83million in 2005 to $3.4 million in 2010. When compared to other GCC states, the UAE saw the second highest spending in education, following behind Saudi Arabia whose expenditure was $5.2million. It has to be noted that the government of the UAE provides limited financial incentives to the IBCs, so their success or failure is determined by market forces such as the number of students that are able to enrol, the value added experience, the value for money they can offer in their courses and the perceived return on the investments students make to get their degree. In many cases, funding for IBC is provided through private partnerships, joint ventures or loans. This strategy of developing the PHEI sector is comparable to the approach used in the UAE for business development (Lane, 2010). The institutions are market oriented and must compete on multiple levels for student enrolment. The extent to which PHEIs attract, enrol, retain and supply high quality graduates to the market place is a testimony to their success.

2.3 Symbiosis of Economic Development and Education

The UAE is committed to the idea of education and research-led development as a way of economic and social growth to compete on a global scale. The former head of the Ministry of Higher Education and Scientific Research (MoHESR), H.E. Sheikh Nahyan bin Mubarak Al Nahyan outlined very clearly the role of the socio-economic model on the tertiary education policy in the UAE in his address to the Commission for Academic Accreditation (CAA).

Knowledge conveys power—the power to shape our economy, the power to shape our society, and the power to shape our future. The colleges and universities of the United Arab Emirates, government-supported and private alike, play an essential role as we here in the U.A.E. seek to realize the tremendous potential of a knowledge-based future. It is therefore of the utmost importance that institutions in the U.A.E. offer the highest quality academic programs, programs that are recognized both within the country and internationally for their excellence. (CAA Portal, 2011)

Private HEIs provide a positive solution meeting the expectations of the nation because they bring a totally different philosophical view of tertiary education which better suites the knowledge economy that the UAE government is trying to create as part of the overall strategy of economic competiveness. A report by Tanmia (2004) stresses the need for a curriculum that is oriented to the job market. This supports the argument raised by Coffman (2003) in favour of international private higher education, which he posits, better suits the needs of private sector employers. Thus the privatization of higher education is a necessary vehicle for the federal modernization vision and development of the knowledge based economy. From a neo-liberalist perspective, it is apparent that development in Higher education in the UAE is inextricably linked to the needs in the economic environment. Coupled with the rapid growth of student numbers and the federal or state mandates, the implications for education are enormous and issues such as funding, infrastructure, staffing, curriculum, and keeping pace with the needs of the increasingly global workforce in the knowledge economy are significant. Al-Suwaidi (1999) asserts that it is imperative that the UAE pursues more aggressive and diverse human resource development policies. Bahgat (1999) and Al-Sulayti (1999) highlight the mismatch between the needs of the labour market and the educational system in the Arabian Gulf region.

The so called "knowledge economy" is becoming increasingly elusive in fast growing societies where knowledge is a perishable product. There is little consensus in the literature on the meaning of "knowledge economies" as different societies subscribe to different models of reform to create knowledge societies. In the absence of conclusive definition, a description will suffice. Knowledge based economies are directly based on the production, distribution and application of information in efficient and competitive ways through the use of the best innovations available. Higher education institutions play a key function in this economy because the main commodity is knowledge production, transmission and transfer. However, what is evident from the literature is that the current state sponsored educational system and policies which require centralized regulation, standardized assessments and prescriptive curriculum are incompatible with the development of a knowledge based economy. The dependence on traditional pedagogical approaches which reward rote learning and memorization as indicators of success will have to be replaced with a more modern student-centred approach. It is for this reason that a study like this is essential as the results could inform practices that are best aligned with the quest for a nation of knowledge producers and active contributors to innovation and creativity in the UAE. Preparing graduates for a knowledge economy will require a shift from the text-book based curriculum toward an outcome or standards focused alternative. Theoretically, both types of curriculum allow for greater flexibility among teachers to choose the best approaches and resources according to the needs of students. Standards based curricula have been successfully implemented in the USA, UK and Australia since the 1990's. In principle the UAE University has been using a standards based approach for decades, but in practice there is not always a clear direction. Davies (1999) highlights the fact that for the same effect to be achieved, greater investment in teacher training and development is required since many tertiary educators are steeped in traditions.

The purpose of this research then, is to explore how a pedagogy of engagement which fall under flexibility and risk taking may be applied as an alternative pedagogical approach that allows greater autonomy among teachers and students, flexible learning and collaborative opportunities, more trust among teachers and students. For students, flexibility would allow more student -based inquiry, problem solving and application rather than passing tests. Risk tasking is defined as "willingness to venture into the unknown. It is an eagerness to try something new or different without putting the primary focus on success or failure. Learning is the reward of risk taking" (Young, 1991, p. 8).

As a consequence, PHEI curricula in western contexts are now designed to teach students "how to learn" not "what to learn". The notion of lifelong learning needs to become central component in the Higher Education curriculum in the UAE. According to OECD "the advocacy for lifelong learning rests on the idea that preparation for active life may not be considered as definitive and that workers must follow training during their professional life to remain productive and employable" (OECD, 2003, p. 27).

A central component to the implementation of educational reforms is the teaching staff. As offshore branch campuses proliferated, many of them sought to recruit western educated tertiary staff. For many of these institutions seeking ministry of education accreditation, they were required to employ Master's degree or PhD holders for senior teaching positions within the universities. Historically, teachers and lecturers were from countries such as Iraq, Egypt, Tunisia and India. What has become evident in recruitment ads is that the talent being sought after are from the United States of America, England, Canada and other western countries. This has resulted in some polarization among university educators and especially within school of language teaching, the debate about native and non-native teachers prevails.

2.4 Holistic Reform of the Behaviourist Model

Notwithstanding the vision and strategies proposed by the main regulatory bodies in the UAE (i.e Ministry of Education, MoE; Ministry of Higher Education & Scientific Research MoHESR, ADEC and KKHDA), private universities find themselves bucking against the status quo which is entrenched in the widely held philosophical view of education as being product oriented. This view of education underpins the deficit model in the education systems within the region. The excessive reliance on standardized testing, quantification and adherence to a strict set of parameters is a reductive and does not regards holistic educational objectives (Pan cited in ECSSR, 1999). Kirk (2009) describes this product orientation as the deficit in the education system within the region.

> The quality and structure of the education system…; teaching basic science and an over dependence on social science means new entrants into the workforce or higher education lack many of the higher order thinking skills and understanding. Education systems that focus on developing and promoting creative thinking, technological competence, language skills and global awareness are few and far between (p.260).

Some learners in the UAE are in the centre of this deficit model of education and are, to some extent, regarded as receptacles for knowledge. The content is predetermined by others and the learner assumes the passive role of memorization and reproducing great masses of information coming from all directions. In a recent study about educational reforms in Ras Al Khaimah, UAE, the traditional curriculum was cited by participants as a major contributor to the difficulties students were experiencing both in terms of quality

and the primary method of instruction (through rote learning). They felt that the traditional system and the current memorization model did not support students because it overemphasizes quantity rather than quality and memorization rather than the practical application of knowledge (Tabari, 2014).

The receptacle metaphor is extended by Freire who described student in the product model as "containers…to be filled by teachers" (cited in McKernan, 2008, p. 290). Mckernan adds that "the more completely filled the teacher fills the receptacle, the better he is. The more meekly the receptacles allow themselves to be filled the better students they are" (ibid). In the UAE this metaphor manifests itself in rote learning and memorization as the learning activities of choice. McKernan (2008) further laments that the problem with education today is that it is often planned in an uneducational and undemocratic way by governments using a top- down approach which has no concern for those working at the grassroot level. Teachers function in a subsidiary capacity to curriculum planners and administrators who are far removed from the realities of the universities. Barrow (1984) opines that top down approached to curriculum are poor and tend to be authortiative. Badran (1989) goes further to suggest that the role of teachers needs to change from information transmitters to knowledge constructors (cited in ECSSR 1999 p. 116). However this latter suggestion has not yet been fully realized. In the UAE, many universities with close partnership in the private sector, aim only to meet the needs of economic development. Even more worrying, is that universities in the UAE have even tried to model themselves upon business values and management structures. It is undoubtedly true that the focal point of the current educational landscape in Dubai is how to promote student achievement. Teachers, who are central to this concern, are expected to work independently, using their individual capacities and the given resources to achieve ambitious goals of the larger community i.e. the institution, the government agencies such as KHDA. The higher the stakes are for students to succeed, naturally the higher the stakes become for teachers to perform. Higher Education institutions now seek to recruit a labour force of risk-taking, self-reliant, flexible, innovative and autonomous teachers whose performance is quantifiable through measurement and observation. Teachers emerge from this alliance as "alienated technocrats performing his/her trade solely for corporate hegemony (Robertson, 2005 p.186). Consequently, teachers are not necessiarily given the respect they deserve, they are merely factory workers producing a pool of resources from which labour market will draw its supply. This will remain unchallenged as long as numbers of gradutes from PHEIs in the UAE continue to grow and if the private and public sector continue to find a pool of skilled labourers from which to draw.

Evidently this subscription to rational scientific definition of progress in education in the UAE demonstrates features of modernism which "concentrates control at the centre with regards to decision making, social welfare and education, and ultimately economic intervention and regulations" (Hok Chun, 2002, p. 58). Unfortunately, some PHEIs in the UAE are characteristically modernistic with their alienating narrow visions, inflexibility in decision making, linear planning and unresponsiveness to the changing needs of students and lecturers (Hargreaves, 1994). However, according to the World Bank report *The Road Not Traveled* (2008), education systems and structures within the region need to be examined and a new approach to reform implemented if the loftly human capital goals are to be realized. It was revealed in a recent report by the Dubai Schools Inspection Bureau that just 30% of male Emirati students met the graduation requirements. Forty percent receive fail grades and another twenty percent drop out. The director general of the Knowledge and Human Development Authority (KHDA), of which the inspection bureau is a part, described this as "…a big problem which affects the whole community. It affects career planning, social issues - crime. The societal effect of this is clear" (Al Karam, 2012). The report also concluded that there may be a link between the narrow scope of the Ministry of Education curriculum and the high

number of school leavers. While there is a paucity of available research on the direct link between the high dropout rate and the UAE's economic returns, it can be extrapolated from research done elsewhere that there has to be some negative effects because of the frantic effort by the government to stem the problem. The high level of student drop-outs in year 12 through tertiary level education is in direct contradiction to the strategy of the UAE government of 2010-2011 which emphasized that "developing a high-level educational system" is one of the main targets of the UAE strategy, through decreasing the dropout averages. One of the items articulated in the UAE Government's strategic directions to achieve a first-rate education system is to promote student retention, educational attainment, and values by reducing student drop-out rates, promoting community and parental involvement in student education, encouraging extra-curricular activities, improving educational guidance and counselling in schools, promoting a culture of self-education, work values and educational values, and encouraging competitive sports through schools and universities (UAE Government strategy 2011-2013, p.10).

The National Center for Education Statistics puts the UAE high school dropout rate between 20 to 25%. The reasons of school drop outs can be classified into push and pull factors (Zureik, 2005). The pull factors centre on the enticing reward system of the job market and the Emiratization drive which forces companies to increase the number of Emiratis they employ. This puts pressure on private sector companies to employ as many Emiratis as possible into the organization to meet the government quotas even if they do not have high school diplomas. The push factors may include generally unappealing environment of the school, teaching methods which focus on rote learning and memorization, heavy workload, limited study time for exams, assessed subjects, and repetitiveness of the curricula from year to year, behavioural problems in school, and a lack of motivation by students. In addition to all of this, up until recently, there were no counsellors in UAE secondary schools to offer academic advice to students.

Since 57 % of the UAE population is currently below the age of 20, those charged with leadership roles in education are examining ways of addressing the needs of this rapidly growing nation for the twenty-first century. As the government sought a solution, the provision of funding for the reform of higher education was seen as primary approach. Significant sums were spent upgrading the infrastructure of government universities and establishing educational free zones especially in Dubai. This did not yield the desired results because western concepts of education were being imposed in a decidedly Arabic context, which do not share the same ideals. As Salili & Hoosain (2007, p. 49) point out, "different cultures attach different meanings to achievement and are motivated to achieve for different reasons, have different goals for achievement and go about achieving their goals in different ways". This is an apt description of the inherent cause for the failure of many educational reforms imposed on institutions in the UAE.

The importance of life-long learning in the information age was examined as another way forward in the development of the human capital of the UAE. Again, this is an idea that has driven reform in many western educational contexts with positive results. In the UAE however, this was only a partial solution and was not supported by all the educational regulatory bodies. These fragmented approaches to addressing educational issues in the UAE have not been successful in the longer term. The latest ideas and technology are often incorporated without careful consideration of the nuances of the expatriate or Emirati culture, the social context, or without planning and review. In short order the innovation is then discarded in favour of the latest educational fad or trend.

The educational leaders in the UAE are eager for this change. "We are all in agreement that a successful society, in this era of knowledge, technology and innovation, is one that is founded upon committed

citizens, capable of analysis and discovery, creativity and initiative." (Shaikh Nahyan Bin Mubarak Al Nahyan (cited in Gulf News, Sept 17, 2013). For this to happen, the leadership of the UAE has committed to giving the utmost attention to promote investment in human capital, empowerment of youth and the development of cognitive and cultural potential of the Emirati people in all fields, especially in the education. In 2014, the government unveiled the UAE national Agenda 2021, which seeks across many sectors including education

2.5 Current pedagogical approach in Higher Education Institutions in the UAE

The concept of traditional learning is principally dependent on the concept of passive learning and educators significantly downloading information into the waiting minds of the students. Al Sulayti (2007) points out that education in the GCC is criticized for its emphasis on rote learning and memorization, high attrition and repetition rates (ECSSR 2008). This traditional teacher centred approach to education has been under scrutiny for many years but a viable alternative pedagogical approach seems illusive. According to the sixth Arab Cultural Development Report 2013-2014, a mere 20 per cent of young people in the GCC feel their educational qualifications meet the requirements of jobs with private companies. (Arab Thought Foundation, 2014).

Increasingly, it is evident that student centred learning approaches such as problem solving, collaborative learning and work based learning are emerging as pedagogical approaches which engage students and also transform the didactic exchange in a manner that facilitates holistic academic enrichment and success of the students. These new teaching approaches seem to herald a pedagogical shift in the higher education institutions much faster than the monolithic wheels are turning. This research paper will explore the viability of the pedagogical shift as an alternative to traditional approaches.

In order to improve the commitment and engagement level of students in the overall process of learning, higher education institutions, on a continuous basis, are engaged in improving the processes through different ways such as incorporating innovative technologies (Mioduser, et al., 2000, p. 22). Many institutions have digitized their resources as a means of communicating with students on an electronic platform which students are believed to favour. The concept of distance education and blended learning are also emerging as a way to improve the student engagement in the learning process and allow more non-traditional students an opportunity to earn a tertiary qualification. The concept of distance education implies the changing behaviour of students, teachers, and administrators. It is considered important for the educators to engage their students with the help of innovative forms of technologies and strategies. This demonstrates that the current shift in pedagogical approaches across higher education institutions will be useful for the improved student engagement in the overall process of learning (DeTienne & Chandler, 2004, p. 242).

2.6 Call for Reforms

Reform is required in multidimensional and interconnected domains that pervade the structure of Higher Education. In the first dimension, is the value created for the main customers of the university (the students). This reference to students as customers became popular in the UAE because of the shift of education from

a public good to a private service in a move that is known internationally as marketisation (Bok, 2003; Dill and Sporn 1995; Slaughter and Leslie, 1997; Sporn 1999). Private higher education institutions in the UAE compete in a free market for students (customers) to whom value must be added so that upon graduation, they are able fit into the labour market, having the desire employability characteristics.

In the second dimension is the process for how that value is created. First we need to discard the old industrial model of pedagogy which was very product centred and replace it with a new model of student engagement pedagogies which are more relevant in a digital world where geographical borders are no longer considered barriers to learning and where transferable skills are widely sought after by employers. Moreover, some entirely new modus operandi for how the subject matter, course materials, texts, written and spoken word, and other media (the content of higher education) are created is required. (Tapscott and Williams, 2007, p10).

The adoption of market forces in the educational sector has resulted in universities now being expected to compete with the efficiencies and effectiveness of a business. Dill (1997) posits that "freeing, facilitating and stimulating markets in higher education will provide academic institutions with incentives to improve the quality of teaching and research, to enhance academic productivity, and to stimulate innovations in academic programmes, research and services to benefit the larger society" (p.168). The call for innovative and socially beneficial products out of Higher Education has to be heeded. Educational reforms at this juncture, can no longer be fragmented and fleeting but should incorporate effective and alternative pedagogies and techniques. Various higher education institutions on a continuous basis are engaged in different pedagogies which are used by the teachers with knowledge and skills (Darling-Hammond & Richardson, 2009, p. 46). The agenda for educational reform and extant educational research posit that effective and active commitment in the process of learning is a significant factor in student success (Evans, et al, 1998; Astin, 1984, Kuh, 2007, Tinto, 2005). This researcher along with other advocates of educational reforms believe that a communication based environment that basically promotes problem solving and engagement with the concepts inside and outside of the class, will allow students to develop the optimal competencies and knowledge that are sought in the workplace (Darling-Hammond & Richardson, 2009, p. 46).

A common theme in research about effective educational reform is the need for reform in innovative and sustainable manner. In 2005 Sheikh Nahyan Al Nahyan leveled criticism of the public education system and announced new federal reform initiatives. The reforms were continued by HE Dr. Hani Hassan Ali, who was the successor of Sheikh Al Nahyan in 2006. (Macpherson, Kachelhoffer & El Nemr, 2007). This transition ushered in a period of rapid policy development. In 2006 the Abu Dhabi Educational Council (ADEC) announced ambitious plans to attempt to reform the school system. Part of these reforms was the introduction of the PPP (Public Private Partnership) whereby foreign consultancy companies were invited to tender for advisory 'rights' to schools. These reforms were initially rolled out in primary schools in 2006, and implemented in secondary schools over the following 2 years into 2008. The mandate of the school reformers was to provide professional development in order to improve pedagogy and encourage best practice, such as student-centred learning, within the classroom. This was in contrast to the "teacher dominated, heavily transmitted teaching styles which were commonplace in schools until that time" (Shaw, Badri & Hukul, 1995), based on memorizing facts and regurgitation (Sonleitner & Khelifa, 2005). As soon as the PPP began, a new set of curriculum standards adopted from the New South Wales curriculum in Australia was introduced, and advisers were then responsible for easing this delivery by training local

teachers to effectively use it. Additionally, teachers' English proficiency levels were targeted with an English Language Trainer included in the package of on-site advisors. Observers commented that "waves of reform were being introduced in a short time span, seemingly in an effort to find the magic recipe for success" (Thorne, 2011, p. 73). The history of reform here in the Gulf reveals smorgasbord of trials, half trials and failed efforts by multiple uncoordinated agencies which do very little except to shuffle human resource round and reallocate financial resources to the most recent project. However, this time around the global clarion for reform cannot be ignored and educational reforms, backed by rigorous research is pointing to the fact that at the higher education institutions, students need to learn how to be critical, so they can effectively question ideas and theories, construct their own ideas and understanding, elaborate and clarify the concepts of other people. These forms of competencies and skills facilitate dextrous higher order thinking skills to act in response to previously intractable circumstances and to establish an aptitude for lifelong learning competences (Chan, 2009, p. 209).

The clarion cry for reforms in the pedagogical approaches in UAE higher education has to be heeded. This research paper will advance the call by investigating extant literature about student engagement as a viable alternative to current traditional pedagogical approaches. Through the analysis of literature, it is usually possible to determine the best direction to take in any educational matter under consideration. Additionally, if there are identifiable gaps in the literature this will inform the ensuing research.

Chapter 3: Literature Review

In this chapter the conceptualization of knowledge in the 21st century is presented as the key driver for education reform. It is the role of Higher education institutions to operationalize the articulated needs of industry into the curriculum in order to better prepare students for the workforce or entrepreneurship upon graduation. One effective mechanism to attain this mandate would be curriculum reform which embraces a pedagogy of student engagement. By establishing the sound conceptual underpinning of student engagement as the antithesis of disengagement, this approach to reform is relevant to the Dubai which on one hand has an alarming early school leaving rate but on the other is aiming to create a first rate education system. Through the literature review student engagement is established as an empirical approach to education reform that has been implemented with positive effect.

3.1 Nexus of education and 21st Century needs

The role of education in preparing graduates who can contribute immediately to the global economy has brought higher educational practices locally and globally under close scrutiny. Calls for reform have come from different paths, especially from the private sector where there are changing demands on employees. Employees in many sectors need to be more collaborative in their performance, in order to function more efficiently and purposefully with other employees and management of the organisation. Collaboration means identifying the shared goals of the group and planning how to effectively attain them; accepting and allocating different accountabilities, conflict resolution, problem solving and dealing effectively with the diversity that manifests itself in these groups (Chan, 2009, p. 209.). These are 21st century skills that make graduates more employable. Any higher education system that is preparing students for employability should be educating for the skills mentioned above. Active commitment in the process of learning offers students different competencies, skills and dispositions that enable them to proficiently and knowledgeably deal with the issues that they will encounter in the work place. This approach to teaching and learning in the literature is referred to as engaged pedagogy which is very firmly rooted in theories of critical pedagogy.

The traditional perception of teaching involves a concept of neutral, transparent and non-political learning. In critical pedagogy, however, learning is conceived as a process linked to the concepts of power, politics, history and context. A commitment to learning and forms of action in solidarity with the marginalized and subordinated groups, built on self-empowerment and social transformation is promoted (Giroux, 1988, p.1). Notwithstanding the numerous definitions and versions of contemporary critical theory (Gur-Ze'ev, 1998; Kincheloe, 2004), most of the related literature begins with a discussion of the roots of the theory of critical pedagogy. Historically, critical pedagogy was perceived to be a product of the Frankfurt School established in 1923 (Gur-Ze'ev, 1998; Kincheloe, 2004; Lather, 1998; McLaren, 2003), and greatly influenced by the theories of Karl Marx, in particular, his view that the essential societal problem was socioeconomic inequality. Marx posited that everyone needed to work toward a socialized economy, within which each individual received according to his needs and contributed according to his ability (Eisner, 2002). Early critical theorists such as Max Horkheimer, Theodor Adorno, and Herbert Marcuse embraced Marxist ideologies and propagated a view of the education process that withholds opportunities for students to formulate their own aims and goals, and essentially serves to de-skill students (Apple, 1990; Kincheloe, 2004).They argued further that schools encourage dependency and a hierarchical understanding of authority, and provide a distorted view of history and other "taken-for-granted truths" that in turn,

undermine the kind of social consciousness needed to bring about change and social transformation (Eisner, 2002).

Paulo Freire later popularized critical pedagogy as the solution to overcoming a marginalizing system of education. In Brazil, he developed educational ideals and practices that would serve to improve the lives of these marginalized masses and lessen their oppression. Freire understood schools to be impediments to the education of the poor, and thus sought to find strategies for students to intervene in what he considered to be a dehumanizing process (Kincheloe, 2004). Freire (1970) referred to this educative process as liberatory action or praxis. He argued that people need to engage in a praxis that incorporates theory, action, and reflection as a means to work toward social change and justice.

Modern critical pedagogues Henry Giroux and Peter McLaren proposed that teacher education be seen as part of the defence against hegemonic policies that perpetuate marginalization through education. They believe that teachers can create meaningful experience in the classroom that are counter to the traditional expectations. The discourse examines the field of teacher education as a new public sphere that has the responsibility to incorporate the ideas of democracy as a critical social movement for individual freedom and social justice. They propose that as a form of cultural politics, the curriculum of teacher education be based on the belief that teachers can act as intellectuals (Giroux, 1988; McLaren, 2003, p.34) capable of responding to the needs of students without a centralized regulatory body dictating outputs. The implementation of a similar proposal in the UAE higher educational context would challenge existing power relations in the field of teacher training, but would pave the way for meaningful reform.

The local context of the UAE and more specifically Dubai, is ripe for training of teachers with the power and ability to act as transformative intellectual agents in the classroom (Freire & Macedo, 2013, p.3). This shift might require an uncomfortable change in power distribution and control over the process and content. Given the freedom and sense of safety to do so, "students can find material that challenges the faculty member's worldview and expertise; they can uncover stories and research results that the faculty member has never heard about. It can be uncomfortable when the instructor no longer controls the subject matter the students will use" (Windham, 2005, p. 8.16). There are two factors that seem to encourage engagement – engaging pedagogy and engaging curriculum. According to the research, it is imperative to change the pedagogical approach (how we teach) and content (what is taught) if learners are to be engaged. Engagement pedagogy requires strong respectful relationships and safe learning environments, especially as teacher-student relationships shift from expert-disciple towards peer-based collaborative learning.

Caroline Shrewsbury (1987), Bell Hooks (1994), and Kathleen Weiler (1991), alongside other feminist pedagogues, argue that education should challenge the structure of the traditional canon, develop and offer alternative classroom practices. Bell Hooks' concept of engaged pedagogy is particularly relevant for this research. In her book *Teaching to Transgress: Education as the Practice of Freedom*, Hooks argues for a holistic, progressive, participatory learning which would be a transgressive approach to the established colonial system of education that perpetuated marginalization of certain groups. The concept of engaged pedagogy espouses a revolutionary approach to teaching that interrogates the biases in curricula, to reduce the systems of domination that exist in the sector (Hooks, 1994).

Engaged pedagogy, as Hooks describes it, seems to run against what one might consider a traditional classroom format: large classed lined up in rows, listening to a teacher lecture on and on. Drawing on the

ideology of *conscientization* by Freire (1970/1992, 1973), Hooks proposes a liberatory approach to education which increase critical awareness and engagement. Educators are required in this pedagogical approach to transgress the conventional methods of teaching and learning by practicing innovative methods of interacting with students. According to Hooks (1994), the concept of engaged pedagogy is more appealing than feminist or critical pedagogy for the reason that it is persistent and requires that the educator has the accountability to perform their work towards self-actualisation. If teachers want to educate their students in an anti-discriminatory, non-threatening and empowering way the concept of self-actualisation should be the aim of the students, as well as the teacher. Hooks, acknowledges that this is no simple task and to practice engaged pedagogy will require massive investment of time and effort from faculty. The components of engaged pedagogy posited by Hooks in which this research finds resonance are conceptualization of the knowledge; linking theory to practice; student empowerment and learner engagement in the curriculum.

3.2 Conceptualization of Knowledge

Power structures in the classroom are established in how knowledge is conceptualized. The way the teacher views knowledge is directly related to their method of instruction. A top down method of instruction is usually associated with the view that knowledge is established facts, it is static, or is based on technical skills. A constructivist, bottom- up approach to knowledge is usually characterized by student teacher discourse as opposed to a lecture method that gives authority to subject matter and the transmitter over the recipients and process of learning (Hooks, 1994). In the promotion of learner participation, power in the classroom is redistributed to include students. This latter conceptualization of knowledge exchange, results in student empowerment.

A knowledge-based economy is the strategic objective of the government in the Dubai National Agenda 2020. It is expected that educators will drive this objective through pedagogic reforms that supports a shift towards a knowledge-based economy in the country. This is a perfectly reasonable undertaking but unless the conceptualization of knowledge changes to a more equitable power distribution in the classrooms and students become empowered, there will be no way of evaluating the extent to which the objective has been achieved. One definition of knowledge is anchored in the literature on cognition and highlights content (a) what something is (concepts, concepts' relationships, taxonomies), (b) why something is (cause-effect relationships), and (c) how to do something (procedures, know-how) (Bruning et al., 2011; Schank and Abelson, 1997).

However, for the purpose of this research, student engagement will be categorized as a cognitive emancipatory phenomenon, with some unique properties. Knowledge develops through a process of learning, which engages other cognitive processes (e.g., perception, meaning creation, reasoning, and memorizing). Emancipatory knowledge bridges the gap between technical and practical knowledge and helps the recipient to be more cognitive of how social relationships are distorted and manipulated by constructs of power and privilege (McLaren, 2003). Unfortunately, so far the dominant pattern of education in the UAE has only fostered memorization, and there is a critical mass among the student population, who have not progressed toward the upper tiers of Bloom's taxonomy. Learning is subject to motivation, attention, and style. The extent to which these physiological factors are facilitated in the classroom, will determine the extent of learning and the resulting knowledge. The common fallacy in the traditional

pedagogical approaches to knowledge is that once teacher shares knowledge, the transfer is complete and that students end up with the same knowledge. This top down approach has proven to be ineffective in the long term as the knowledge gathered through this approach is superficial.

Another important caveat is that knowledge is never complete or perfectly correct or consistent. Knowledge is the product of agreement or consent between individuals in a shared context. So it is necessary for students to understand the social functions of knowledge and for them to develop the skills of ongoing knowledge acquisition and learning, even outside of the classroom. Student engagement has been centred on the objective of enhancing all students' abilities to *learn how to learn* or to become lifelong learners in a knowledge-based society (Gilbert, 2007, p. 1).

3.3. Linking Theory to Practice

Uncritical reflection of social reality is a product of an educational system that separates theory from practice. Hooks (1994) maintains that not linking theory to practice perpetuates dominant power structures through the curriculum and reinforces collective exploitation and repression. This view is also posited by Freire and Faundez (1989), who believe that objective knowledge as a sole intellectual goal gives teachers power over students who do not possess knowledge. This perspective arises from a failure to link theory to practice. It is necessary to remove this dichotomy and allow students to link academic and theoretical concepts to their lived realities (Beyer, 1995).

In the UAE Higher Education system, the intrinsic link between theory and practice is an oft neglected factor and learning is not necessarily relevant, engaging and enjoyable to students. Badran (1989) criticizes the current traditional role of teachers as "knowledge transmitters" and calls for a new training that produces teachers who are facilitators of knowledge construction. This he concludes will "stimulate the learning process" (p.116). The applicability of theories outside the class challenges the traditional pedagogical approaches and creates an environment where the teacher becomes co-constructors of knowledge. This sentiment is echoed by Dunleavy, et al (2009) who posit that "affecting a deeper transformation to school and classroom practices calls upon all of us to begin looking at school improvement as a collaborative *knowledge-building activity* where teachers themselves are actively engaged in co-constructing ideas that contribute directly to school improvement and development" (p. 18). In the current traditional model of education in the UAE as well as many parts of the world, a student's identity is reduced to a test score. Principals and teachers are robbed of their agency in favour of accountability and centralized regulations of governing organizations. Teaching to high stakes exams strips teachers of their ability to engage students. Challenging the current discourse and posing an alternative pedagogical approach are essential in stemming the present situation.

3.4 Learner Engagement through curriculum design

Helsby (2002) conducted a robust study of recent UK and US graduates and their employers in which they were asked to identify specific attributes thought to be associated with employability. The recurrent themes included intellectual qualities (e.g. analytical, independent, critical), transferable skills (e.g. communication, time management), personal characteristics and attitudes (e.g. confidence, enthusiasm, pro-activity), and career orientation. The development of learned optimism or efficacy beliefs, use of

reflection on learning and strategic thinking about the best course of action in a situation are also attributes that could be encompassed in the term 'student empowerment' (Knight & Yorke, 2003). This concept of student engagement has far reaching implications for the methods of teaching in UAE Higher Education Institutions and will require a tuning of the curriculum to meet to objectives of academic success and employability. There is evidence of links between academic success and curriculum design. Domingo, et al (2007) triangulated data from approximately 6,700 students and 5000 academic staff on over 30 campuses in the USA, found associations between staff reports of coherence in first year programmes and courses, and student perceptions of academic competence. Harvey, et al (2006) describe the importance of "goal orientation and self-efficacy" (p. iv) as influences on persistence in the face of doubts or difficulties. Some researchers suggest that confidence and autonomous learning can be developed through appropriate and informed curriculum design (Chan 2001 cited in Harvey et al, 2006; Lines, 2005).

Flores-Juarez (2005) completed research on factors influencing student engagement at a university in Mexico and found that one of the main factors that affected first year engagement, was the academic programme which is directly related to curriculum design and included issues such as assessments, schedules and perceptions of connectedness. Although the structure of the programme is not the only influence on student engagement, it does present a regulating factor that might facilitate the development of positive attitudes and behaviours, hopes and goals. This research suggests that there is potential for transformative curriculum design, as the UAE pursues reform of the education sector for student engagement and empowerment. However, McInnis (2001) posits that it is not enough to implement ad hoc solutions without good understanding. It is necessary to explore the ways that curriculum design has been used to facilitate engagement and empowerment. Curriculum reforms should move away from 'teacher-centred' pedagogic approaches to more 'learner-' or 'student-' centred, or 'active' learning approaches.

However, reform in the absence of engagement pedagogy will have little transformative impact. Watkins and Mortimore define pedagogy as 'any conscious activity by one person designed to enhance learning in another' (1999, p.3). Bernstein also purports that pedagogy 'is a sustained process whereby somebody(s) acquires new forms or develops existing forms of conduct, knowledge, practice and criteria from somebody(s) or something deemed to be an appropriate provider and evaluator' (Bernstein, 2000, p.78). Teachers' ideas, beliefs, attitudes, knowledge and understanding about the curriculum, the teaching and learning process and their students affects pedagogy because teacher beliefs are contextually based in social, cultural and political factors. Teachers' pedagogical strategies signify their dispositions towards teaching and learning and are a more concrete expression of their approach, wanting, for example, their students to feel safe, or encouraging their participation or cultivating a cheerful teacher persona or being seen as a knowledgeable and authoritative figure. Teaching practices are the specific actions and discourse that take place within a lesson and that physically enact the approach and strategy. According to Alexander (2009), teaching practices comprise: teacher spoken discourse (including instruction, explanation, metaphor, questioning, responding, elaboration and management talk).

The 2005 Global Monitoring Report on quality (UNESCO, 2005) includes creative, emotional and social development as indicators of quality learning. This notion of 'quality' refers not merely to physical infrastructures and materials but also to the quality of the human interaction in the classroom through appropriate pedagogy (Alexander, 2008; Barrett et al., 2007; Moreno 2005; Barrow, et al., 2007; UNESCO, 2005). The ultimate goal of any pedagogy is to facilitate student creative, emotional and social development. 'Effective' pedagogy includes those teaching and learning activities which make some

observable change in students, leading to greater engagement and understanding and/or a measureable impact on student learning. Implicit in these definitions is a starting point or baseline with which to contrast the observable change in behaviour or learning taking place as a result of a teacher's pedagogy.

In looking at the relationship between school inputs, such as quantitative surveys of textbooks and other physical school resources and student achievement, it is possible to draw conclusions about the quality of the pedagogy. Research results in this area range from showing 'significant positive associations' (Barrett et al., 2007, p.22) to others which state that 'there are no clear and systematic relationships between key inputs and student performance' (Hanushek 1995, p. 232, cited in Barrett et al., 2007). Alternatively, other studies see quality as encompassing the more complex pedagogical issue of the way resources are used in teaching and learning that affects students' achievement (Alexander 2007; Barrett et al., 2007). In the case of the UAE, spending huge amounts on first rate resources, will not guarantee a first rate system of education. Attention is required to moderate the input given to students to ensure engagement and hence positive attainment.

Bryson et al (2009) stated that "although rarely systematically explored", the multidimensional topic of engagement encompasses issues of a relevant curriculum, effective teaching, retention, and facilitation of deep learning. Engagement, which is a prerequisite for learning, is conceptualised more specifically as "the perceptions, expectations and experience of *being* a student and the *construction* of being a student in higher education." The finding of the Bryson, et al study, which was conducted in a UK university, identifies distinct but interconnected aspects of engagement at various levels in the pedagogical process such as task, module, course, and institutional levels. Engagement with learning was influenced by "students' expectations and perceptions, balances between challenge and appropriate workload, degrees of choice, autonomy, risk and opportunities for growth and enjoyment, trust relationships, communication and discourse" (2009). The study also identified some factors that detracted from engagement such as assessment *of*, rather than *for*, learning; intensive structures that leave less time for reflection and activity; a competitive and detached culture, rather than a cooperative and inquiring culture (ibid).

It is widely accepted that currentl,y students live in world that engages them differently than the world of the previous generation. Student engagement with this technology rich society compels institutions to respond in a compatible manner. One contentious issue is that students leave school incapable of, or unprepared for a productive and healthy life in the knowledge economy in which they will live and lead (Gilbert, 2007). The failure to change pedagogy, curriculum, and assessment strategies will result in a failure of our students and jeopardize our own futures (Willms, 2003; Robinson, 2009; Tapscott, 1998; Prensky, 2005; Gilbert, 2007). This is certainly the risk that should be mitigated in the UAE by implementing a pedagogy of engagement.

Basically student engagement has been explained as the effective students' participation of students both outside and inside the classroom, which points towards number of quantifiable and assessable results (Kuh et al., 2007). Hu and Kuh (2002) also defined student engagement in different activities as the quality of students' effort they dedicate to educationally determined tasks and activities that they persist with to gain desired results (p.3). Student engagement has also been defined as the extent to which the students are taking part in different tasks and activities that have been designated as acceptable learning outcomes by universities (Krause and Coates, 2008, p. 493). It can therefore be concluded that student engagement is the premeditated efforts that institutions make to empower and involve students in the experience of learning (HEFCE, 2008).

Student engagement in higher education is a multidimensional construct that includes affective, cognitive and behavioural dimensions of school adjustment (Marks, 2000, p. 153). According to different researchers Marks (2000) and Klem & Connell (2004), involvement and engagement in different activities and tasks has an important and vital influence on the outcomes of results. Useful and effective engagement and involvement of students refer to feelings that student have towards learning (Marks, 2000, p. 23) and the institutions they attend (Klem & Connell, 2004, p. 262). The behavioural engagement refers to persistence and effort in learning, as well as involvement in extracurricular activities (McKinney et al., 1975, p. 198). The cognitive nature of student engagement refers to the quality of the cognitive processing undertaken in various school related tasks (McKinney et al., 1975, p. 198). In the literature on self-regulated learning, cognitive learning relates positively with the deep understanding, synthesis and several other indicators of academic performance.

In recent years, the concept of student engagement has attracted a growing interest in the field of education (Marks, 2000, p.12). Many researchers and educators observe this concept as a solution to different problems of low academic performance and high dropout rate taking place in many institutions (Marks, 2000, p.12). Literature indicates that intrinsic motivation, pleasure and interest in learning activities are predictive of highest academic performance (HEFCE, 2008,). Similarly, there is a positive correlation and consistency among the reports of teachers and students about engagement and academic performance (HEFCE, 2008).

3.5 Conceptual Framework of Student Engagement

Student engagement first emerged as a psychological concept in the late 1980sand some researchers tended to attribute it to a set of individual demographic and social risk factors. However, as early as 1990 there was a conceptual shift when Csikszentmihalyi identified student engagement as a growth-producing activity through which the individual allocates attention in active response to the environment. Csikszentmihalyi (1997) describes how to accomplish this through what he refers to as "the blueprint of flow activities" which includes paying close attention to details, discovering hidden opportunities for action, and matching capabilities to circumstances, appropriate goal setting, frequent progress monitoring with relevant feedback, and increasing task requirements so that the individual is continuously challenged.

All too often in many learning contexts, students are presented with disconnected skill and drill, and teach-to-the-test activities that lead to frustration, anxiety, and boredom. By offering coherently linked, stimulating, and action-driven educational opportunities tailored to the variety of student skill levels and interests, the teacher will be providing the foundation for students to learn through discovery, and create meaning for themselves as well as lasting knowledge. Csikszentmihalyi (1990) shares that in order to create "meaning involves bringing order to the contents of the mind by integrating one's actions into a unified flow experience" (p. 216). As a result, students will be engaged, motivated, and ready for the challenges they are bound to face in life.

This new interpretation of student engagement as a pedagogical construct, conceptually located it within the domain of education. The main principle is that students in the higher education must be engaged in their activities and other tasks related to their course in order for useful and effective education and learning to take place. The student engagement theory hypothesizes three basic ways to carrying out engagement 1) an emphasis on mutual efforts, 2) assignments based on different projects, 3) a non-academic focus

(Kearsley & Shneiderman, 1998, p.12). It further suggests that the outcomes of the aforementioned techniques in the learning process are authentic, creative and meaningful (ibid). Many researchers over the past two decades have explored student engagement as a multifaceted, multidimensional concept with specific connections to social, academic and intellectual environments (Appleton, Christenson & Furlong, 2008; Jacobsen, Friesen & Saar, 2010; Kuh, et.al., 2007; Nelson Laird, Garver, A. & Niskodé, 2007; OECD, 2007; Willms, Friesen & Milton, 2009).

The engagement of students is important to the process of learning (Meyer & Turner, 2006, p. 377). Both these theorists emphasize that the engagement of student is independent from, but not mutually exclusive to utilizing technology in the classroom. The use of technology can make facilitate student engagement in different ways which are not easily attained otherwise (Kearsley & Shneiderman, 1998, p.11). Consequently, student engagement theory is meant to be utilized as the model or framework for student learning and teaching with the help of technological inclusion (Claxton, 2006; Dunleavy & Milton, 2008, p. 12). Extant literature on common strategies to improve student engagement in learning reveals a clear pattern of "best practices". Windham (2005) recommends that, to engage learners in learning, new educational curriculum and activity must include – "Interaction, Exploration, Relevancy, Multimedia use and Instruction" (pp 5.7-5.9). Various elements of Windham's (2005) list are echoed by Willms (2003, 2007, 2009), Claxton (2007), Hay (2000), Barnes, Marateo, & Ferris (2007) and Dunleavy & Milton (2009). Canadian researchers Willms, Friesen and Milton (2009) drawing on prior research on the topic, used the following three constructs in a three-year research project and development initiative into student engagement: social engagement, academic engagement and intellectual engagement. The researchers defined the three dimensions as follows:

- Social Engagement – A sense of belonging and participation in school life.
- Academic Engagement – Participation in the formal requirements of schooling.
- Intellectual Engagement – A serious emotional and cognitive investment in learning, using higher order thinking skills (such as analysis and evaluation) to increase understanding, solve complex problems, or construct new knowledge.

Pedagogy of engagement (PoE), sometimes referred to as engagement -based learning and teaching (EBLT), provides the foundation for developing and strengthening student involvement in the overall learning process. This foundation is built through specific principles, habits, skills, and strategies. All stakeholders of the university community can cooperate to develop sustainable educational practices that foster engagement beliefs, values, feelings, motivation, behavioural habits, and skills that are at the central to achievement and success. In synthesizing the work of previous researchers it can be concluded that there are three basic types student engagement which are continuously referenced in current literature:

- Cognitive domain consists of beliefs and values.
- Emotional/Affective domain consists of motivation and feelings.
- Behavioural domain consists of habits and skills.

In the PoE approach, teachers and students, institutions work systematically across all three domains to ensure an integrated approach to cultivate and support student engagement at the highest level. For the past twenty years, the multifaceted construct of student engagement has been used in the educational and psychological research to explain differences in educational achievement and attainment patterns among students. The literature consistently converges around three components or dimensions of engagement:

behavioural, emotional, and cognitive components (Appleton, Christenson, & Furlong, 2008; Fredericks, Blumefield, & Paris, 2004).

Cognitive engagement includes mental involvement with learning through the exercise of thinking. The nuanced aspects of student engagement in learning tasks is what some research on cognitive engagement are concerned with such as the ways in which students think deeply about ideas and concepts, how they make meaning of the material presented to them, and how they use self-regulating and meta-cognitive strategies to master academic content and tasks (e.g. Corno, 1993; Corno & Mandinach, 1983; Pintrich & De Groot, 1990; Pintrich & Garcia, 1991; Pintrich, Wolters, & Rosenthal, 2000). Other research into students' cognitive engagement generally examines the psychological investments students make in academic tasks (Fredericks, Blumenfeld, & Paris, 2002). Some of this research survey student outlook on school work, for example the amount of effort students expend on completing homework (e.g. Birch & Ladd, 1997), the degree of persistence students demonstrate when faced with challenges in their academic work (Corno,1993). "Authentic achievement" is the term coined by Newman, et al (1993) to describe students with high levels of cognitive engagement. They propose that intrinsically motivated and highly engaged students demonstrate a disciplined approach toward learning that goes beyond a desire to simply understand class content and/or receive a better grade.

Emotional or Affective engagement refers to students' social, emotional, and psychological attachments to school. In the field of psychology, research investigates affective engagement in relation to students' enjoyment of their academic studies, including the level of interest, happiness, boredom, and anxiety they experience during academic activity (Bohnert, Fredericks, & Randall, 2010). Other studies examine affective engagement in relation to students' sense of belonging, identification, and relationship to peers, teachers, as well as school as an institution (Daly et al, 2009; Finn & Rock, 1997; Finn & Voelkl, 1993; Goodenow, 1993; Goodenow & Grady, 1993; Osterman, 2000; Van Ryzin et al., 2009). In both cases, the psychological research concludes that students who are attached to the people and practices of school are more motivated to pursue and complete academic tasks than students who lack similar school attachments. This motivation becomes a characteristic feature of the students' life, leading to the same qualities during their employment (Dornbusch, Erickson, Laird, & Wong, 2001; Fraser & Fischer, 1982).

Behavioural engagement encompasses a broad range of behaviours at school, from attendance up to students' actively participating in academic and non-academic activities at the university. Research on behavioural engagement is particularly broad, reflecting the diverse interests and perspectives at work in the engagement research literature. Fredricks et al. (2004) have identified three forms of behavioural engagement which vary significantly.

- Positive conduct, which includes attending class, avoiding disruptive behaviours, responding to directions, and following classroom rules,
- Involvement in learning which includes concentrating, making an effort, being persistent, contributing to class discussion, asking questions, finishing homework, and spending extra time on class-related learning.
- Participation in school-related activities includes taking part in non-academic, extracurricular activities such as sports teams or student organizations.

Research has shown that each component of engagement is significantly related to student outcomes. Student engagement is more malleable than other status indicators or student traits that have been shown to

be related to student outcomes (Finn, 1993; Fredricks et al., 2004) because it is responsive to change in the social environment. Given the strong relationship between student engagement and other student outcomes and the relative ease with which student engagement can be enhanced through pedagogical and environmental changes, it would follow that the educational authorities in the UAE and the research community need to pay more attention to this as an alternative pedagogical approach and ways to increase it in PHEIs. Student engagement is a strong predictor of student success. Studies have reported a positive association between student engagement and academic achievement regardless of race, gender, and socio-economic status (Klem & Connell, 2004). Highly engaged students are also less likely to drop out of school (Finn & Rock, 1997). From a developmental perspective, academic failure and dropping out are not isolated events but instead are results of a long-term process of disengagement (Alexander et al., 1997; Randolph, Fraser, & Orthner, 2004). Enhancing student engagement may help to rectify the poor student outcomes in the UAE, reported by the local and international studies mentioned previously. For this reason, it is critical to identify the types of social and educational settings that promote student engagement. PHEIs in the UAE, which are a key part of students' educational environment, can provide conditions to facilitate engagement pedagogies.

3.6 Student Engagement Approach as the Antithesis of Disengagement

The antithesis of engagement is disengagement. Students who are disengaged in school are thought to experience a qualitatively different set of outcomes. Research suggests that disengaged students are the most likely group of students to drop out of school (Balfantz, Hertzog, & Mac Iver, 2007; Rumberger, 1995). This is a likely explanation for the high dropout rates among students in the UAE. Unfortunately, 15-29 year olds, who represent the fastest growing segment of the UAE population (La Cava, 2010), are the most likely candidates to experience dynamics associated with school disengagement and failure. This is a compelling reason for educational policy makers to adopt strategies of reducing student disengagement at the university level.

In the UAE there is a dearth of literature in the concept of student engagement as an alternative pedagogical approach. Many researchers, especially in the field of TESOL investigate language education (Troudi cited in Brown and Coombe, 2015) reflective teaching (Engin, 2014) student retention issues in the region (Ridge et al, 2013), but few address the construct of engagement. One study conducted in Sharjah, UAE among high school students predicted a positive relationship between cognitive engagement and achievement (Christenson, Reschly and Wylie 2012). Another study by Gitsaki, et al (2013) explored student engagement as an outcome of the iPad initiative in government higher education institutions. Outside of the UAE, researchers position student engagement approach as the opposite of disaffection among students. "The opposite of engagement is disaffection. Disaffected [students] are passive, do not try hard, and give up easily in the face of challenges... [they can] be bored, depressed, anxious, or even angry about their presence in the classroom; they can be withdrawn from learning opportunities or even rebellious towards teachers and classmates (Skinner and Belmont,1993). Fredricks, Blumenfeld, and Paris (2004) conclude that engagement is associated with positive academic outcomes, including achievement and persistence in school; and it is higher in classrooms with supportive teachers and peers, challenging and authentic tasks, opportunities for choice, and sufficient structure.

The concept of student engagement versus disengagement in higher education institutions refer to the concentration and emotional quality related to involvement of learners in carrying out and initiating the activities of learning. Students who are disengaged do not demonstrate sustained behavioural involvement in the activities of learning. On the other hand, engaged students select different activities at their proximal level of development, commence actions when provided different opportunities, and display concentrated effort in carrying out different learning tasks (Meyer & Turner, 2006, p. 377). Engaged students basically demonstrate the encouraging emotions that indicate accomplishment such as interest, optimism, enthusiasm and curiosity. On the other hand, the antithesis of engagement is disengagement. Disengaged students are inactive and unreceptive, they are averse to class activities, and easily surrender in the face of problems and challenges. It is also noticed that the disengaged students can be depressed, bored, anxious, or even annoyed and irritated about their classroom presence; they can be reserved from the opportunities of learning or also disobedient towards their classmate and teachers (Claxton, 2006; Dunleavy & Milton, 2008, p.23). The literature reveals that the disengaged students withdraw from the higher education institute in considerable numbers.

According to 2012 data from the Knowledge and Human Development Authority (KHDA, 2013) in Dubai, up to 25 % of Emirati boys fail to complete high school. The same report cites push factors such as uninspiring teachers and classes. This is supported by Ridge (2012) who asserts that "teacher quality is a major factor and, especially in the U.A.E., there needs to be rapid improvement in training Arab male teachers. Many of them struggle with how to teach and are very unengaging" (p.14). The pull factors such as low-skilled public sector jobs in the army or police force, or roles in family businesses. High school dropouts mean that fewer male students pursue higher education, where they currently make up just 30 percent of local university populations. The low rate has tremendous economic and social implications for the country, as women are less likely to marry an uneducated man. In addition, if local men cannot qualify for higher level jobs, those positions go to expatriates instead.

Student engagement researchers have identified that the engagement of student is not the same as the motivation of the student (Meyer & Turner, 2006, p. 377). Alternatively, disengagement for many students is linked with the problems associated with behaviour, and learning (Ridge, et al, 2014). Behaviour challenges is usually a precursor to failure and withdrawal. From an emotional viewpoint, disengagement from classroom education is linked to intimidation and self-knowledge about proficiency, competence and self-worth. Therefore, it is clear from the literature that student engagement approach is the antithesis of disengagement of students (Claxton, 2006, p.1). These finding are quite salient in the UAE context.

3.7 Instrumentation and Measurement of Student Engagement

From the literature it is evident that there is no consistent instrument for testing student engagement. Additionally, to test engagement theory, research must be accomplished to evaluate the students' level of engagement as compared with the understanding level of students at the end of any project or course. The engagement level of students can effectively be measure by possibly utilizing the National survey for the engagement of student.

A number of measures relating to aspects of social life and school-related learning have dominated over the last decade. According to Willms, Friesen and Milton (2009) social engagement and academic engagement were well established in the research literature, but intellectual engagement was a new construct which explores what were the students in the classroom, what they thought about their experiences regarding

learning and the job they realized had actually contributed to the learning (Willms, Friesen and Milton, 2009, p.6). The study resulted in two important findings:

- Between 50 and 70 percent of the differences between the levels of engagement of students in 93 schools were the result of factors related to school climate and classroom.
- The gaps of achievement in schools of the study sample, were far greater than the differences associated with family background of students.

These findings indicate that levels of engagement vary by school and suggest that the role of the teacher in the classroom can be as important as the students' family background.

Jacobsen, Friesen and Saar (2010) proposed additional measures derived from observations and interviews in order to study in greater depth, the possible links between teaching practices and student intellectual engagement. These factors were teachers' designs of learning, types of assessment practices, students' technology use, and leadership practices. Their study employed multiple measures of social, academic and intellectual engagement classroom observations; artefacts of student learning; teachers' planning documents; and focus group and individual interviews. Their study introduces additional measures such as: (i) a classroom observation protocol, (ii) criteria in the form of a rubric to assess teachers' planning documents and (iii) criteria in the form of a rubric to assess student learning and depth of understanding.

The voices of teachers are infrequently heard in the studies regarding student engagement. According to Harris (2008), some of the teachers disagree with and do not completely comprehend the concept of student engagement in the process of learning. Harris (2008) also mentioned that teachers identify the engagement of students in learning process when they listen, behave, and do their activities and task accordingly. It is also illustrated by Harris (2008) that the perspectives of teachers vary in many ways. Teachers have different perspectives on student engagement, according to teachers, student engagement means:

Participation of students in the activities of classroom and following the rules and regulations of the school.

- Willingness to participate in different activities that take place at school.
- Confident and also motivated in participation in what occurs at institute.
- Being engaged in different activities of learning by the process of thinking.
- Learning persistently in order to reach the goals of life.
- Valuing and owning the overall process of learning (Harris, 2008, p. 65).

All these categories are renamed by Harris (2008) as "behaving", "enjoying", "being motivated", "thinking", "seeing purpose", and "owning". Whereas, the initial category of teacher perspectives contains mainly behavioural aspects of student engagement, on the other hand the second and third category is focused on the emotional characteristics of student engagement. The last three categories given above i.e., thinking, seeing purpose, and owning, highlight the cognitive characteristics related to the engagement of students (Harris, 2008, p.65). Interestingly in this research, not all the teachers correctly describe student engagement as the process of learning. Some take a reductionist view such as on taking part, or attracting students to different learning activities (2008, p. 74). It is evident that some of the teachers subscribe to the early understanding of student engagement as a classroom management strategy while others see it as a pedagogical approach.

Canadian researchers like Dunleavy and Milton (2009, 2011) and Willms and Flanagan (2007) observed the conspicuous exclusion of the student voice in the research about student engagement and initiated research that explored the students' perception the topic. Dunleavy and Milton (2009) state that the voices of student need to be important and essential in designing how we think about the effective and current aim of learning and schooling environments. They gathered in-depth information from students and teachers on different elements related to engagement of students in order to explain the concept of "deal school" or the environment of learning and also explored what factors would increase engagement of students in the process of learning.

Additionally, Willms and Flanagan (2007) conducted a similar study through an online research survey in which participants could anonymously articulate their perspectives on engagement of students. The instrument of survey was entitled "tell them for me" and was developed by Willms and Flanagan in the year 2004. When apparently successful students of the higher education institutions openly spoke about their engagement level and level of learning in these studies, they generally explained the classrooms of the school as "hectic, stressful, boring, and not connected with the real picture of the world" (Dunleavy & Milton, 2009, p. 9). Some of the students also mentioned that merely they are following the expectations' or rules or the concept of "doing school". Different external factors can be utilized in order to motivate these students (Dunleavy & Milton, 2009, p. 9). Even though students in the research did not address all the categories and terms, such as academic, behavioural and cognitive, they concurred with the principles of student engagement. Dunleavy and Milton (2009) explain different issues that left students feeling disengaged and frustrated in the school environment. Earlier literature by Pope (2003) explained the concept of "Doing School" as how institutions were forming materialistic, stressed-out and under educated generation of students. The research by Dunleavy and Milton was a patent reminder of this and it presented ideas of what it would really take from students to be engaged in their learning environment of. Among their suggestions were:

- Finding solutions to real issues and challenges
- Observing the interconnection of different subject matters.
- Learning from one another and from the other people from the community.
- Connecting with the expertise and experts in specific fields of study.
- Engaging in more conversations and dialogue (Dunleavy and Milton, 2009, p.10).

At present, what basically occurs in the process of education will significantly impact the individual lives and also the whole society for decades to come. With all forms of inherent problems and challenges in facilitating and measuring the engagement level of students, defining the concept of student engagement is really useful and effective since the participants in education sector are rapidly changing to keep pace with the demands of the global world. Bennett, et al (2008), quoting Prensky (2001), suggest that the youth today have become "accustomed to learning at high speed, making random connections and processing visual and dynamic information and learning through game based activities". This is a stark contrast to typical classroom activities. Instead of traditional, passive teacher-led lectures, young people today have developed a decided preference for "discovery-based learning that allows them to explore and to actively test their ideas and create knowledge (Brown, 2000, as cited in Bennett, Maton, & Kervin, 2008, p. 779). Unfortunately, the education sector itself has not kept pace with the changes. There is mounting disconnect between the needs and wants of the students and what is provided by the institutions. It is concluded by Harris (2008) that the engagement of student must be clearly and explicitly explained within the documents

of government, academic research and curricula in order to avoid the misinterpretation and misunderstanding (p.75). In so doing various disconnects and gaps that are currently evident will be reduced through effective empirical data collection and analysis of student engagement that actually takes place in the classroom to meet the demand of current students.

This research seeks to add to the existing body of knowledge some contextual understanding of how a pedagogy of engagement, which falls under flexibility and risk taking, may be applied as an alternative pedagogical approach that allows greater autonomy among teachers and students, flexible learning, collaborative opportunities and more trust among teachers and students. For students, flexibility would allow more student -based inquiry, problem solving and application rather than passing tests. Risk tasking is defined as "willingness to venture into the unknown. It is an eagerness to try something new or different without putting the primary focus on success or failure. Learning is the reward of risk taking" (Young, 1991). As a consequence, HE curricula should be designed to teach students "how to learn" not "what to learn". The notion of lifelong learning needs to become central component in the Higher Education curriculum in the UAE. According to OCDE "The advocacy for lifelong learning rests on the idea that preparation for active life may not be considered as definitive and that workers must follow training during their professional life to remain productive and employable" (OCDE, 1997).

Notwithstanding the vision and strategies proposed by the main regulatory bodies in the UAE (i.e. Ministry of Education, MoE; Ministry of Higher Education & Scientific Research MoHESR, ADEC and KKHDA), private universities find themselves bucking against the status quo which in entrenched in the widely held philosophical view of education as being product oriented. Kirk (2011) describes this product orientation as the deficit in the education system within the region. The quality and structure of the education system; teaching basic science and an over dependence on social science, means new entrants into the workforce or higher education lack many of the higher order thinking skills and understanding. Higher Education systems that focus on developing and promoting creative thinking, technological competence, language skills and global awareness are not sufficiently evidenced in the UAE.

Many learners in the UAE are at the centre of this deficit model of education and are, to some extent, regarded as receptacles for knowledge. According to the Emirates Centre for Strategic Studies and research educational instruction "do not match international standard "and the programmes are often "theoretical and without any practical depth" (2009, p.231). The report cites the absence of skills such as critical thinking, problem solving, collaboration, written and oral communication, creativity, self- direction, leadership, adaptability responsibility and global awareness as a major deficit in education. The content is often predetermined by others and the learner assumes the passive role of processing of great masses of information coming from all directions. This receptacle metaphor is extended by Freire who described student in the product model as "containers…to be filled by teachers" (cited in McKernan, 2008). Mckernan adds that "the more completely filled the teacher fills the receptacle, the better he is. The more meekly the receptacles allow themselves to be filled the better students they are (ibid). Greene (1971) describes this as "socially prescribed knowledge, external to the knower, there to be mastered" (cited in Young, 1989). In the UAE this manifests itself in rote learning and memorization as the learning activities of choice (Souleles, 2013; Farah and Ridge, 2009; Crabtree, 2010).

McKernan (2008) further laments that the problem with education today is that it is often planned in a non-educational and undemocratic way by governments using a top- down approach which has no concern for those working at the grassroots level. Teachers function in a subsidiary capacity to curriculum planners and

administrators who are far removed from the realities of the universities. Barrow (1984) opines that top down approached to curriculum is poor and tend to be authoritative. In the UAE, many universities with close partnership in the private sector aim only to meet the needs of economic development. Even more worrying is that universities in the UAE have even tried to model themselves upon business values and management structures. Consequently, teachers are not necessarily given the respect they deserve, they are merely factory workers producing a pool of resources from which labour market will draw its supply. House (1979) observed that "the basic predicament of teachers is that they are treated as passive consumers within their own organizational structure. They are acted upon rather than acting" (cited in Young, 1979). This will remain unchallenged as long as numbers of graduates from HEIs in the UAE continue to grow and if the private and public sector continue to find a pool of skilled labourers from which to draw.

Educators and researchers concur that to minimize the social and economic loss, increasing student engagement is a proven solution (Fredricks, Blumenfeld & Paris, 2008; Koljatic & Kuh, 2001; Rumberger and Lim, 2008). The degree, to which a student is involved in a variety of educationally purposeful activities, is one of the most important predictors of postsecondary student persistence and retention (Fredricks, Blumenfeld & Paris, 2008; Rumberger and Lim, 2008). Extant literature on engaged learning pedagogy all converge on one basic fact i.e. student engagement pedagogies is significantly different from much of the learning that goes on in PHEIs.

In many UAE institutions there are many under-performing students, including Emiratis and expats alike. There is gap between their educational achievement and the expected learning outcomes. Researchers blame the education system for the following reasons:

- Traditional schooling practices are not effective for some groups of students.
- Continuing to do what we have always done will perpetuate rather than eliminate the gap.
- Repeated failure over time creates an achievement gap that is exceedingly difficult to erase.

Almazouri (2013) posits that since it was established, the UAE education system has been focusing more on memorising facts than fostering critical thinking. "The system we have adopted has been going through the same process over and over again: moulding and shaping young minds to fit into a narrow template to meet particular needs of society" (ibid). Although many teachers recognize that a large percentage of their students fit the profile of under achievement, they are reluctant to change the way they have always approached their teaching. The student engagement curriculum and the recurrent inspections to ensure compliance will pose problems for many of the teachers in the UAE. Student Engagement pedagogy will require them to teach in a very different way than they are accustomed to and instead of lecturing and non-interactive seminars the focus needs to be more on solving problems, critical and lateral thinking, industry interactions and taking learning outside the classroom. Teachers are required to adopt instructional styles that are more learner focused, and to provide more opportunities for active learning through the use of digital technologies to support the creation and sharing of knowledge. UAE teachers agreed that students are not intellectually engaged in the core academic subjects (Tabari, 2014). Teachers feel challenged to find new and different methods to teach so that students are engaged in deep, meaningful and authentic ways.

As new strategies and reforms for the UAE's education system are developed, fostering critical thinking is an important element to be included. The objective of a revised curricula should go beyond teaching facts to training young minds how to think independently, question and come up with their own answers, rather than memorising and repeating the same paradigms. Institutions are required to promote an interactive

educational experience by establishing an environment in which both parties, students and teachers, function as partners in inquiry (Almazroui, 2013).

One possible model of reform which aligns economic goals with education in the UAE was suggested by Sahlberg (2006) who is an education specialist with the World Bank. After examining the global trend toward knowledge economies and reforms in education systems he asserts that with economic competiveness indicators of flexibility, creativity and risk taking are the new values to be adopted to replace current reform indicators of standardization, accountability and fixed results in global education systems. As shown in figure 9 below, policies and strategies have to be recalibrated to meet the new realities of knowledge-based economies. In education, teaching and learning have traditionally been established around standardization, accountability and a product orientation based on fixed results. To achieve intended change a flexible, non- linear education system that encourages creativity, innovation and risk-taking should be adopted, because these are factors that define competiveness in a knowledge based economy.

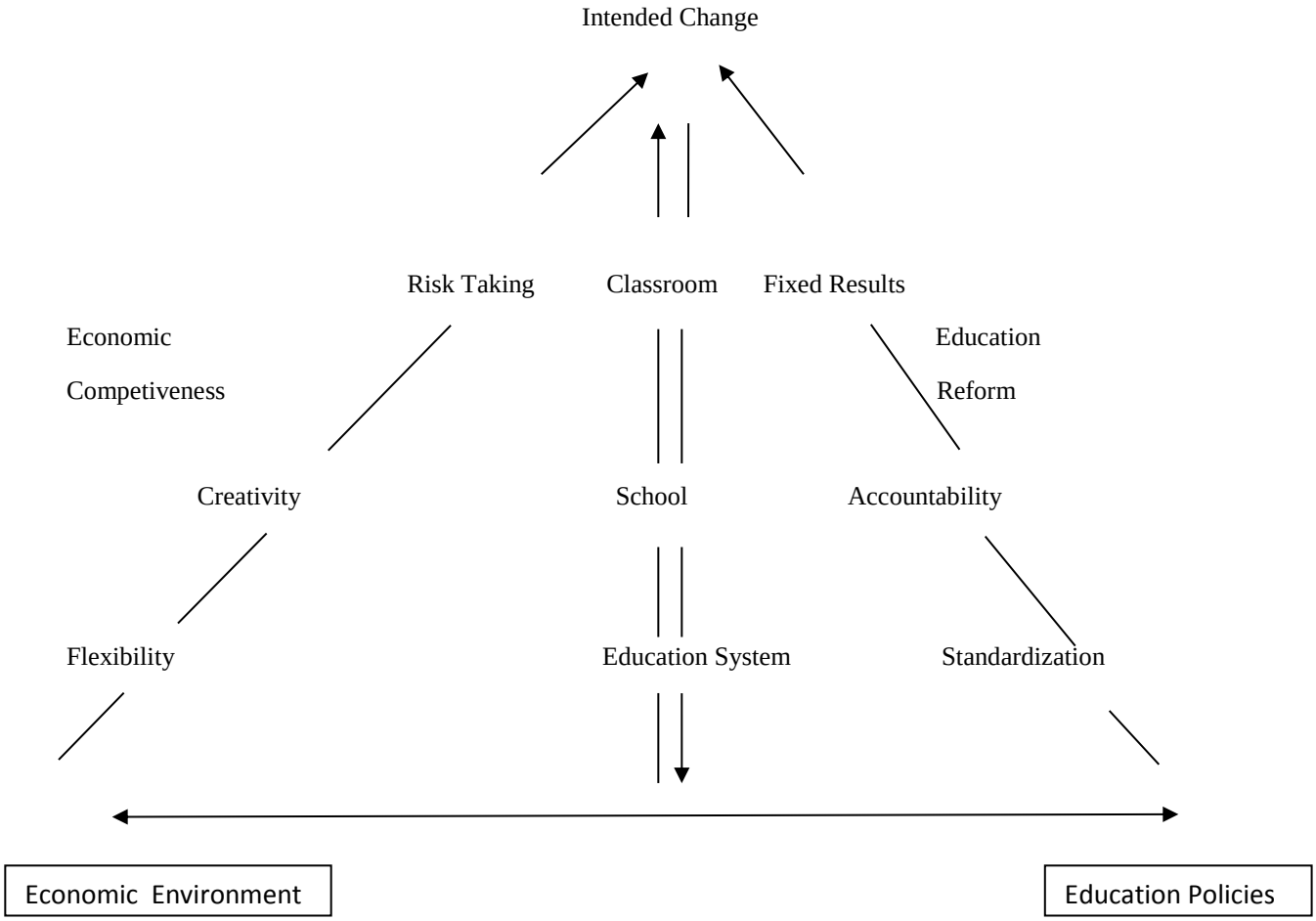


FIGURE 9: SAHLBERG'S MODEL OF EDUCATIONAL REFORM

To promote the economic competiveness of the graduates from UAE universities, tertiary education needs to move away from the restrictive environment of fixed results, and standardized testing as shown on the right side and they must embrace the key indicators of economic competiveness such as risk taking, creativity and flexibility shown on the left. These provide educators with the liberty to interpret curriculum and teach in a manner that promotes learning which will create a competitive and productive labour force.

3.8 Theoretical Framework and Review of the Research and Methodological Literature

Student engagement is defined by Kuh as "the time and energy students devote to educationally sound activities inside and outside of the classroom, and the policies and practices that institutions use to induce students to take part in these activities" (2003a, p. 25). The philosophical underpinnings of student engagement have been attributed to Astin's (1984) theory of student involvement which examined environmental factors that influence student development. A direct correlation between student involvement and student development was posited by this theory. Astin further posits that the role of student involvement in relation to outcomes led to increased learning, personal development, and overall satisfaction with college involvement. Astin's research defines student involvement as "the amount of physical and psychological energy that the student devotes to the academic experience" (1984, p. 297).

Empirical studies on engagement pedagogies incorporating Astin's theory of involvement have linked student engagement pedagogies with outcomes such as persistence, retention, satisfaction, achievement, and academic success (Astin, 1984, 1993; Goodsell, Maher, & Tinto, 1992; Kuh & Vesper, 1997; Pascarella & Terenzini, 2005). Involvement theory indicates that students must be actively involved in the collegiate environment in order for learning and development to take place. This premise helped to provide support for the idea that educational practices need to be implemented, inside and outside the classroom, to engage students on campus (Kuh, 2003a). In light of Astin's argument, that learning takes place when students are involved, his involvement theory served as the theoretical framework to guide this study. This researcher used Astin's student involvement theory as the focal point to capture students' levels of engagement in their educational environments.

According to Pascarella and Terenzini "one of the most inescapable and unequivocal conclusions we can make is that the impact of college is largely determined by the individual's quality of effort and level of involvement in both academic and nonacademic activities" (1991, p. 610). This statement resonates with Astin (1999) claim that students who were diligent in their efforts to studying course work, meeting teachers, collaborating with colleagues, and going to the library was beneficial to learning and promoted positive outcomes, such as academic achievement, personal and intellectual development, and graduation attainment.

Constructivism provides the paradigm for the reforms that are needed in PHEIs as well as the methodology chosen for this study. This learning philosophy has spurred innovative instruction, increased student motivation, created new ways to perform assessment, and promoted lesson planning that are related to the real world at all levels of education. Chickering and Gamson (1987) have set forth seven practices that cover the framework for educational reform being advocated for PHEIs in this study. The practices they see as necessary for developing a student-centered climate are promoting active learning, fostering student and faculty contact, providing frequent feedback, setting high expectations, respecting diversity and various learning modalities, stressing time on task, and cultivating cooperation among students. Boylan (2002)

confirms that these strategies are still effective practices in higher education. Knowledge that is constructed across the disciplines, develops cognitive abilities that are transferred to real life situations. Using cooperative and experiential learning in contextual settings increases student motivation and learning. Student reflection is needed for self-assessment and is an integral part in the development of critical thinking skills. These practices are in alignment with those warranted for PHEIs in the UAE and play an instrumental role in changing the focus of educational institutions from teaching to learning.

Many of the strategies offered by Chickering and Gamson (1987) and Daniels and Bizar (1998) apply at all levels of the educational system, and are included as research best practices targeted for post-secondary education. Student learning as well as teacher effectiveness are enhanced when students are actively engaged (Kuh, 2003). Penrose and Ball (2007) insist, "Studies of teacher effectiveness indicate that student engagement in learning is to be valued above curriculum plans and materials" (p. 107). Thus learners should be permitted and expected to assume a greater role in their education and learning. This implies that changes need to be made in the PHEI curriculum, which would foster a learner-centered atmosphere and redefine the role of the instructor to that of a facilitator.

Mastery of a set of techniques and procedures for learning is considered as self-directed learning (Tennant & Pogson, 1995). Instructors need to assist and facilitate students' acquisition of learning strategies as well as subject content. In this research, intentional strategies such as directed attention, selective attention, self-monitoring, self- evaluation, and self-reinforcement are employed. Lecturers in PHEIs need to have a firm understanding of the numerous theories and philosophies of education such as constructivism, positivism, realism, and andragogy so that the theory can enhance the experience and vice-versa (Tennant & Pogson, 1995).

Much of the theory and practices concerning adult learning can be traced to the works of Knowles who defined andragogy as "the art of teaching of adults" (Knowles, 1984, p. 6). This definition helped me distinguish post-secondary or adult education as a separate and defensible profession. This perspective on higher education have underlying assumptions that directly affects how adult learners are engaged in the classroom. Knowles proposed that adults are self-directed learners, who possess a wealth of practical intelligence and life experiences from which to build. They have educational needs related to their social roles, are problem oriented and interested in the application of knowledge, and are intrinsically motivated (as cited in Merriam Webster, 2001). These assumptions question classroom structure and authority and stand in stark contrast to the behaviorist models of the traditional PHEI classroom in the UAE. Knowles' assumptions are founded in constructivism and support many of the student engagement practices that Daniels and Bizar, Chickering and Gamson propose. If an educator subscribes to the theoretical construct of andragogy, then she must actively question the status quo in private UAE private higher education institutions.

The foundational elements of the conceptual framework for this research consisted of the identification of best practice teaching methods, effects on students' perception of learning, and intervention strategies to improve student achievement and student engagement in the classroom. Educators that utilize a teacher-focused approach believe that students acquire knowledge through a method called information transmission, otherwise known as a lecturing. These teachers do not assume that their students need to be active participants in the learning process for this type of teaching to be successful (Struyven et al., 2010). This approach to teaching aligns with objectivistic thought where it is believed that the object of knowing is thought of as the end result of the learning process (Tam, 2000). The focus of objectivism is the end

result, not on how the knowledge was gained. Unfortunately, this is very common product oriented practice across the Gulf regional educational landscape.

On the contrary, educators that utilize a student-focused approach educate their students by teaching them to open their minds to other perspectives and to develop new ideas about the topic they are studying. Students are viewed as active constructors of knowledge and this activity is considered to be an essential part of the learning process (Struyven et al., 2010). Supporting the student-focused approach is the "constructivist perspective that describes learning as a change in the meaning or interpretation of knowledge that is constructed from students' experiences" (Chatti et al., 2010, p. 78). Constructivists recommend that students develop their own meaning of the content being learned by attaching a personal linkage to the material so that their knowledge of the material increases in breadth and depth (Jonassen, 1991). Studies have consistently shown that students who construct their knowledge, enhance their critical-thinking and problem-solving skills and are better able to transfer their knowledge to new situations (Lieux, 1996). Another by-product of the constructivist approach is that students' efficacy level increased and this resulted in their increased willingness to take risks and express their ideas more openly (Krain & Nurse, 2004; Cabrera & Anastasi, 2008). This student-focused, constructivist perspective has been associated to intrinsically motivated learning as students who construct their own knowledge proactively sought out information rather than wait for information to be told to them (Brown, 2006; Souleles, 2013).

An analogous differentiation to the teacher-focused versus student-focused approach is the learning-focused versus content-focused approach to teaching. Postareff, Katajavuori, Lindblom-Ylanne and and Trigwell (2008) state that what differentiates the latter is the underlying purpose of teaching. The purpose of the learning-focused approach is to improve student learning by facilitating the learning process which allows students to construct their own knowledge. On the contrary, the purpose of the content-focused approach is to deliver course content to students so that they will learn by absorbing the transmitted information from their teacher.

Prosser and Trigwell (1999) demonstrated in their research that higher education teachers embraced different conceptions of teaching and learning. Their conceptions were found to be related to their teaching approach. For example, teachers who believe they teach to transfer information to their students were associated with an approach where the teacher is viewed as the focal point of the class. On the other hand, teachers who believe they teach to change the students' understanding of the course content are associated with an emphasis on the student being the focal point. Subsequent studies have added to Prosser and Trigwell's findings by showing that a student-focused/learning-focused approach to teaching was associated with students adopting a deeper approach to learning as compared to a teacher-focused/content-focused approach (Trigwell et al., 1999; Postareff et al., 2008; Struyven et al., 2010). This is viewed as positive because a deep approach to learning emphasizes the construction of knowledge and understanding. Students who adopt this approach learn by making concepts real and they evaluate and synthesize knowledge gained at a real-world and personal level. In contrast, a surface approach to learning stresses learning that is founded on extrinsic motives that are driven by the desire to complete a task exhausting minimal amount of effort during the learning process. This latter approach has not served the UAE HEI landscape very well, hence the current need for a liberatory alternative through an engagement model.

In terms of the relationship between a student's learning approach and their academic performance, the findings were generally that deep approaches to learning were related to higher quality outcomes and grades although exceptions were found (Gijbels, Van de Watering, Dochy, & Bossche, 2005). Zeegers (2001)

reported a positive correlation between a deep approach to learning and academic performance in undergraduate law students. Snelgrove and Slater (2003) found similar results with undergraduate nursing students. In contrast to those studies, Gijbels et al. (2005) discovered no significant difference in the mean scores of a multiple-choice examination given to undergraduate law students from a different university. Despite the mixed findings of whether active teaching and learning leads to greater short-term learning than more traditional passive approaches (Lieux, 1996; Dochy, Segers, Van den Bossche, & Gijbels, 2003; Krain & Shadle, 2006), an active learning approach involving real-world and personally meaningful application has been shown to promote a deeper understanding of key concepts (Krain & Lantis, 2006). Active and experiential learning was shown to enhance personal interest in the subject matter and raise the level of student engagement in the classroom (Lieux, 1996). Furthermore, students who actively engage the subject were found to have a better understanding of the topic and were more likely to retain that knowledge (Dochy et al., 2003; Krain & Nurse, 2004). Long-term memory was shown to increase in students who use multiple types of sensory inputs during the learning process. In addition, a multiple sensory learning experience enables students with different learning styles to also access and retain the material (Dochy et al., 2003; Prince, 2004). Overall, an active approach to learning has been shown to have significant impacts on student satisfaction with their overall educational experience, enthusiasm to learn, and willingness to attend class on a regular basis (Lieux, 1996; Savery, 2006; Shellman & Turan, 2006).

These findings supported an earlier study by Trigwell et al. (1999) that found student-focused conceptual change approaches were associated with deep approaches to learning and teacher-focused information transfer approaches to teaching were associated with surface approaches to learning. In both studies a consonant teaching approach was used that resulted in students adopting a deep approach to learning that were typically associated with perceptions that the teaching was good, the goals and standards were clear, and that there was a feeling of independence in how and what the students learned (Trigwell et al., 1999; Prosser, et al., 2003). What can be said is that the awareness of the relationship between teaching approaches, student approaches to learning, and the learning outcomes for the class will assist teachers in developing a more consonant learning-focused teaching style that has been empirically shown to have a positive influence on student achievement and classroom engagement (Postareff et al., 2008).

3.9 Effects of Students' Perception of Learning

Earlier research that identified the differences in student achievement when they are taught using a consonant or dissonant approach, also identified a relationship between student perception of learning and achievement (Meyer & Vermunt, 2000; Prosser, Trigwell, Hazel, & Waterhouse, 2000). Biggs, Kember, and Leung (2001) pointed out that a student's approach to learning is directed by their preference for choosing a particular process, predominately a deep or surface approach, and to the subsequent associated cognitive processes for the learning task. The process that the student takes is dependent on the interaction between their personal character (e.g., their intelligence quotient, personality, and prior knowledge), their motivation, and their choice of learning strategy (Daly & Pinot de Moira, 2010). Daly and Pinot de Moira (2010) noted that a student's learning approach is not an innate trait characteristic; rather their choice of learning strategy is dynamic and situational. Factors that contribute to their choice range from the type of assignment or examination they are preparing for, the importance of the outcome of that assignment or examination, instructional practices, social factors like peer pressure, or the learning environment. For example, research has consistently found that multiple-choice examinations encourage studying focused on memorization (i.e., surface approach to learning; Daly & Pinot de Moira, 2010). Ultimately, students will

adopt a learning style that they feel will have the highest probability for obtaining their desired goal or outcome, while taking their context into strong consideration. Beneath all of the rationalization and cognitive processing that students' undergo in deciding on what learning approach is appropriate for them to accomplish this learning task, the one influential underlying variable is the students' degree of motivation (Biggs et al., 2001).

Kember, Wong, and Leung (1999) noted that motivation is generally classified as either intrinsic or extrinsic. Intrinsically motivated tasks are engaged in for the satisfaction, enjoyment, or inherent interest for the task itself. On the contrary, extrinsically motivated tasks are engaged in for the purpose of receiving some type of external outcome. Daly and Pinot de Moira (2010) asserted that motivation is linked with the student's sense of control and interest in the content of the learning task. The thought was that if a student's sense of control and interest in the learning task were high, their motivation to perform well academically would also be high.

When looking at intrinsically and extrinsically motivated students, intrinsically motivated students take responsibility for their own learning. Daly and Pinot de Moira (2010) found a relationship with intrinsically motivated students and their use of deep approaches to learning. It is important for the student to learn the material because increasing their knowledge base is what drives them. On the contrary, extrinsically motivated students are focused on the feedback or acknowledgment from an external source (e.g., teacher, parents, and supervisor). Daly and Pinot de Moira (2010) explained that extrinsically motivated students tend to be goal-oriented and viewed learning as a means to an end. Because learning is not the primary goal for the extrinsically motivated student, these types of students have been found to adopt a surface approach to learning because learning the content is not what is most important, passing the examination or assignment is.

Further inquiry into the motivation of students identified three additional variables associated to a student's level and type of motivation, and that is self-esteem, students' perception of control, and self-efficacy. Historically, self-esteem has been linked to a person's overall happiness in life and feelings of being a good and valued person within their social networks. Yet, when it comes to academic achievement, self-esteem has been an unreliable predictor (Stupnisky et al., 2007). This was evident in Twenge and Campbell's (2001) study where they revealed the overall level of self-esteem in college students have been increasing, but the retention rates of first-year college students is decreasing to an average of approximately 83%. What was shown was an indirect relationship between high self-esteem and academic achievement through better class behaviour, less stress and anxiety in students, and increased motivation to attend school (Lui, Kaplan, & Risser, 1992). Furthermore, Zwick, and Sklar (2005) determined that only about 20% of first-year college students' grade point averages could be linked to variables like high school grade point average and SAT scores. This resulted in further inquiry to determine what other variables attributed to the unidentified determinate of first-year college success. Stupnisky et al., (2007) initially hypothesized that increasing the students' self-esteem would be the most effective means of increasing student achievement due to the assumption that college students desire high self-esteem and academic success. Later findings suggested that this was not the case. There was essentially no direct evidence linking self-esteem to achievement. In fact, the data pointed to the implication that the level of self-esteem is more a result of their academic performance rather than a predictor of academic success (Stupnisky et al., 2007). As a result, attention focused on another possible variable, students' perception of control. The literature pertaining to perception of control focused on the challenging transition first-year college students had to endure coming from their

respective high schools. In most cases, expectations increased as they now experienced greater emphasis on academic performance, increased competition, unfamiliar academic tasks, the need to socialize with new peer groups, and an increased focus on career. Perry (1991) initially identified this as a period when students may lack a sense of control over their environment. Stupnisky et al. (2007) found that students who felt out of control typically blamed an external source for failures (e.g., their professor or the subject matter). By not taking responsibility for their failures and continuing to feel as though they were victims of their circumstance, students in this situation began to exhibit a decrease in motivation and their academic performance continued to decrease. This maladaptive pattern brought attention to the importance of a student's perception of control in the college environment (Stupnisky et al., 2007).

Literature on perception of control showed that when compared to people with low levels of perceived control, high levels of perceived control were associated with lower levels of stress, anxiety, and depression, improved overall health, and a higher overall satisfaction with life (Garber & Seligman, 1980; Thompson, 1981; Chipperfield, 1993). The relevance is seen in a study conducted by Findley and Cooper (1983) and followed up on by Kalechstein and Nowicki (1997). The combination of these two meta-analysis studies identified a relationship between students' internal locus of control, which is analogous to having a high perception of control, and academic achievement in students ranging from the first grade to college. These findings support the notion that perceived control is relevant when looking to improve academic achievement. In addition, Stupnisky et al., (2007) found that students with low perceived control functioned with an external locus of control by blaming others or uncontrollable circumstances for their shortcomings. Weiner (1995) linked feelings of being out of control with lacking personal accountability, feelings of shame, and decreased motivation to perform well in school. The opposite was found in students with a high level of perceived control. Those students felt accountable for their academic performance, believed that they controlled their academic standing, felt guilty when they did not perform well, and were motivated to study. Perry, Hladkyj, Pekrun, and Pelletier (2001) supported this finding by reporting similar findings and added that students with a high level of perceived control was more engaged and experienced less boredom and anxiety. Perry, Hladkyj, Pekrun, Clifton, and Chipperfield (2005) conducted a follow up study and found that students' originally assessed with high levels of perceived control had higher grade point averages and withdrew from less classes when compared to students originally assessed with low levels of perceived control. As a result, perception of control is critical in first-year college students, as it will dictate their level of motivation and ability to persevere through the transition from high school to college (Stupnisky et al., 2007).

The understanding of the influence self-efficacy has on student performance is another important aspect to consider. A core concept within the social cognitive theory is self-efficacy. Bandura (1986, 1997) defines self-efficacy as a person's belief in their ability and capability of executing a task or action. Pajares and Schunk (2001) showed that self-efficacy was a determinant in students' ability to meet performance outcomes with mathematics and writing learning tasks. Phan (2010) supported these findings by noting that students with high self-efficacy strived for mastery, while students with low self-efficacy were primarily focused on avoiding negative evaluations of their performance. Students with high self-efficacy not only pursued content mastery, but also more willing to persevere through an academic challenge when compared to those with low self-efficacy. These discoveries linked the behaviours of self-efficacy to deep approaches to learning and also back to Bandura's social cognitive theory.

Another interesting finding was that unlike with a student's perception of control, self-esteem was found to be a predictor of self-efficacy (Phan, 2010). The feeling of self-worth associated to high self-esteem was found to be necessary for an individual to feel competent in the task they are attempting to accomplish. Based on these findings, it can be said that if students feel good about themselves they are more likely to believe that they will succeed in learning and strive for mastery. Phan (2010) concluded that students who had low self-worth avoided learning due to feelings of hopelessness and helplessness and were inclined to utilize maladaptive learning strategies in an attempt to avoid additional negative feedback.

In summary, a student's personal values as it pertains to learning greatly influence their approach to learning. Self-esteem, perception of control, and self-efficacy all contribute to a student's degree of motivation to succeed academically. Understanding how perception influences performance is a critical piece in striving towards a pedagogy of engagement that supports the learning of students in a holistic manner.

3.10 Intervention Strategies – Project Based Education

What has become apparent is that the world is changing at a quicker pace than ever before and the expectations of college graduates are continually evolving (Brown & Adler, 2008). Siemens (2006) points out that the half-life of knowledge (i.e., the time span from when knowledge is gained to when it becomes obsolete) is shrinking due to the transformative nature of globalization. Education literature is pointing in the direction of developing appropriate learning environments that embraces activities that support knowledge creation and not just to memorize answers to pre-existing questions (Nielsen et al., 2010). Employers are seeking graduates that can think independently and creatively, collaborate, and search for new knowledge. Teaching students how to inquire and expand their knowledge base has been shown to support the 21st century skills needed to function and adapt in this new work environment.

Learning, in and of itself, is a process where knowledge is created. The effectiveness of the learning process is dependent on multiple variables like the context the student is learning in, the student's approach to learning, the teacher's approach to teaching, the student's level of motivation, and the student's perception of learning. In addition, educating students to effectively perform 21st century skills like collaborative teamwork, effectively communicate, and develop innovative approaches to problem-solving must also be considered. Incongruently, the 20th century approach to education that is still dominant in today's school system at all levels continues to primarily utilize a lecture-focused, passive approach to learning. This approach is not meeting the academic needs of 21st century students. Students who take an active role in their own education have been found to be better at monitoring and regulating their own motives and learning strategies, when compared to students who are engaged in passive learning pedagogy (Bell, 2010; Lietz & Matthews, 2010). By being an active learner, students are able to have a greater sense of control of their learning and through that gain confidence in their ability to learn. Engaging students using an active learning pedagogy addresses the underlying factors for high student achievement, which is increasing student self-efficacy, perception of control, and self-esteem.

Nielsen et al. (2010) identified the project-based learning environment, which is established in this research, as a recognized approach to effectively educate today's students. Project-based learning is an innovative student-driven and teacher-facilitated approach that focuses on learning and performance outcomes needed for success in the 21st century. At its core, project-based learning allows students to drive their own learning through inquiry, collaborative research, and the development of a project that reflects what they have

learned (Bell, 2010). A critical component to this approach is that the projects are not supplemental activities to class lectures, but rather, it is the basis of the curriculum. This approach to teaching and learning was intentionally designed in this study to motivate students by introducing a real-world application of the topic being studied, typically introduced as a core question or problem.

Students are able to use previous knowledge and develop new knowledge in order to address this real-world challenge. Research on project-based learning has shown that students were more engaged in class and that subsequently raised their level of motivation, self-esteem, self-efficacy, and academic achievement (Blumenfeld et al., 1991; Bell, 2010). Bell (2010) also points out that with the consultation and facilitation of their teacher, students not only gain content knowledge, but they also learn accountability, responsibility, independence, teamwork, time management skills, and conflict management skills through this curriculum by functioning within a sample of a real-world organizational dynamic (i.e., a group with peer accountability).

Bell (2010) documented an increase in independent-thinking skills and motivation through the implementation of a project-based learning curriculum with elementary school students. Geier et al. (2008) found that students who were engaged in a project-based learning curriculum outscored traditionally educated students on a standardized test. In a British study, Boaler (1999) tracked students learning in a traditional math program and another set of students taught using a project-based learning curriculum over the course of three years. It was discovered that three times as many project-based taught students achieved the highest possible grade on a national examination when compared to students from the traditional program. In addition, students from the project-based learning curriculum performed better when they responded to applied and conceptual problems. Thomas (2000) identified three studies that spoke to the efficacy of project-based learning. In three elementary schools in Dubuque, Iowa they were able to raise their IOWA Test of Basic Skills scores from "well below average" to the district average in two schools and to "well above the district average" in the third over a three-year span. In addition, during those three years two of the elementary schools were able to raise their reading gains from 15% to over 90% (p. 9). In an inner city Boston middle school, a project-based learning program called Expeditionary Learning was implemented. The eighth graders in this school "exhibited the second highest scores in the district on the Stanford 9 Open Ended Reading Assessment (p. 9). Similarly, in Maine, a middle school that implemented a project-based learning model "showed significant increases in all achievement areas on the Maine Educational Assessment Battery (MEAB) after only one year using this approach (1995-1996). The gains made by this school were three to ten times higher than the state average" (p.10). Research conducted by Nielsen et al. (2010) found that project-based learning is an effective teaching model for engineering education students. The engineering students were able to achieve process skills (e.g., collaborative skills, project management skills, were able to display evidence of innovation and creativity) and reportedly felt more motivated to learn actively engage the outside sources to accomplish the requirements of the project. Nielsen et al. (2010) identified a limitation to this approach that can be generalized to other subject matters is that it can be difficult having students from different educational backgrounds, different life experiences, and different perceptions of learning work together to assimilate their thinking and knowledge into a single project or problem. Additional research is needed to address the challenges of combining multiple innovative theories. What is known is that a high level of awareness and a conscious effort to effectively communicate is critical in the success of this approach.

Project-based learning is a non-traditional approach that addresses many best practices to teaching as shown in educational literature. Project-based learning is student driven. The freedom that a student has in how they would like to construct their knowledge is critical to this approach. Allowing students to construct their own learning promotes an internal locus of control and a perception of control over their learning environment. The ability to learn at their own pace and in a way that meets their learning needs encourages a deep approach to learning (Bell, 2010). Research has shown that when students are responsible for both the solution to a problem and the means of solving it their motivation to participate and take ownership of their learning increases (Krain, 2010). Another critical component of project-based learning is scaffolding. Scaffolding is a term used to describe the support provided to each student to expand their knowledge base beyond what they thought possible. Bell (2010) described techniques like providing appropriate level resources for students, support and guidance from the teacher, and having students develop learning goals that are manageable and success-oriented that can facilitate the scaffolding process. Lastly, project-based learning is experiential. Krain (2010) emphasizes that content learned experientially and through multiple sensory inputs have a higher probability of creating events that are memorable and easily retained. In addition, students who found the project-based learning task meaningful were more inclined to immerse themselves deeper into the content. Larmer and Mergendoller (2010) defined a meaningful project as one that matters to the student and fulfils an educational goal.

In order to establish these best practices in a local context and ensure optimization of learning and full student engagement a revision of the curriculum based on a project based model was undertaken as an intervention to run alongside the existing teacher focused product based curriculum. In the next chapter a detailed description of the intervention design, data collection and data analysis instruments is given.

Chapter 4: Research Methodology

4.1 Purpose of the Study

The purpose of this action research study was to introduce and analyze the effectiveness of an alternate pedagogical approach in the form of standards-focused project-based learning to improve student engagement and academic achievement in first year classes being taught at this research site.

Instead of continuing a dissonant, teacher-focused style of teaching, an alternative pedagogical approach that engages students was introduced as the intervention. Standards-focused project-based learning is an active-learning approach where students drive their own learning through the completion of a project(s) that promotes inquiry, standards alignment, and collaborative research (Markham et al., 2003; Bell, 2010). Comparing final exam scores and data obtained from focus groups between students taught using a lecture-based (i.e., teacher-focused style) and another group of students taught using the standards-focused project-based learning approach (i.e., student-focused style) served as the primary method of assessing the effectiveness of this alternative teaching approach.

4.2 Research Questions and Hypotheses

In order to address the challenge of low student achievement and decreasing student engagement, two research questions were developed for this action research study. The qualitative action research question asked "what kind of change can be brought about by engaging students in a student-focused and active learning environment by the design and implementation of a standards-focused project-based learning model?" The quantitative comparative action research question asked "what is the difference in exam scores between students in a lecture-based class and students in an active-learning class that utilizes a standards-focused project-based learning curriculum?" For the quantitative question, the dependent variable is the exam scores and the null hypothesis is that there is no significant difference in exam scores between students in a lecture-based class and students in an active-learning class.

4.3 Research Design

This action research study took place at a three-year university in two sections of a foundation programme and in two sections of a first-year education course in the first half semester of the academic year. A standards-focused project-based learning curriculum was introduced to students enrolled in these two courses. One of the course sections was the control group; while students enrolled in the other section was in the experimental group. The control group followed a lecture-based curriculum. The experimental group followed a curriculum based on the standards-based project-based learning model. The experimental group was provided a core question that aligned with the course's student learning objectives. The students were provided class time to work on a student-developed project that focused on answering the core question by utilizing data that provided evidence that the student groups have met the student learning objectives. The student groups presented their project to the class based on a predetermined date as documented in the syllabus. During the following class period, students in the experimental group took a multiple-choice exam where their content knowledge was assessed. Students in the control group received a series of lectures by the course instructor and took the same multiple-choice exam on the same day as the experimental group.

The design and development of this study was grounded in the philosophy of Participatory Action Research (PAR) where it is believed that research is conducted for the purpose of generating meaningful change (Argyris & Schon, 1996). Action research as critical praxis was introduced by Carr and Kemmis (1986) and Kemmis and McTaggert (1988) because the elements of change and improvement of people's lives were central to this methodology (cited by Troudi, 2015, in Brown and Coombe (eds), 2015). The rationale for choosing this design is because this researcher has an emancipatory interest in improving the quality of teaching in Higher Education in the UAE. "It is this emancipatory version of action research that is appropriate to serve a critical agenda…" (Troudi, 2015 p. 92, cited in Brown and Coombe (eds), 2015).

Using PAR as a research methodology fosters social policy reform and social transformation (Ozanne & Saatcioglu, 2008). Dick (2006) posits that PAR is a real world research that employs critical approaches (including critical reflection) with a view to improving human life. PAR is defined as a non- traditional method of conducting research in which participants are active collaborators not passive subjects. This feature of PAR makes it a deliberative democratic research design. Bradbury and Reason (2003) see PAR as a "value laden activity, grounded in lived experience, developed in partnership, addresses significant problems, works with people, develops new ways of seeing/interpreting the world... and leaves infrastructure in its wake" (p.156).

The primary characteristic of a participatory worldview is that it is self-reflexive. Heron (1996) describes the participative epistemology as being "post conceptual" in that it can articulate a paradigm, express the realities within a paradigm and reframe the paradigm in a wider context (Reason and Heron, 1995). The fundamental appeal of the participatory epistemology is its departure from a Cartesian mechanical abstraction to cooperative inquiry that allows participants to share an authentic context.

Too often researchers are too far removed from the subject of their research and the relationship is purely established for knowledge generation. Action science methodology generates knowledge that has validity, practical applications in a social context that is ripe for change. The objective of creating an environment for change situates Action Science within a critical paradigm. Early social scientist such as Kurt Levin and John Dewey established action science as a method of advancing basic knowledge with a view to solving social problems in education. With its disciplinary roots in the social sciences, education should play an important role in providing liberatory alternatives to the status quo. This cannot be achieved unless action science is used to add to existing knowledge while imparting practical application of the same. According to Argyris, Putnam and Maclain Smith (1985) Action science research generates and tests propositions concerning (1) the variables embedded in the status quo that keep it the status quo; (2) the variables involved in changing the status quo and moving toward liberating alternatives; (3) the variables in a science of intervention that will be required if the previous propositions are ever to be tested; and finally (4) the research methodology that will make change possible and simultaneously produce knowledge that meets rigorous tests of disconfirmability (p.16)

This research paper was born out of a desire to challenge the status quo in the approaches to teaching in the UAE that were not meeting the expectations of the mandate established by the MOE. It was impractical to simply conduct another quantitative research and produce more data. In order to change the way education was conducted it was necessary to present the status quo, supply the alternative through a viable intervention and accomplish change by demonstrating practicality.

Some might argue about rigour and generalizability of one method of inquiry over the other. A seminal contribution to explaining and differentiating competing paradigms of inquiry has been the work of Guba and Lincoln (cited in Denizen and Lincoln,1994). They posit that inquiry paradigms are defined by a basic belief about the nature of reality and coming to an understanding of this reality. Table 3 below summarizes the four different paradigms and the three fundamental questions of ontology, epistemology and methodology. Heron and Reason (1997) critiques his table for its omission of the "Axiological" question which inquires what is sort of knowledge is intrinsically valuable in human life.

Issues	Positivism	Post positivism	Critical Theory	Constructivism
Ontology	Naive realism- 'real' Reality but apprehendable	critical realism - 'real' reality but only imperfectly and probabilistically apprehendable	Historical realism- virtual reality shaped by social, political, cultural, economic, ethnic and gender values crystallized over time	relativism - local and specific constructed realities
Epistemology	dualist/objectivist: findings true	modified dualist/objectivist; critical tradition/community; findings probably true	transactional/ subjectivist; value mediated findings	transactional/ subjectivist; created findings
Methodology	experimental/ manipulative; verification of hypotheses; chiefly quantitative method	modified experimental/ manipulative; critical multiplism; falsification of hypotheses; may include qualitative methods	dialogic/dialectical	hermeneutic/dialectical

TABLE 3 PARADIGM DESCRIPTORS (GUBA & LINCOLN, 1994)

In the revised Figure 13 below the juxtaposition of the participatory worldview alongside the other paradigms highlight the issue with the idea that reality is a construction in the mind of an individual. This solipsism poses a potential problem for conceptual constructs and leaves these paradigms of inquiry in a state of flux.

Issues	Positivism	Post positivism	Critical Theory	Constructivism	Participatory
Ontology	Naive realism- 'real' reality but apprehend-able	critical realism - 'real' reality but only imperfectly and probabilistic-ally apprehend-able	Historical realism- virtual reality shaped by social, political, cultural, economic, ethnic and gender values crystallized over time	relativism - local and specific constructed realities	participative reality - subjective-objective reality, co-created by mind and given cosmos
Epistemology	dualist/ objectivist: findings true	Modified dualist/ objectivist; critical tradition/community; findings probably true	transactional/ subjectivist; value mediated findings	transactional/ subjectivist; created findings	critical subjectivity in participatory transaction with cosmos; extended epistemology of experiential, propositional and practical knowing; co-created findings
Methodology	experimental/ manipulative; verification of hypotheses; chiefly quantitative method	modified experimental/ manipulative; critical multiplism; falsification of hypotheses; may include qualitative methods	dialogic/ dialectical	hermeneutic/ dialectical	political participation in collaborative action inquiry; primacy of the practical; use of language grounded in shared experiential context
Axiology	propositional knowing about the world is an end in itself, is intrinsically valuable		propositional, transactional knowing is instrumentally valuable as a means to social emancipation, which is an end in itself, is intrinsically valuable		practical knowing how to flourish with a balance of autonomy, co-operation and hierarchy in a culture is an end in itself, is intrinsically valuable

TABLE 4: WORLDVIEW OF PARTICIPATORY INQUIRY

What is evident from table 4 above is that the primary purpose of human inquiry should be practical. Participatory inquiry then becomes tangible action in the service of humanity. Skolimowski (1994) argues that participation strongly suggests engagement which implies responsibility. The participatory worldview presupposes and orientation toward reflective action based on praxis. Evidently this participative epistemology is closer to critical theory than to constructivism, but goes further to incorporate the fundamental acknowledgement of practical knowing. This latter quality of participatory inquiry paradigm resulted in the Action Research Paradigm Protocol (ARPP) being the framework for developing this study.

The ARPP consists of 3 phases which are further divided into 10 steps, also known as the action research inquiry cycle.

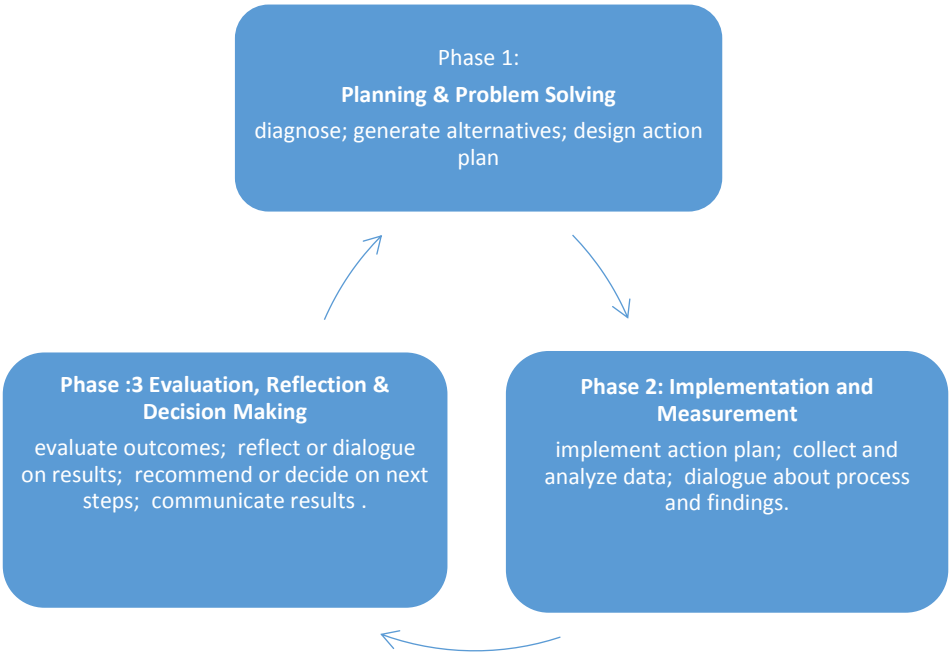


FIGURE 10: ACTION RESEARCH PARADIGM PROTOCOL(AARP)FIGURE 10 ACTION RESEARCH PARADIGM PROTOCOL (AARP)

As seen in figure 10 above, the steps are as follows (a) diagnose the problem, (b) generate alternatives, (c) design action plan, (d) implement action plan, (e) collect and analyze data, (f) dialogue about process and findings, (g) evaluate outcomes, (h) reflect or dialogue on results, (i) recommend or decide on next steps, and (j) communicate results (Bradbury and Reason, 2003). By adopting the above model for this research, the rigour and validity of this study is grounded in an academic action research paradigm.

The assessment for this study integrated quantitative and qualitative data and their respective analyses for the purpose of understanding the problem of this study and to determine if this intervention was an effective alternative to increasing academic performance and student engagement in the classroom.

4.4 Target Population, Sampling Method, and Related Procedures

The target population for this action research study were foundation and first year students at this research site. As the primary stakeholder of the results of this study, this researcher's positionality as a scholar-practitioner is a key element of action research (Herr & Anderson, 2005). Since the purpose of this action research study was to determine an alternate pedagogical approach to increasing student engagement and by extension improve achievement in the researcher's class, utilizing a convenience sample that consisted of this researcher's students was found to be appropriate. Although a convenience sample is commonly defined as a sample that is easiest to access, having the students of the researcher be involved appropriately addressed this study's two research questions by providing useful qualitative (i.e., student feedback) and quantitative (i.e., examination scores) data directly from this study's target population. In order to increase this study's transferability and to decrease the threat of coercion and perceived bias, a second instructor following the same methodology was added.

The inclusion criteria for this convenience sample were students (18 years of age or older) enrolled in one of two sections of this researcher's foundation course and students enrolled in one of two sections of a participating instructor's first-year education course. Based on past results and transcripts submitted at the time of application, it was concluded that the foundation students were largely homogenous in terms of their educational level. The same was true of the first years who participated in this study. Due to the foundation course being a prerequisite for undergraduate entry, no students were enrolled in both courses at the same time. The research site is a UK branch campus in the UAE, so participants who preferred to speak in a language other than English (e.g., Arabic) were offered accommodations that consisted of a translator and/or interpreter services.

The approximate sample size was 108 students. The projected enrolment for the foundation course was 59 students and 49 students for the first-year education course.

Participant information is shown in Table 5 & 6 below.

Course	**Full Consent**	**Consent Excluding Audiotape**	**No Consent**
Foundation Course Control Group	21	5	4
Foundation Course Experimental Group	24	4	1
First year Education Course Control Group	18	3	1
First year Education Course Experimental Group	22	4	1

TABLE 5: DESCRIPTION OF PARTICIPANTS

	Number of Consenting Participants (Including Audiotaping)	Number of Participants that Participated In The Focus Group
Foundation Course Control Section	26	11
Foundation Course Experimental Section	28	14
First Year Education Course Control Section	21	12
First Year Education Course Experimental Section	26	12
Total	101	49

TABLE 6: FOCUS GROUP PARTICIPANTS

4.5 Setting

The institution where this action research study was conducted was at a three-year university located in the emirate of Dubai. This university has an undergraduate enrolment of approximately 2300 students and a total enrolment that includes postgraduate (Master's level) students of approximately 2700 students. The average class size is 19 students with a student-to-faculty ratio of 13 to 1. This university employs 55 full-time and 30 part time faculty. Sixty percent of the student population are expatriates living in the UAE. The other 40% is made up of international students, 27% from the Indian subcontinent, 11% from Africa, and 2% from the UAE Emirati population. The student population consists of 68% females and 32% males. The ethnic distribution of the students can be described as 57% Asian, 17% Arab, 10% African 10% Caucasian and 6% other.

The identified problem is occurring within foundation and undergraduate courses throughout the UAE. The research site is no exception. The foundation course is a pre requisite academic skills course which students undertake before going on their first year of any degree if they have not done A 'level or equivalent exams. In addition, the Foundation course develops and assesses the skills and competencies for the university readiness. There were two sections available and students enrolled with no prior knowledge of this action research study. Since Foundation education course is a required course for all students who have only completed 12 years of schooling, both sections are historically similar and typically representative of this university's demographic representation. Due to this researcher being scheduled to teach two sections of this foundation course during this action research study's intervention period, creating a control group and experimental group running simultaneously was possible.

The first year education course has 4 core modules Students must take all of the following

EDU1301 Education Policy: Historical and Contemporary Perspectives

EDU1302 Psychological Approaches to Learning

EDU1303 An Introduction to Childhood Studies and Child Development

EDU1304 Professional Studies

The course focuses on the social dynamics that influences how children think, feel, and behave. This course is required for early childhood education students and is taken during a students' first year at this university. There were two sections available and students enrolled with no prior knowledge of this action research study. Both sections are historically similar and typically representative of this university's demographic representation. The ages of students generally enrolled in this course range from 18-25 years of age, with the majority being 18-20 years of age and a few rare occurrences of enrolled students being 30 to 40-plus years of age. Due to this additional instructor being scheduled to teach two sections of this first-year education course during the intervention period of this action research study, creating a control group and experimental group running simultaneously was possible.

4.6 Recruitment

Given that a convenience sample was used, no active recruitment strategy was utilized. Students who registered for this researcher's foundation course and the assisting professor's first-year education course were included. The researcher is the teacher for the foundation 2 groups and the assisting education lecturer is the teacher for the two first year education classes. This lecturer was recruited based on prior classroom observation by the researcher who noted the manner in which the lecturer innovated in the classroom and made every effort to engage students outside of the standard lecture seminar models.

I made the initial contact with potential participants prior to the start of the action research study during the participants' regularly scheduled class time. The students were informed that they would be receiving a recruitment letter and the University of Exeter consent form via their university email account. The researcher then requested that each student drop off the signed informed consent to the researcher's private office or secured mailbox outside of the researcher's office door. Blank copies of the informed consent form were made available in the researcher's office for those students who choose not to print out the form. For this purpose of this action research study, an original physical signature was required to participate. By utilizing the students' email and meeting with them individually outside of their scheduled class time, this researcher ensured the privacy of each student by allowing them to make their own decision about participating without the possibility of coercion. In addition, this protocol allowed each prospective participant an opportunity to ask questions about the study via email or in person. Upon completion of this action research study, this researcher solicited email addresses of all students who are interested in the results of this study. All contact after the completion of the study will occur via email.

Students who decided to opt out of this study were granted permission to receive individualized study for that particular segment of the course. The student(s) received individualized instruction by the applicable instructor so the student(s) would be able to remain in full compliance with the all of the requirements of their respective course syllabus. For the student(s) that opted-out of the experimental group, an individualized assignment with comparable rigor was given so these student(s) would have the opportunity

to earn the points that was otherwise assigned to the participants developing their project as directed by this study's procedures.

4.7 Instrumentation

Change was assessed quantitatively and qualitatively. This action research study consisted of two samples (a) one control group and one experimental group in the Foundation course, and (b) one control group and one experimental group in the first-year education course. The control groups were taught using the traditional lecture-focused pedagogy. The experimental groups were taught using the standards-focused project-based learning pedagogical model. The foundation course control and experimental groups took the same content knowledge multiple-choice examination (UCLES/OUP Placement test) on the same day. The first-year education course control and experimental groups took the same content knowledge multiple-choice examinations on the same day. All groups were taught using these methods for the first 10 weeks of the semester. Each group had a total of 4 hours of classes each week. It was important for the validity of this research that all groups had the same number of instructional hours and so the intervention was conducted without making any timing changes to the normal timetable. The different approach with the experimental group was the departure from the traditional lecture/seminar format to an interactive problem based, which engaged students in more active learning approaches. Appendix 2 outlines the differences between the traditional syllabus and the standards based problem in solving intervention syllabus used in this intervention

At the conclusion of each class, in both the control and experimental sections of the foundation course and the first year education course, this researcher and the participating lecturer documented observations made, milestones accomplished, procedures followed (according to the study's design), and general thoughts.

After completing multiple-choice examination (see appendix 5) and the UCLES/OUP placement test (see appendix 3), students from all sections were invited to participate in a focus group where they had an opportunity to share and reflect on their class experience by discussing what they thought was effective in support of their learning, if the intervention increased their engagement with the course and the course material, and what they felt needed improvement or modification. Sample of focus group interview and transcript included in appendix 13. Information pertaining to each instrument is as follows:

4.7.1 Multiple-Choice Examination

The MCQ instruments were designed to test content knowledge and writing skills in the two courses. Across both the foundation and education course the items proved to be internally consistent with KR20 =.86 on the Foundation test items and .78 on the education test items.

The mean score from both the control group and the experimental groups was compared and quantitatively analyzed using a one-way analysis of variance (ANOVA) to determine if a statistical difference existed between the mean scores. The first examination of both courses was used to measure content knowledge quantitatively. Descriptions of both examinations are located in Table 7 below.

Course	Number of Questions	Reliability	Source of Questions
Foundation Course	60	Average reliability coefficient (KR20) = .86	All questions were generated using the publisher's supplemental test bank.
First Year Education Course	50	Average reliability coefficient (KR20) = .78	All questions were generated using the publisher's supplemental test bank.

TABLE 7: DESCRIPTION OF MCQ

4.7.2 Observation

The most widely used information gathering method is participant observation. As a research tool observation involves "active looking, improving memory, informal interviewing and writing detailed field notes" (Dewalt and Dewalt, 2011). This classic form of data collection in a naturalistic setting allows for deeper understanding of the setting, the participants and their actions within the setting (Patton, 1990). The intervention in this research was being implemented in a naturalistic setting so that justified the use of participant observation in conjunction with other quantitative data collection techniques. The data collected through observation can aid me in evaluating the fidelity of an intervention especially when students' self-reporting is a part of other instruments. Through observation both verbal and non-verbal cues can be captured at data which can be analysed to reveal important information relevant to the research. The recording of the research observations in this study were done using field notes which captured students' behaviour, comments and interactions during the 10 weeks research period. Samples from the field notes are included in appendix 14.

An analysis of the field notes was conducted to identify patterns of behaviour that occurred in both the control and experimental groups. This data was compared to the focus group data to qualitatively assess student interaction and engagement in both groups. Field notes consisted of the course instructors' documentation (if applicable) of observations made, milestones accomplished, procedures followed (according to the study's design), and general thoughts after each class. This data yielded results on the observable behaviour of students in both groups during the lecture based and project based sessions.

4.7.3. Focus Groups Interviews

Group interviews have an enduring presence as a research technique and has the potential to unearth opinions and attitudes at a different level from the more widely used individual interviews (King and Horrocks, 2010). In this research participants are engaged in an interactive intervention. It is therefore only plausible to employ a data collection instrument that is naturalistically aligned to this group interaction.

According to Frey and Fontana (1993) group interviews can be methodologically justified in social research for many reasons one of which is triangulation.

Among the many group interview procedures, *focus group* interview is the instrument that was used in this research. It is important to make this distinction as the participants were not just interviewed as a group but the content of the interview was strictly focused on the topic of this research and was structured in such a manner as to highlight the respondents' attitudes, ideas and feelings about the intervention strategy. This approach to the focus group interview is supported by Frey and Fontana (1993) who assert that focus group interviews are "formal, and directive, having a moderator who structures the discussion" (cited in Morgan, 1997).

In practice focus groups can produce data on multiple levels, individual, group and interactive (Kidd and Parshall, 2000). It is critical not to conflate the information obtained at the group level with the interactive component of the focus group as these are two discrete levels of data collection in this instrument. The primary aim of a focus group instrument is to generate discussion about a particular issue and to generate conversations about opinions expressed. However, according to Morgan (1996) an additional and oft overlooked aspect is the "range of experiences and perspectives that these focused conversations uncover" (p.134). This view is expanded upon by Smithson (2000) who posits that focus groups are inherently social events which yield rich data through the interaction among individuals. Individual anecdotal information obtained can be used to provide breadth and depth for the quantitative findings. The conversational nature of this method of data collection allows participants to reveal not just their thoughts but the reasons for those thoughts. The comparative advantage of using a focus group is the rich quality of the experiential information that is generated. Below is in table 8 the distribution of the focus groups can be seen. These groups were convened in a seminar room as a feedback session for the control and experimental groups.

4.7.4 Participants

	Number of Participants that Participated In The Focus Group	
Foundation Course Control Section	11	Focus Group A
Foundation Course Experimental Section	14	Focus Group A
First Year Education Course Control Section	12	Focus Group B
First Year Education Course Experimental Section	12	Focus Group B
Total	49	

TABLE 8: FOCUS GROUP DISTRIBUTION

4.7.5. Pilot questions

A pilot was conducted on the student focus group questions. The participants in the pilot was chosen based on their years of teaching experience in a college/university setting. They were all initially contacted by email using Researcher's University's Pilot Request template. Once permission was granted, each lecturer was sent by email a copy of the student focus group questions. They returned their feedback by email to the researcher. The following were the original set of focus group questions:

Did you feel prepared for the exam? What supported your learning? What could have been improved?

Did you feel the course instructor effectively facilitated the learning process for you? In what way? What could have been improved?

Did you feel engaged (i.e., high level of investment in the classroom experience) in class? What motivated you to engage this class? What could have been improved?

Did you feel engaged in this course outside of class (e.g., reading the textbook, reviewing class material, participate in study groups)? What motivated you to engage this course outside of class? What could have been improved?

Did you feel that you contributed to the learning experience of your peers? In what way? What could have been improved?

Is there anything else you would like to share about your experiences in this class?

What follows is a summary of the feedback received from the piloted focus group interview questions. The lecturers intimated that compound questions could cause ambiguity and suggested that the items should be listed and asked separately. Based on the feedback, the student focus group questions have been changed to the following:

How well were you prepared for the summative tasks?

What do you attribute your level of preparation and learning to?

What supported your learning?

What could have been improved?

Did the course instructor effectively facilitate the learning process for you? Explain your response.

How much were you engaged (i.e., level of investment in classroom experience) in class?

If you were engaged in class, what motivated you to be engaged?

If you were not engaged in class, what could have been improved to raise your engagement?

Were you engaged in this course outside of class (e.g., reading the textbook, reviewed class material, participated in study groups, doing personal research on course content)?

If you were engaged outside of class, what motivated you to be engaged?

If you were not engaged outside of class, what could have been improved to raise your engagement?

In your opinion, did you contribute to the learning experience of your peers? In what ways?

Is there anything else you would like to share about your experiences in this class?

4.7.6. Data Collection Procedures

The data collected for this action research study was (a) student oral presentations – experimental group, (b) examination scores (multiple-choice examinations) (c) field notes, and (d) student feedback during the student focus groups. Procedures for data collection are as follows:

Problem solving project

At the start of week 11 students presented their problem solving project on one of the 5 content areas in the syllabus. Presentations were done with the aid of posters and the product that was design as part of the project. All presentation groups displayed their projects in the classroom and other students were able to view, question and comment.

Multiple-Choice Examinations

At the end week 11 of the programme 50 minutes multiple-choice examinations were proctored during class time by the respective course instructors and graded using Excel software. Although the course instructors administered and proctored the examination, this researcher analyzed and assessed all the data.

4.8 Procedures

Standards-focused Project Based Learning (PBL) model introduced by Markham et al. (2003) was used as an alternative approach to traditional lecture based delivery of materials. Both courses run for 24-weeks and the intervention was done for the first 10 weeks of the semester. The student learning outcomes for both courses were the foundation for the learning objectives of the assigned project (see appendix1). In the PBL model students work collaboratively to experience and explore relevant, real-world problems, questions, issues and challenges. They demonstrate their knowledge of the content by then creating presentations and products. The following procedures were developed based on the ARPP:

Phase 1- Planning and Problem solving

I taught two sections of the foundation course. Section 1 continued with my current lecture-based course design, whereas section 2 was introduced to the standards-focused project-based learning pedagogical model. The participating instructor taught two sections of the first year education course. Section 1 continued with the participating instructor's current lecture-based course design, whereas section 2 was introduced to the standards-focused project-based learning pedagogical model.

Students in the experimental sections created groups of 4-5 students. Each group was provided the applicable student learning outcomes and a driving question that guided the student groups in the development of their project.

Phase 2- Implementation and measurement

During class in the experimental section, student groups worked on their projects. The respective instructor met with each group for approximately 10 minutes providing them with consultation on their project. The control group followed a lecture-based teaching model.

In the experimental section, each group presented their project on a predetermined presentation date as stated in their respective course syllabus. The respective instructor determined the order of presentations by each group. Applicable examination chapters were reviewed in class for the control group.

In the experimental section, the instructor and all groups not presenting provided feedback to the presenting group. This did not occur in the control groups.

Both the control and experimental groups were administered the same examination on the same day in week 11.

Phase 3- Evaluation, Reflection and Decision Making

After completing the examination, focus groups involving consenting participants were conducted. This focus group interview represented the 3rd phase of the action research model indicated in figure 4.1 At the focus groups, participants reflected on their class experience by discussing what they thought was effective in support of their learning, if the intervention increased their engagement with the course and the course material, and what they felt needed improvement or modification.

4.9 Data Analysis Procedures

This action research study responded to the two research questions by triangulating quantitative and qualitative data. The procedures for the collection, analysis, and store of the data are as follows:

Multiple-Choice Examinations (Quantitative Data Source) were annually marked and scores uploaded yo excel spreadsheet. The grades were initially analysed for descriptive statistics using Excel software.

Student results were then exported from Excel to SPSS (Statistical Package for the Social Sciences) to administer a one-way analysis of variance (ANOVA) by comparing the mean scores of the multiple experimental and control groups.

Electronic data was password protected on this researcher's computer. All paper copies of student scores are protected with a double lock system (lock on office door and stored in a locked filing cabinet) in this researcher's private office. All of the examination data will be kept securely for seven years after the completion of this study.

Instructors' Field Notes (Qualitative Data Source)

At the conclusion of each class, in the control and experimental sections, this researcher and the participation instructor documented (if applicable) observations made, milestones accomplished,

procedures followed (according to the study's design), and general thoughts. There were 30 field note entries, one for each class over the 10 weeks.

These field notes were used to document and track the progress of this study. These notes were organized into two sections as shown in Table 9 below.

Content	Reflection
Setting	Personal descriptions
Activities	Emphasis on ideas
Participants involved	Follow up questions
Behaviour and perspectives of participants (verbal and non-verbal	Clarification of ideas
Quotes from participants	Insights and speculations
Researchers impact	

TABLE 9: FIELD NOTE CATEGORIES

Using the Miles and Huberman (1994) framework for qualitative data analysis the data from the field notes were reduced, displayed and then conclusions were drawn and verified. This was operationalized through first descriptive and then analytical coding to isolate the thematic patterns that existed in the field notes data. Essentially a theme captures something important about the data in relation to the research question and represents some level of patterned response or meaning within the data set.' (Braun and Clarke, 2006, p.82). By thematically analyzing the field notes, it was possible to triangulate the data from this instrument with the data yielded from the focus group interviews

Focus Groups Interviews (Qualitative Data Source)

Upon completing their respective examination (see appendices 3 & 6), all participating students from both the control and experimental groups were invited to participate in a recorded focus groups where they were asked open-ended questions pertaining to their learning experience. A separate individual not associated to this action research study facilitated the focus groups.

Data collected from the focus group interview was transcribed and analysed thematically using content analysis to identify, evaluate and report the patterns in the students' perception of their learning experience and to compare the experiences between those participating in the control group and the experimental group (See Appendix 12). According to Braun and Clarke (2006), thematic analysis is a qualitative process of 'identifying, analysing and reporting patterns (themes) within data. It minimally organizes and describes your data set in rich detail. However, frequently it goes further than this, and interprets various aspects of the research topic.' (p.79)

As a qualitative analytical method, thematic analysis is independent of theory and epistemology and is compatible with both positivist and constructionist paradigms within education. In the former, thematic analysis reports the experiences, meanings and realities of the participants while in the latter, it seeks to deconstruct these events experiences and realities.

4.10 Credibility, Validity and Transferability

Ensuring that an assessment measures what it is intended to measure is a critical component in this research. I first established content validity, which is when an assessment represents all aspects of tasks within the domain being assessed, by looking at each test item to make sure they were testing an area of the curriculum that the students were taught. Additionally, this test is ready made from the Oxford placement test bank which is recognized as a valid placement test for ESL learners. In the case of the first year test, the assisting lecturer and another colleague teaching on the same programme, checked the content validity by ensuring test items reflected the content that was covered in the first 11 weeks of the programme. Face validity was also established as the appearance of the test matched the structure and format students were told they would be evaluated on.

The danger however with this type of instrument is that it has little criterion or predictive validity as the students' performance on this test does not evaluate all the skills they require for university entry or progression to second year. Additionally, it is difficult to say that if the pass this test in term 1 they will do well in term 2.

Credibility was established as assisting professor and I facilitated the procedures of this action research study during every scheduled class period for the designated time frame of this study. Both course instructors met with each student group in their respective experimental section for approximately 10 minutes on all non-presentation and non- examination days. Participating students were engaged in the research activities on a regular basis. At the conclusion of each class, for the control and experimental groups, we documented observations made, milestones accomplished, procedures followed (according to the study's design), and general thoughts through field notes. Triangulation occurred through the use of examination data, student focus group feedback, and the field notes generated by the researcher and the additional course instructor.

Transferability was established through the thorough and detailed explanation of the problem and organizational context so people outside of the research site will be able to determine if their setting is comparable. In addition, all of the activities and events of this action research study was thoroughly documented. This will allow others to make their own determination of the applicability (i.e., transferability) of this study when analyzing and assessing their organizational problem. By adding an education course that was taught by a different course instructor, but following the same methodology, the level of transferability increased. This means any subject specialist could use this method to evaluate student engagement.

4.11 Ethical Issues

I was employed full-time at the research site, which is a three-year UK branch campus. In addition, I was responsible for implementing the intervention. Regarding the problem, I believe that with the advancements in technology and communication, students now require a different approach to learning. The traditional lecture-based model does not appear to be the most effective means of educating the 21st century student. My observation of the class's apparent lack of interest when lectures are being conducted and the consistently low exam scores was the catalyst for this action research study. I also observed that when experiments, group exercises, or projects are assigned the class appears more engaged. This action research

study was an attempt to identify a more effective way of educating university students in the UAE. It is my intention to closely analyse the data and see empirically what type of pedagogy is more effective. Although a hypothesis has been developed, I suspended any preconceptions of the problem and allowed the methodology to determine a more effective approach to teaching.

Given that I was the instructor for both the control group and the experimental group of the foundation class, a potential threat of coercion existed. As the primary stakeholder of the results of this study, my positionality (researcher and practitioner) is a key component of the action research model (i.e., scholar-practitioner research: Herr & Anderson, 2005). Since the purpose of this action research study is to determine an alternate approach that results in higher student achievement and classroom engagement, researcher neutrality was critical to the reliability and validity of this study. As a result, I remained neutral when instructing both the control group and the experimental group. By remaining neutral, the potential threat of coercion was minimal. A second instructor was added to this study so a comparable group ran simultaneously. This participating instructor taught an education course using the same methodology as the researcher. By duplicating the study, transferability (within the university) of this study's findings increased.

In addition, at the research site, this research utilized two professors as faculty mentors/consultants for this study. These two faculty mentors/consultants performed a secondary analysis of the data (both qualitative and quantitative) and periodically observed this researcher teaching to ensure alignment with the study's methodology. The transparency of the study protected the validity of this study's data against the perception of researcher bias.

Ethical clearance to conduct this research was received from the University of Exeter (see appendix 2). I obtained the consent of all participants (students and assisting lecturer) using a standard written/signed consent form (see appendix 1). The privacy of participants was ensured by sending the recruitment letter and a copy of the informed consent form to each of the students via university email (see appendix 1a). I then requested that each student drop off the signed informed consent to the researcher's private office or secured mailbox outside of the researcher's office door. Blank copies of the informed consent form were made available in my office for those students who chose not to print out the form. An original physical signature for the informed consent form was mandatory. This process allowed students to make their own decision about participating without the possibility of coercion and allowed them the opportunity to ask questions via email or in person. Since the researcher had the email addresses of all the students it was possible to engage the potential participants in a private manner.

Risk assessment. This action research study was not more than minimal risk. The research took place in an established educational institution and setting. It involved a normal educational practice (e.g., instructional strategy and classroom management method). Participants were required to interact and collaboratively work with other participants in small groups. Participants were also required to present information in front of the class. This had the potential to increase participants' level of anxiety and feelings of discomfort due to the increase in active engagement and public speaking while in class. In order to reduce any possible risk to the participants the course instructor met with each of the participant groups for approximately 10 minutes during non-presenting and non-examination class days. During this meeting, the instructor consulted and coached each group. This planned interface provided opportunities to ease the anxiety levels of participants during the group process and in preparation for their group presentation. Oral

presentations as a method of assessment is also part of the 3-year degree programme so this was seen as a good foundation skill to develop.

Privacy and confidentiality. The data collected during the course of the study was not considered sensitive data. Participants of this action research study are students (18 years of age or older) who enrolled in either this researcher's foundation course and in a participating instructor's first year education course. Due to this being a convenience sample where no active recruitment occurred, the privacy of the participants was based on their agreement to participate and subsequent compliance with the confidentiality statement written into the informed consent form. During the data collection process the UK data protection policy (GPS4) protected participants' privacy. This agreement prohibits the release of student data pertaining to academic performance without the formal consent of the student. Staying within the guidelines of the confidentiality code, this researcher did not link any student performance data to any identifying information. Unique participant numbers were created. Participants' student identification numbers and any other identifiers were not used. Class scores for the examination were not viewable by the participants. They only had access to their score.

Participants were reminded of the confidentiality statement they agreed too at the beginning of this study. The procedures for data collection, transmission, and storage of the data are stated below.

Examination scores. The procedures are (a) administered examination using Excel; (b) participants' results were data entered by this researcher into SPSS (Statistical Package for the Social Sciences) to administer an analysis of variance (comparing the mean scores of multiple experimental and control groups); (c) electronic data was password protected on this researcher's computer. All paper copies of student scores were protected with a double lock system (lock on office door and stored in a locked filing cabinet) in this researcher's private university office; and (d) all of the examination data will be kept securely for seven years after the completion of this study.

Field notes. The procedures are (a) at the conclusion of each class in both the control and experimental sections, the course instructors documented (if applicable) observations made, milestones accomplished, procedures followed (according to the study's design), and general thoughts; (b) these field notes were used to document and track the progress of this study; (c) all field notes were protected with a double lock system (lock on office door and stored in a locked filing cabinet) in this researcher's private university office; and (d) all of this researcher's field notes will be kept securely for four years after the completion of this study.

Focus groups. (a) the audio file was transferred to a hard drive for secure storage. Once transferred, the original audio file was deleted from the audio recording instrument and the file on the hard drive was labelled using no identifying information; (b) the researcher's notes was protected with a double lock system (lock on office door and stored in a locked filing cabinet) in this researcher's private university office; and (c) the audio file and this researcher's notes will be kept securely for seven years after the completion of this study.

After four years from the publication date, this researcher will shred all Excel sheets, field notes, and Student Focus Group notes. This researcher will also delete all Excel data, SPSS data files and reports, and Microsoft Word files containing field notes, student focus group interview notes and all other documentation related to the research.

Non-participants. Since this action research study only impacted a segment of the course and not the entire course, students who opted out of the study could still remain in their respective class without jeopardizing their academic standing in the course. Students who decided to opt out of the action research study were granted permission to receive individualized study for that particular segment of the course that the study applied too. The student(s) received individualized instruction from their respective instructor so they would be able to remain in full compliance with the all of the requirements of their respective course syllabus. For the student(s) that opted-out of the experimental group, an individualized assignment with comparable rigor was given so they would have the opportunity to earn the points that would otherwise be assigned to the participants developing their project as directed by this study's procedures.

4.12 Limitations of the Research Design

Stringer (2007) indicated, "Action research outcomes apply only to the particular people and places that were part of the study" (p. 59). This is the case with this action research study. Although transferability of the findings is possible, the intent and design of the study was based on the needs and requirements at this research site. In addition, this researcher had no control with enrolment so diversity and demographic variables could not be predicted nor controlled for.

In order to address this limitation, this researcher thoroughly documented the procedures followed (field notes), events leading up to project completion, and the assessment results (exam results and student focus group feedback data). The additional instructor also documented the procedures followed (field notes), events leading up to project completion, and the assessment results (exam results). This information provided the opportunity for people outside of this action research study to determine if the outcomes are applicable to their situation based on the documented methodology (Stringer, 2007). In addition, the transferability and replicability of this action research study increased as a result of this practice.

Another limitation was that only one action research cycle was completed. Due to time constraints, further action research cycles will need to occur in a follow up study. In addition, utilizing a larger sample size at various levels (second year and third year, and higher) and from additional institutions of higher education will increase transferability. To address this limitation, a first year education course was included in this study. The students in first year education course are students at the same university. Due to the addition of this second course, the sample size analysed doubled to approximately 108 students.

This action research study was limited by its relatively small sample size. This study involved a total of four classes with a maximum sample size of 108 students. This number was reduced after seven students choose to not participate. In addition, this researcher had no control with enrolment so diversity and demographic variables could not be predicted or controlled for. Classes at this research site typically do not exceed 35 students so the only way to increase the sample size is to increase the amount of classes used for the study.

Another limiting factor was the study's data was gathered after only the first 10 weeks of class. Participants were unfamiliar with the standards-focused project-based learning curriculum and subsequently reacted to this non-traditional approach without having enough time to truly process what they were experiencing. If data was gathered throughout the entire semester, a much more holistic perspective on the student experience could be obtained.

4.13 Chapter Summary

Chapter 4 introduced the purpose, intervention, and methodology of this action research study that was implemented to determine if standards-focused project-based learning is an effective alternative to the status quo. The purpose of this study was to introduce and analyze the effectiveness of an alternate pedagogical approach in the form of standards-focused project-based learning to improve student engagement and academic achievement in among students being taught at this research site. The procedure required one section of a Foundation course to be the control group while the other section of the same course will be the experimental group. This was duplicated in a first year education course during the same semester. Field notes documented the activities within the four sections and were created by the course instructors, examinations were compared statistically to measure any difference between the control and experimental groups, and focus groups were held to receive qualitative feedback on the experience participating students had. The triangulation of these three data elements attempted to answer the two research questions that focused on increasing student engagement in the learning process and improving academic performance.

Chapter 5 presents the results of the data collection and its respective analyses of the study. A discussion pertaining to this study's results, its implications, and recommendations for future research will occur in Chapter 5.

Chapter 5: Data Analysis and Finding

5.1 Introduction

Low student achievement and decreasing student engagement provoke a call for pedagogical change. In an attempt to address these challenges, an intervention was introduced that consisted of a pedagogical approach, which engaged students through standards-focused, project based learning. This is an active-learning approach where students drive their own learning through the completion of a project(s) that promotes inquiry, standards alignment, and collaborative research (Markham et al., 2003; Bell, 2010).

This research study sought to analyse the effectiveness of this student engagement approach by answering two research questions using an action research approach with quantitative and qualitative data.

Research Question 1: What kind of change in scores can be brought about by engaging students in a student-focused and active learning environment through the design and implementation of a standards-focused project based learning model?

Research Question 2: What is the difference in exam scores on mid-term exams between students in a lecture-based class and students in an active-learning class that utilizes a standards-focused project based learning curriculum?

This chapter reports the findings of this action research study by presenting both the qualitative and quantitative data collected from participants. Data collection began in October 2014 and concluded in December 2014. This date range was inclusive of the first of two course segments of the semester. Chapter 5 contains four sections. The first section reports and analyses quantitative and the second section presents, through thematic analysis, the qualitative data analysis procedures. The third section discusses the results of the study, and the fourth section is a chapter summary.

5.2 Method of Analysis

This action research study examined the identified problem using an action science approach. Academic achievement through the analysis of a multiple-choice examination was measured quantitatively through the statistical method of a one-way analysis of variance (ANOVA). Participant engagement in the learning process was analysed qualitatively using thematic coding and analysis of the focus group responses and instructor field notes. The utilization of these four data sources (e.g., examination scores, oral presentation evaluation, focus group responses, and instructor field notes) provided triangulation that increased the credibility of this study's findings.

5.2.1 Course Instruction

In October 2014 the participants in all the classes began receiving instruction pertaining to the course content for the first segment of the course. Both courses had two sections running concurrently. Section 1, for both courses, were predetermined as the control sections. Section 2, for both of the courses, were predetermined to be the experimental sections. For 10 weeks, the control sections received the course

content through a series of lectures. The experimental sections received the intervention that was the standards-focused project based learning curriculum. Participants in the experimental sections were placed in self-selected groups ranging from 4 to 5 participants per group. They were given no traditional lectures, but instead had interactive seminars and group workshops during which they received consultation from the course instructor for a minimum of 10 minutes (per group). The first term of both courses usually culminate with a MCQ exam in week 12. Prior to the examination date, participants in the experimental group presented their projects to their respective classes. Participants in the control sections received course content lectures up until the examination date. The exam has been used to determine the mid-term grade for each class and students are able to seek academic counselling during the next 12 weeks of the course, if they find they are not scoring well at the half term point.

5.3. Quantitative Results

The Foundation examinations contained 60 multiple-choice questions specific to the respective course content, and a writing task. The Education examination contained 50 questions specific to the course content of the first year programme. Both examinations were summative and reflected the content taught during the term. These exams are part of the original syllabus and were used as an indicator of half term progress. Participants recorded their responses for their respective multiple-choice examination using an answer sheet. The researcher scored each examination using Excel software. Participant results were entered from the Excel report into the software application SPSS (Statistical Package for the Social Sciences) by the researcher. Using SPSS, a one-way analysis of variance (ANOVA) was conducted to determine if there were any statistically significant differences between the mean scores of the two control groups and the two experimental groups. A one-way ANOVA was used because four mean scores were being analysed and there was only one dependent variable being measured, which were the examination scores. The null hypothesis of no statistical significance between the four mean scores was tested at a .05 confidence interval.

5.3.1 The effect of the standards-focused project based learning on students' examination score

A one-way analysis of variance (ANOVA) was conducted to evaluate the causal relationship between the standards-focused project based learning pedagogical approach and the change in academic achievement. The independent variable was the standards-focused project based learning curriculum. The dependent variable was the examination scores. Refer to table 10 for the mean and standard deviation of the sample groups.

Dependent variable: Test score

Groups	Mean	Standard Deviation
IFP Control Group	32.73	2.41
IFP Experimental Group	39.32	2.76
Education Control group	29.67	2.73
Education Experimental Group	29.27	2.18

TABLE 10: MEAN AND STANDARD DEVIATION MEASURES

In the foundation classes, the results were significant. The foundation course control section had a mean score of 32.73 out of 50 possible points on the examination, while the experimental section had a mean score of 39.32. The difference of 7.41% between the control and experimental group is statistically significant as it placed the latter group in a higher result band, moving up from a pass grade to a merit. It could be posited from this initial analysis that students who had the intervention of a standards based project that engaged them more with the content and skills, did better than those students who were exposed to traditional lectures in the foundation classes. This result, aligned with the literature that reported that an active-learning approach was related to higher quality outcomes and grades (Prosser et al., 2003). On the contrary, in the first year education classes there is only a .40 difference in mean scores, as the control group had a mean score of 29.67 out of 50 total possible points and the experimental group had a mean score of 29.27. This result would indicate that the results for students on the summative task show little difference between the control and experimental groups in the education course.

The findings from this study were similar to the study conducted by Gibjels et al. (2005), where no statistical significance was determined in mean scores of a multiple-choice examination given to undergraduate law students. An explanation of this finding was identified when Gibjels et al. further analysed their findings and discovered that 23% of the participants lacked the metacognitive skills to evaluate how functional their study practices were in their learning environment and admitted to having problems with their study strategy. Many of the students realized that their study methods were not suitable for studying their course of study, but they did not know how to develop them (p. 333, 2005). Interestingly enough, the first year students in my research had the same dilemma. Many of these students have come from a secondary school background of rote learning and they have score very high grades simply by memorizing and regurgitating information on tests. The curriculum in university presents a particular challenge because some courses require higher order thinking skills and a level of metacognition that they do not possess. The foundation students on the other hand, are in a bridge programme where they are aware that they are being taught the skills required for university, so they are more receptive to learning metacognitive strategies. While there may be many reasons to explain the lack of improvement among first year groups, a discussion of these is outside the scope of this current study.

The Levene Statistic was used to test for homogeneity of variances and that resulted in p = .748. The Levene Statistic is a statistical formula that is designed to evaluate the assumption that the population variances for the sample groups are equal (Green & Salkind, 2008). If the p value of the Levene Statistic is significant then it can be concluded that the assumption of equality-of-variance is violated. Significance was not established due to the p value being greater than the confidence level of .05. As a result, it can be assumed that the equality-of-variance assumption has not been violated. Refer to table 11 below for the result.

Test of Homogeneity of Variances

Dependent variable: Test score

Levene Statistic	df1	df2	Sig.
.865	3	97	.462

TABLE 11:TEST OF HOMOGENITY

A significant difference in performance scores was found between the control and experimental groups of Foundation students as F (3, 97) = 12.912,

$p < .001$.

Refer to table 12 below for the results.

ANOVA

Dependent variable: Test score

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1715.906	3	571.969	89.629	.000
Within Groups	619.005	97	6.381		
Total	2334.911	100			

TABLE 12: ONE ANOVA RESULTS

Because a difference among the groups was observed, a post hoc Tukey test was conducted to examine which groups significantly differed with each other. Since the equality-of-variance assumption was not violated, a post hoc comparison was made using the Tukey HSD test. The Tukey HSD test is a statistical formula designed to conduct paired comparisons between three or more sample groups when the equality-of-variance assumption is not violated.

This test is designed to control for a Type I Error (i.e., false positive – incorrect rejection of the null hypothesis) (Green & Salkind, 2008). There was high significance between the mean examination score of the experimental section of the foundation course class when compared to the control section of the foundation course class, the control section of first year education class, and the experimental section of first year education class. Refer to table 13 below for the results of the multiple comparison analysis results.

Multiple Comparisons

Dependent Variable: Test Scores

Tukey HSD

(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig.
IFP Control Group	IFP Experimental Group	-6.59066*	.68801	.000
	Education Control group	3.06410*	.74116	.000
	Education Experimental Group	3.46154*	.70063	.000
IFP Experimental Group	IFP Control Group	6.59066*	.68801	.000
	Education Control group	9.65476*	.72924	.000
	Education Experimental Group	10.05220*	.68801	.000
Education Control group	IFP Control Group	-3.06410*	.74116	.000
	IFP Experimental Group	-9.65476*	.72924	.000
	Education Experimental Group	.39744	.74116	.950
Education Experimental Group	IFP Control Group	-3.46154*	.70063	.000
	IFP Experimental Group	-10.05220*	.68801	.000
	Education Control group	-.39744	.74116	.950

*. The mean difference is significant at the .05 level

TABLE 13: TUKEY HSD RESULTS

(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig.
IFP Control Group	IFP Experimental Group	-6.59066*	.68801	.000
	Education Control group	3.06410*	.74116	.000
	Education Experimental Group	3.46154*	.70063	.000
IFP Experimental Group	IFP Control Group	6.59066*	.68801	.000
	Education Control group	9.65476*	.72924	.000
	Education Experimental Group	10.05220*	.68801	.000
Education Control group	IFP Control Group	-3.06410*	.74116	.000
	IFP Experimental Group	-9.65476*	.72924	.000
	Education Experimental Group	.39744	.74116	.950
Education Experimental Group	IFP Control Group	-3.46154*	.70063	.000
	IFP Experimental Group	-10.05220*	.68801	.000
	Education Control group	-.39744	.74116	.950

TABLE 14 : VARIANCE OF GRADES AMONG PARTICIPANT GROUPS

It is important therefore to triangulate this result with the qualitative data to arrive at an explanation for this outlying occurrence.

* HOMOGENOUS SUBSETS TO LEVEL .05

Group	N	Subset for alpha = 0.05		
		1	2	3
Education Experimental Group	26	29.2692		
Education Control group	21	29.6667		
IFP Control Group	26		32.7308	
IFP Experimental Group	28			39.3214
Sig.		.945	1.000	1.000

Uses Harmonic Mean Sample Size = 24.960.[a]

The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed. [b]

TABLE 15 MEANS FOR GROUPS IN HOMOGENOUS SUBSETS

The above post hoc range test summarized in table 15 shows the means of each group in ascending order. It shows that IFP control and experimental groups differs significantly.

Mean Plot

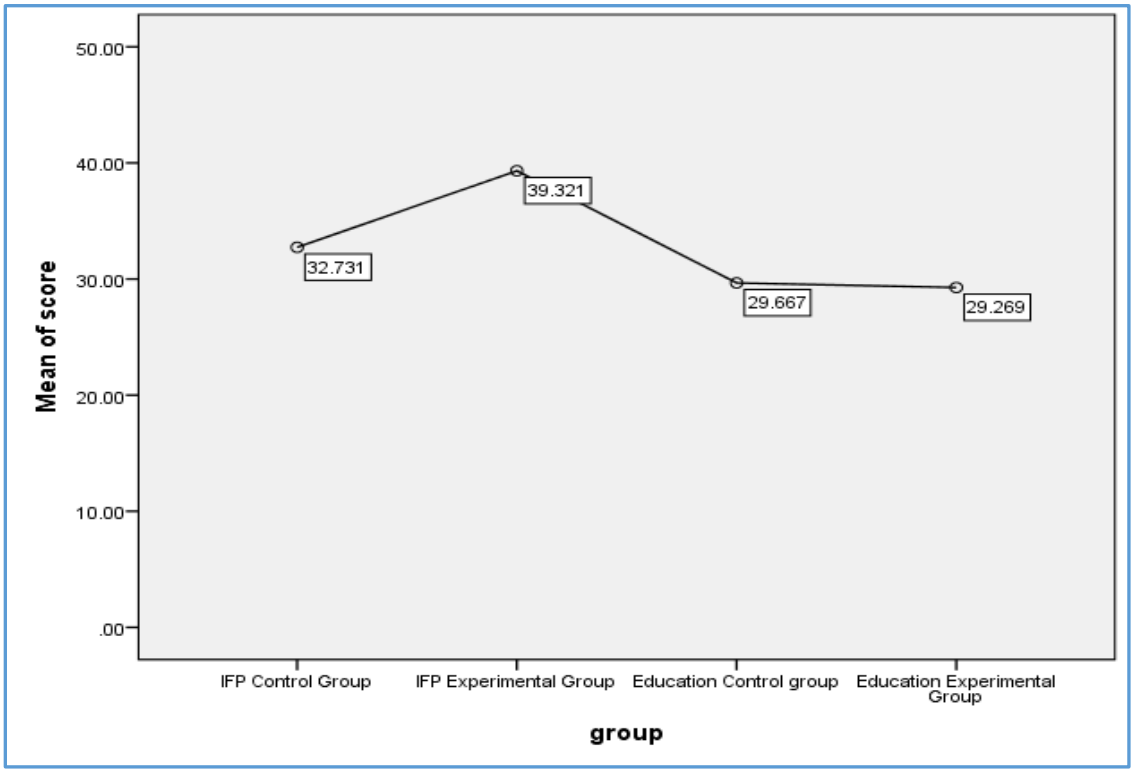


FIGURE 11: PLOT OF MEAN TEST SCORES ACROSS ALL GROUPS

The above graph in figure 11 illustrates the significant impact student engagement pedagogy can have on performance. Evidently the difference seen between the foundation experimental group and all the other groups supports the hypothesis that the more involved and engaged students are, the higher their achievements.

5.4 Qualitative Results

The responses from the focus groups were audio-taped and transcribed. A thematic analysis was conducted, thoroughly reviewing the transcripts and content analysis of frequently repeated words and themes. The four major themes that directly responded to the qualitative research question were (a) connection between teaching style and performance, (b) students' preparedness for exam, (c) positive influence of peer pressure and (d) students driven by an external locus of control. (Appendix 12)

Through the process of answering the research questions, a statistical analysis was conducted on participants' examination scores. In addition, three primary themes emerged when reviewing the qualitative data generated by the focus groups interviews and patterns of behaviour identified through the instructors' field notes. In order to understand possibly why there was a significant difference in the mean examination scores of the two foundation course classes and not the two first year education classes, the qualitative data was analysed. The obvious answer was detected in the attitudes reported by the participants. Students who take an active role in their own education have been found to be better at monitoring and regulating their own motives and learning strategies, when compared to students who are engaged in passive learning pedagogy (Bell, 2010; Lietz & Matthews, 2010). This was observed in the foundation course control and experimental sections. The control section participants expressed their challenges with properly preparing for the examination. On the contrary, many of the participants in the experimental section reported how the group dynamic assisted them in preparing for the exam. They did not want to disappoint or inconvenience their group members. The foundation course experimental section's participants discussed in their focus group how they gained deeper knowledge by hearing different perspectives and benefiting from the expertise and experiences of others. Twelve out of the 14 participants who actively participated in the focus group reported that they felt that they contributed to the learning of their peers. The depth of learning that occurred in the project groups could be one reason why 11 out of 14 of the participants in the first-year psychology experimental section felt prepared entering the examination.

5.4.1 Students Experience and Perspectives

Based on the content analysis of the focus groups transcript, four primary themes of student behaviours were found. They were (a) connection between teaching style and performance, (b) students' preparedness for exams (c) positive influence of peer pressure and (d) students driven by an external locus of control. The results of these themes are explained below.

5.4.2 Connection between teaching style and performance

Social cognitive theory states that people (e.g., students) must believe in their capability to learn before change in their thinking and behaviour can occur (Bandura, 1986, 1997). This belief that success is possible is a critical first step in the learning process. The results varied when participants reported their confidence level going into their respective examinations.

Teaching styles are invariably linked to student performance. This section present findings on the extent to which students expected teachers to contribute to their performance. It also analyses what could have been done to enhance student performance. The students' responses were grouped according to the general similarity in their responses.

Respondents	Summary of responses	Sample comments from students
Experimental groups **(*n*= 26)**	Lively and Relaxed Class Environment (19)	"The class was lively and engaging" (Ross-Foundation Exp. group).
	Teacher giving us interesting tasks and setting high expectations (16)	"Your teaching style caused us to look for more information outside of class and to do more work on our own" (Amana –Foundation Exp. Group)
		Miss made the class very active, so I wanted to learn (Arun-Foundation exp. group)
		"The balance between humour and strictness" (Mona – Foundation exp. group)
	Friendliness of the teacher (21)	"Miss gave us the deadlines and we had to work at our own pace to meet them (George-1st year exp. Group)
	Being able to work at our own pace (13)	
Control Groups **(*n* = 24)**	Teacher should motivate (9)	"The teacher could have made the class more interesting" (Abdulla- 1st year control group)
	The class/ topics were not interesting (14)	"I needed to be more engaged. The topics in the lecture were boring" (Hoda –Foundation Control group)
	Better teaching style (10)	Using videos and other interactive methods to reduce the amount of reading would be better (Kasim -1st year control group)

TABLE 16: CONNECTION BETWEEN TEACHING STYLE AND STUDENTS' PERFORMANCE

Two main issued emerged from the responses in table 16 above. First, it was the willingness for teachers to motivate their students. Second, it was the ability of the teacher to create an interactive and a relaxed learning environment among the experimental group to which students attributed to their engagement. The majority of the responses, 19 to be exact, show that having a lively and relaxed class is linked to positive performance. However, the responses also show that the teacher should do more to motivate. This however is in tension with the traditional lecture style instructional methods. There is much to be said for the 21 respondents in the experimental group who identified the friendliness of the teacher as being closely connected to their performance. In many contexts, including the UAE friendliness of lecturers is

misconstrued as a weakness. Teachers believe they have to be very serious as the business of education is a serious one. It would seem however that the responses in this study indicate otherwise. In the control group where the traditional lecture method was employed the lack of interest in the class and the topics being taught was associated with their performance.

5.4.3 Facilitation of Learning

Respondents	Summary of responses	Sample comments from students
Experimental Group (n=26)	Yes, Teacher Facilitated Learning (23) No, she did not (3)	Yes, she did (facilitate our learning) and was available after class for more instruction and guidance (Khalid, Foundation Exp. Group) "We needed more guidance on the test " (Faisal Ist year Exp group)
Control Group (n=24)	Yes, teacher facilitated learning (5) No, Teacher did not facilitate Learning (19)	"I think the course the course was well delivered, we got all the materials and we just had to memorize the information for the test" (Dina, Foundation control group). "Not really she taught the lectures and seminars, but that's it. Not enough time was given for exam preparation" (Najad, 1st year control group)

TABLE 17: FACILITATION OF LEARNING

In relation to the question about whether teachers facilitated learning, there was a wide range of responses which are summarized in table 17. Broadly, the responses can be categorized into two contrasting perspectives. First, the majority of students in the experimental group agreed that the teacher facilitated learning. This was evidence in the students' responses such as "*She caught our attention with some really good activities" (Mariam); I was very engaged and learnt a lot because the teacher made the class interesting (Zubair).* Only 3 students of the 26 did not agree. In the control group the converse distribution is evident with the majority of the students saying learning was not facilitated by the teacher. In the control group. A frequent response that stood out in the focus group on this issue was that students needed to be more engaged in the class in order to learn. *"I wasn't engaged, I drifted off a lot (Salem)*; "*I needed to be more engaged, the topics in the lecture [were] boring" (Humaid*); "*Not really engaged* "(Suhail.) The findings show mixed outcomes reflecting average teacher performance.

5.4.4 Students' preparedness for examination

Respondents	**Number of Participants that Responded**	**Number of students who felt prepared prior to the examination**
Experimental Group	26	19 (73%)
Control Group	24	15 (62.5%)

TABLE 18: PREPAREDNESS FOR EXAMINATION

Table 18 on the previous page, shows that in the experimental group 73% of the felt that they were prepared and that they would do well on the examination. In the control groups the number of participants who reported feeling prepared for the exam was 62.5%. For participants from the two experimental sections, their level of preparation was aligned with behaviours such as (i) reading the text book, (ii) regular class attendance, (iii) working with peers and (iv) reviewing other sources of information (e.g., textbooks from other classes and doing independent information gathering using the Internet and the campus library). Among the control groups, more commonly occurring were statements pertaining to why they did not feel prepared for the examination. Comments like*, "I only skimmed the book,"* (Amna, Foundation student) *"I only studied the night before,"* (Muna, Foundation Student) and *"I should have attended class more"* (Reem, Year 1) were dominant during the focus group. When asked about their interaction with their fellow learners, 4 out of 23 participants felt that they contributed to the learning of their peers. Two outlying comments that stood out in the control section focus groups were, *"I could have asked more questions in class*," (Hessah) and "*I could have interrupted less."* (Sammy, 1st year). What is evident from the comments from participants Reem and Hessah is that they are aware of the desired engagement in the classroom. Students know that asking questions and interacting with peers and the teacher is a way of clarifying doubts. However, when asking questions for no real reason, this can be disruptive to the class (Sammy).

In looking at the responses in the focus group interviews, it is apparent that the experimental group felt more prepared to take their summative MCQ examination for the term and required less revision time than the control group. This meant that the standards-focused project based model intervention was effective in engaging students and improving their performance. It could also by extension be indicative that this pedagogy of engagement reduces the need for surface learning approaches when revising for exams.

These comments indicate that students exposed to the traditional lecture based approach to teaching were not learning at a deep level. Students require a greater degree of engagement for them to adopt appropriate study strategies that will foster preparation for summative tasks. The absence of sufficient interaction in the traditional lecture based models leave students feeling deficient and underprepared. Engaged pedagogy, as Hooks describes it, seems to run against what one might consider a traditional classroom format: large classes with students lined up in rows, listening to a teacher lecture on and on. Drawing on the ideology of *conscientization* by Freire (1970/1992, 1973), Hooks proposes a liberatory approach to education, which increases critical awareness and engagement. Educators are required in this pedagogical approach to transgress the conventional methods of teaching and learning by practicing innovative methods of interacting with students.

For the experimental sections 19 of participants in the Foundation class felt prepared to sit the test, while 15 of the participants from the first year education class did. Participants in the Foundation class aligned their level of preparation to behaviours such as (a) group collaboration, (b) reading the textbook, (c) completing the group presentations, and (d) doing outside information gathering (e.g., using the Internet and the campus library). Participants from the first year education classes focused their comments on what they felt was missing, primarily the lack of a study guide. One participant (Kiera, Foundation Student) felt that reading the book helped prepare her for the examination and another stated that applying the information to the real world application of the content helped prepare her (Amna, Foundation Student). The other comments by the remaining participants were summarized with these statements: *"I wasn't motivated to study,"* (Ahmed, Rehab, and Aly, Foundation Students) "*I was lazy and didn't know what to study,"* (Alex, Foundation student) and *"I did not study because there was no study guide"* (Abdulla, Reem

and Dennis, Year 1). This confession of "laziness" points to a lack of self-efficacy and self-direction. In most cases when students lack self- direction they do not expend effort on long-term goals because they cannot realize immediate gratification. For a student to embark on a project, he has to value the return on his effort to be more than his loss of comfort. The problem with a student who lacks self-efficacy is that he is not inclined to trust in a return that is both distant and uncertain. On the contrary, self-efficacious students are more apt to trust in the success and pay-off of effort expended on studying, and are much more likely to overcome their natural laziness (Bandura in V.S Ramachaudran 1998, pp. 71-81).

When participants were asked in the focus group interview how prepared that they felt prior to the examination, the results were mixed. An interesting finding was that 7 out of 11 participants in the foundation course control section felt prepared for the examination. In response to their level of preparedness for the exam most of the students in the control group reported varying level of preparedness based on their expectation of the test. *"I felt prepared for the test because I attended all my classes and I expect to get questions related to the topics we studied"* (Mona). Another respondent was partially confident because of their academic skills of taking notes and revising them. *"I took a lot of notes and revised on my own so I guess I was prepared"* (Nabil). The same partial confidence was expressed by Selma who said *"I think I was partially prepared because I attended classes but did not pay too much attention"*. Marwa shared the same sentiment as she reported being *"kind of prepared"* This comment is not uncommon from disengaged students who are not sure what to expect since they did not participate fully. Ali and Farhan reported being well prepared but did not elaborate why. The notes from the observation indicated that they were regular attendees to class and they were students on scholarships, so this might indicate a level of confidence and good ability in test taking. It was obvious that some respondents had asked others who did the module before about the test because Chloe said *"I think I was prepared but other students say the summative test is hard"*. This response would seem to indicate an expected dissonance in the level of difficulty of the in course practice and the summative test. As it turned out their performance on the test was not exceptional so their reported levels of partial preparedness were congruent with their performance.

5.4.5 Evidence of Collaboration

Respondents	**Summary of responses**	**Sample comments from students**
Experimental Groups (n=26)	Yes Collaboration (26)	
Control Groups (n=24)	No Collaboration (16) Yes Collaboration (8)	

TABLE 19: COLLABORATION AMONG STUDENTS

Some participants reported having difficulty motivating themselves to come to class and their level of preparation was reported on average as low. In table 19 it can be seen that only 8 out of the 24 participants

in the control sections felt that they contributed to the learning of others. It appeared that the participants in this class primarily studied alone.

Unlike the foundation course experimental section, there was no evidence of participants supporting other participants. Most of the responses in the control section focus group seemed to indicate that there was no need to support each other. This data is captured from the statements indicate a drawback of the lecture-based method of instruction, as the value of collaborative learning is not explicitly encouraged. *"There was no need to help anyone we all got the same hand outs and materials"* (Sergie). Alina's comment indicates a very good reason for this attitude *"I just want to pass this course and it's very straightforward, come to class, take notes, revise and take the test - so no need to help anyone".* Six respondents opined that they did not collaborate *"... because [we] can all access the materials online"* (Faiza); *"The classes were enough for me to learn what I needed so ... and I didn't have any time to help others"* (Tahir); *"I was way too busy to help anyone"* (Marco); *"No I didn't work with anyone during this course"* (Herma); *"Didn't know we should help others. No need to. Some students didn't attend but that's their problem"* (Karen); *"The classes were enough for me to learn what I needed so ... and I didn't have any time to help others"* (Florence). Two respondents in the control group reported collaboration *"I helped one of my friends because she was having problems finding some of the reading materials in the library"* (Keanu); *"Yes, I shared my notes with two of the people in my class because they missed some of the lectures"* (Reema).

Collaboration is an essential part of student engagement. Vygotsky's theories stress the fundamental role of social interaction in the development of cognition (Vygotsky, 1978), as he believed strongly that community plays a central role in the process of "making meaning." The focus group data showed that the experimental foundation group were quite different from the control group in the area of collaboration and that there was 100% collaboration on activities "*We had to work in groups all the time" (*Eli*); "A lot of group work was needs and I think we all contributed to helping each other"* (Emma); *"Working with others was all we did in class and out of class. This was hard to get used to but it really helped to make the work easier"* (Desi); *"I think that's how the course was designed- yeah to make sure we help each other"* (Eric*); "No way we could get the work done without collaborating with each other"* (Dina); "*All the time we were helping each other. Even from other groups with how to write up the interview materials" (*Sara); *"All the seminars and class activities made sure we were working with each other"* (Sheeba) and *"Yes we were always contributing to each other's learning through discussions and other activities"* (Lauren).

The limited to no support from their peers, apparent overconfidence and minimal out-of-class preparation, could all be reasons why control group averaged 33 out of 50 possible points on the examination (66% or a C grade). On the other hand, among the Foundation experimental group where working in groups was an integral part of the standard focused project based model of teaching, the students scored on average 39 out of 50. The lowest score among this group on the summative MCQ was 35. This is two scores more than the average scored among control group foundation students. This is despite the fact that there was no teaching to the test among the experimental groups. The students' performance resonated with literature about deep learning. The deep approach comes "from a felt need to engage the task appropriately and meaningfully, so the student tries to use the most appropriate cognitive activities for handling it" (Biggs, 2003, p.16). In this approach students make a conscious effort to connect with, and understand what they are learning. This requires a strong base knowledge for students to then build on seeking both detailed information and trying to understand the bigger picture. They are then able to apply that knowledge in any assessment, whether project based or MCQ.

5.4.6 Students' perception of learning

The focus group interview data showed that the perceptions of learning were very similar in both the first year education groups. The course participants in the experimental and control sections spent the majority of their focus group time reporting their displeasure that there was no study guide for the examination. There was a sense of dependency observed as a few participants reported that they did not know what to study for the examination due to there being no study guide, so they only studied by skimming the book. *"We need more direct guidance from the teacher"* (Rana. Yr 1); *"We would benefit from more input on our project and with a study guide from the lecturer"* (Callum, Yr1). These sentiments were also shared by Reem who said she *wanted "more help from the teacher so we could choose our project topic and start working on it earlier. She [the teacher] should also give us a study guide"* (Reem, Yr 1). Abdulla wanted more information about the test and time to revise the content directly in class. He said *"our teacher could tell us what we needed to study for the test so we feel less anxiety"* (Abdulla, Yr. 1). Harsh in the experimental year 1 group expressed dissatisfaction with the different instructional approach *"we should get more direct instruction from the teacher and less group work. We didn't even get a study outline guide"*. All these comments summarize the basic lack of the traditional lecture and testing method that is commonly practiced in universities, students want to be told what to study, what the test will be about and then they do just that. This reductionist approach to education leads to students graduating from universities but lacking in employability skills. The shift from an industrial society to an information and knowledge society has far-reaching implications for the kinds of skills needed by the workforce and the population at large (Allen and Van der Velden, 2012). In a European Union commission study in 2013 "only 50-60% of graduates across all countries and fields of study indicated that their study programme clearly succeeded in providing a good basis for entering the labour market and for developing new skills on the job, while some 15-20% indicated that their study programme clearly failed to do so" (Humburg and Van der Velden, 2013).

5.4.7 Students' Perception of Teaching Style

Their perception and expectation about the role of their teacher appeared to have influenced how much time and energy they spent preparing for their examination. The responses to question 5 in the focus group interviews point to the idea that there appears to be a very strong dependency and expectation that the course instructor will provide for the participants, the specific detailed knowledge needed in order for them to do well on the examination. The question was "Did the course instructor effectively facilitate the learning process for you?" The feedback provided in the first year education course experimental and control focus groups were that the participants expected the course instructor to teach to the examination. Most students were satisfied with the teaching style and did not express any dissatisfaction. However, a few other like Abdulla, from the control group felt the learning process was not effectively facilitated. *"She [the teacher] taught the lectures and seminars but that's it. Not enough time was given to exam preparation"* (Abdulla,Yr 1). Hameed, also in the control group said *"the teaching style could be reviewed because I learn better by doing activities"*. This comment would suggest that the traditional lecture seminar method does not accommodate different learning styles that students entering university have. Some other control group students felt learning was not effectively facilitated as they had a lot of reading to accomplish on their own. *"She [the teacher] gave us a lot of reading material for outside of class reading but did not really follow up to say if this was relevant information for the test*" (Marwa, Yr 1). Hameed followed up on this comment by suggesting that *"using videos and other interactive methods to reduce the amount reading would be*

better" (Hameed, Yr 1). One interesting comment which came from Houda in the experimental group reflects the notion that passing the test was a priority to some students "*It [the teaching style] was ok but more direct information about the test would make me feel less anxious*". Other students from the experiment group agreed that the teaching style facilitated learning, but more test preparation alongside the group project would make them feel more prepared for the test

The teaching style that they received did not meet their learning needs and subsequently they did not know how to adapt. Students expect teachers to create a meaningful experience in the classroom that are counter to the traditional methods. The motive for students wanting this meaningful experience is their desire to succeed so they would like the teacher to make the most of the class time. The above responses from the control and experimental first year participants in the study would seem to reinforce the fact that students' perception of teaching style is linked to students' performance, or as in this specific case, the lack of it. Both the first year education course experimental and control sections averaged a score of 29 out of 50 points, which is a 58% or a C- grade. This is not remarkable except that this is across both first year groups. It could be posited here that there are other reasons for this uniformly average performance despite the intervention. Meta cognition, self-efficacy and motivation research suggest possible reasons, however those fall outside the scope of this present research

The literature pertaining to perception of control focused on the importance of how in control a student feels over his or her learning environment. Transitioning foundation education students are faced with increasing expectations as greater emphasis is typically placed on academic performance, increased competition, unfamiliar academic tasks, the need to socialize with new peer groups, and an increased focus on undergraduate study. Perry (1991) initially identified this as a period when students may lack a sense of control over their environment. For the two control sections, their feedback was consistent with the literature. Participants sought more direction in how to prepare for the examination. *"I find it hard to study with no study guide for direction"* (Aida, Foundation Student) and *"I wanted to be given the exact definitions along with the application of real life situations"* (David, Foundation Student), were common statements made. Participants wanted more class discussions and group work. *"I think there should be more of an open discussion or verbal feedback of what we learned and relate them to a personal experience."* (Hakim, Yr1). Along that line of thinking Sara from the first year control group stated, *"If I am engaged in class, it forces my attention on what is being taught".*

Participants from the experimental groups sought more structure. The common feeling among the majority of participants was, *"I wanted to spend more time in class going over material we were actually supposed to know for the test"* (Muna, Yr 1). Participants felt uncomfortable in this type of learning environment. "I wanted more instruction" (Wassim, Foundation Student) and *"I wanted more boundaries for what we needed to know"* (Jaya), were also common statements made. Ola from the foundation experimental group was concerned that she spent more time than she would have liked working within her group to complete the project than studying material that she thought was going to be on the exam. Another participant stated, *"I'm a verbal learner so I learn best by taking notes and attending lectures. I learn by writing things over and over"* (Joelle, Foundation student). Although the vast majority of students wanted more specific direction on how to do well on the exam, participants also expressed their appreciation for the time that they had interacting with their peers and the course instructor in their groups. "*I liked how the professor let us learn on our own and find information ourselves"* (Najad, Foundation student). "*The professor focused individual attention to our group and helped us"* (Kyra).

Overall, there was more negativity being verbalized in the first year education course focus groups than from the foundation course focus groups. One possible reason is that the first year education course participants are primarily first year students. Since this study occurred in October and November 2014, all of the first year education course participants would have had at least completed two semesters prior in a foundation programme or entered directly after completing A levels or equivalent study, unlike the foundation course students who are still in their university readiness classes. As a result, the first year students may have developed expectations on how course instructors should behave and any incongruence between their present experience and their expected experience resulted in frustration. This frustration evidently led to a lack of engagement due to the blame being placed on external forces beyond their control. This aligned with Stupnisky et al. (2007) who found that students who felt out of control typically blamed an external source for failures (e.g., their professor or the subject matter). By not taking responsibility of their failures and continued to feel as though they were a victim of their circumstance, students in this situation began to exhibit a decrease in motivation and their academic performance continued to decrease. This maladaptive pattern brought attention to the importance of a student's perception of control in the university environment (Stupnisky, et al., 2007) and supports this study's findings.

The results and findings of this action research study have shown that an increase in classroom engagement and academic performance is possible when using the standards-focused project based learning teaching approach. The results and findings have also shown that there are two factors that influence the outcome of this approach, as only one of the two courses sampled showed a significant difference in their average examination score when comparing the experimental group with the control group.

One factor had to do with a student's need for predictability. Interestingly, some participants in both control groups reported feeling that their course instructors taught the course effectively and they had no complaints about the lecture-based teaching approach. Josh from the first year control group reported, "*I think the course was well delivered, we got all the materials and we just had to memorize the information*". Selma from the same group said *"I didn't have to do too much - just go to class and listen and take notes, then study for the test*". Participants from the foundation course control group wanted more discussion and activities, but overall did not express dissatisfaction.

Participants from first year education control group complained about not receiving a study guide to assist their preparation for the exam, but they did not express dissatisfaction in relation to the course instructor's teaching method. This was an interesting discovery because both control groups did not do as well as they could have done on the examinations. The foundation course control group averaged a C grade and the first year education course control section averaged a C- grade. The possible conclusion here is that despite the teaching method, students who cannot self-direct their learning are not likely to perform well. As stated by Abdullah (2001), self-directed learners are "responsible owners and managers of their own learning process" (p. 1). Self-directed learning integrates self-management (management of the context, including social setting, resources, and actions) with self-monitoring (the process whereby learners monitor, evaluate, and regulate their cognitive learning strategies) (Bolhuis, 1996; Garrison, 1997).

There were persistent reminders to the focus group facilitator that the participants were not pleased that they did not receive a study guide and more specific details from the course instructor on what they needed to study for the examination. This blaming behaviour coupled with their low examination scores aligned with the literature, which reported that students who felt out of control typically blamed external sources

for the failures and this type of maladaptive behaviour has been linked to a decrease in academic performance (Stupnisky et al., 2007).

The second factor had to do with assessment. Biggs et al. (2001) pointed out that a student's approach to learning is directed by their preference for choosing a particular process, predominately a deep or surface approach, and to the subsequent associated cognitive processes for the learning task. The process that the student takes is dependent on the interaction between their personal character, their motivation, and their choice of learning strategy (Daly & Pinot de Moira, 2010). Daly and Pinot de Moira (2010) noted that a student's learning approach is not an innate trait characteristic; rather their choice of learning strategy is dynamic and situational. Factors that contribute to their choice range from the type of assignment or examination they are preparing for, the importance of the outcome, instructional practices, social factors like pressure, or the learning environment. For example, research has consistently found that multiple-choice examinations encourage studying focused on memorization (i.e., surface approach to learning; Daly & Pinot de Moira, 2010). Ultimately students will adopt a learning style that they feel will have the highest probability for obtaining their desired goal or outcome, while taking their context into strong consideration.

The findings from this action research study aligned with the literature. Both course instructors observed an internal conflict occurring within the majority of participants in their respective experimental sections. The conflict appears to have been between what was required of them to do well on the project and also the multiple-choice examination. Both course instructors emphasized a deep approach to learning when working on the project. Participants were asked to understand the content and relate it to the real world. During the consultation meetings between the course instructors and the participants' groups, deeper inquiry into the subject matter was discussed where additional data gathering was asked of the participants. Both course instructors expressed their pleasure in observing the in-class and out-of-class engagement the participants in the experimental groups were showing. What became evident was that the participants in the experimental sections viewed this process as additional work and from their perspective did not align with their primary concern, which was the upcoming examination. As the literature pointed out, multiple-choice examinations encourage a surface approach to learning due to the focus on memorization (Daly & Pinot de Moira, 2010).

Subsequently, both instructors unintentionally were dissonant in their teaching approach due to the incongruence between course expectations and student assessment. Vermunt and Verloop (1999) reported that incongruence between a students' learning style and the demands of the learning environment can hinder their academic achievement. If a summative assessment that required participants to provide evidence of the depth of their knowledge (e.g., short answer or essay examination) was used instead of a multiple-choice examination, the results and findings for this study might have been different.

5.4.8 Need for more structure

The attitude expressed from the participants of the control sections were very different from what was conveyed from the foundation experimental groups. The literature stated that an active approach to learning has been shown to have significant impact on student satisfaction with their overall educational experience, enthusiasm to learn, and willingness to attend class on a regular basis (Lieux, 1996; Savery, 2006; Shellman and Turan, 2006). The findings from this study did not align completely with literature. The assumption that the participants would be open to a new teaching approach was proven to be a wrongful assumption.

Both experimental groups sought more structure. The majority of participants reported wanting more boundaries and instruction in figure 34 below. One participant expressed her displeasure that she felt that she worked twice as hard completing the project when she could have been studying for what she thought was going to be on the examination (Marsha). Although the participants in the experimental group were shown how the learning objectives were directly linked to the project's grading guide (i.e., rubric) and to the examination, they had difficulty seeing and conceptualizing this. This was concern was detected and documented in the lecturers' observation diary in week 3 of the intervention on November 9 "*Lots of discussions among the groups even though not on the group project. Some groups are not fully on task as yet. They are still trying to figure out what to do". On November 24, six weeks into the intervention the lecturers again observed "Lots of questions from the groups today about the end of term summative test. Seems they all have the same concern. I encouraged them not to worry about the test but to get through their group tasks in preparation for the project" (1st year Education Lecturer's observation diary).* This insistence on focusing on the exam and the inability to define their project can be blamed on the traditional approach to education that the first years have been used to. In the project based approach they are forced to take ownership of the project, set boundaries and meet deadlines. These require cognitive and academic skills students have never been encouraged to tap into before. It is noteworthy that by December 10 the teacher's observation of the experiment group of first year students was positive "The students have now created a good routine. Most groups have sorted out their time management issues and are working with much excitement about their project". When the issue of time management and was followed up in the focus group participants reported that they were primarily focused on finding out what they needed to know for the examination. Much of the discussion in the focus group revolved around not knowing how to manage their time effectively in order to meet the project deadline and prepare for the exam. Some comments are displayed below.

1st year experimental group

"It was hard to determine if we were on track. Some more direction from the teacher would be helpful. I questioned how will we do a project plus study for the test?" (Amal).

"More structure to what we needed to do would make me more satisfied. I felt like I was working overtime both inside and outside of class" (Rana).

"I was very stressed out because sometimes I felt we were not managing our time properly and I had many questions about the exam" (Emma).

"*The structure of the course was very flexible so sometime I was worried that we would be behind in the content even though we were having fun in the classes" (Amin).*

Foundation experimental group

"At the beginning we were not sure how we were going to get everything done in the short time plus do an exam without any lectures. That really worried me" (Rosa).

"*The course outline was a bit strange and we were in charge of completing the topics outlined in whatever way we decided. It was like a free for all… really" (Ali).*

"The only thing we knew was the project due date and the exam date. And that we had to get through the materials between Oct and Dec. Some more deadlines would help" (Marco).

"The course was different in that we had deadlines but a loose outline. So we could work at our own pace, but that's hard in a group so there would be a lot of work" (Michael).

The entry from the observation diary of the foundation lecturer on December 7 revealed a more positive picture in terms of being on task, but revealed a rather different challenge - dealing interpersonal relationships and conflicts when working in groups. "Today we discussed the progress of the project. The groups are all on track. There were some conflicts within two groups which were plaguing the relationships but students seemed mature enough to ignore their personal feelings". This is not surprising as it has long been established that conflict among group members is one of the risk factors in using group work as a method of instruction (Payne and Monk-Turner, 2006). However, as a method of instruction, group work is inherently beneficial. Students who work in groups tend to achieve better grades and are inclined to take a deeper approach to learning, retain more information and develop teamwork skills (Oakley, Felder and Elhajj, 2004). This was evident from the observation diary entries from both lecturers in the experimental group by the final week of the intervention.

"Groups are working well on in class synthesis task. Good discussions on projects and constructive feedback from within the groups" (Foundation lecturer, Dec 12).

"Groups are working well to complete their projects. They have clear group roles and are spending a lot of time outside of class on the course materials" (Year 1 Lecturer, Dec10).

5.4.8 Positive influence of peer collaboration

Peer relationships have a significant influence in the university environment because of the amount of time students spend together on campus and in classes. When students make friends and feel socially connected, they are predisposed to positive academic performance. Positive peer relationship promotes motivation to learning and good academic performance (Christenson, et al 2012). The value of peer influence in collaborative learning to enhance student success by facilitating motivation, shared understanding of material, and peer support, among other benefits across disciplines and contexts is also echoed by McKeachie, 2002 and Ormrod, 2008.

Many students who enter universities are coming from relatively homogenous communities (Orfield, 2009). As a result, the campus or the classroom is the first site that provides opportunities to engage with others with different backgrounds, experiences, and beliefs. University classrooms provide an opportunity for peer interaction that ultimately has a positive impact on many students. An increasing amount of researchers have found that structural and interaction diversity promotes a wide variety of academic and civic outcomes (Gurin et al., 2002; Loes, Pascarella, & Umbach, 2012). When asked about their interaction with their fellow learners, 73% of the participants in the experimental group felt that they contributed to the learning of their peers. According to Dunleavy and Milton, (2009), learning from one another and from the other people from the community and finding solutions to real issues and challenges are two approaches that lecturers incorporate in order to improve engagement and by extension performance. The entries from the observation diary of the foundation lecturer on Nov 9 and 24 respectively, read "students have done well today to divide the research task for their project. There were active negotiations going on among the

students as they tried to find out the strengths in the group" and "Today there was a group presentation and there was clear evidence of group cooperation. Pleasing to see how different group members have contributed to the mini class presentation". The lecturer from the first year experimental group also recorded a similar observation. "Students no longer need to be told to sit in their groups. The groups seem to be bonding well. They are working well together on research and sharing the information".

The attitude expressed from the students in the control sections was very different from what was conveyed from the two experimental groups. After the initial confusion, the foundation course experimental section embraced the group dynamic and used it to enhance their learning experience. The majority of the participants felt peer pressure to not let down their group members and many sought help from one another when studying for the examination. One comment from the foundation experimental group participants clearly articulated the value of peer working in their groups "There were a lot of group activities which we had to get through. Some of them I liked but others I just did to make sure my group was not annoyed with me". Table 20 below summarizes the data captured from participants in the experimental groups, which clearly indicates the significant role of peer influence.

Reasons for Engagement	**Foundation n=14**	**1st Year n= 12**	**Sample comments from students**
Peer/friends	7	3	"We connected very well in our group do we stayed focus" (Ross)
Teacher	1	3	"the teacher and her spirit of teaching" (Mona)
Myself	6	1	"I wanted to do well so I paid attention" (Karen)
Group	4	1	"The class was lively and engaging"(Yusef)

TABLE 20: PEERS AS A STRONG SOURCE OF ENGAGEMENT

This shift in attitude was not observed in the first year education course experimental section. The majority of the attitudes maintained their negativity from start to finish. They viewed the group project as unnecessary and completed the task because it was a graded assignment. The common sentiment among the first year experimental group was that working in group causes time to be wasted as materials had to be explained and understood by all group members. There were about 10 comments that revealed this sentiment. Unlike with the foundation course experimental section, no participant in the first year group, reported positive outcomes from working with their peers in the group setting. Ironically, both course instructors reported a high level of engagement from students in their respective experimental sections when compared to their respective control sections.

For the experimental groups both instructors had much different experiences when compared to their respective control group. Both instructors observed a higher level of energy in the experimental group. "Quite a buzz in the classroom. Lots of questions being asked and a lot of discussion about what the project should be about" (Foundation Lecturer, Oct 16). The same lecturer a few weeks later observed "This week we had the debates. The energy in the class was high. Most speakers have taken this task very seriously by doing a lot of research outside of class. A lot of preparation and practice is evident. Participants appeared engaged in the process and actively discussed the topics within their respective groups". The first year lecturer also had high praise for the level of engagement with the content in their seminar." Students liked the student led seminar tasks they had to prepare for today's class and the group presented an excellent seminar on refugee children. They had done a good deal of pre class reading and internet research on this topic" (Year 1 Lecturer, Oct 16). This project based approach to teaching and learning clearly motivated the experimental group. At the end of the unit the lecturer observed "The student led seminars ended this week and all the groups have presented various seminar topics with some brilliant activities. One group event recreated a refugee camp in the class with tents and rations. A lot of work was done to get the information across" (Year 1 lecturer, Nov 8). With this kind of activity, the work load is more for both students and lecturers but the immediacy of the feedback is rewarding for the students and lecturers. One instructor noted that she felt as though she "was more responsive to the need of students in this project based format because she could get immediate feedback if the participants understood the material or not" (Year 1 lecturer, Nov 4). In another entry she recorded that "The reading and research on education policy proved to be quite heavy for the students. They seem to be bogging down. I was able to intervene and get them back on track. Some of them have already started work on the time line to capture their research in a visual format and to get all group members to be understanding. Others don't seem to know when to stop reading and have so much research info to synthesize. There is a healthy discussion about this among group members as they observe that other groups have moved on" (Year 1 lecturer, Nov 12)

In addition, participants were directed to relate the textbook information with real world situations. The foundation lecturer observed that in the experimental group "*Today students are designing interview schedules and planning their field data collection. It's interesting to see the various skills within the groups and how they negotiate the different tasks they have to complete. Some students are really anxious about this task. Others have confidence in their understanding and ability to complete the data collection*" (Foundation lecturer, Nov 12) and *"Students are learning in real time many skills from their text books such as negotiation, formal writing, conducting interviews and collating data. It is good to see how they read about these skills and relate their reading to the execution of the task. Circulating among the groups and reinforcing learning at various paces can be a challenge for me but the students are clearly learning a lot*" (Foundation Lecturer, Dec8). This led to much deeper conversations that were more meaningful to the participants because they were discussing class content in the context of their own personal inquiry. Participants were observed using a number of outside sources to add to their projects. Many groups elected to use the resources at the campus library to design their projects. Observation notes indicated that most of the students in the experimental group made reference to books or journals they had read prior to the session and these ideas would be discussed among the member. Participant groups interacted well with their respective instructors when they met during class for consultation.

Apparently, what course instructors perceived as engagement, students perceive as work. "There was too much research and we wasted time discussing and trying to decide on what to do. In the end though I was happy with the project we did" (Year 1 Experimental group). A similar comment came from the foundation

experimental group "My group has spent two weeks trying to decide on our project focus. This frustrated me in the beginning but in the end we got it together". It is evident from both groups of students however that they felt the work paid off in the end and they were happy with what the produced. The comments further emphasized the difference in the levels of benefits that are produced in an engagement model rather than the traditional lecture approach to teaching. The students reported "It was a lot of work when compared to our other course but it was interested to do. I learned a lot which I don't think I would in a regular lecture" (Foundation Experimental group). "Don't think I have spent so much time working on a project before. But I don't mind it because it's fun working with my friends even after class ends" (Foundation experimental group). A similar comment among Year 1 experimental group was recorded "*Heavy workload inside and outside of the class. But it was a lot of fun. I got to make some good friends".* The fact that students in higher education can equate their interaction in the classroom to being "fun" is remarkable. No similar sentiments were recorded in the control groups.

The literature stated that an active approach to learning has been shown to have significant impact on student satisfaction with their overall educational experience, enthusiasm to learn, and willingness to attend class on a regular basis (Lieux, 1996; Savery, 2006; Shellman and Turan, 2006). The finding among foundation experimental students in this study were consistent with the literature, however the same could not be said for the first year education course experimental group.

5.4.9 Reasons for engagement

Thirteen percent (4 out of the 23 participants) in the control group reported feeling engaged in class. One participant reported that he has a lot going on in his personal life and will study when he can (Ahmed). A few participants said that when "fun activities" occur they are more motivated to come to class. A lecture-focused teaching approach with the incorporation of two videos was used for the control groups. Participants in the control sections were "passive and spoke in class when prompted" by the respective instructor. Participants were observed to be more attentive when real world stories were incorporated into the lectures. One of the instructors noted in her observation "many blank stares when going over more complex theories or concepts" (1st year lecturer). In addition, "*the use of videos did not prove to be effective as a number of participants were observed falling asleep, attempting to covertly use their personal electronic devices, and/or staring blankly at the screen"* (Foundation lecturer). A general concern by both instructors was whether or not the participants understood the content of the lectures despite the fact that they all were given the same information. This is clearly antithetical to the experimental groups where the lecturers had immediate feedback on the level of understanding.

The two participants that expressed an intrinsic motivation to do well in their respective course reported that the "topic interests her" (Reem) and the other has a personal relation to the course topics because she works in a nursery in Dubai (Ola). One suggestion made by a participant (Anna) that was supported by their peers was to participate in study groups. Anna felt an increase in motivation when she works with others to reach their goals.

A couple of outlying comments that stood out to indicate no motivation at all were, *"I did not have the book to study from" (*Karim) and *"I forgot to study"* (Faisal). For this course all materials are uploaded on the university's academic portal so even without a textbook, students can still access hand-outs and reading lists. Karim's total disengagement is quite contrastive to what was observed and recorded in the experimental group. Faisal's admission that he forgot to study raises the issue of priority. There were clearly

other competing interests which took a higher priority over learning. In a traditional approach to teaching, this is common and students like Karim and Faisal have no ongoing accountability in the system. Only when they fail do lecturers realize they have slipped through the cracks.

The participants in the experimental sections did not find it as challenging to come to class regularly. The majority of them looked forward to coming to class to work on their projects. Nineteen out of 26 participants (73%) felt engaged in class and 22 out of 26 participants (84%) were engaged in the coursework outside of class. A common reason expressed by participants is that they were motivated by their peers to participate and to get a good grade. The group dynamic was found to be influential to the thinking and behaviours of participants. *"I was motivated to work outside of class because I did not want to let my group down"* (Participant 21); *"I like working in groups"/ "It is more fun than reading the text alone and it gives me motivation"* (Emma). The project itself also helped with motivation and class engagement. "*I was pretty engaged in class. I felt that the topic being discussed in my group was interesting and relatable"* (Josh). Similar to the control sections, the overwhelming motivational factor for the experimental sections was their final grade for the course. Despite the final grade being their primary motivator, one participant from an experimental section forgot about the exam and a number of them disclosed that they *could* have studied more.

One challenge that was observed in both experimental groups was that the participants had a very difficult time starting their projects. They expressed their confusion and uncertainty. Many groups requested examples and wanted more specific direction as to what their respective instructor was grading them on. Early consultation focused on providing foundational content knowledge needed to get the participant groups thinking about their project. What was evident early on was that the openness of possibilities for the project created anxiety amongst many of the participant groups. A majority of the groups requested more structure and did not respond well when informed that they needed to be creative and innovative in their approach. All of the groups required assurances that the direction they were going with the project was appropriate with their respective instructor. This was found to be important as many of the groups' initial project designs was summarizing the assigned chapters on Microsoft PowerPoint. These groups required additional support and reassurance to trust themselves and their ability to discover new information from other sources. Once all of the groups felt confident in their thinking their energy level and enthusiasm increased. Because creativity and innovation was stressed, participants were also very eager to see what the other groups came up with.

5.4.10 Students Driven by an External Locus of Control

Harlen and Deakin Crick (2002) define motivation as a "force that drives an individual's capacity to learn, adapt, and change in response to internal and external stimuli. Motivation is closely identified with the will to learn, and that has been shown to determine the amount of effort that a learner will put into a task" (p. 2). Locus of control as defined by Miller, Fitch, and Marshall (2003) is "the tendency students have to ascribe achievements and failures to either internal factors that they control (effort, ability, motivation) or external factors that are beyond control (chance, luck, others' actions)" (p. 549). A person who is considered a self-directed learner would be described as having a greater internal locus of control then that of an external locus of control. In simple terms, the more internal the level of control, the greater the ability of the individual to deal with changes within their learning environment. Seventeen out of the twenty-three control group participants reported being interested in the course because of their desire to pass, as captured

in table 21 below. They reported that their primary motivation for their respective course was their final grade.

Control Group reasons for motivation							
Need to pass (1)	I wanted to pass the course (1)	Passing the course(5)		I have never failed any courses so I did not want to start now (2)	Fear of failing made me revise a lot out of class (4)		I wanted to pass (4)

Table 21: Motivation by an external factor of passing the course

Despite grades being their primary motivational factor, the majority of participants in the control sections had difficulty motivating themselves to attend class. Even when in class, one participant in the control group reported that his "*goal was to not fall asleep in class*" (Michael) which he reported as a common practice of his. This revelation indicates very poignantly that despite the importance of getting a good grade, unless the classroom environment is interactive and engaging students cannot attain their goals. The inability to perform at a level of excellence when motivation is extrinsic, was pointed out in the literature review in the work of Stupnisky, et al. (2007). This is perhaps why across the groups the grades were not as high as they could have been if there was more internal locus of control. Traditional teaching approaches are not conducive to deep learning among students in this context. As stated before surface learning does not produce the desired performance among students. Hence, university classes are required to create a bridge between what the students expect and their current competence. It cannot be assumed that their desire for good grades is sufficient to keep them learning

5.5 Chapter Summary

This action research study analysed the effectiveness of an alternate pedagogical approach to address problems in decreasing student achievement and low student engagement. This chapter presented the quantitative and qualitative data that showed the distinct difference between a model of teaching that engages students and one that is based on the traditional lecture method. A holistic representation of the participants' learning experience was developed through the collected examination scores, focus group feedback, and instructor field notes. In addition, Chapter 6 will also include a reflection of the study and recommendations for future cycles of improvement and other research possibilities stemming from this study's findings.

The quantitative data was presented by comparing the mean scores of all four sections used in this action research study. One-way analysis of variance was used and statistical significance using a 95% confidence interval was found. Because a significant difference was found, a post hoc test (Tukey HSD) was used. A statistically significant difference was among all groups except the education class experimental and control groups

The qualitative data was presented with a thematic focus. Three primary themes were identified when analysing the data generated by the focus groups. The three themes were (a) positive influence of peer pressure, (b) students' dependence on instructor-developed study tools, and (c) students driven by an

external locus of control. In addition, the instructor field notes were analysed, and congruency was found within the experiences and observations of both instructors. In using the qualitative data to triangulate and develop the findings of the Tukey HSD, it was evident that the attitude of the first year groups was a primary variable. Both found it difficult to assess the participants' comprehension of the lectures in the control sections. The energy level and observed classroom engagement appeared higher in the experimental sections when compared to the control sections. In addition, both instructors were able to provide more individualized attention to students in the experimental sections due to the regularly scheduled consultation meetings.

The discussion in Chapter 6 will further develop the argument in favour of student engagement approaches to learning, which are supported by these findings. It will also include a reflection of the study and recommendations for future cycles of improvement and future research possibilities.

Chapter 6: Discussion & Implications

All across the Higher education landscape in the UAE, low academic performance and disengagement have been regularly observed in among students. I feel education should be positively transformative, an alternative approach that would better meet the learning needs of today's first-year college students was sought. Inquiry into this problem led to the development and implementation of this action research study. The purpose of this study was to introduce and analyze the effectiveness of an alternative pedagogical approach in the form of standards-focused project-based learning to increase student engagement and academic achievement in classes being taught at this research site. Standards-focused project-based learning is an active learning, student engagement approach where students drive their own learning through the completion of a project(s) that promotes inquiry, standards alignment, and collaborative research (Markham et al., 2003; Bell, 2010).

6.1 Discussion

By implementing the intervention of standards-focused project-based learning, students experienced a consonant, student-focused, engaging approach to teaching. Standards-focused project-based learning introduced students to a learning environment where they led their own learning through inquiry, standards alignment, and collaborative research (Markham et al., 2003; Bell, 2010). It is evident from this and other studies that students exposed to the standards-focused project-based learning exhibited positive gains in student achievement by making their learning real and meaningful (Bell, 2010). In addition, these students showed an increase in 21st century skills (e.g., independent thinking, critical thinking, collaborative skills, and effective communication skills) by being empowered to take control of the learning process (Bell, 2010; Krain, 2010). Furthermore, students developed a deep learning approach that stressed knowledge construction and conceptual learning (Daly & Pinot de Moira, 2010). By doing so, students that learn from the student-focused project-based learning curriculum scored higher when measuring content knowledge and reported a higher degree of engagement when compared to students taught using a lecture-focused approach to learning (Trigwell et al., 1999).

This study confirmed the findings of Simpson et al. (2004) who discovered through their research that many first-year college students believe that learning is passive and should be easy and quickly accomplished. This finding might be explained because first-year college students have typically formed their personal theories on learning by the time they graduate from high school (Schommer, 1994; Hofer & Pintrich, 1997; Schommer-Atkins, 2002). Consequently, the majority of students entering higher education will bring with them learning habits that have been conditioned and reinforced over a minimum of 12 years. What this means is that a student's personal belief about learning has been shown to greatly impact their motivation, academic performance, and what they feel is their academic responsibility while in school Nist & Simpson, 2000; Hofer, 2001; Schommer-Atkins, 2002; Simpson & Nist, 2002). My research has confirmed these finding and it was most evident among the first year experimental and control group in this study as their expectation was that the lecturer should provide study guides, more direct instruction and information about the summative assignment. Consequently, their motivation to participate, learn and succeed was purely external, because they wanted to pass the course.

Given the high importance placed on the student's belief system and perceptions on learning, this study made it possible to capture a holistic view of a student's learning experience. This was accomplished by analyzing academic achievement through the use of summative examination scores, the students' perspective on their learning experience through focus group discussions, and the course instructors' observations on how students academically prepared themselves.

6.2.1 Apparent differences in performance

It is evident that there are some observable differences between students in a lecture-based class and students in an active-learning class that utilizes a standards-focused project-based learning curriculum. In the foundation classes, the results were significant. The foundation course control section had a mean score of 32.73 out of 50 possible points on the examination, while the experimental section had a mean score of 39.32. This result aligned with previous studies which reported that an active-learning approach was related to higher quality outcomes and grades (Kember and Gow, 1994, Prosser et al., 2003). On the contrary, the first year education classes showed no significant difference in mean scores as the control group had a mean score of 29.67 out of 50 total possible points and the experimental group had a mean score of 29.27. This lack statistically significant difference in scores could indicate a lack of the metacognitive skills to evaluate how functional their study practices were in their learning environment and it also highlighted the fact that students had a grave problem with their study strategy. In the research, many of the students realized that their study methods and preferences were not suitable for studying at the tertiary level, but they did not know how to develop them. The First year students got stuck in a cycle of blaming the lecturer for not assisting them with more direct instruction. Their inability to transfer or adapt their learning style or strategies to a new context or specific task indicates a lack of metacognition. It is however important for students to be aware of their learning styles and strategies and how to adjust to the task at hand. If the first year students were able to do this like the students in the foundation experimental group perhaps their results would be different. Pintrich (2002) asserts that students who know about their learning strategies will be more likely to use them. This would mean that in evidence would be a high level of consciousness about their degrees of strength and weaknesses and the ability to monitor their learning for optimal success (Bransford, et al. 2000).

In this current study, it was apparent through the focus group data and the lecturer's observations that students in the first year education control and experimental groups were unaware of effective learning strategies and were heavily dependent on their lecturers teaching them to the test. Participants' expressions such as *"I came to class", "I read the materials from the text", "I highlighted the text"* shows a passive approach to learning. This passivity resulted in expressions of uncertainty and unpreparedness for the summative MCQ. Because they were steeped in surface type learning they could not perform adequately on the summative task. Stanger-Hall (2012) describes this condition as being "cognitively passive" (P. 297). The salient point here is that traditional methods of teaching in university compound this problem of student passivity and any intervention or change must make metacognitive strategies explicit. This is endorsed by Pintrich, (2002) and Tanner (2012) who warned that development of metacognitive skills are not easily facilitated in a content based lecture or teacher centred class, but in a more interactive and participatory type of delivery of skills and concepts. This was clearly the case in the foundation experimental group who showed that despite not preparing explicitly for the summative MCQ, they were able to transfer the learning skills and strategies required to perform well on the task.

In order to possibly understand why there was a significant difference in the mean examination scores of the two foundation course classes and not when comparing the two first year education classes lies in the attitudes reported by the participants. Students who take an active role in their own education have been found to be better at monitoring and regulating their own motives and learning strategies, when compared to students who are engaged in passive learning pedagogy (Bell, 2010; Lietz & Matthews, 2010). This was observed in the foundation course control and experimental sections. The control section participants expressed their challenges with properly preparing for the examination. On the contrary, many of the participants in the experimental section reported how the group dynamic assisted them in preparing for the exam. They did not want to disappoint or inconvenience their group members. The foundation course experimental section's participants discussed in their focus group how they gained deeper knowledge by hearing different perspectives and benefiting from the expertise and experiences of others. A commonly held perception among some experienced faculty members in the Higher Education sector in the UAE is that performing at a high intellectual level is presents a challenge for most students, so I was very pleased to hear the students identifying how they were able to think critically, synthesize ideas, discuss contrastive opinions and arrive at solutions through negotiating meaning in the project based approach.

Twelve out of the 14 participants who actively participated in the focus group reported that they felt that they contributed to the learning of their peers. The depth of learning that occurred in the project groups could be one reason why 11 out of 14 of the participants in the foundation experimental section felt prepared entering the examination. It is certainly a remarkable achievement to have this occur in a UAE university as this higher intellectual engagement is what is most lacking. Biggs (1999) claims that many university teachers have reported difficulties in teaching international students and getting good results because of issues related to deficient language skills together with learning related problems that are seen as 'cultural' in origin. Students are often described in research, as being either 'lazy' or 'not at a high enough intellectual standard for university life'. Thankfully my research has proved that this stereotype can be broken when a pedagogy of engagement is intentionally implemented.

The collaborative component of standards focussed project bases engagement model of teaching is very valuable to student development and performance. Collaboration means identifying the shared goals of the group and planning how to effectively attain to attain them; accepting and allocating different accountabilities, conflict resolution, problem solving and dealing effectively with the diversity that manifests itself in these groups (Chan, 2009, p. 209.). Extant research advocates the concept of grouping and pairing of students for the purpose of achieving an academic goal (McKeachie, 2002; Ormrod, 2008). Vygotsky (1978) was an early proponent that students are capable of performing at higher intellectual levels when asked to work in collaborative situations than when asked to work individually. In the collaborative classroom students are responsible for each other's learning as well as their own. Thus, the success of one student helps other students to be successful. In the last few decades, collaborative learning strategy has become more prominent in higher education (Ahmed and Mahmood, 2010). They further assert that collaborative learning showed potential to be used in higher education and in the early of 1990s, Marzano (2003) and Wenglinsky (2002) point out that number of studies have found that cooperative learning often has a good impact on student accomplishments and their motivation. Abrami, Poulsen and Chambers (2004) define collaborative learning as "an instructional strategy in which students work actively and purposefully together in small groups to enhance both their own and their teammates learning". The peer support system makes it possible for the learner to internalize both external knowledge and critical thinking skills and to convert them into tools for intellectual functioning.

In the present study, the collaborative learning medium provided students with opportunities to analyze, synthesize, and evaluate ideas cooperatively. The classroom environment encouraged informal discussion and sustained interaction. It is evident that students in the foundation experimental group, and to a lesser extent the first year experimental group, learned from each other's scholarship, skills, and experiences. In higher education classrooms, Orlich el at (2011) suggest that it is a good idea to use discussion approach to help students to exchange their ideas in a group because it results in more knowledge about the discussion topic and it permits students to be more active learners. Furthermore, Reece and Walker (2007) suggest that discussion has some advantages for the students such as; it can encourage them to be more creative, criticize other's view and change their attitude. The students in my study developed and demonstrated the ability to move beyond just making statements of opinion to giving reasons for their judgments in order to justify their ideas and the research they wanted to incorporate in their project.

Any Higher education system that is preparing students for employability should be educating for the skills mentioned above. Proponents of collaborative learning claim that the active exchange of ideas within small groups not only increases interest among the participants but also promotes critical thinking. There is research evidence that cooperative teams achieve at higher levels of thought and retain information longer than students who work quietly as individuals (Johnson and Johnson, 1986). This was evidenced among the foundation experimental group where the mean score of 39% was higher than the overall mean score of the 33% among the control group in a summative MCQ test. Additionally, according to Totten, Sills, Digby and Russ, (1991) collaborative learning gives students an opportunity to engage in discussion, take responsibility for their own learning, and thus become critical thinkers. The students' performance on their final oral presentation and poster exhibition in the experimental group showed clear evidence of this.

6.2.2 Changes brought about by student engagement pedagogy

The second research question in this study sought to uncover the changes that are brought about by engaging students in a student-focused and active learning environment by the design and implementation of a standards-focused project-based learning model. The results and findings of this action research study have shown that an increase in classroom engagement and academic performance is possible when using the standards-focused project-based learning teaching approach. Among the foundation experimental group it was evident that this approach allowed a synchronous interaction between teachers and students because there were specific details on how teachers and students will meet their education goals, including specific concepts, order, or instructional materials (Krueger & Sutton, 2001).The intervention in this action research articulated the higher levels of learning for which teachers, and students were being held accountable through measures such as inquiry and problem solving; collaborative learning; continual assessment embedded in instruction and higher-order questioning.

These educational goals reflect the expectations for a 21st century education which local and international educators are encouraged to embrace in their educational reforms. By aligning classroom instruction and assessment with the standards, teachers can ensure that their students will meet these high demands.

This research is a small scale example showing the value of standards-based instruction in one higher education context. The intervention produced a high and deep level of student understanding because standards delineate what matters, provide clarity and a fixed point of reference for students and teachers. Through guided instruction the focus was on student learning, collaboration and a common discourse,

which allowed students to have conversations about their course and ensure equal educational opportunities for everyone in the class. With increasing calls for cultural and emotional intelligence across education it is imperative to find a medium of instruction that facilitates the development of these skills.

6.2.3 Innovation and creativity

Much has been said in recent years about the development of 21st century skills among students. Creativity and innovation are central components of these sought after skills because these skills facilitate economic prosperity and social development in countries like the UAE that seek to be a dynamic knowledge society. Education is seen as central in fostering creative and innovative skills. Conceptualized as a universal skill, creativity is an ability that everyone can develop. Creativity can be fostered or inhibited. Educators have the power to unlock the creative and innovative potential of students.

Creativity has been understood as the "ability to produce work that is both novel and appropriate" (Sternberg & Lubart, 1996). Craft (2005) sees creativity as the ability to see possibilities that others have not noticed, Esquivel (1995) sees it as the critical process involved in the generation of new ideas. Innovation has also been defined as the "intentional introduction and application within a job, work team, or organisation of ideas, processes, products, or procedures that are new to that job, work team or organisation and that are designed to benefit the job, work team or organisation" (West & Richards, 1999). Creativity has been defined as a product or process that shows a balance of originality and value. It is a skill, an ability to make unforeseen connections and to generate new and appropriate ideas. Creative learning is therefore any learning which involves understanding and new awareness, which allows the learner to go beyond notional acquisition, and focuses on thinking skills.

During this action research, students were given an opportunity for creative learning in the experimental groups and the final projects that they produced were evidence of this. It can therefore be extrapolated that if the only summative assessment was the project students did at the end of the course, their results would have been better across both experimental groups. While this is only conjecture, it is very plausible based on research evidence which confirms that students generally do better in project based assessments that are both formative and summative than MCQS (Elton, 2002). Creative learning is based on learner empowerment and student engagement, which is antithetical to the reproductive experience that is often the case in traditional lecture based contexts. The application of one's learning in a manner that benefits a domain can be called innovation. Innovative teaching then, is closely linked to the facilitation of creative learning, the implementation of new methods, tools and contents which could benefit learners and their creative potential.

Innovation and creativity are linked to future development of industry and society. Dill (1997) posits that "freeing, facilitating and stimulating markets in higher education will provide academic institutions with incentives to improve the quality of teaching and research, to enhance academic productivity, and to stimulate innovations in academic programmes, research and services to benefit the larger society" (p.168). The call for innovative and socially beneficial graduates out of Higher Education has to be heeded. If more educational institutions start to foster these skills through student engagement pedagogy, more graduates from university will be ready to contribute to immediately to economic development of the UAE.

Having analyzed the data, and in my quest for a working model that adequately represent student engagement related to my research, I have designed with the following diagram. Conspicuously absent is state of the art facilities or physical infrastructure because, engagement pedagogy is independent of these factors.

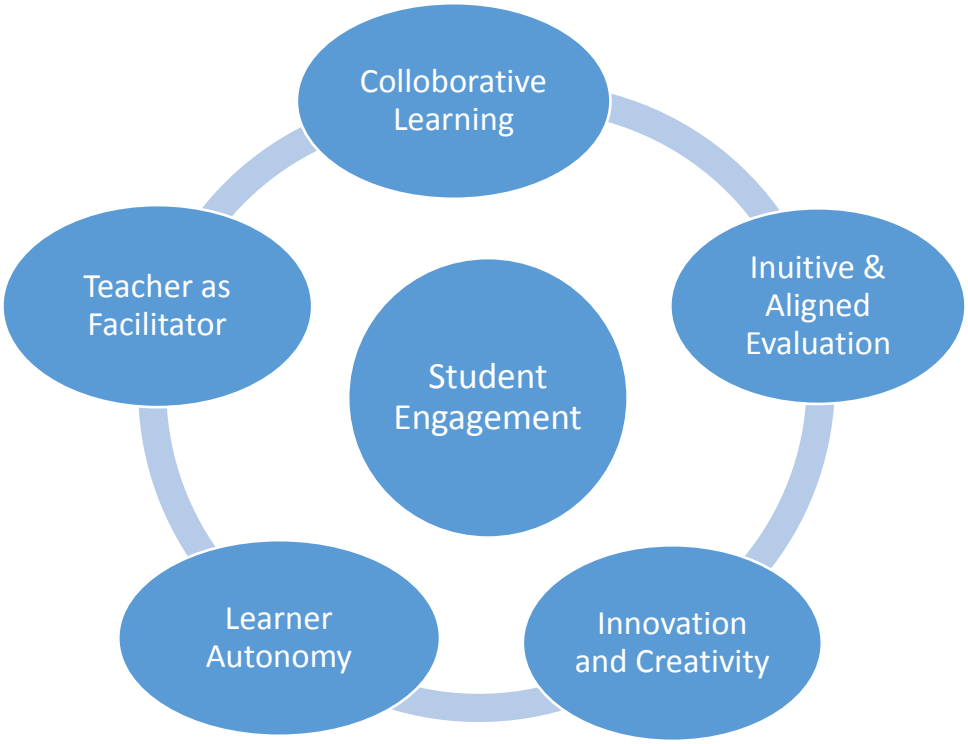


FIGURE 12: MODEL FOR STUDENT ENGAGEMENT IN THE UAE

Student engagement is the main product of a teaching environment where power has shifted from the teacher to the students. To educate students so they are at liberty to explore knowledge without coercion and a fixed structure for output requires a facilitator that has intentionally created the right conditions in which learning can begin at its deepest level. These conditions make for room innovation and creativity; collaboration and learner autonomy. The educator in this context must be flexible to explore various tools and technological advancements that will enhance this engagement and must ensure the complete alignment of the content with the forms of evaluation.

6.3 Implications for Practice

This study has significant pedagogical and theoretical implication for the field of education in general and more specifically TESOL education. From a pedagogical perspective, my research confirms that there are effective and viable alternatives to the traditional lecture-based teaching approach. The results from the foundation course showed that an approach like the standards-focused project-based learning model could produce significant academic gains when compared to a lecture-based approach.

Theoretically, this study reiterated the importance of the students' perception of learning. Students have been learning how to learn for the majority of their lives. They have spent many years being conditioned

on traditional learning practices. This belief in what learning should look like influences their overall perception of learning. It will take time to receive buy-in to the new approach. Using a non-traditional method of teaching requires patience on the part of the course instructors because there will be a steep learning curve for the students to navigate. Lecturers will require ongoing professional development to keep up with best practices in the engagement approaches. From the students' perspective, their primary goal is earning a good grade for the class. Being extrinsically motivated appears to be the norm, but evidence gained from this study showed that getting a good grade is not enough motivation for most to properly prepare for an examination, especially early in the semester. Participants essentially wanted the course instructors to teach to the examination. The challenge is that the world of work needs people who can plan, collaborate, communicate effectively, and understand that they are now global citizens (Markham et al., 2003; Boss & Krauss, 2007; Nielsen et al., 2010; Struyven et al., 2010), not just pass examinations.

The results and findings of this study also emphasized the importance of properly assessing academic performance. The incongruence between course expectations and the summative assessment could have contributed to the low examination scores and why participants were confused and hesitant toward the intervention. My study concurs with Prosser et al. (2003) who suggested that higher quality learning outcomes could be expected from learning environments where there is consonance in the teacher's approach to teaching and learner expectations.

Ultimately, while the small sample size in this research negates generalization, it still holds that the measurable improvement in grades and change in the pedagogy is worth pursuing in a larger study. This should encourage educators in the UAE HE sector in their quest for improvement. This quest might involve risking students' level of comfort, but a pedagogy that promotes independent learning, peer collaboration and problem solving is aligned with the government vision for the UAE.

Admittedly, my research has answered some questions and given rise to the need for ongoing research about the pedagogy of engagement. Further research in this topic could look at ways in which professional development for faculty could lead to the use of student engagement strategies. An area of study could be the examination of the impact of engagement pedagogy on students' self-perception.

6.4 Conclusion

The primary goal of this action research study was to improve student engagement and academic performance in this researcher's foundation course. In doing so, an alternate teaching approach to traditional lectures was introduced in the form of standards-focused project-based learning.

This study found one instance that showed a significance difference in the examination scores of participants in a lecture-based class (foundation course control group) when compared to an active-learning class (foundation course experimental group) that utilized a standards-focused project-based learning curriculum. The foundation course experimental section's mean examination score was found to be significantly higher using a 95% confidence interval than the mean examination scores of the foundation course control section. When analysing the data from the other class (first year education course), no significance was found.

Since the foundation course showed significance and first year education course did not, a number of possible reasons explaining this occurrence was mentioned. Possibilities included (a) participants receiving a dissonant teaching approach, (b) participants feeling that their learning expectations were not met, and/or

(c) a resistance to the non-traditional teaching intervention. Further inquiry into why no significance was found introduces further research needed to address the identified problem of low student engagement and decreasing academic performance in classes.

Behavioural changes in the participants introduced to the standards-focused project-based learning curriculum were observed in the form of high levels of peer collaboration, independent learning, innovation and creativity. Participants in the experimental groups were observed being highly engaged in and out of the classroom. Although this was viewed positively by both course instructors, participants' feelings towards this behavioural change were mixed. Participants from the foundation course experimental section were initially resistant, but later embraced the group environment and utilized their peers to gain a deeper understanding of the content. Participants from the first year education course experimental section displayed an external locus of control and viewed the project-based curriculum as not relevant to their primary concern, which was passing the multiple-choice examination. These findings emphasized the importance of the student's perception of learning and its influence on academic performance and motivation.

6.5 Recommendations

Based on the findings in this study there are a few recommendations that I would like to suggest across the higher education sector.

1. Consideration should be given to policy revisions which support educational reforms as mentioned in chapter 3 using the Sahlberg (2006) model. As the UAE national agenda focuses on attaining a first rate education by 2020 a model of reform that encourages risk taking, creativity and engagement might be more effective than other reforms that have been tried before. The government's focus has clearly shifted to a more pedagogically sound model so the time is right to capitalize on the federal support to effect change.

2. There is a need for curricula revisions which reduces the use of didactic approaches and facilitates a more interactive and engaging pedagogy. Chalk and talk, knowledge transfer methodology has been written into many curricula across Dubai. By moving away from the textbook teacher centred curriculum and implementing student -centred curriculum is a necessary way forward. Covering topics through group work, active learning, problem based learning and self -directed learning is the way forward in higher education.

3. Academic faculty require on going teacher training and professional development as they try to implement engagement pedagogy. The burden of implementation of a pedagogy of engagement will be on academic faculty. Consequently, they have to be trained to deliver content in an engaging was. Teacher colleges could take the lead in this through revision of their training programmes to include engagement instruction. Additional setting up a professional training and development body for teachers in higher education would be a practical way to impart key skills for the reform. Establishing an equivalent to the PG Cert HE which supports a pedagogy of engagement is another way to offer professional development for academic faculty

4. Institutions should develop a robust evaluation strategy to gauge if students' expectations, performance and attainment are being supported by a congruent approach to teaching and learning. Evaluation and Assessment are a crucial part of any pedagogical reform. Tasks have to be aligned with teaching and content. While standardized tests play a role in a rote learning knowledge based environment, more critical

thinking empirical and applied evaluation tools are required to asses learning in an environment of engagement.

6.6 Personal Reflections on this research

The 5-year journey that I embarked upon when I started my thesis has been a very rewarding one for me academically and professionally, I recall my supervisor advising us to choose a topic we were passionate about. I am glad I took that advice because it's my passion for seeing students engage with their work and have fun while learning that has kept me motivated. There were many intervals of procrastination and delay because of work or personal commitments but it was my passion for the topic that kept me going.

My quest for a solution to my question about the issue of disengagement among UAE higher education students, has brought be to examine where education intersects with the world of work and how the government's vision for its people can act as a driving force to ensure proper alignment of educational standards and practices to meet employability requirements of the nation. My research has provided a platform for me to propose meaningful reform to the pedagogical approach in higher education institutions that will realize tangible outcomes in the short and long term for all stakeholders in the education industry. Consequently, this research has given me a voice that can result in transforming the way educators approach teaching and learning.

I can conclude that the doctorate of education is the best tool for a practitioner researcher, because it keeps you focused on research that brings practical solutions that have immediate application to one's immediate educational context and the wider field of education. Research that grapples with lofty theoretical ideals is good and it provides philosophical fodder for discussions. However practical research that provides a medium of improvement in the quality of education is much more rewarding.

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APPENDICES

Appendix 1: Participant Informed Consent Form

Title of Research Project: The Antithesis to Traditional Pedagogy: Student Engagement

CONSENT FORM

I have been fully informed about the aims and purposes of the project.

I understand that:

there is no compulsion for me to participate in this research project and, if I do choose to participate, I may at any stage withdraw my participation and may also request that my data be destroyed

I have the right to refuse permission for the publication of any information about me

any information which I give will be used solely for the purposes of this research project, which may include publications or academic conference or seminar presentations

if applicable, the information, which I give, may be shared between any of the other researcher(s) participating in this project in an anonymized form

all information I give will be treated as confidential

the researcher(s) will make every effort to preserve my anonymity

.....…….. .....
(Signature of participant) (Date)

……
(Printed name of participant)

One copy of this form will be kept by the participant; a second copy will be kept by the researcher(s)

Contact phone number of researcher is 04 3693966. The supervisor for this research is Dr. Salah Troudi and he may be contacted at s.troudi@exeter.ac.uk

If you have any concerns about the project that you would like to discuss, please contact:

Racquel Warner
r.warner@mdx.ac
043683966

……
* when research takes place in a school, the right to withdraw from the research does NOT usually mean that pupils or students may withdraw from lessons in which the research takes place

Data Protection Act: The University of Exeter is a data collector and is registered with the Office of the Data Protection Commissioner as required to do under the Data Protection Act 1998. The information you provide will be used for research purposes and will be processed in accordance with the University's registration and current data protection legislation. Data will be confidential to the researcher(s) and will not be disclosed to any unauthorised third parties without further agreement by the participant. Reports based on the data will be in anonymised form.

Revised March 2013

Appendix 2: Certificate of Ethical Approval

MSc, PhD, EdD & DEdPsych theses.

UNIVERSITY OF EXETER

Graduate School of Education

Certificate of ethical research approval

MSc, PhD, EdD & DEdPsych theses

To activate this certificate you need to first sign it yourself and then have it signed by your supervisor and finally by the Chair of the School s Ethics Committee.

For further information on ethical educational research access the guidelines on the BERA web site: and view the School's Policy online.

REA THIS ORM CAREFULLY AND THEN COMPLETE IT ON YOUR COMPUTER (the form will expand to contain the text you enter). **O NOT COMPLETE BY HAN**

Your name: Racquel Warner

Your student no: 59004944

Return address for this certificate: P.O. Box 500697 Dubai UAE

Degree/Programme of Study: EdD TESOL

Project Supervisor(s): Dr. Salah Troudi

Your email address: r.warner@mdx.ac

Tel: 971503423860

I hereby certify that I will abide by the details given overleaf and that I undertake in my thesis to respect the dignity and privacy of those participating in this research.

I confirm that if my research should change radically, I will complete a further form.

Signed: Racquel Warner .date: October 13, 2014 (Revised October 23, 2014)

Chair of the School's Ethics Committee

Certificate of ethical research approval

TITLE OF YOUR PROJECT: The Antithesis to Traditional Pedagogy: Student Engagement

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1. **Brief description of your research project:**
This research aims to explore student engagement as a viable alternative to traditional teaching approaches used in a private university in Dubai.

2. **Give details of the participants in this research (giving ages of any children and/or young people involved):** The participants 18-25 year old full time students in foundation and 1st year Education degrees at a private university in Dubai

Give details (with special reference to any children or those with special needs) regarding the ethical issues of: N/A

3. **<u>informed consent:</u> Where children in schools are involved this includes both headteachers and parents). Copy(ies) of your consent form(s) you will be using must accompany this document.** a blank consent form can be downloaded from the GSE student access on-line documents: **Each consent form MUST be personalised with your contact details.**

A consent form from the GSE online documents will be printed and given to each participant for signing. Accompanying this for will be a recruitment letter informing students about the research and why they are being requested to participate. Students who decided to opt out of this study will be granted permission to receive individualized study for that particular segment of the course. The student(s) will receive individualized instruction by the applicable instructor so the student(s) will be able to remain in full compliance with the all of the requirements of their respective course syllabus. For the student(s) that opt-out of the experimental group, an individualized assignment with comparable rigor will be given so these student(s) will have the opportunity to earn the points that will otherwise be assigned to the participants developing their project as directed by this study's procedures. Since the researcher is also the lecturer for the module there is a possibility that students might feel obliged to participate. The researcher will make this very clear in the scheduled class session informing students that they are not obliged to participate and that the researcher will ensure (as stated previously) full compliance with the module requirements whether they are participating in the study or not.

4. **<u>anonymity and confidentiality</u>**
5.

By utilizing the students' email and meeting with them individually outside of their scheduled class time (to discuss their participation) this researcher will ensure the privacy of each student by allowing them to make their own decision about participating without the possibility of coercion. No

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Chair of the School's Ethics Committee

individual names or student numbers will be reported in the study as only aggregate data will be used. Where qualitative entries are made students name will not be used

6. **Give details of the methods to be used for data collection and analysis and how you would ensure they do not cause any harm, detriment or unreasonable stress:**

This action research study will take place at a three-year university in two sections of a foundation programme and in two sections of a first-year education course. A standards-focused project-based learning curriculum will be introduced to students enrolled in these two courses. One of the course sections will the control group; while students enrolled in the other section will be in the experimental group. The control group will follow a lecture-based curriculum. The experimental group will follow a curriculum based on the standards-based project-based learning model. The experimental group will be provided with a core question that aligns with the course's student learning objectives. The students will be given class time to work on a student-developed project that focuses on answering the core question by utilizing data that provides evidence that the student groups have met the student learning objectives. The student groups will present their project to the class based on a predetermined date as documented in the syllabus. During the following class period, students in the experimental group will take a multiple-choice exam where their content knowledge will be assessed. Students in the control group will receive a series of lectures by the course instructor and they will take the same multiple-choice exam on the same day as the experimental group. Given that a convenience sample will be used, no active recruitment strategy will be utilized. Students who register for this researcher's foundation course and the assisting professor's first-year education course will be included. This researcher will make the initial contact with potential participants prior to the start of the action research study during the participants' regularly scheduled class time. The students will be informed that they will be receiving a recruitment letter and the informed consent form via their university email account. The researcher will then request that each student drop off the signed informed consent to the researcher's private office or secured mailbox outside in the researcher's door. Blank copies of the informed consent form will be made available in the researcher's office for those students who chose not to print out the form. For this purpose of this action research study, an original physical signature will be required to participate. In addition, this protocol allows each prospective participant an opportunity to ask questions about the study via email or in person. Upon completion of this action research study, this researcher will solicit email addresses of all students who are interested in the results of this study. All contact after the completion of the study will occur via email.

7. **Give details of any other ethical issues which may arise from this project - e.g. secure storage of videos/recorded interviews/photos/completed questionnaires, or**

1. Student results will be exported from Excel to SPSS (Statistical Package for the Social Sciences) to administer a one-way analysis of variance (ANOVA) by comparing the mean scores of the multiple experimental and control groups.
2. Electronic data will password protected on this researcher's computer. All paper copies of student scores will protected with a double lock system (lock on office door and stored in a locked filing cabinet) in this researcher's private office.

3. All of the examination data will be kept securely for seven years after the completion of this study.

8. **special arrangements made for participants with special needs etc.**
N/A

9. **Give details of any exceptional factors, which may raise ethical issues (e.g. potential political or ideological conflicts which may pose danger or harm to participants):**
Students who decided to opt out of this study will be granted permission to receive individualized study for that particular segment of the course. The student(s) will receive individualized instruction by the applicable instructor so the student(s) will be able to remain in full compliance with the all of the requirements of their respective course syllabus. For the student(s) that opt-out of the experimental group, an individualized assignment with comparable rigor will be given so these student(s) will have the opportunity to earn the points that will otherwise be assigned to the participants developing their project as directed by this study's procedures.

***This form should now be printed out**, signed by you on the first page and sent to your supervisor to sign. Your supervisor will forward this document to the School's **Research Support Office** for the Chair of the School's Ethics Committee to countersign. A unique approval reference will be added and this certificate will be returned to you to be included at the back of your dissertation/thesis.*

***N.B.** You should not start the fieldwork part of the project until you have the signature of your supervisor*

This project has been approved for the period: October, 2013 **until:** June, 2017

By (above mentioned supervisor's signature): ..... **ate:** 28/20/2014

***N.B. To Supervisor:** Please ensure that ethical issues are addressed annually in your report and if any changes in the research occur a further form is completed.*

GSE unique approval reference:.... 11 16 .....

Signed:.....**date:**... .. ...10/20 14.
Chair of the School's Ethics Committee

Chair of the School's Ethics Committee

Appendix 3- Traditional and Project Based, Standard Focussed Syllabi for Foundation Classes

Traditional Foundation syllabus

Goals	Objectives	Content Themes/Topics	Skills	Assessments
Development of effective written communication skills	Produce advanced essay structures Ability to write accurately and coherently in an academic context Demonstrate the ability to express opinions	Sustainability Advertising Education Business Travel	Academic listening Academic reading Note taking skills Academic Writing Oral presentation	Formative Tasks: Listening and Note taking Essay (1000 words) Annotated Bibliography Oral presentation
		Delivery Methods Lectures -60 minutes Seminar- 90 minutes Labs – 90 minutes	Source Evaluation Information synthesis Critical thinking Group discussion skills	Summative Task: Multiple Choice Test
Introduction to the use of source materials	Conduct research on designated topics Demonstrate the ability to evaluate sources Read confidently from a variety of information sources			
Preparation of students for key academic listening tasks	Ability to approach listening tasks such as lectures and class discussions with confidence and competence Ability to take coherent notes from listening tasks Appropriate use of functional and situational language			

Fig 17: Traditional syllabus for the control group in Foundation Programme

ii. Standard Focused Syllabus Outline for the Foundation Group

Goals	Objectives	Content Theme/Topics	Skills	Assessments
To improve students' problem solving abilities	Ability to identify and analyse problems Exercise judgement and evaluate options Ability to describe and defend problem analysis and solution orally and in writing Cooperation in groups to distribute and complete tasks	Sustainability Advertising Education Business Travel	Academic listening Academic reading Note taking skills Academic Writing Oral presentation Source Evaluation Information synthesis Critical thinking Group discussion skills	Formative Tasks: Listening and Note taking Essay (1000 words) Annotated Bibliography
		Delivery Methods		
		Seminars- 90 minutes (x2) Group Workshops-60 mins		Summative Task: Group exhibition and oral presentation
To facilitate transfer of knowledge from one context to another	Ability to access and use information appropriately Critical analysis of information to identify academic quality and reliability Ability to synthesize experiences based on context Evidence of tacit knowledge use and transfer Demonstration of the ability to map context and adapt information to that context Development of computational skills including use of statistics			

To improve students communication skills	Demonstration of interpersonal skills such as conscientiousness, dependability and personal responsibility Ability to develop and articulate purposive messages Ability to actively listen and respond in a reasoned manner Developing nonverbal communication skills			

Fig 18: Standards based problem solving syllabus for experimental foundation group

Appendix 4- Traditional and Project Based, Standard Focussed Syllabi for First Year Classes

iii. Traditional Syllabus outline for Ist Year Education Course

Goals	Objectives	Content Theme/Topics	Skills	Assessments
Module introduction	Student will be aware of how social policy informs education within the society	What is the purpose of education What is social policy	Listening and note taking Reading and annotation	None
Background to Education	Students will be able to identify how education developed using a historical perspective	Historical perspective on education (1800 – 1920) Part 1	Listening and note taking Reading and annotation	Formative Task Reading of book chapter History of Education Bartlett & Burton (2012) Chapter 4
Background to Education	Students will be able to identify how education developed using a historical perspective the 20th century	Historical perspective on education(1920-2010) Part II	Listening and note taking Reading and annotation	Formative Task Watching Video /class discussion
Examining current education provisions	Identify current provisions and predicting future trends based on current context	Current and future trends in Education	Listening and note taking Reading and annotation	Formative task Seminar discussion
Role of compulsory education in society	Make notes about the advantages and disadvantages of compulsory education	Value of compulsory education	Listening and note taking Reading and annotation	Formative Task Reading and note taking
Evaluation of UK national curriculum	Describe and judge the value of the UK national curriculum	The UK National Curriculum and its reforms	Listening and note taking Reading and annotation	Formative Task Reading and class discussion

Examining Education provision in Early Years	Map the development of early childhood provisions and the various policies that support this development	Early Years Education policy and provision	Listening and note taking Reading and annotation	Formative Task Seminar discussion
Examining Education provision in primary years	Map the development of primary education provisions and the various policies that support this development	Primary Years Education policy and provision	Listening and note taking Reading and annotation	Formative Task Reading and class discussion
Examining Education provision in secondary years	Map the development of secondary education provisions and the various policies that support this development	Secondary years education policy and provision	Listening and note taking Reading and annotation	Formative Task Tutorial
Comparison of education provisions	Identify similarity and differences in the educational provisions of local context and the UK	Comparison of UK and UAE educational development and provisions	Listening and note taking Reading and annotation	Formative Task Revision for MCQ

Fig 19: Traditional syllabus for the control group in 1st year Education course (EDU1301)

iv. Standard Focused Syllabus Outline for Ist Year Education Course

Goals	Objectives	Content Theme/Topics	Skills	Assessments
Module introduction	Student will be aware of how social policy informs education within the society	What is the purpose of education What is social policy	Listening and note taking Reading and annotation Application of knowledge	Formative Tasks Peer group formation and group research about social policy and education Role play of social policy development scenario

Background to Education	Students will be able to identify how education developed using a historical perspective	Historical perspective on education (1800 – 1920) Part 1	Reading and annotation. Class discussion	Formative Task Reading and in class discussion of book chapter History of Education Bartlett & Burton (2012) Chapter 4 Small group tutorial with lecturer
Background to Education	Students will be able to identify how education developed using a historical perspective the 20th century	Historical perspective on education(1920-2010) Part II	Time management Team work Information accuracy Oral presentation	Formative Task Watching Video /class discussion Groups work to create a timeline of education development from 1800-2010 In class reporting and sharing
Examining current education provisions	Identify current provisions and predicting future trends based on current context	Current and future trends in Education	Information Literacy skills Note taking Group discussion	Formative task Library research about current trends and group discussion of newspaper articles related to the topic Small group tutorial with lecturer
Role of compulsory education in society	Make notes about the advantages and disadvantages of compulsory education	Value of compulsory education	Source evaluation Developing arguments Rationalizing Logical reasoning Oral presentation	Formative Task Seminar debate about compulsory education. Feedback and comments from peers
Evaluation of UK national curriculum	Describe and judge the value of the UK national curriculum	The UK National Curriculum and its reforms	Reading and annotation Group discussion	Formative Task

			Information extraction and synthesis	Journal articles reading, discussion and synthesis about the topic Small group tutorial with lecturer
Examining Education provision in Early Years	Map the development of early childhood provisions and the various policies that support this development	Early Years Education policy and provision	Interview question development Objective setting Team work	Formative Task Site visit and interview at British curriculum schools in Dubai
Examining Education provision in primary years	Map the development of primary education provisions and the various policies that support this development	Primary Years Education policy and provision	Literature review and synthesis Oral reporting	Formative Task Reporting on findings from site visit. Comparison with the literature
Examining Education provision in secondary years	Map the development of secondary education provisions and the various policies that support this development	Secondary years education policy and provision	Discussion Process journal development Teamwork	Formative Task Small group tutorial to discuss group project (due in week 12)
Comparison of education provisions	Identify similarity and differences in the educational provisions of local context and the UK	Comparison of UK and UAE educational development and provisions	Case study analysis Making site observation and note taking	Formative Task Field trip to first school in the UAE. Case study analysis and comparison of education in the UAE and the UK

Fig 20: Standards based problem solving syllabus for experimental Ist year Education course

Appendix 5 – Lesson outlines for Foundation Experimental Group

IFP 0200 3b Sem: Preparing a debate – Project Based Model

Task 1: Taking a position

Look at this statement:

Social networking is not helpful for academic study

Spend 3 minutes writing down your position and explanation on a piece of paper. Try to come up with at least THREE points. You must work alone for this activity

Once your tutor gives the instruction, go to the corner of the room that most closely corresponds with your opinion for the statement (strongly agree, slightly agree, slightly disagree, and strongly disagree).

Once all students are in their corners, assign roles for the next discussion step such as a note-taker, discussion leader, timekeeper, presenter etc. Discuss your position and synthesize the reasons for your responses. You will have 5 minutes for this.

At the end of the discussion time, one student from each group will present their group's position – 90-120 seconds per presentation.

While other groups are presenting you must complete the handout on the next page.

Once all groups have shared, students may change their position.

STRONGLY AGREE	SLIGHTLY AGREE	SLIGHTLY DISAGREE	STRONGLY DISAGREE

Task 4: Preparing for debate

There are 6 assignment teams in your group. Your assignment team is going to be assigned a position in the following debate:

CSR is nothing more than a marketing tool for a company

Three teams will agree and three will disagree. The debate will take place in the lab.

The structure of the debate is as follows:

Intro Proposing (captain)

Intro Opposing (captain)

Proposing 1st Speaker

Opposing 1st speaker

Proposing 2nd speaker

Opposing 2nd speaker

Break to prepare rebuttal

Opposing rebuttal 3rd speaker

Proposing rebuttal 3rd speaker

Opposing final statement

Proposing final statement

So, the captain will introduce the argument of the team and sum up at the end. 2 other members will use the structure given in the lecture to formulate strong arguments (this is the same idea as the themes you are preparing for your assignment). Non-speakers can help in the research. A 3rd member, the rebutter, will start researching on what they think the other team's arguments will be so they are ready to attack those arguments in the debate.

4 of the assignment teams will be randomly selected to participate. You should use the remaining seminar time to prepare your arguments. Each speaker should have a theme that they will present and they should make sure they refer to literature to support their argument.

Your success will be judged using the following grid:

	Debate 1	Debate 1	Debate 2	Debate 2
	Team FOR	Team AGAINST	Team FOR	Team AGAINST
Clear intro: we know what the 2 arguments of the team will be				
Speaker 1: good argument using the 3 M's and using sources and data				
Speaker 2: good argument using the 3 M's and using sources and data				
Rebuttal: clear reference to the other team's arguments and why they are weak				
Final Statement: Captain focuses on the strongest points of their team; the weakest points of the opposition and ends with a powerful statement				

Task 5: TV Debates

To help you prepare, watch the video at the link below outside class. The video lasts 45 minutes but is well worth it to see how debaters work. Use the table below to analyse the debate. You will be asked to explain your table notes in the lab.

Here: http://www.thedohadebates.com/debates/player8bf2.html?d=60&juke=1

or

Here: http://www.youtube.com/watch?v=kORAjIrT3b4

	Speaker 1	Speaker 2	Speaker 3	Speaker 4
NAME				
STRONG ARGUMENTS				
WEAK ARGUMENTS				
STRONG DEBATING SKILLS				
WEAK DEBATING SKILLS				

Appendix 6: Lesson outline for First year Experimental Group

Lesson Aims : To outline the role of the national curriculum in British education

To identify the point of views that exist on the National Curriculum

To articulate their own position on the role and benefits of having a national curriculum in education

In groups of 3, use these guiding questions for your research

What do you think is the purpose of the national curriculum in England?

From media reports, what has the response to the reform of the national curriculum been?

Would the UAE education system benefit from having a national curriculum?

Here are some links you can consult for critical opinions

http://www.theguardian.com/education/national-curriculum

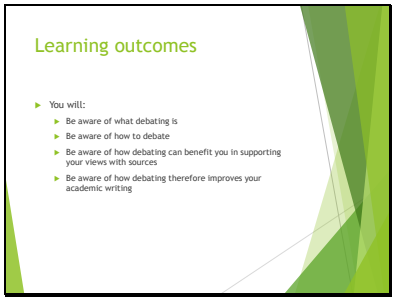
http://www.theguardian.com/education/2013/apr/01/new-curriculum-teaching-concepts-younger

http://www.educationengland.org.uk/history/bibliography.html

Report your findings in a creative way (role play, a panel discussion , debate, etc) .

Appendix 7 - Foundation lecture slides: Traditional lecture approach

Slide 1



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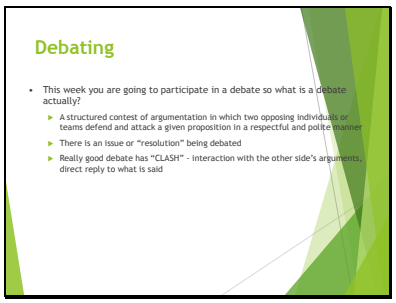
Slide 3



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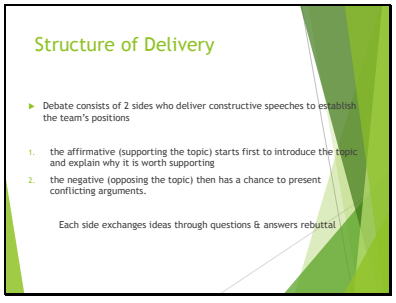
Slide 5



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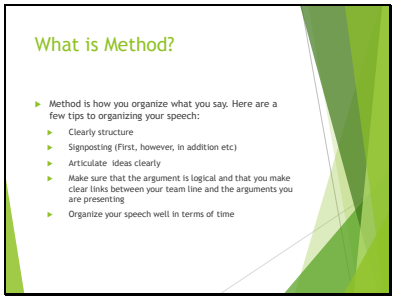

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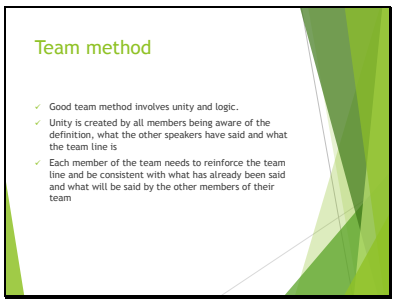

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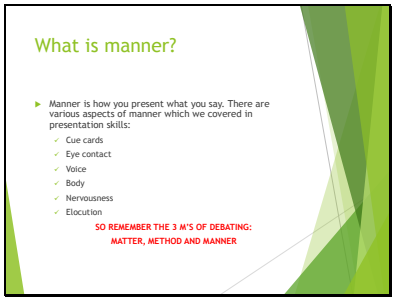
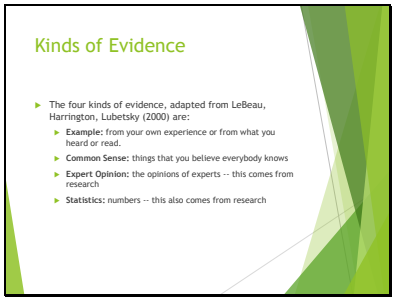


Slide 11

Slide 12

Slide 13



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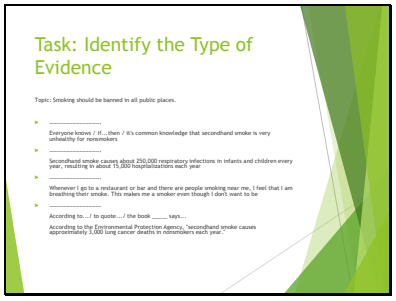

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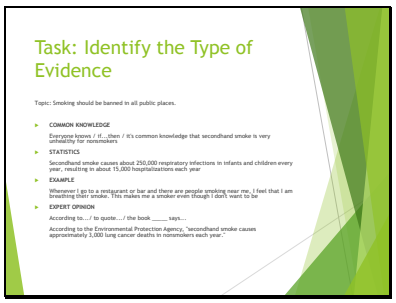

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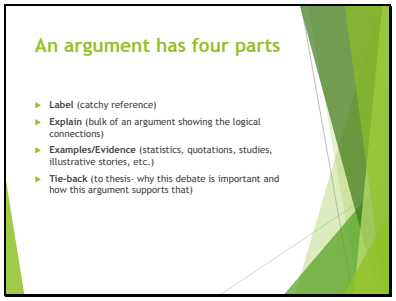

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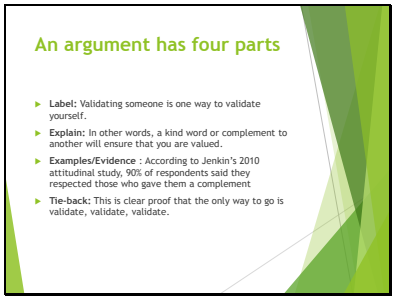

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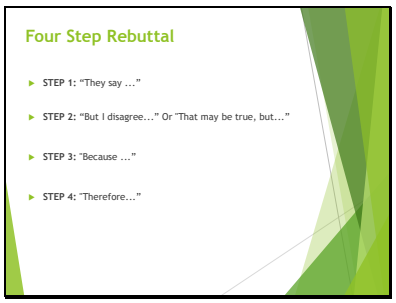

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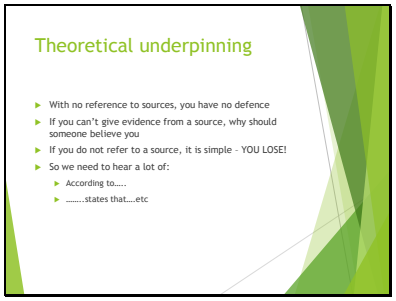

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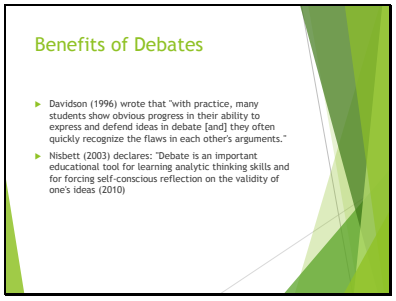

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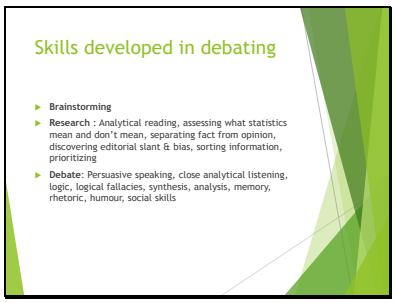

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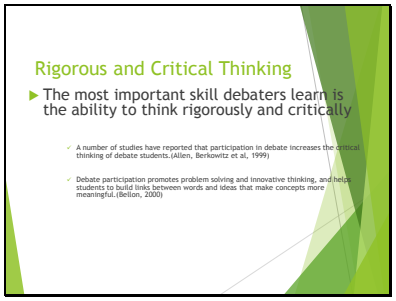

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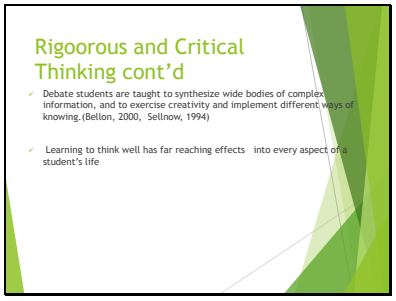

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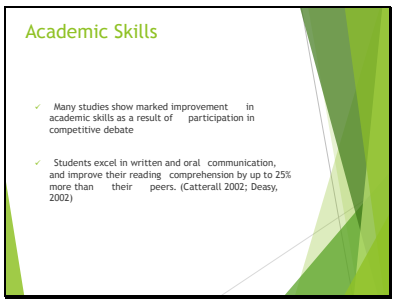

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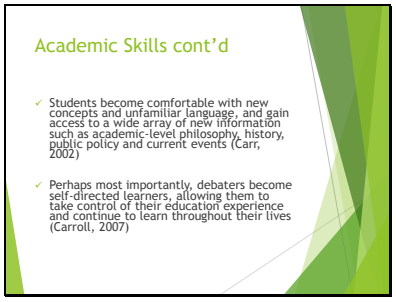

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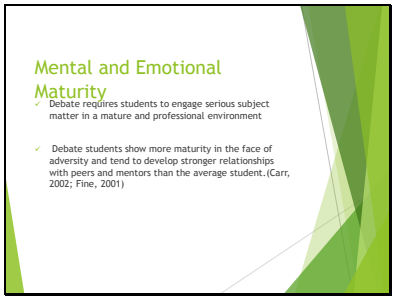

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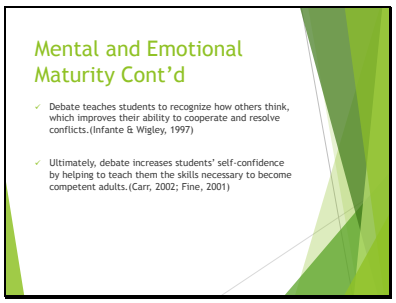

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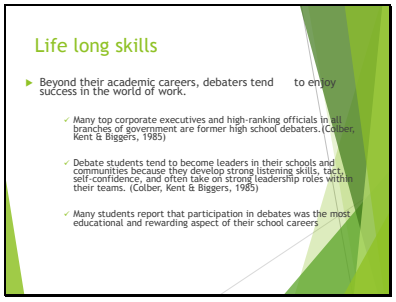
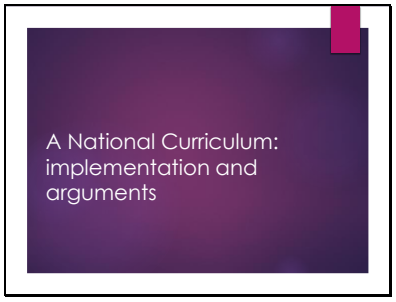


Slide 29

Slide 30

Slide 31

Appendix 8 – First year lecture slides: Traditional lecture approach



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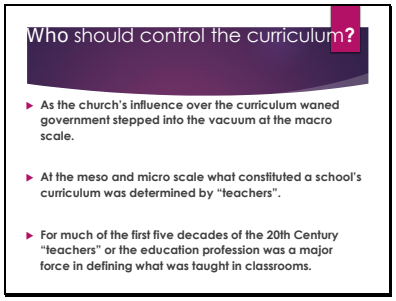

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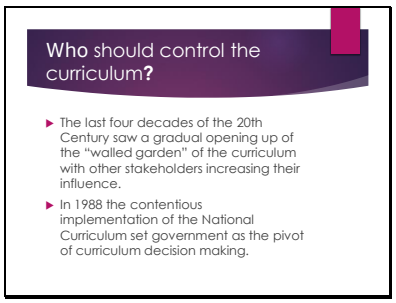

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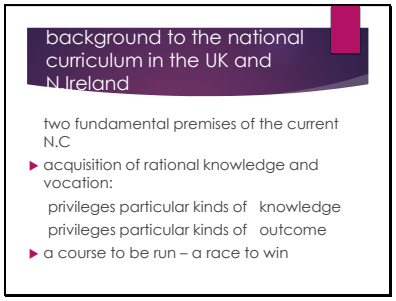

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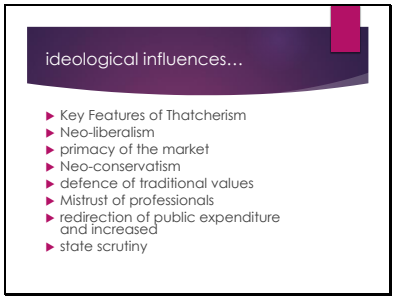

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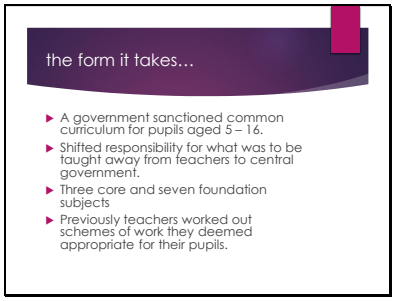

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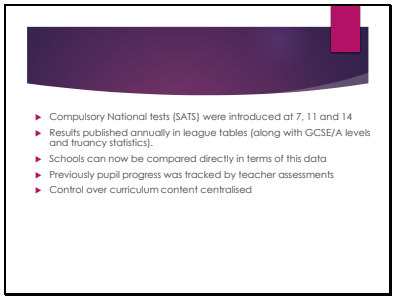

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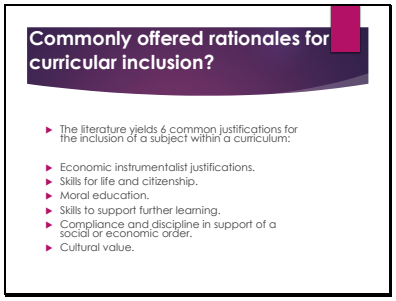

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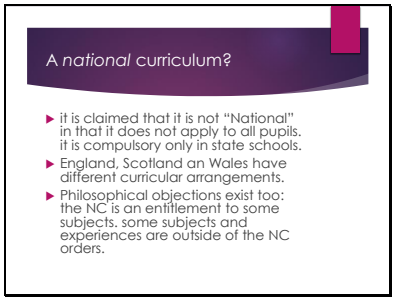

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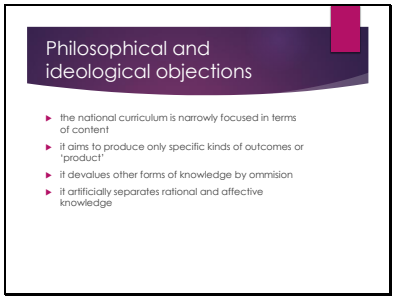

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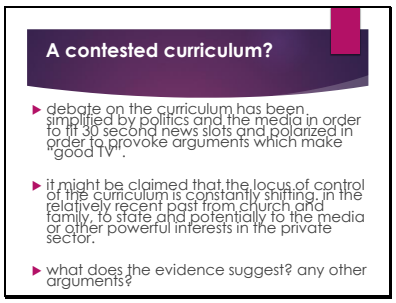

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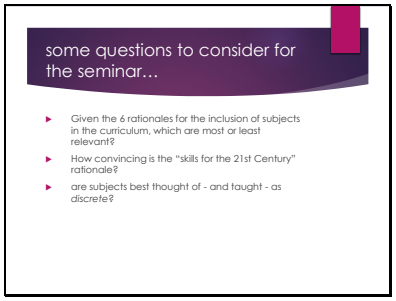


Appendix 9A & B : Summative assessment for Foundation and First year students

9A: Foundation MCQ Summative

English Language Placement Test Version 2

Name: _____

Date: _____

Contact Phone Number: _____

Intended Degree Programme: _____

Office Use Only:

Grammar/Reading:

Writing:

Speaking:

Overall level & recommended class:

Follow up call:

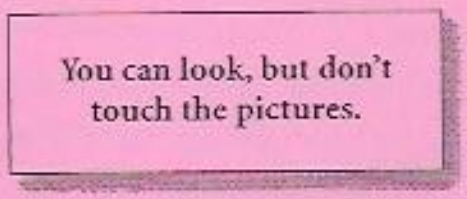
GRO notified:

Part 1

Questions 1 – 5

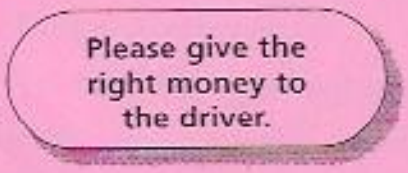
- Where can you see these notices?
- For questions **1** to **5**, mark **one** letter **A**, **B** or **C** on your Answer Sheet.

1



A in an office
B in a cinema
C in a museum

2

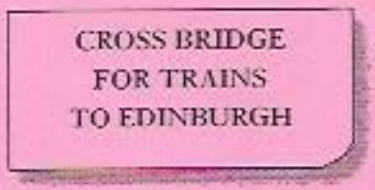


A in a bank
B on a bus
C in a cinema

3

A in a street
B on a book
C on a table

4



A in a bank
B in a garage
C in a station

5

A on clothes
B on furniture
C on food

Questions 6 – 10

- In this section you must choose the word which best fits each space in the text below.
- For questions **6** to **10**, mark **one** letter **A**, **B**, or **C** on your Answer Sheet.

THE STARS

There are millions of stars in the sky. If you look **(6)** ..... the sky on a clear night, it is possible to see about 3000 stars. They look small, but they are really **(7)** ..... big hot balls of burning gas. Some of them are huge, but others are much smaller, like our planet Earth. The biggest stars are very bright, but they only live for a short time. Every day new stars **(8)** ..... born and old stars die. All the stars are very far away. The light from the nearest star takes more **(9)** ..... four years to reach Earth. Hundreds of years ago, people **(10)** ..... stars, like the North Star, to know which direction to travel in. Today you can still see that star.

6	A at	B up	C on
7	A very	B too	C much
8	A is	B be	C are
9	A that	B of	C than
10	A use	B used	C using

Questions 11 – 20

- In this section you must choose the word which best fits each space in the texts.
- For questions **11** to **20**, mark **one** letter **A**, **B**, **C** or **D** on your Answer Sheet.

Good smiles ahead for young teeth

Older Britons are the worst in Europe when it comes to keeping their teeth. But British youngsters **(11)** ..... more to smile about because **(12)** ..... teeth are among the best. Almost 80% of Britons over 65 have lost all or some **(13)** ..... their teeth according to a World Health Organisation survey. Eating too **(14)** ..... sugar is part of the problem. Among **(15)** ..... , 12-year-olds have on average only three missing, decayed or filled teeth.

11	A getting	B got	C have	D having
12	A their	B his	C them	D theirs
13	A from	B of	C among	D between
14	A much	B lot	C many	D deal
15	A person	B people	C children	D family

Christopher Columbus and the New World

On August 3, 1492, Christopher Columbus set sail from Spain to find a new route to India, China and Japan. At this time most people thought you would fall off the edge of the world if you sailed too far. Yet sailors such as Columbus had seen how a ship appeared to get lower and lower on the horizon as it sailed away. For Columbus this **(16)** ..... that the world was round. He **(17)** ..... to his men about the distance travelled each day. He did not want them to think that he did not **(18)** ..... exactly where they were going. **(19)** ..... , on October 12, 1492, Columbus and his men landed on a small island he named San Salvador. Columbus believed he was in Asia, **(20)** ..... he was actually in the Caribbean.

16	**A** made	**B** pointed	**C** was	**D** proved
17	**A** lied	**B** told	**C** cheated	**D** asked
18	**A** find	**B** know	**C** think	**D** expect
19	**A** Next	**B** Secondly	**C** Finally	**D** Once
20	**A** as	**B** but	**C** because	**D** if

Questions 21 – 40

- In this section you must choose the word or phrase which best completes each sentence.
- For questions **21** to **40**, mark **one** letter **A**, **B**, **C** or **D** on your Answer Sheet.

21 The children won't go to sleep ..... we leave a light on outside their bedroom.

A except **B** otherwise **C** unless **D** but

22 I'll give you my spare keys in case you ..... home before me.

A would get **B** got **C** will get **D** get

23 My holiday in Paris gave me a great ..... to improve my French accent.

A occasion **B** chance **C** hope **D** possibility

24 The singer ended the concert ..... her most popular song.

A by **B** with **C** in **D** as

25 Because it had not rained for several months, there was a ..... of water.

A shortage **B** drop **C** scarce **D** waste

26 I've always ..... you as my best friend.

A regarded **B** thought **C** meant **D** supposed

27 She came to live here ..... a month ago.

A quite **B** beyond **C** already **D** almost

28 Don't make such a .....! The dentist is only going to look at your teeth.

A fuss **B** trouble **C** worry **D** reaction

29 He spent a long time looking for a tie which ..... with his new shirt.

A fixed **B** made **C** went **D** wore

30 Fortunately, ... from a bump on the head, she suffered no serious injuries from her fall.

A other **B** except **C** besides **D** apart

31 She had changed so much that ..... anyone recognised her.
A almost B hardly C not D nearly

32 ..... teaching English, she also writes children's books.
A Moreover B As well as C In addition D Apart

33 It was clear that the young couple were ..... of taking charge of the restaurant.
A responsible B reliable C capable D able

34 The book ..... of ten chapters, each one covering a different topic.
A comprises B includes C consists D contains

35 Mary was disappointed with her new shirt as the colour ..... very quickly.
A bleached B died C vanished D faded

36 National leaders from all over the world are expected to attend the ..... meeting.
A peak B summit C top D apex

37 Jane remained calm when she won the lottery and ..... about her business as if nothing had happened.
A came B brought C went D moved

38 I suggest we ..... outside the stadium tomorrow at 8.30.
A meeting B meet C met D will meet

39 My remarks were ..... as a joke, but she was offended by them.
A pretended B thought C meant D supposed

40 You ought to take up swimming for the ..... of your health.
A concern B relief C sake D cause

Part 2

Do not worry if you do not have time to do this part of the test.

Questions 41 – 50

- In this section you must choose the word or phrase which best fits each space in the texts.
- For questions **41** to **50**, mark **one** letter **A**, **B**, **C** or **D** on your Answer Sheet.

CLOCKS

The clock was the first complex mechanical machinery to enter the home, **(41)** ..... it was too expensive for the **(42)** ..... person until the 19th century, when **(43)** ..... production techniques lowered the price. Watches were also developed, but they **(44)** ..... luxury items until 1868, when the first cheap pocket watch was designed in Switzerland. Watches later became **(45)** ..... available, and Switzerland became the world's leading watch manufacturing centre for the next 100 years.

41	**A** despite	**B** although	**C** otherwise	**D** average
42	**A** average	**B** medium	**C** general	**D** common
43	**A** vast	**B** large	**C** wide	**D** mass
44	**A** lasted	**B** endured	**C** kept	**D** remained
45	**A** mostly	**B** chiefly	**C** greatly	**D** widely

Dublin City Walks

What better way of getting to know a new city than by walking around it? Whether you choose the Medieval Walk, which will **(46)** ..... you to the Dublin of 1000 years ago, find out about the more **(47)** ..... history of the city on the Eighteenth Century Walk, or meet the ghosts of Dublin's many writers on the Literary Walk, we know you will enjoy the experience.

Dublin City Walks **(48)** ..... twice daily. Meet your guide at 10.30 a.m. or 2.30 p.m. at the Tourist Information Office. No advance **(49)** ..... is necessary. Special **(50)** ..... are available for families, children and parties of more than ten people.

46	**A** introduce	**B** present	**C** move	**D** show
47	**A** near	**B** late	**C** recent	**D** close
48	**A** take place	**B** occur	**C** work	**D** function
49	**A** paying	**B** reserving	**C** warning	**D** booking
50	**A** funds	**B** costs	**C** fees	**D** rates

Questions 51 – 60

- In this section you must choose the word or phrase which best completes each sentence.
- For questions **51** to **60**, mark **one** letter **A**, **B**, **C** or **D** on your Answer Sheet.

51 If you're not too tired we could have a ..... of tennis after lunch.
A match B play C game D party

52 Don't you get tired ..... watching TV every night?
A with B by C of D at

53 Go on, finish the dessert. It needs ..... up because it won't stay fresh until tomorrow.
A eat B eating C to eat D eaten

54 We're not used to ..... invited to very formal occasions.
A be B have C being D having

55 I'd rather we ..... meet this evening, because I'm very tired.
A wouldn't B shouldn't C hadn't D didn't

56 She obviously didn't want to discuss the matter so I didn't ..... the point.
A maintain B chase C follow D pursue

57 Anyone ..... after the start of the play is not allowed in until the interval.
A arrives B has arrived C arriving D arrived

58 This new magazine is ..... with interesting stories and useful information.
A full B packed C thick D compiled

59 The restaurant was far too noisy to be ..... to relaxed conversation.
A conducive B suitable C practical D fruitful

60 In this branch of medicine, it is vital to ..... open to new ideas.
A stand B continue C hold D remain

Quick Placement Test Version 2

Name: .....

School: ..... Date: .....

Instructions: Use a pencil. **Mark ONE letter for each question.** Example: A B C D

Part 1

1 A B C
2 A B C
3 A B C
4 A B C
5 A B C
6 A B C
7 A B C
8 A B C
9 A B C
10 A B C
11 A B C D
12 A B C D
13 A B C D
14 A B C D
15 A B C D
16 A B C D
17 A B C D
18 A B C D
19 A B C D
20 A B C D
21 A B C D
22 A B C D
23 A B C D
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25 A B C D
26 A B C D
27 A B C D
28 A B C D
29 A B C D
30 A B C D
31 A B C D
32 A B C D
33 A B C D
34 A B C D
35 A B C D
36 A B C D
37 A B C D
38 A B C D
39 A B C D
40 A B C D

Part 2

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42 A B C D
43 A B C D
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Part 1		Part 2	
1		41	
2		42	
3		43	
4		44	
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Part 3

Write your answer here. Tick one box to show which question you have answered:

a) Describe the similarities and differences between your home town (or a town you know well) and Dubai. ☐

b) Why is education important? ☐

9B: First Year Early Childhood MCQ

1. Which of the following statements offers the most accurate comparison for the developmental theories of Jean Piaget and Lev Vygotsky?

a. Piaget described child development as the individual exploration; Vygotsky saw it as stimulated by social interaction

b. Both theorists described child development as a predictable set of cause and effect relationships.

c. Piaget described child development as a function of parental intervention' Vygotsky saw it as independent of outside influence.

d. Both theorists described child development as corresponding to a fixed timeline.

2. A group of children in a preschool class are playing house and pretending to be various members of a family. Engaging in this type of sociodramatic play is important to the children's' development primarily because it allows them to:

a. Learn important differences in family roles.

b. Explore and manipulate group dynamics.

c. Mimic codes of behavior they witness in the adult world.

d. Think and behave in more complex ways in a risk free environment.

3. A group of seven year old children are playing a make believe game in which they are pretending to be pirates drawing a map to buried treasure. This activity will most likely lead to the children's acquisition of knowledge by:

a. Promoting the development of their gross-motor skills.

b. Improving the acuity of their senses.

c. Influencing their development of spatial reasoning.

d. Enhancing their ability to categorize.

4. According to the theories of Lawrence Kohlberg, children's moral thinking develops:

a. In tandem with cognitive development, so progress can be predicted based on academic achievement.

b. In unpredictable ways response to several complex environmental factors.

c. In steps, beginning with responding to external authority and moving toward respecting universal principles.

d. In emulation of their roles models, so adults constitute the key influence in establishing a child's ethics and values.

5. As babies begin to move around the end of infancy, the rely increasingly on the process of social referencing to interpret the actions of significant others in order to determine:

a. The degree of dexterity that is required for specific tasks.

b. The limits of their caregiver's supervision.

c. The appropriate response to a new situation.

d. The duration of their sleep cycles.

6. An 18-month-old child has begun responding to request with "no" and dong the opposite of what others want. In terms of emotional development, this negativism is typically a manifestation of the child's:

a. Use reversible thinking.

b. Sense of independence.

c. Use cross-modal perception.

d. Formation of a strong attachment.

7. Which of the following play activities would be most likely to foster a five-year-old child's developing sense of empathy?

a. Building a tower with blocks

b. Feeding a guinea pig

c. Constructing a hand puppet

d. Playing music on a keyboard

8. To promote the cognitive and physical development of a one-year-old baby, it is most effective for caregivers to choose toys that the baby finds interesting to:

a. Hear (eg. Rattles)

b. Manipulate (eg. Blocks)

c. Touch (eg. Stuffed animals)

d. Watch (eg. Mobiles)

9. The development of stranger anxiety in infants between the age of seven and nine months is most closely likes to their:

a. Increased memory.

b.Increased vocalization.

c. Increased visual ability.

d. Increased emotional sensitivity.

10. Experiments have shown that babies develop a fear of heights only after they begin to crawl. This finding confirms the direct relationship between cognitive development and:

a. Sensorimotor experience.

b. Threshold of responsiveness.

c. Cross-modal perception.

d. Operant conditional.

11. When children grow up in an environment in which their wants and needs are consistently ignored, there children may eventually perceive that their behavior is of no consequence due to an inability to negative impact on the child's development is called:

a. Learned helplessness.

b. Depersonalization.

c. Cognitive dissonance.

d. Oppositional identity.

12. An 18-month old child has begun to acquire one-word vocabulary at a significant rate. Which of the following language skills is this child likely to develop next?

a. Responding correctly to indirect requests

b. Recognizing different grammatical structures

c. Modifying speech to take the listener into account

d. Using two-word sentences to identify objects and actions

13. The psychological process during early childhood in which children try to take on the qualities of important people in their environment is called:

a. Social co-construction.

b. Self-regulation.

c. Identification.

d. Induction.

14. At six months of age, children are excited by a game played with an adult in which, adults place their hands over their eyes and then remove their hands. According to Jean Piaget, the interest and enthusiasm is due to the children's:

a. Development of hand/eye coordination.

b. Acquisition of object permanence.

c. Progress in locomotion.

d. Use of trial and error for problem solving.

15. The improvement in visual capacity and acuity in three-month-old infants is accompanied by which of the following behavioral developments?

a. Personal referencing.

b. Babbling.

c. Social smiling.

d. Jargoning.

16. For which of the following reasons do the bones in infant's hands and wrists ossify and harden before others in the body?

a. To support and increase in muscle fibers during development in infancy

b. To assimilate the increased calcium uptake in the extremities of the body

c. To protect the infant from falling during the first stages of walking

d. To make it possible for the infant to grasp and pick up objects

17 A third-grade student has limited mobility and cannot hold a pencil. She relies on a classroom volunteer to write for her in school and she relies on her parents to write for her at home. Recently, the students' parents have requested assistive technology that would allow her to do her written work independently. When the opportunity arises to purchase this equipment, the school should primarily consider which of the following factors?

a. The expense of the equipment

b. The likely effect of the equipment on the general education setting

c. The potential impact of the equipment on student learning.

d. The availability of the equipment

18 Of the following conditions that affect learning and development, which one occurs as the result of brain damage to child during pregnancy, birth or early infancy?

a. Cerebral palsy

b. Fragile X syndrome

c. Dyslexia

d. Down syndrome

19. A kindergarten boy with an anxiety-withdrawal disorder will most likely have difficulty:

a. Learning to read due to his short attention span.

b. Managing his behavior due to his poor impulse control.

c. Learning to write due to his poor physical coordination.

d. Building peer friendships due to his limited social skills.

20. A three-year-old child is highly sensitive to noise and becomes fixated on certain tasks and objects. The child has difficulty regulating anxiety and recognizing nonverbal communication. These behaviors are typical of which of the following syndromes?

a. Asperger's syndrome,

b. Down syndrome.

c. Turner's syndromes

d. Reye's syndrome

21. Which of the following examples best illustrates the parents' role in their baby's proximal development?

a. Parents monitor their baby's progress relative to predetermined developmental milestones.

b. Parents determine how long their baby should be exposed to specific sensory stimuli.

c. Parents foster their baby's emotional attachment through prolonged close physical contact.

d. Parents help their baby pick up objects until the baby is able to do it independently.

22. A preschool child has recently been diagnosed with juvenile diabetes. His family has approached the child's teacher to ask for the school's assistance to help their child understand and manage the disease. Which of the following would be the most appropriate response for the child's teacher in this situation?

a. Locating relevant informational literature for the family

b. Working with the school's support services to identify resources for such children and their families

c. Forwarding the family's name to local social service agencies

d. Asking the school administration to plan a diabetes-screening clinic for all children.

23. Which of the following best describes the primary purpose of an Individualized Family Service Plan (IFSP) for a child with special needs?

a. To assess how the child's developmental delays affect current educational performance

b. To document instructional interventions that the child's parents have implemented

c. To establish and address flexible priorities for the child's development across all domains

d. To outline how assistive technology can be used to improve the child's academic experience

24. A chills who has been diagnosed with an absence seizure disorder is most likely to experience:

a. Permanent neurological impairment.

b. Brief interruptions in awareness.

c. Delays in motor skill development

d. Episodes of aggressive behavior.

25. The speech dysfluency of stuttering most frequently has a detrimental effect on a child's:

a. Reading comprehension skills

b. Feeling of autonomy.

c. Written language skills.

d. Sense of self-worth

26 A second-grade student arrives at school with several large bruises that he cannot explain. Which of the following is the appropriate course of action for the teacher in this case?

a. Noting the incident in the child's records

b. Making contact with the child's primary caregiver(s)

c. Following the school's protocol for mandated reporting

d. Requesting a referral to the school psychologist.

27. Developmental delay and cognitive impairment, along with eyes that are smaller than average, a poorly developed upper lip, and flattened cheekbones, are typical of children with:

a. Cystic fibrosis.

b. Cerebral palsy.

c. Muscular dystrophy.

d. Fetal alcohol syndrome.

28. A child with fine-motor impairment will likely have the most difficulty performing which of the following tasks?

a. Kicking a ball

b. Carrying a book

c. Drawing a picture

d. Reading a story

29. A child diagnosed with childhood-onset pervasive developmental disorder exhibits aggressive and violent behaviors toward herself and others. By law, a child with this diagnosis and who exhibits these behaviors:

a. must be places in the least restrictive environment.

b. Must be educated within the public school setting.

c. Must be placed in an alternative setting at the family's expenses.

d. Must be supervised by an aide at all times in the classroom.

30. In which of the following organizations do trained home visitors model verbal interactions and parenting techniques through the use of selected books and toys to enhance early literacy?

a. National Health Service (NHS)

b. Parent-Child Home Program

c. Institute for Responsive Education.

d. London Healthy Schools Network

31. Children raised in a family environment with a high level of discord and social dysfunction are typically at a significantly greater risk of experiencing:

a. Receptive language disorders.

b. Autistic spectrum disorders.

c. Expressive language disorders.

d. Anxiety disorders.

32. When evaluating books for a classroom library, which of the following features of a book should second-grade teacher consider *first*?

a. The number of illustrations

b. The length

c. The durability

d. The literary quality

33. Which of the following is a defining characteristic of picture books written for young children?

a. A large cast of characters

b. An elaborate, specific rhyme scheme

c. An emphasis on sight words

d. A simple illustrate narrative

34. Novels such as *Little House on the Prairie* by Laura Ingalls Wilder and *Where the Red Fern Grows* by Wilson Rawls are characteristic of which following literary genres?

a. Folktales

b. Memoirs

c. Suspense

d. Fantasy

35. Using wordless children's books within a language arts curriculum is most effective for promoting children's:

a. emotional and social development.

b. Awareness of narrative structure.

c. Oral and written language skills

d. Fine motor skills

36. Which of the following authors is best known for books in which children come to terms with their anger and fears?

a. Jan Brett

b. Mitsumasa Anno

c. Maurice Sendak

d. Margaret Wise Brown

37. Read the haiku below; then answer the question that follows.

A moose's head lifts

Silently from the water,

A rippling sun

The poem features which of the following literary devices?

a. Metaphor

b. Simile.

c. Hyperbole

d. Personification

38. Together with the literary merit and popularity, which of the following is the most important consideration for the evaluation of children's literature for second-grade readers?

a. The authenticity of the book's characters

b. The availability of other texts written by the book's author

c. The historical context of the book's theme

d. The complexity of the book's story line

39. Introducing young readers to several types of fictional, nonfictional, and informational books will most significantly broaden their awareness of:

a. Different purposes and contexts for writing.

b. Practical methods for learning new vocabulary.

c. Important conventions of Standard English grammar.

d. Useful strategies for drafting and revising writing

40. Both the dream world described in *Peter Pan* and the talking animals of *The Wind in the Willows* represent characteristic aspects of which of the following genres of children's literature?

a. Fable

b. Nursery rhyme

c. Tall tale

d. Fantasy

41. The children's books written by Theodor Geisel as Dr. Seuss are recognized internationally for their:

a. Plausible settings.

b. Inventive wordplay.

c. Realistic illustrations.

d. Dense narratives.

42. A three-year-old pairs her drawing of a dog with a scribbled caption intended to describe the picture. In the developmental continuum of writing, the child's use of scribbling in significant as an indication that she understands writing as a:

a. Necessary adjunct to visual imagery.

b. Social practice that follows certain formal conventions.

c. Graphic representation of specific phonemic relationships.

d. Means of communicating ideas.

43. Which of the following is the most important characteristic of effective persuasive writing?

a. A coherent, logical argument

b. A relaxed, conversational tone

c. A clear, forceful conclusion

d. A vivid, colorful vocabulary

44. The most appropriate reason to begin a new paragraph while drafting an essay is to:

a. Introduce a new subject.

b. Vary the essay's rhythm.

c. Limit an overlong section.

d. Add interesting details.

45. In learning to write, a child begins to use letters to represent words. He has begun to leave spaces between words and to mix upper- and lowercase letters. As his writing development progresses, this child would likely next begin to:

a. Use standard spelling.

b. Recognize the differences between letters and words.

c. Represent initial and final sounds or morphemes in words.

d. Use only capital letters.

46. Read the passage below; then answer the question that follows.

[1]They are one of my favorite foods. [2]I could eat them every morning. [3]I especially love cranberry ones, because the combination of tart and sweet is so refreshing. [4]No one has to wonder what I want for breakfast-my answer will always be muffins! [5]I also like apricot, almond, and peach.

Which of the following sentences should be moves to the beginning of the paragraph to improve its logical organization?

a. Sentence 2

b. Sentence 3

c. Sentence 4

d. Sentence 5

47. Which of the following prewriting strategies is most effective for organizing a piece of writing from start to finish?

a. Brainstorming

b. Outlining

c. Clustering

d. Note taking

48. Read the sentence below; then answer the question that follows.

Until recess was over, the girls would they're friends on the play-ground.

Which of the following revisions would correct the spelling error in the sentence above.

a. Change Until to Untill

b. Change they're to their

c. Change friends to friends

d. Change playground to play ground

49. Read the sentence below; then answer the question that follows.

"***Was it Gwendolyn Brooks," Shawna asked, "who wrote the poem "Ode on a Grecian Urn"?"***

Which of the following sentences corrects the punctuation errors in the sentence above?

a. "Was it Gwendolyn Brooks?" Shawna asked, "who wrote the poem "Ode on a Grecian Urn?"

b. 'Was it Gwendolyn Brooks,' Shawna asked, 'who wrote the poem "Ode on a Grecian Urn"?'

c. Was it Gwendolyn Brooks, Shawna asked, who wrote the poem "Ode on a Grecian Urn?"

d. "Was it Gwendolyn Brooks" Shawna asked, "who wrote the poem 'Ode on a Grecian Urn'?"

50. Read the sentence below; then answer the question that follows.

I am so tired I could sleep for a year.

This sentence acquires meaning by using which of the following types of figurative language?

a. Metaphor

b. Simile

c. Hyperbole

d. Personification

End of the test

Appendix 10A & 10B : Experimental Group Standard Focused Project -Based Assessments

International Foundation Programme

Summative Project

Due Date: December 15, 2014

Group Oral Poster Presentation on Sustainability in the UAE

Task descriptor

From your personal observations and from reports in the media, identify an unsustainable practice in your community. Through primary and secondary data collection find a solution to the problem which demonstrates sustainability.

Present your research and findings in an oral poster presentation for 30 minutes. There should be at least 4 people in your group to work on this project.

Each person in the group will present for 5-8 minutes. The remaining time will be used for a discussion of your presentation with the audience.

10B: First Year Control Group Project- Based Assessment

BA Early Childhood

EDU1301 -Summative Project

Due Date: December 15, 2014

Group Oral Poster Presentation on Early Childhood Provisions in the UAE

Task descriptor

From your personal observations and from reports in the media, identify the needs that exists in early childhood provisions in a UAE city of your choice. Through primary and secondary data collection find a solution to the problem which demonstrates your knowledge of child development, teacher training and physical infrastructure required for an early childhood setting that meets the needs of 2-4 year olds.

Present your research and findings in an oral poster presentation for 30 minutes. There should be at least 4 people in your group to work on this project.

Each person in the group will present for 5-8 minutes. The remaining time will be used for a discussion of your presentation with the audience.

Appendix 11

Focus Group Interview Questions

1. How well were you prepared for the summative tasks?
2. What do you attribute your level of preparation and learning to?
3. What supported your learning?
4. What could have been improved?
5. Did the course instructor effectively facilitate the learning process for you? Explain your response.
6. How much were you engaged (i.e., level of investment in classroom experience) in class?
7. If you were engaged in class, what motivated you to be engaged?
8. If you were not engaged in class, what could have been improved to raise your engagement?
9. Were you engaged in this course outside of class (e.g., reading the textbook, reviewed class material, participated in study groups, doing personal research on course content)?
10. If you were engaged outside of class, what motivated you to be engaged?
11. If you were not engaged outside of class, what could have been improved to raise your engagement?
12. In your opinion, did you contribute to the learning experience of your peers? In what ways?
13. Is there anything else you would like to share about your experiences in this class?

Appendix 12: Table of responses to major themes

Theme: Link between teaching style and performance	
Experimental Groups	**Control groups**
We were very happy with the class.	It was useless.
The teacher was friendly and approachable.	Nothing special about this class.
The teacher was good. She accommodated any question in the class.	Could be better.
The teacher was good. She made herself available.	It was boring.
It was a memorable class experience. Everything was awesome.	It was not the best class I had.
The classes were great. No complaints.	The class was not motivating.
It was good. It made me look forward to semester 2.	We just did the same thing over and over; show up sit down take notes and leave. I though university was more than this.
It was great. We had a great teacher.	The teacher could have made the class more interesting.
We had fun in our classes.	Better communication from the teacher.
The teacher motivated us to be engaged	Different style of teaching instead of lectures
She caught our attention with some really good activities.	It was hard to determine if we were on track. Some more direction from the teacher would be helpful. I questioned how will we do a project plus study for the test?
The willingness of the teacher to explain anything.	Changing the lecture seminar routine.
The class was lively and engaging.	I am a visual learner so I needed more graphic stimuli.
Teacher's sense of humour	More variety of topics would make the course more interesting.
Balance between humour and strictness.	Watching more movies would catch my attention.
The teacher and her spirit of teaching.	More input on our project and study guide from the lecturer on what was coming on the test (would improve the course).

Electronic resources that the teacher suggested that we should use (supported my learning).	More help from the teacher so we can choose our project topic and start working on it earlier. She should also give us a study guide (would improve the course).
Worksheets and in class activities (supported my learning).	Give us information and time to revise on the test content directly. Our teacher could tell us what we needed to study for the test so we would feel less anxiety (would improve the course).
Study materials (supported my learning).	Ahmed: More direct instruction from the teacher and less group work. We didn't even get a study outline guide (would improve the course).
It was easy to pay attention because the teacher knew how to deal with everyone.	More help with a study guide and revision sheets. (would improve the course).
She was a very good teacher.	More guidance and past tests from the teacher (would improve the course).
Yes she explained everything very well.	More engaging activities (would improve the course).
Yes she did a great job explaining everything.	More feedback in the seminars (would improve the course).
She did by teaching us how to work independently.	I needed to be more engaged. The topics in the lecture we boring.
On a scale if 1-10 for engagement I was a 7.	More structure to what we needed to do would make me more satisfied. I felt like I was working overtime both inside and outside of class.
The teacher (supported my learning).	I was very stressed out because sometimes I felt we were not managing our time properly and I had many questions about the exam .
It was a lot of work when compared to our other course but it was interested to do. I learned a lot which I don't think I would in a regular lecture.	The structure of the course was very flexible so sometime I was worried that we would be behind in the content even though we were having fun in the classes.
Yes she even answered a lot of silly questions.	The course was different in that we had deadlines but a loose outline. So we could work at our own pace, but that's hard in a group so there would be a lot of work.
She definitely did\She stimulated my brain.	No. She could give us more guidance on the test.

Theme: Students preparedness for assessments	
Experimental Groups	**Control Groups**
I think the course was well delivered, we got all the materials and we just had to memorize the information.	Not really. She taught the lectures and seminars but that's it. Not enough time was given for exam prep.
I didn't have to do too much - just go to class and listen and take notes, then study for the test.	I guess it was Ok but more direct information about the test would make me feel less anxious.
I liked how the professor let us learn on our own and find information ourselves.	The style of teaching could be reviewed because I learn better by doing activities.
The professor focused individual attention to our group and helped us.	I find it hard to study with no study guide for direction.
Reading the book helped prepare me for the examination".	I wanted to be given the exact definitions along with the application of real life situations" .
Applying the information to the real world application of the content helped prepare me	She gave us a lot of reading materials outside of class but did not really follow up to say if this stuff was coming on the test.
Yes she did and she was available after class for more instruction and guidance.	I think there should be more of an open discussion or verbal feedback of what we learned and relate them to a personal experience.
Yes she did by reviewing and telling us what to expect in the tasks.	I wanted to spend more time in class going over material we were actually supposed to know for the test.
I felt prepared for the test because I attended all my classes and I expect to get questions related to the topics we studied.	I wanted more instruction on how to do the test.
I took a lot of notes and revised on my own so I guess I was prepared.	I did not study because there was no study guide.
I think I was prepared but other students say the summative test is hard.	No we needed more preparation for the test.

I was really well prepared.	I wasn't prepared because I had other things to do.
Kind of prepared.	I think I was partially prepared because I attended classes but did not pay too much attention.
I was quite prepared.	I didn't think that as I was very well prepared because I didn't have any pass papers.
I was prepared because I practiced by revising the lectures.	I only skimmed the book.
I was just average in being prepared.	I only studied the night before.
90% prepared.	I should have attended class more.
I was quite well prepared.	The teacher (source of preparedness).
I think we were well prepared because the skills we were learning could be used anytime in an exam or not.	We covered a lot in class (source of preparedness).
I was prepared because I revised a lot.	I wasn't motivated to study.
The level of focus on our tasks (source of preparedness).	I should have attended class more.
Revision sheets (source of preparedness).	Sammy: I could have interrupted less.
Paying attention in class (source of preparedness).	I could have asked more questions in class.
I studied all the lectures on the academic portal so I was prepared.	I was lazy and didn't know what to study.
I wasn't totally prepared.	I was kind of prepared.
Practicing with past papers (source of preparedness).	More information on the test (would improve the course).
Paying attention in class and practicing from past exams (source of preparedness).	More past papers and revision guide (would improve the course).
Studying hard (source of preparedness).	More revision guides and past papers (would improve the course).
Covering lots of topics through research (source of preparedness).	The teacher's help (source of preparedness).
Revision sheets (source of preparedness).	The teacher helped me to pass because she answered all my questions (source of preparedness).
Studying hard (source of preparedness).	
Participating in class (source of preparedness).	

Theme: Influence of peers through evidence of collaboration	
Experimental Groups	**Control Groups**
We had to work in groups all the time".	There was no need to help anyone we all got the same hand outs and materials".
Yes, I shared my notes with two of the people in my class because they missed some of the lectures".	I don't think so because they can all access the materials online.
Oh yeah, all the time we worked with others. Good thing because we wouldn't be able to get through all the work"	I just want to pass this course and it's very straight forward, come to class, take notes, revise and take the test - so no need to help anyone.
A lot of group work was needed and I think we all contributed to helping each other.	I was way too busy to help anyone.
I helped one of my friends because she was having problems finding some of the reading materials in the library.	No I didn't work with anyone during this course.
Working with others was all we did in class and out of class. This was hard to get used to but it really helped to make the work easier.	The classes were enough for me to learn what I needed so … and I didn't have any time to help others.
I think that's how the course was designed- yeah to make sure we help each other.	Didn't know we should help others. No need to. Some students didn't attend but that's their problem.
No way we could get the work done without collaborating with each other".	I didn't like group work so I didn't bother to do any work with others.
All the time we were helping each other. Even from other groups with how to write up the interview materials".	Less peer marking and group activities (would improve the course).

All the seminars and class activities made sure we were working with each other.	More individual feedback and advice (would improve the course).
Yes we were always contributing to each other's learning through discussions and other activities.	I don't think I did. (contribute to the learning experience of my peers).
Yes, peer correction of work for my friends who valued my feedback.	I didn't (contribute to the learning experience of my peers).
Yes group activities that we completed inside and outside of class made us support each other to learn more.	My group has spent two weeks trying to decide on our project focus. This frustrated me in the beginning but in the end we got it together.
I helped by studying with others.	I didn't contribute to anyone.
Yes we connected well in our groups .	Not really, I didn't work with anyone expect in class when the lecturer told us to.
Yes we shared a lot of experiences with each other.	There was no chance to we just attended lectures and seminars.
Yes we wrote our project together	The work was easy enough so I didn't work with anyone
Yes having conversations with my group helped us understand things better	We were not in groups so we didn't work together.
I helped my friend clarify their doubts	I had friend who I hung out with but we didn't discuss the work we did in class.
It was helpful to discuss topics with my friend. We learned from each other	Just to ask some questions but no real group work.
Peer revision helped us go through materials we learned.	No , I don't think I helped anyone really.
Giving each other advice and support.	Yes I might have answered a few questions for others or explained what I took in my notes if when they asked me .
It was a nice experience to see how well we cooperated in our groups.	

Competitions among the groups in class (helped them engage in the class).	
Yes she taught us very well and made it interesting with different activities like the debates and the group work.	
In class discussions and debates (supported my learning).	
Don't think I have spent so much time working on a project before. But I don't mind it because it's fun working with my friends even after class ends.	
There were a lot of group activities which we had to get through. Some of them I liked but others I just did to make sure my group was not annoyed with me.	
Revising the topics with friend many times (source of preparedness).	
There was too much research and we wasted time discussing and trying to decide on what to do. In the end though I was happy with the project we did.	
The study materials and the group work we did.	

Theme: Students driven by an external locus of control	
Experimental Groups	**Control Groups**
My eagerness to learn and do well.	I want to pass.
Getting high marks.	High grades are important for my scholarship.
Getting high grades.	I have to get a scholarship for first year.
Relaxing environment.	Passing the exam.
Passing and doing well.	Passing the course.
Relaxing Environment.	Good grades are important to me.
End goal of achieving good grades.	I want to do better than friends.
It was a challenge for me to learn independently so I pushed myself.	Passing is important.
Wanting to pass the course.	Getting a high grade.
I just want to learn enough so I can get into first year.	I want a scholarship for first year.
My parents have high expectations.	Passing is very important.

Passing foundation is important.	I don't want to get a bad grade.
Good grades will help me to be confident	I have lots of cool friends in class. I keep coming so I can hang out with them.
This place is very competitive so I have to do well.	Just to pass this course is important.
We are going on a holiday at the end of the course if I pass.	To see what I can learn.
My friends in the class.	Passing.
Doing well in the course.	Good grades.
My teacher is really motivating. .	My friends can't get a better grade than me, so I have to pass.
My family is expecting good results.	Good grades are good to have.
I want to do well.	I just want to pass.
I like it when I can complete a course with good grades.	My family is depending on me to do well.
Just to satisfy myself.	Passing.
Passing the module.	
Getting a good grade.	

Qualifying for a scholarship	

Appendix 13

Foundation Experimental Focus Group transcript

Researcher	Hi Everyone, I'd like to welcome you to the focus group session which is the final part of the research project you have been participating in since October. I am really glad you participate in this project.
Sarah	Thank you miss. It was good, it was a different experience for us.
Desi	Yeah miss, will the class next semester be run the same.
Researcher	I am not sure. If the results for the study are positive, then I can make case. Or you could tell your lecturer about this experience and see if she will carry on the same approach. Ok so I am going to ask you some questions about your experience in the class this semester. You all did the summative test last week. How did it go? Do you feel you were prepared for it.
Mona	Yes, I felt very prepared because I attended all my classes… but... I think the things we learnt did not come on the test. The test was much easier.
Amna	…True, a lot of the multiple choice questions and just basic English stuff.
Nabil	I took a lot of notes during our group work time and even in the tutorial so I guess I was prepared.
Rana	Reading the books and all the extra materials helped me prepare for the test.
Arun	I felt prepared.
Sarah	I think we were all well prepared because.
Dima	I would prefer if we got a practice test at some point, but it turned ok. I could do the test.
Yusef	I was confident because you told us not to worry about it.
Areej	I was worried a bit, but after chatting with my group I felt a bit more prepared.
Khalid	I was prepared.
Ross	90% prepared.
Kieran	I think I was well prepared and my group was too.
Matthew	We were working really hard in class on group works and stuff so I felt if the same things come on the test I am ready.
Bryan	I was ready for anything that came on the test because my friends last year said it was not hard.
Researcher	Most of you said you felt prepared , what gave you this confidence?
Rana	Miss, you know that we only did well because of you Miss.
Group	Laughter
Rana	But seriously Miss, because we did not focus too much on exam but on the project, I did not stress out over it.
Yusef	Miss remember I asked you a few times about the test and you said don't worry, so I took your advice Miss (Laughs).
Researcher	Ok guys, I really want you to seriously thin about what you would say attributed to you being prepared to the test. Was it your friends, yourself, the materials…? What?
Kieran	The whole way the class was taught. We were interested in learning.
Matthew	Yes the class was interesting and so we felt if we did well in the semester then the exam would be ok.
Ross	You miss and my friends..
Dima	Yes miss the way you taught us made us confident that we were ready for the test

Sarah	Reading the materials and preparing all the activities helped me feel confident and prepared.
Amna	You made us feel prepared Miss.
Bryan	My friends in the class and you miss gave me the confidence that I could pass term 1 and when it turned out to be a multiple choice I was like ….really, so I just did it.
Nabil	I think I worked hard so I felt that prepared me for the test.
Researcher	Ok great to hear your responses so far. Now can you tell me what supported your learning during the course.
	The class was lively and engaging.
Mona	Balance between humour and strictness.
Amna	Your teaching style cause us to look for more information outside of the class and to do more work on our own.
Nabil	Relaxing environment.
Rana	You miss and your spirit of teaching.
Arun	Miss you made the class very active so I wanted to learn.
Sarah	It was a challenge for me to learn independently so I pushed myself.
Dima	Competitions among the groups in class.
Yusef	My eagerness to learn.
Areej	The topics and activities.
Khalid	How well you taught.
Ross	You caught our attention with some really good activities.
Kieran	Your willingness to explain anything.
Matthew	Different style of teaching instead of lectures.
Bryan	Changing the lecture seminar routine.
Researcher	I would like you to think about that question in terms of the resources we had on the course.
Sarah	Electronic resources that the teacher suggested that we should use.
Areej	Preparing all the out of class activities.
Matthew	Study materials.

Khalid	Worksheets and in class activities.
Researcher	Did the course instructor effectively facilitate the learning process for you and how did she do this?
Khalid	Yes, you did Miss and you were available during the tutorials and after class for more instruction and guidance.
Areej	Yes, you did by reviewing and telling us what to expect in the tasks.
Yusef	Yes, you did Miss.
Researcher	Yusef,can you explain how?
Yusef	Miss you gave us a lot of guidance in the tutorial time and the activities were interesting.
Arun	Yes, you taught us very well and made it interesting with different activities like the debates and the group work.
Dima	Yes, you explained everything very well.
Sarah	You are a very good teacher Miss because you had all these good activities like debates and so on.
Matthew	Yes, you did a great job explaining everything.
Bryan	Yes, she even answered a lot of silly questions.
Rana	She did by teaching us how to work independently.
Amna	Not 100% Miss You could give us more guidance on the test, but everything else was good so…
Sarah	But Amna she told us if we could do these activities the test would seem easy.
Amna	Yes I guess so because it was after …
Nabil	No we needed more preparation for the test.
Mona	You definitely did Miss \My brain was always stimulated.
Ross	Yes, Miss you explained everything.
Kiera	Yes you explained the course very well
Arslan	Yes, Miss you were always prepared with these activities.
Desi	Yes, your explanations were helpful.
Researcher	Ok now I want you to think about your level of engagement in the class, how engaged were you with the module? How much did you put into your learning?

Yusef	I was engaged but only after week 2 when I started to understand what was expected of us and we had to complete the out of class group work.
Arun	
Dima	It was easy to pay attention because the teacher knew how to deal with everyone.
Researcher	Could you explain that a bit more Dima.
Dima	Yes Miss, I think because you gave us all the space to think for ourselves and to complete the activities at our own pace and you were always there to answer any doubts, that made me more engaged.
Researcher	Ok, thanks I understand .
Sarah	I wasn't that engaged at first because I felt it was too much work and I would lose my focus. But after we stared working in our groups that was fun and my friends would make sure I was understanding what we were doing and contributing.
Kiera	Yes, I was engaged. At least I felt interested in the topics and in the activities. I wanted to come to all the classes.
Amna	On a scale if 1-10 for engagement I was a 7.
Rana	I was well engaged.
Desi	Yes ,100% engaged.
Sarah	Really engaged in and out of class. The group work and library tasks kept me working all the time and not even feeling bored.
Amna	Yes, because you gave us a lot of attention and activities.
Nabil	I was not fully engaged. Only when we had the tutorial group work and you were sitting with our group. I found that the others would do most of the work so…
Ross	(*Talking directly to Nabil*)Yes , you were just piggy backing in our group, that why you did not do well in the final presentation.
Mona	I was only engaged when you started to ask questions and tell us about the activities we would be doing.
Bryan	I was very engaged because you made the class interesting.
Matthew	The class was very relaxed. Miss wasn't too strict and I found that I looked forward to coming to this class out of my 4 modules.
Arslan	I started to lose interest in class because we had a lot of work, but then I thought Miss had put a lot of effort into preparing the materials so I started to get engaged just before the debates.
Researcher	What was your motivation to be engaged in the class guys?
Desi	You miss and the way you made the class interesting.

Mona	Passing and doing well.
Amna	The topic, activities and the relaxing environment.
Nabil	End goal of achieving good grades.
Rana	The classes were lively and engaging.
Arun	Balance between humour and strictness.
Sarah	Getting high grades.
Dima	Your sense of humour.
Yusef	Getting high marks.
Areej	My eagerness to learn.
Khalid	It was a challenge for me to learn independently so I pushed myself.
Ross	Competitions among the groups in class.
Kieran	I never failed a course before so I am usually engaged so I can pass.
Matthew	I like the class and how it was taught so that was engaging for me.
Bryan	I wanted to pass.
Researcher	Nabil you said you were not fully engaged, what could have been improved to increase your engagement?
Nabil	Less work Miss. The things we were doing was very hard Miss.
Researcher	Ok Nabil thanks for that information.
Researcher	Were you engaged in the course outside of class?
Desi	Yes, we had a ton load of reading so I would do those on the way home in the bus or at home. No way I could have done all the readings.
Areej	We had to do a lot of research so we did that outside of class and then in class we shared our ideas.
Amna	Most of our preparation work was done outside of class. Our group would get together in our free period or after uni to do work.
Nabil	Not really, my group would send me readings but I didn't really do that much outside of class.
Khalid	We did a lot of work outside of class. Even preparing the debate and the final presentations.
Arun	A lot. We did a lot of work outside of class.
Sarah	Yes, most of the time I spent in the library was after class.
Dima	My group met up a lot after class to review our notes or to discuss our reading materials.
Yusef	We did a lot of work outside of class'cause when we got into class we were always working on activities using the information we read.
Mona	I was engaged outside of class because I wanted to learn more, so even when we did not have to I was reading and looking up more information.

Rana	I was on the internet a lot , looking up information that could help me with the class project.
Ross	Yes I was and my group members made sure even when I did not feel up to it That I had something to look up.
Kieran	We would skype each other to discuss what we would be doing next in class or to plan our project.
Matthew	Yes I did a lot of independent work even when I did not have to because the topics were really interesting.
Bryan	Yes my group and I used out of class time to do a lot of work.
Researcher	If you were not engaged outside of class, what could have been improved to increase your engagement.
Nabil	I don't really know Miss.
Khalid	Miss he just does not like uni so nothing is going to change his attitude.
Researcher	Ok. Just a few more questions guys, I am almost finished. Do you think you contributed to the learning experience of your peers?
Bryan	It was helpful to discuss topics with my friend. We learned from each other.
Mona	Peer revision helped us go through materials we learned.
Amna	
Nabil	Yes I had to work in a group, but it did not go so well, I don't think I really contributed.
Rana	All the seminars and class activities made sure we were working with each other".
Arun	Yes, we were always contributing to each other's learning through discussions and other activities".
Sarah	Yes, we shared a lot of experiences with each other.
Dima	I helped by studying with others.
Yusef	Yes, having conversations with my group helped us understand things better.
Areej	We were always smsing, chatting of being in touch about uni.projects, so I think we supported each other.
Khalid	Yes, peer correction of work for my friends who valued my feedback.
Ross	Yes, group activities that we completed inside and outside of class made us support each other to learn more.
Kieran	Yes we connected well in our groups.
Matthew	I helped my friend clarify their doubts.
Desi	Working with others was all we did in class and out of class. This was hard to get used to but it really helped to make the work easier".
Researcher	Is there anything you would like to share about your experience in this class?
Areej	It was a nice experience to see how well we cooperated in our groups.

Amna	It was a memorable class experience. Everything was great and I think I did well.
Nabil	We had a good time, it was a good semester.
Khalid	Good semester. I liked this class.
Arun	The classes were great. No complaints.
Sarah	The class was good. I did not expect my first year in uni to be so interesting.
Dima	Overall it was a really pleasant experience.
Yusef	It was good. It made me look forward to semester 2.
Mona	I learned a lot. We had fun.
Rana	It was a steep learning curve but I was really interested in the course.
Ross	It was great. We had a great teacher. We had fun.
Researcher	Guys, I want to thank you for your candid answers and for participating in this focus group and the research project. Hopefully your input will help me to change the way we deliver this programme. Thanks again guys.
Many students	You're welcome miss, thanks miss, bye miss.

Appendix 14

Samples of teachers notes taken during observation of classes

Date	Entry	Group being observed
October 16, 2014	Quite a buzz in the classroom. Lots of questions about what the final projects should be about.	**Foundation**
October 16, 2014	Students liked the student led seminar tasks they had to prepare for today's class and the group presented an excellent seminar on refugee children.	
October 23, 2014	This week we had the debates. The energy in the class was high. Most speakers have taken this task very seriously by doing a lot of research outside of class. A lot of preparation and practice is evident.	**Foundation**
October 27, 2014	Pleasing to see how different group members have contributed to the mini class presentation.	**1st year**
October 30, 2014	Today we discussed the progress of the project. The groups are all on track. There were some conflicts within two groups which were plaguing the relationships but students seemed mature enough to ignore their personal feelings Groups are working well on in class synthesis task. Good discussions on projects and constructive feedback from within the groups.	**Foundation**
November 3, 2014	Lots of discussions among the groups even though not on the group project. Some groups are not fully on task as yet. They are still trying to figure out what to do.	**Foundation**
November 3, 2014	Students no longer need to be told to sit in their groups. The groups seem to be bonding well. They are working well together on research and sharing the	**1st year**

	information Lots of questions from the groups today about the end of term summative test. Seems they all have the same concern. I encouraged them not to worry about the test but to get through their group tasks in preparation for the project.	
November 4	I feel I am more responsive to students in the project based format because I can give immediate feedback to students on their understanding of the material.	**1st year**
November 6, 2014	Groups are working well to complete their projects. They have clear group roles and are spending a lot of time outside of class on the course materials.	**Foundation**
November 8	The student led seminars ended this week and all the groups have presented various seminar topics with some brilliant activities. One group event recreated a refugee camp in the class with tents and rations. A lot of work was done to get the information across. With this kind of activity, the work load is more but the immediacy of the feedback is rewarding for the students and me.	**1st year**
November 8, 2014	The reading and research on education policy proved to be quite heavy for the students. They seem to be bogging down. Some of them have already started work on the time line to capture their research in a visual format and to get all group members to be understanding. Others don't seem to know when to stop reading and have so much research info to synthesize. There is a healthy discussion about this among group members	**1st year**

	as they observe that other groups have moved on.	
November 12, 2014	Students are learning in real time many skills from their text books such as negotiation, formal writing, conducting interviews and collating data. It is good to see how they read about these skills and relate their reading to the execution of the task. Circulating among the groups and reinforcing learning at various paces can be a challenge for me but the students are clearly learning a lot. Today students are designing interview schedules and planning their field data collection. It's interesting to see the various skills within the groups and how they negotiate the different tasks they have to complete. Some students are really anxious about this task. Others have confidence in their understanding and ability to complete the data collection.	**Foundation**
November 20, 2014	Students have done well today to divide the research task for their project. There were active negotiations going on among the students as they tried to find out the strengths in the group.	**Foundation**
November 27, 2014	The students have now created a good routine. Most groups have sorted out their time management issues and are working with much excitement about their project.	**Ist year**
December 9, 2014	The aspect of collaboration is also further emphasised by my repeated feedback to the groups which shows that collaboration continues to be a challenge. It seems that the effectiveness of	**Foundation**

	the groups as a tool in enhancing collaborative learning is undermined by off-topic discussions by some group members which are distracting to others.	