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Faculty Perceptions of Student Engagement at United Arab Emirates Universities

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This is to certify that the doctoral study by

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Walden University
2020

Abstract

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MA, Walden University, 2015

BS, University of Jordan, 1993

Dissertation Submitted in Partial Fulfillment

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Abstract

Many university students across the United Arab Emirates (UAE) face the problem of low achievement when compared to students graduating from other countries. This may be due to lower student engagement, which in turn may be a result of faculty's choice of teaching strategies. The purpose of this qualitative study was to understand how university faculty support student engagement and achievement. The conceptual framework for the study consisted of Chi and Wylie's interactive, constructive, active, and passive learning framework, which emphasizes the relationship between students' academic achievement and their engagement in the learning activity. The research questions addressed faculty members' choice of teaching strategies that enhance students' engagement in the teaching and learning process at 4-year universities in the UAE, and the ways faculty members perceive teaching strategies that can successfully support student engagement. A qualitative research was chosen for the study, and data were collected through an open-ended online questionnaire from 106 faculty members teaching at universities in the UAE. Resulting from thematic analysis, the findings suggested that faculty choose their teaching strategies based on their experience, self-development, students related factors, and course content. Promoting interactive dialoguing, construction of knowledge, active learning, and passive receiving of information in their classrooms were perceived as successful in enhancing student engagement. The findings potentially contribute to a better understanding of the teaching and learning process in higher education and suggest ways for deans and academic leaders to enhance student engagement, thus improving higher education institutions and leading to positive social change.

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Acknowledgments

I would like to thank my family for encouraging and supporting me throughout the years of my doctoral study. To my father and mother, who always inspired me to stay strong and achieve my ambition. To my husband, who was always there by my side in every milestone of my studies. To my sons, who always listened to my study plans and always said “You got this mom” “You can do it mom,” your words mean the world to me and gave me the push that I always needed. I love you both so much. I would like to thank my sisters and friends for being there for me and checking if I was doing ok throughout this journey.

I would also like to thank faculty members at UAE universities who shared their insights and experiences to support my study as well as the co-coder who helped me in the coding and data analysis process. I hope that the information provided about the perception of faculty members of student engagement will be useful to others and can contribute to achieving positive change and help in supporting university students in the UAE.

I would like to thank the members of my doctoral committee for their support. A special thank you to my chair Dr. Nicolae Nistor for providing me with guidance and encouragement throughout this journey. I truly appreciate your support to help me complete my doctoral study. It was a great pleasure learning from you. Thank you so much.

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Chapter 1: Introduction to the Study

The problem of low achievement of university students in the United Arab Emirates (UAE) can be related to the low engagement of students in the learning process. The purpose of this study was to understand how university faculty support student achievement. Faculty members might lack the andragogical skills to positively affect the quality of their instruction and the level of student satisfaction. Adequate preparation, using technologies, and instructors' attributes can all enhance students' motivation and improve retention (Sogunro, 2017).

This chapter includes sections related to the importance of student engagement and active learning strategies. The problem statement, purpose of the study, and the research questions are presented, as well as the interactive, constructive, active, and passive (ICAP) framework as a conceptual framework of the study. The nature of the study being a qualitative study and ways that data were collected and analyzed are also presented in this chapter. The chapter includes definitions of key terms related to the study. Assumptions, scope, and delimitations related to participants' location are highlighted in addition to the significance and limitations of the study.

Background

The issue of low achievement of university students in the UAE has been a major concern of students, parents, and government (Hatherley-Greene, 2014). However, the educators' role is to improve teaching and enhance students' engagement. Independent active learning that is based on the andragogical approach, focuses on encouraging students' engagement and gives students the opportunity to share their experience may

lead to improved student learning outcomes. In order to enhance student engagement, educators need to know what adults want to learn so that they can use this knowledge in their daily personal and professional life and not just for building academic skills (Giannoukos, Hioctour, Stergiou, & Kallianta, 2016).

A comparison between pedagogical and andragogical teaching methods revealed that the andragogical teaching method is more effective than the pedagogical teaching method and might affect the students' dependency on teachers, unlike the andragogical method that enhances creativity and improves students' achievement (Rismiyanto et al., 2018). Student dependency on teachers leads to a lack of creativity, changing the way that teaching and learning are achieved through putting the students at the center of the learning process using the blank page method, an approach that enhances learning (Ntombela, 2015).

Educators adopt new teaching strategies to change the traditional lecture modes and to enhance student engagement. This was evident in the literature related to strategies that faculty are using to promote active learning in the context of higher education in the UAE. According to Al Kaabi (2016), education in the UAE depends on face-to-face, teacher centered, and traditional education, which consequently affects students' performance. Al Kaabi highlighted a study that compared the motivation of students who were taught in a traditional way and others who were more engaged in their learning activities and showed that students who were taught in a traditional way were less motivated than those who were actively engaged in their learning.

This study is needed to develop a deeper professional understanding of student engagement in higher education. By highlighting the issue of student engagement and effective strategies, my study revealed what approaches higher education faculty use to promote student engagement and prepare students of the UAE to face the challenges of the 21st Century. Faculty using active learning are helping students develop crucial skills like critical thinking, collaboration, creativity, and communication with the proper use of technology that can enhance their active learning (Kivunja, 2015).

Problem Statement

The problem addressed in this study is the low achievement of university students in the UAE. University graduates in the Gulf region lag behind students who graduate from East Asia and other developed countries. According to Mahrous and Ahmed (2009), Hochberg's multiple analysis revealed that students in the Middle East scored lower than students in the United Kingdom in reading and academic papers. As for diaries and field trips, middle east countries scored lower than the United States. Middle Eastern countries gave more importance to homework than those in the United Kingdom and the United States. In the UAE, English is the language used for instruction in higher education. However, students in the Gulf are taught English using memorization without a full and applicable understanding of the content (Al Murshidi, 2014).

Students with limited English writing skills are encouraged to focus on the language rather than on the topic of the assignment (Mahrous & Ahmed, 2009). Only 10% of first-year Emirati college students meet minimum English requirements, and because of the skill gap, the students are unable to start their chosen program of study

without extra courses (Hatherley-Greene, 2014). Some UAE students also indicated that they faced difficulty using English grammar because school and university teachers taught them grammar using traditional methods of learning of memorizing without fully understanding the functions of English grammar (Al Murshidi, 2014). Some UAE students who transferred to the United States to complete their studies have struggled due to the level of university education they received in advance (Al Murshidi, 2014). The level does not match the international level of education and could cause restrictions to the continuation of their overseas academic studies. Some students have faced challenges in their academic transition to universities in the United States due to the rigors applied in that region (Godwin, 2006).

A possible cause of this problem lies in the low engagement of students in the teaching and learning process. Lecturing in UAE higher education institutions remains the main mode of teaching, and students are expected to learn in a passive way and use their passive learning during exams. The results of a pre-course survey showed that 92% of students did not enjoy lectures, while 95.2% of students viewed working on projects as a way to help them learn more (Mohammed, 2017). Students in the Gulf region have also found it hard to adapt to their college environment as they came to realize that they needed to move away from their high school education that was centered on the teacher and started to work on their own to complete their assignments (Al Kaabi, 2016). Moreover, high school students in the UAE are sometimes allowed to copy their assignments from the Internet and get full grades for their plagiarized work (Al Kaabi,

2016). In college, this conduct is considered cheating, and students fail any assignment that is copied from another source.

According to Ahmed and Ahmed (2017), students who achieve a higher cumulative grade point average are more engaged in the teaching and learning process, while students with low cumulative grade point averages are less engaged. To improve academic achievement, it is important that university faculty employ teaching strategies that enhance student engagement. However, this does not often seem to be the case (Plush & Kehrwald, 2014). Thus, new college students display a mainly passive learning behavior, and they are unprepared for active learning and more demanding learning goals (Mahrous & Ahmed, 2009). Passive-receptive learning aimed at memorization rather than the application of concepts can lead to a lack of problem-solving skills among students (Mahrous & Ahmed, 2009). At the opposite end, active learning focuses on students' learning motivation, engagement, and self-reliance, such as project-based learning, for instance, and enhances student engagement and critical thinking skills (Ntombela, 2015).

Purpose of the Study

The purpose of this study was to understand how university faculty support student achievement through teaching strategies. According to Mohammed (2017), at universities in the UAE, learning is regarded as a process that encourages experiential and active learning in classrooms, which is in line with the UAE government's belief that education will lead to the development of the nation. However, university faculty seem to choose teaching strategies that lead to insufficient student engagement in the teaching and learning process and low achievement (Mohammed, 2017).

Research Questions

Given the unclear practices of faculty members at universities in the UAE, I examined the following research questions:

RQ1: How do faculty members choose teaching strategies that enhance student engagement in the teaching and learning process at 4-year universities in the UAE?

RQ2: What do faculty members perceive to be teaching strategies that can successfully support student engagement?

Conceptual Framework

The conceptual framework for this study was based on Chi and Wylie's (2014) ICAP framework. This framework emphasizes the relationship between students' engagement in the learning activity and their learning performance. The ICAP framework categorizes students' engagement into four styles: interactive, constructive, active, and passive. Subsequent research and ICAP applications might offer guidance on how to improve student achievement. Subsequent researchers have explored the effects of implementing active learning strategies in classrooms on students' satisfaction with their learning experiences (Hyun, Ediger, & Lee, 2017).

Applications of the ICAP framework in science, technology, engineering, and mathematics (STEM) classrooms have shown that the student learning performance greatly improves in interactive classrooms. Hyun et al. (2017) stressed the importance of this learning improvement and the role of faculty to develop activities that can enhance and develop students' engagement and learning. The delivery technique in postsecondary

education relies on traditional ways of teaching, like lecturing, and few researchers have compared other kinds of active learning to traditional learning. The study was focused on ways that STEM courses should be redesigned to achieve active learning.

Active activities require motor movements, and constructive activities require students to generate their own ideas. Interactive activities require students to exchange ideas to come up with a new understanding. The STEM classes examined in this study were a good option to measure the education outcome when using the ICAP framework, especially because these courses are widely taught in traditional ways. Interactive activities promote better learning than constructive activities (Hyun et al., 2017). The learning performance of students involved in interactive activities improved significantly, which provides a suggestion that the interactive mode of activity is an excellent option for STEM classrooms (Hyun et al., 2017). However, instructors have noted that interactive activities require increased effort, especially regarding classroom management (Hyun et al., 2017). Wiggins, Eddy, Grunspan, and Crowe (2017) suggested more research to investigate moving from active to constructive or constructive to interactive to understand the possible benefits from using these methods to better serve students.

ICAP has also been implemented in schools and districts in the United States. For example, the Colorado Department of Education started a process to help graduates meet graduation requirements (Moeder-Chandler, 2017). The ICAP implementation was divided to two categories: goals for the state's graduation requirements and creating and implementing a digital ICAP program to monitor students' completion to ensure requirements for graduation. The Colorado Department of Education designed graduation

requirements as well as the Naviance design, which allows the flexibility of dates that can be set by schools or districts (Moeder-Chandler, 2017). Students were informed about the graduation requirements, and they received training on how to access the new ICAP model. The ICAP activity completion was guided by school counselors. The ICAP activities that students chose can help in assessing the quality of the program. Although faculty were familiar with Naviance, they required assistance from the technology staff (Moeder-Chandler, 2017). Moeder-Chandler (2017) recommended further measurements of ICAP to be completed by students for 2021.

Nature of the Study

I employed a qualitative study methodology in this study. The research sites that were purposefully selected for this study were 4-year universities in the UAE. The participants of this study were university faculty from different universities in the UAE. This design was chosen to help explore the phenomenon of low achievement of students at UAE universities, exploring strategies believed to be related to this phenomenon in real-life context. In this qualitative study, I described a problem in a real-life context. The research questions, sampling, data collection, and analysis were carefully chosen to ensure trustworthiness and validity of the study (see Baxter & Jack, 2008).

The data collection method and analysis helped to save time as the survey was completed and sent by e-mail, which helped in avoiding social discomfort during interviews. I analyzed the data using thematic analysis to identify emerging categories. The results of the analysis consisted of a concept network showing which concepts and

combinations of concepts played a central in the essays and converged with Chi and Wylie's (2014) framework.

Definitions

Active learning: The cognitive engagement, involvement, and evaluation of students in the learning material (Chi & Wylie, 2014).

Constructive learning: When students are able to come up with self-explanation and are capable of increasing their cognitive knowledge (Chi & Wylie, 2014).

ICAP framework: A definition of students' levels of cognitive engagement categorized in four modes: interactive, constructive, active, and passive (Chi & Wylie, 2014).

Interactive learning: When students are engaged in a pattern of dialogue whether individual or joint and they can benefit from their peers (Chi & Wylie, 2014).

Passive learning: When learners are isolated, and they are not required to integrate their learning to prior knowledge. They can remember the information, but only in a specific context (Chi & Wylie, 2014).

Assumptions

Assumptions in this study included reporting of knowledge and a description of participants' experience (see McEwan & Reed, 2017). There are assumptions related to the population of this study and it is not yet proven, which justifies conducting this research to provide evidence that supports these assumptions (Simon & Goes, 2013). The following assumptions are associated with active learning and ways that faculty choose

their strategies to promote active learning. The following assumptions are related to active learning:

1. Active learning prepares students for social change (Nikolaros, 2015).
2. Active learning is preferred by the majority of students (Ismail, Atek, Azmi, & Mohamad, 2015).
3. Active learning prepares students to meet the demands of the 21st Century (Barber & King, 2016).
4. Active learning helps students progress in their studies (Bugge & Wikan, 2016).

The following are assumptions associated with the active learning strategies that result in the improvement of students' low achievement in UAE universities:

1. Faculty do not always incorporate Knowles's model of andragogy in their classrooms to enhance self-concept, learners' experiences, readiness to learn, and motivation.
2. Faculty do not always incorporate different kinds of technologies to encourage students to be involved in blended learning, e-learning, and collaborative learning with others from different countries.
3. Faculty do not always promote creativity, communication, critical thinking, and collaboration in their classrooms.

The study had some boundaries related to the population as I assumed that participants would answer the questions honestly. I also assumed that the data collected

reflected the perception of faculty. Due to the nature of the study's limited transferability, it is difficult to generalize the findings of this study in other contexts.

Scope and Delimitations

The scope of the study is related to the boundaries of the study, how it operates, and what it covers. The scope is closely connected to the problem that is intended to be resolved by a study (Simon & Goes, 2013), which in this case was the low academic achievement of university students in the UAE. The scope of this study is related to the boundaries of the study. The study boundaries were established by various universities in the UAE. The rationale for these boundaries is that conducting the study at more than one university in the UAE was related to the fact that I invited participants from various universities in the UAE (government, semi government private, branch) to obtain as many responses and insights as possible.

The delimitation of the study includes narrowing the scope in relation to the participants, time, resources, and location. With regards to participants and location, the study was confined to data collected from university faculty in UAE universities. As for the time for data collection phase, it was conducted in a period of 2 months. Data analysis was concurrent with the collection of data, and the collection of data was completed in a set amount of time. Limited transferability of the results was expected for this study (see Baxter & Jack, 2008).

Limitations

Limitations of the study are related constraints that cannot be controlled and can influence the results of the study. These limitations can be related to potential weakness

in the design in the methodology (Simon & Goes, 2013). Because this was a qualitative study, a potential weakness is related to the researcher bias. Throughout this study, I was the only person responsible for data collection. As for the analysis of data, cross coding was conducted with the help of an external coder. Consequently, the possibility of research bias does exist. Strategies that were used to improve the validity and reliability of the study are described in Section 4 of the study. Another limitation of this study is related to the generalizability of findings. Open-ended surveys were completed by faculty members who agreed to participate. It was not possible to collect data from all faculty members in all chosen universities. The findings are related to a specific context and do not allow generalizability of the study findings beyond the specific context of the study.

Significance

The negative consequences of the examined problem are the difficulties that students from the Gulf region, including UAE, encounter when they transition from secondary to tertiary education. Many of these students achieve low grades on university entrance exams and need to be enrolled in additional courses, where they improve their skills in English, computing, math, and personal development. This may take up to 2 years to qualify them for the requirements of higher education (Burton & Warner, 2017; Hatherley-Greene, 2014). In addition, many students drop out of the university because they are unable to pass the courses that will prepare them to start the higher education program (Al Kaabi, 2016).

The findings of the study provide an opportunity to better understand the teaching and learning process in higher education, which has the potential to help faculty and

deans make decisions related to instructional design in higher education. This evidence can contribute to further knowledge needed for positive social change, increasing students' academic motivation and their advanced skills in their areas of interest (see Hilal, 2013).

Summary

This chapter included an introduction to the study, problem statement, purpose of the study, research question, conceptual framework, assumptions, and limitations, as well as the significance of the study. The purpose of this qualitative study was to understand how university faculty support student achievement in UAE universities. The main key concepts of this study were the importance of active learning and active learning strategies using technology in UAE universities. The ICAP framework was used as a conceptual framework of the study. The findings of the study potentially address a gap in scholarly studies related to strategies used by faculty in UAE universities.

Chapter 2 is a review of literature that focuses on active learning, active learning strategies, and active learning using technology. It also includes literature related to ways that technology is used in the Gulf region and the middle east as well as students' perceptions in relation to using these technologies for academic purposes. Literature related to challenges that faculty members face in the region is also included as well as literature reviewed of similar studies that address student engagement.

Chapter 2: Literature Review

The problem of the low achievement of university students in the UAE can be related to low student engagement in the learning process. The purpose of this study was to better understand how university faculty support student achievement. The literature reviewed establishing relevance to the problem is related to issues of active learning, active learning strategies, active learning using technology in the Middle East, and factors that might influence the promotion of active learning in UAE. Instructors might lack the andragogical skills that affect their quality of instruction and the level of student satisfaction. Adequate preparation, using technologies, and employing instructors' attributes can all enhance student motivation and improve retention (Sogunro, 2017). However, professors in the UAE often lack support from their management as well as lack the needed funds for professional development. Faculty are overwhelmed with their demanding jobs, which can affect the way they perform (Rile, Tan, Salazar, & Perez, 2015).

The first section of the literature review addresses active learning included in the literature, focusing on Knowles's (1980) model of andragogy. Active learning strategies that can promote learning are highlighted in the second section of the review. Using technology to enhance active learning is presented in the third section of the review. In the fourth section, I highlight the perspective of students in the Middle East in relation to using technology for academic purposes. The fifth section is related to factors that might influence the promotion of active learning, as teachers who are used to the traditional

way of teaching are facing challenges related to their digital competencies. In the last section of the review, I present literature that used the qualitative study methodology.

Literature Search Strategy

The literature reviewed in the following was published between 2015 and 2020. The search for peer-reviewed articles was conducted using search engines that can be accessed through Walden Library, such as ERIC and Google scholar. The keywords used for the search were *student achievement, active learning, passive learning, Knowles's model of andragogy, pedagogy, heutagogy, traditional teaching, technology and learning,* and *teaching strategies in the UAE.*

Conceptual Framework

In this study, I focused on the low achievement of university students in the UAE. I explored strategies used by faculty members at universities in the UAE as well as ways that these strategies can enhance students' engagement and academic achievement. The importance of student engagement and moving away from passive to active, constructive, interactive learning was the focus of Chi and Wylie's (2014) ICAP framework that focuses on activities that enhance student engagement. The engagement behavior of students is based on four levels of engagement: interactive, constructive, active, and passive. Classroom and laboratory studies were used to validate the hypothesis that students' learning increases when they use learning material that helps them shift from passive to active and from constructive to interactive. Chi and Wylie defined active learning as the cognitive engagement, involvement, and evaluation of students in the learning material. Constructive learning is when students are able to come up with self-

explanation and are capable of increasing their cognitive knowledge while interactive learning is when students are engaged in a pattern of dialogue, whether individual or joint, and they can benefit from their peers. Passive learning is when learners are isolated, and they are not required to integrate their learning to prior knowledge (Chi & Wylie, 2014).

Based on the processes of knowledge change, different levels of learning are achieved according to modes of engagement. The interactive mode of engagement achieves a higher level of learning, which decreases when using constructive to active to passive modes of engagement (Conole & Brown, 2018). The contribution of the ICAP framework and hypothesis in both research design and instructional design was also highlighted in Conole and Brown (2018) article. In their study, the hypothesis is that students go through various knowledge change processes when they move from passive to active and from constructive to interactive, resulting in an increase in learning. According to Conole and Brown, the hypothesis of ICAP is that when students get more engaged and move from passive to active and from constructive to interactive, their performance will improve. Conole and Brown also presented the substitution, augmentation, modification, and redefinition model. This model incorporates technology into learning activities and helps in designing and enhancing the learning experience (Conole & Brown, 2018). This study benefited from the ICAP framework that focuses on active learning as more beneficial than traditional learning and helped in highlighting the benefits of using teaching strategies that promote and enhance students' level of activities.

Active Learning

The importance of active learning that prepares students for social change as well as the ecological significance was contended by Nikolaros (2015). Effective methods of teaching for college students and ways that professors should prepare students to achieve social change requires curriculum and instructional designs to achieve ecological relevance. Nikolaros focused on the importance of improving college teaching as well as examining the methods of teaching and differentiating different levels of teaching that need different levels of preparation. Nikolaros presented a comparison between pedagogy and andragogy, focusing on the way that the andragogical approach leads to a proficient level of teaching, unlike the pedagogical approach that focuses on content and not on students to rely on teachers in their learning. Nikolaros focused on the importance of the experience and level of awareness of professors and their ability to enhance student learning to develop real-life relevance.

Professors should be able to help students shift from the pedagogical way of learning into an andragogical way, which enhances their conception and awareness. Nikolaros (2015) then focused on the Socratic questioning that can deepen learning, emphasizing clarification, assumptions, evidence, and reasoning perspectives and implications. According to Nikolaros, instructors need to provide physical, sociocultural organizational characteristics and association symbiosis for each lesson. An ecological-centered classroom enhances a dynamic social system and helps students build educational skills. Nikolaros presented substantive feedback that is important for academic growth; he suggested that the relationship between feedback and achievement

is underresearched. Based on the author's experience, feedback impacts students' efficacy as students value their work based on the feedback they receive from instructors. Nikolaos concluded that college instructors need to be conscious in their teaching practices to help students advance in their learning through intellectual and emotional maturity that will help them shift from the teacher-centered approach to be able to understand self-doubts and lack of certainty.

Al-Hadithy (2015) provided information about translation classrooms in the UAE and that students in translation classrooms were passive learners and not actively engaged in their learning. Al-Hadithy noted that modern translation classrooms should provide learners with a long-lasting learning experience that should enhance their ability to work independently and think for themselves as well as cooperate with a team. Al-Hadithy tried to answer questions related to transition competence. Al-Hadithy presented two kinds of translation: school translation that emerged from grammar translation and professional translation achieved by students with high proficiency. Al-Hadithy noted that in a UAE university, a third type of translation emerged, which is a combination of the two kinds that forms a challenge in terms of planning and preparation assessment. Students are usually passive in their learning rather than being engaged in the learning process. Al-Hadithy also noted that the assessments in the UAE are conducted using traditional ways, which leads to the failure in preparing students to meet the challenges in their future as professional translators. Teaching and learning can become more effective if teachers and learners think of ways to achieve sustainable translation skills that will enhance their future careers.

Knowing what kind of learning undergraduate and graduate students prefer was explored through a comparative analysis by Ahmed and Ahmed (2017), who examined whether undergraduate and graduate students preferred surface or deep learning as the approach affects the quality of their learning and their academic achievement and educational outcome. In Pakistan, where Ahmed and Ahmed's study was conducted, most learning is teacher-centered, and learners are expected to memorize the material. Students of all levels of education focus on memorization rather than application and deep understanding of content. Students need a set of skills to meet the demands of the 21st Century, yet if focusing on rote learning and memorization, students are not able to improve their critical thinking, problem-solving, and creativity skills. Ahmed and Ahmed used a quantitative research method to learn about the impact of learning strategies on academic achievement. The results of the study showed that both male and female students preferred deep learning strategies (Ahmed & Ahmed, 2017). For high achievers, deep learning is significant when compared to low achievers (Ahmed & Ahmed, 2017).

Ahmed and Ahmed (2017) concluded that deep learning strategies are useful, and the academic performance of students depends on these strategies. They also highlighted the role of teachers in using these strategies in their classrooms to improve students' academic achievement. Ahmed and Ahmed suggested training sessions for teachers to help them identify students' learning styles and using deep learning strategies to help learning develop their abilities. However, the authors called for further research to learn about whether learning approaches might vary or not.

Muneja (2015) presented a theoretical basis for adult learning facilitation. Muneja reviewed six journals related to the andragogical theory globalization and adult learning articles. The theory of andragogy was the focus of some of the articles that Muneja reviewed. The theory of Knowles was presented, and Muneja outlined the elements of adult education, including self-directed learning, cooperative learning activities, experiential learning, contextual learning, elective learning, individualized learning, and systematic learning. Muneja found that adults are more self-directed and have the experience that they can use in their study as well as in their orientation to learning. Muneja explained that Knowles presented the fifth assumption that adult learners are motivated by internal factors rather than external ones.

According to the Muneja (2015) Knowles was a practical person and used his experiences to theorize adult learning. Muneja also reviewed articles related to constructivism as a theocratical framework for adult learning as well as Piaget's theory of learning and stage theory for adult learning facilitation. The findings of reviewed studies indicated that in countries outside the western context like Tanzania, Africa, scholars are not familiar with the theories of adult learning facilitation as the key theorists were from the West, and their theories were based on their context. Therefore, there is a need for academics in Africa to consider the field of andragogy in order to apply it in their own context.

Students of all ages seek progress in their studies and choose the best program that fits their needs. Bugge and Wikan (2016) investigated the differences among students that attend different kinds of programs and ways that students' progress can be

affected by the way that the study is organized. Using a quantitative study and structured questionnaire, Bugge and Wikan examined which type of program suits which type of learners. The study included 511 students from a Norwegian University College 110 of these students are flexible students and 168 are full-time students. In the institutions, most of the study programs are on campus and taught in the traditional way through lectures and seminars and there are few online and web-based activities. The findings showed that students with different characteristics are engaged in flexible studies, while others found campus-based studies more appropriate for their needs. It also indicated that flexible studies meet the needs of diverse students.

Lifelong learning is considered a solution to give people the opportunity to continue to learn throughout their life. Flexible students' characteristics are older in age than campus students and more females are enrolled in flexible studies than males they also have different family situations than campus students (Bugge & Wikan, 2016). Flexible studies reach more social groups than campus programs. Some flexible students are employed which prevents them from attending university for their studies and they can adjust their working and their time for study. Higher education institutions are encouraged to offer programs that meet the needs of students other than traditional programs. Attending university is not only for young people and lifelong learning is a strategy that accommodates the need for formal education of adults (Bugge & Wikan, 2016). These study programs need to be flexible and designed without prejudice to traditional studies and their advantages (Bugge & Wikan, 2016). The limitation of the

study is that it is just one study from one university college and that might limit the possibility to generalize.

Active Learning Teaching Strategies

The importance of incorporating the key concepts of andragogy into learning activities based on Knowles's theory of andragogy was contented by Leigh, Whitted, and Hamilton (2015). Knowles's model is based on four assumptions: self-concept, adult learner experience, readiness to learn orientation, and motivation for learning. Leigh et al. also highlighted the andragogical design elements that need to be included in the curriculum of adult learners. These elements are preparation of the learner, providing a respectful environment, assessing the needs of learners, and negotiation of learning objectives.

Based on the feedback of students, the Decisional Matrix for Preceptorship Experiences (DMPE) was developed to be used as a tool to include the design elements from Knowles theory. The research highlights the use of DMPE to facilitate the learning experience of adult learners in a post licensure educational mobility program (RN-BSN; Leigh et al., 2015). Faculty members felt that learners were more involved in activities that were related to their personal or professional lives. The learner-centered approach builds on learners' current knowledge and prior experience. and the role of faculty is to guide students to enhance their learning. The basic principle of andragogy is to shift from teacher-centered approach to a learner-centered approach.

The results of the study showed that students exceeded the standards of success in their performance of learning outcomes before and after implementation of DMPE. The

DMPE was found to be a valuable tool to facilitate students' input of their learning, it was also found as effective in creating an approach for adult learners (Leigh et al., 2015). The limitations of the study were that the evaluation was limited to a small sample which did not allow continued factor analysis of the API instrument. One item was not applicable to adult learners, this item asked learners to rate their reliance on lecture, but lecture is not a common teaching strategy in nursing course.

Utilizing Patterns of Culturally Responsive Teaching Strategies (CRTS) are important to promote active learning. CRTS is a process that places student practices and cultural norms as central to the learning process. The cultural identity of students is of great importance and patterns of CRTS were examined through an assessment survey (Rhodes, 2017). Rhodes focused on teaching practices that help in providing a respectful and connecting environment with equal treatment to learners. Three elements were highlighted such as, establishing inclusion, developing attitude, enhancing meaning, and engendering competencies. These elements build on norms and practices that help in the development of cooperation, positive attitude, deep reflection, and evidence of proficiency.

Two studies were conducted the first study was to validate the CRTS of 17 culturally responsive teaching strategies. The results showed that some teachers use experience rather than progress report or rubrics, one third of the sample indicated that students did not have the opportunity to select their own activities (Rhodes, 2017). The second study was done throughout 2 years with 219 participants and described the culturally responsive teaching practices. The results of the two studies showed that

educators are not using some culturally responsive teaching strategies like asking for students to give their input about learning which grounds self-directed learning, nor did they address world issues. Rhodes (2017) stressed on the importance of CRTS as a tool for educators to include the students' cultural identities into teaching strategies. The author called for further research to better understand the culturally responsive teaching theory and its practice in classrooms.

Strategies that teachers use in class and the influence of teachers' perception towards their preferred teaching method on the classroom environment was contented by Koç and Köybasi (2016). Koç and Köybasi contented that classroom behavior, classroom environment, and instructions are influenced by teachers' pedagogy, their characteristics, behavior, and their perception of the preferred teaching methods. Koç and Köybasi aimed to better understand teachers' concept of teaching and their multicultural educational attitudes, the variables used were based on department and gender.

The relational screening model was used to identify the relation between the two variables and the participants were university students from various departments. Data were collected through a questionnaire and Teacher Multicultural Attitude Survey (TMAS). The results showed the teachers' attitudes towards multicultural education and constructive teaching were positive (Koc & Köybasi, 2016). The results also showed that the teaching-learning perspective of teachers differed by gender as female teachers adopted a constructive teaching strategy, while male teachers preferred the old fashion concept. In addition, the attitude of multicultural education differed according to department, it was found that teaching department had a more positive attitude than the

science and mathematics departments. Koç and Köybasi (2016) highlighted the importance of multicultural education and that teachers need to be qualified for this kind of education allowing further application of constructivism as well as including courses that are relevant to multicultural education. Koç and Köybasi recommended further studies to assess the teachers' teaching perception and the way it affects students' learning outcomes.

Active learning strategies that promote students' abilities to succeed in the global economy and the importance of ensuring andragogical effectiveness were highlighted in a study by Ntombela (2015). The study was conducted at a university college in Oman (a neighbor country to UAE and one of the Gulf countries). Ntombela introduced project-based learning called the *Project* offered for students during the first years of their study. The Project was a component that is presented as a soft skill. Project was a result of the reaction from the Industrial Interaction Group that criticized graduates for lacking soft skills.

Project-based learning uses the Blank Page Method (BPM), a six-step approach that stresses the mode of learning and teaching: Think, Research, Plan, Write, Edit, and Present. BPM is student driven and calls for changing the role of the teacher as a center of the learning process to a more student center role. As students take responsibility for learning technology tools, it enhanced learners' approach to education and established that students were prepared through PBL. When the learning process is centered around a project, students were encouraged to use available technology tools to complete a task, which is similar to what they will experience in real life working environment.

Ntombela (2015) reported limitations of Project that teachers saw it as a subject rather than an approach that will enhance students' soft skills and students interpreted strategies that Project presented as non-transferable to other subjects. Ntombela concluded that learning should be driven by learners as well as the importance to prepare students for the 21st century. Project was not an approach but a subject which jeopardizes the transferring of the skills acquired to other subjects it is also teacher controlled which can also jeopardize the andragogical approach.

Adult educators need a certain set of skills to promote active learning through andragogical approach. The skills that an adult educator should have were examined through an interview with an adult educator. Giannoukos et al. (2016) conducted a study at Second Chance School that welcomes adults who are over 18 and did not complete their high school teaching. The adult educator's approach in this school is based on Knowles's model of andragogy. Based on this model the educator needs to encourage students, avoid traditional ways of teaching, and give students the chance to be more engaged and share their problems and experience.

Giannoukos et al. (2016) presented the adult educators' working analysis that includes purpose and activities of literacy teaching, working framework, experience performance, requirement relationship with other members of the organization, and other skills. The characteristic of the adult learner that include flexibility of teaching model and material according to the group of learners in addition to the educational techniques in adult education such as brainstorming, work in groups, simulation, and role play. Some instructors focus on goals rather than strategies to achieve these goals. However,

instructors need to show flexibility related to teaching material and the ability to increase or reduce the level of instruction according to different cognitive skills of learners.

The adult educator who was interviewed taught the Greek language at the School of Second Chance with students from different ethnicities and educational knowledge. Giannoukos et al. (2016) showed that required knowledge and skills in writing and reading the Greek language in relation to the labor market are necessary in the present time and will remain necessary in the coming 5 years when the situation in the labor market will be very difficult. The important role of an educator is the ability to link training to labor market by giving students the needed skills and not just required knowledge.

Another active learning strategy that enhances students' self-directed learning through a learning diagnosis test was highlighted by Khiat (2015) who validated a learning diagnosis test at SIM University in Singapore. The test is a learning support measure to help university students become more self-directed. The research was conducted at the SIM University with 14.000 adult learners enrolled. Khiat focused on strategies rather than theories of self-directed learners. No attempt was done to differentiate between self-directed and self-regulated learning.

Khiat (2015) aimed to help students know their strengths and weaknesses in self-directed learning. Although workshops and resources can assist students to improve self-directed learning, students might not know the strategies in self-directed learning that they lack. Data through a survey were collected from 1,695 students. Students who took the test were able to focus on improving self-directed skills that they found weak. The fit

of the model in understanding the learning needs of students was good and it would present the types of students' self-directed learning experience. Khiat concluded that the aim of the research to help students improve their achievement at the university. The tool is considered as a self-diagnosis to help students understand their needs. Yet this tool cannot be the only way for students to know their needs as instructors, faculty members, as well as counselors help students who are struggling with their studies.

The issue of students' dependency in learning and the way lecturers treat students as young learners using pedagogical methods in teaching was highlighted by Rismiyanto, Mursid, and Januarius (2018) This method affects students' achievement and leads to lack of creativity and independence. The quantitative study using pre-and post-test design involved 87 students in Speaking for Instructional Purposes classes (SIP). This course enhances the competencies of students prior to their joining of Microteaching and Teaching Internship courses. The aim of the study was to compare andragogical oriented teaching methods (AOTM) to pedagogical oriented teaching methods (POTM).

Rismiyanto et al. (2018) showed that AOTM was more effective when implemented to improve student achievement. The AOTM method includes small group discussion, effective use of clickers, one-minute papers, interactive lecture demonstration, case studies, concept mapping, tutorial worksheets, problem-based learning, just in time teaching, analytical challenge before a lecture, computer simulation and games, group tests, problem sets in groups, random calling, and writing with peer review. Rismiyanto et al. also highlighted some pedagogical methods like direct instructions, lecture by teacher, classwork and homework assignments, memorizing,

reviewing, and textbooks assignment. When Rismiyanto et al. compared AOTM to POTM as teaching methods the AOTM was more effective for adult learners as using this method did not only improve the achievement of learners, but it also improved their creativity and instructional skills.

Active learning promoted in an informal learning environment through the English Outdoor Program (EOP) was presented by Ismail et al. (2015). This program aims to reduce the anxiety of English language learners who tend to feel nervous when using English in a formal setting like the classroom. Throughout the program students were involved in fun language activities, these activities were carried out by facilitators who were also students from the same age group. Ismail et al. examined the role of peer facilitators who trained to run this program to help students learn English in an outdoor setting. Their role was to facilitate, provide support, and create a speaking environment that enhances speaking skills and help learners feel comfortable. The research was done through a mixed-method approach using questionnaires and interviews with participants and peers. The findings showed a positive role that peer facilitators play in the learning process.

Many researchers focused on the relation between learning and development of skills, practical knowledge, experiential learning in an accurate, free, and effective way. Yet, many ESL learners score low grades or fail in their English proficiency test. The EOP program integrated four language skills with the focus on oral skills that encourage learners to use the language in an outdoor, informal setting. EOP is activity-based learning supported by group activities to help learners be actively engaged in learning the

English language. Ismail et al. (2015) showed that participants enjoyed an outdoor learning environment, they felt comfortable and practical. Most participants felt that facilitators were helpful, friendly, and supportive. Ismail et al. concluded that the promotion of outdoor and simulated environment for language learners, as simulated learning, promotes active learning through fun, exciting, and personal experience within a planned syllabus. Ismail et al. provided a guide to encourage social and personal development opportunities for students involved in EOP.

Keeping students interested in their studies through active learning strategies that can help improve students' attention in class Munoz-Luna and Jurado-Navas (2016) explained that these activities provide various learning opportunities to increase classroom quality time opposite to traditional learning. The attention of students can decrease while doing monotonous activities. Munoz-Luna and Jurado-Navas presented routine breakers that can promote active learning and improve learners' attention. These activities can be used in any type of session and for all ages. Routine breakers can be short in duration (3-5 minutes) such as poster sessions-teaching or snowball technique. Other activities can last up to 15 minutes like (a) physical routine breakers, (b) thematic routine breakers, and (c) nonthematic routine breakers. Participants in the study rated sessions with routine breakers more positively than sessions held in a traditional way.

The role of the teacher is not only about teaching or transferring knowledge from teacher to student, but it also relies on the dynamics that the teacher creates in the classroom that makes the difference between good and bad teaching. Concentration and the level of attention of students decrease after few minutes and the learner is restricted to

a passive role, while teachers control the class and that leads to lack of focus after 15 minutes in class. Munoz-Luna and Jurado-Navas (2016) conducted a study at a Spanish university where they were teaching for 8 years. Data were collected through observation with 40 undergraduate participants. The results showed that routine breakers improved student-teacher communication in class. Students were more capable of expressing themselves and were less shy. This led to an increase in their motivation and improvement of their academic achievement. It helped them prepare for their future careers and better understand theories when learned through practice. These strategies also motivated teachers to move away from traditional forms of teaching in classrooms.

In addition to keeping students focused on their studies, it is also important to help them overcome barriers, especially in a diverse classroom. Gawronski, Kuk, and Lombardi (2016) examined inclusive teaching practices based on Universal Design. These strategies were designed to reduce barriers among diverse students and to better understand the perception of students and faculty of UD. Using the principles of UD increases student participation and success, it also supports faculty to be able to cater for different learning styles of diverse learners. Two online surveys were conducted with 179 participants, and the results showed that students reported that faculty used inclusive instruction strategies after their training, which indicates that inclusive instruction training had a significant effect on students' perception (Gawronski et al., 2016). The results also showed that the demographics of faculty like age and ethnicity play a minor role in predicting their action in classrooms regarding the use of inclusive instructions. Faculty also reported that they rarely use these strategies although they feel that they are

important. Both students and faculty reported that these strategies were not used in class. The findings suggest further investigation to learn about barriers that faculty might face when they try to use these strategies in their classrooms.

Active teaching strategies do not only affect the concertation, engagement, and students' interest in class, methods that teachers use can also affect students' motivating factors. Sogunro (2015) conducted a study with 203 university students using a mixed-method research design. A combination of qualitative and quantitative methods was used for collecting data to gain insight of adult learners' motivation factors. Sogunro presented eight motivational factors for adult learners in higher education these are: (a) quality of instruction, (b) quality of curriculum, (c) relevance, (d) interactive classrooms, (e) effective management, (f) timely feedback, and (g) conductive learning. Motivation is a key factor for students' success, the more students are motivated the more learning they achieve. The result showed that quality of instruction, quality of curriculum, relevance, and interactive classroom were among the top five motivation factors from the students' perspective, each factor has a unique way in motivating students.

The implications of the study are to determine motivational factors and the impact of diverse backgrounds in motivating learners. The cultural variety of students can affect the intrinsic and extrinsic motivation of students, which is an area suggested for further research (Sogunro, 2015). Further studies are suggested to examine the impact of each motivational factor on student motivation. The results of the study suggested that the eight motivational factors are important to improve students' motivation to learn.

Keeping students motivated in higher education was contended by Sogunro (2017). Data collected for the study was from five focus groups with 119 participants more than one-third of the participants said that the quality of instruction was the reason for their motivation. Motivating factors rated by students were quality of instructions, quality of curriculum, interactive environment, relevance, feedback, and effective management practice. The quality of instructions was the most valued compared to other motivating factors.

According to Sogunro (2017), the quality of instruction is a mixture of utilizing the andragogical competencies, adequate preparation, and attributes of the instructor. Sogunro suggested implications for practice that focus on the composite of quality instruction which is a result of integrated factors that include andragogical competency, sufficient preparation, effective organization skills, content of knowledge, currency, technological competencies, resourceful instructors, and their attributes. However, most university instructors still lack these teaching skills. Instructors lack the andragogical skills that led to students' dissatisfaction with the quality of instructions.

Sogunro (2017) recommended that higher education faculty should be familiar with skills of andragogy as the higher education institutions are highly dependent on adult learners and instructors. Skills like adequate preparation, content, and currency of knowledge, technological competencies, resourcefulness, and instructors' attributes can motivate students to learn and improve retention of students in colleges and universities. The study was limited to master's students and the findings might not be generalized to graduate students in other universities. Sogunro recommended areas for future research to

conduct a comparative analysis of the instruction quality among higher education instructors that have a background in andragogy and those who do not have an andragogical background.

Active learning of students can also be enhanced through their participation in college radio as an educational tool. College radio is a way to enhance students' active participation, contribution to their learning, community service, and engagement (Ibrahim & Mishra, 2016) Ibrahim and Mishra (2016) conducted a study among students at Sur College of Applied Sciences. With 150 participants completing a survey question, more than half of the students agreed that a radio can be a source of information, entertainment, and community engagement. Ibrahim and Mishra also indicated that college radio can help in their education and overall development. Students were also keen to participate in programming activities and production. The findings of the study are in line with the theoretical foundation of the study which reinforces the role of college radio as a way of learning that complements classroom teaching.

Active learning that is based on cooperation between students from different universities was explored by Ritchie (2018). The learning initiative described in the study was an open education experience between US and UK universities. Students from the UK traveled to the US to teach and perform music in both formal and informal settings. The students were not limited to constrains in a traditional classroom and they were motivated by the connection with others, they were challenged to become innovative and they were able to develop skills like planning, setting goals, blogging skills to raise funds

for the trip, and meeting financial deadlines. Throughout the project students are engaged in heutagogy, achieving high levels of personal, and colearning (Ritchie, 2018).

Students are assessed through a reflective journal that helps them achieve deeper learning. When students have control over their learning using technology that enables them to connect with the global community, students and teachers became supporting peers (Ritchie, 2018). Students learned through experience and student-directed activities, which helps them become more active learners. The aspects of organizing the trip gave students the responsibility that enhanced their learning when compared to being in a classroom and using textbooks.

This project was integrated into the curriculum after the success of two trips and the MUS681module was approved in a 4-year BMus degree. The module helps students to develop practical skills and application in teaching and performing context (Ritchie, 2018). They experience open learning with no textbooks, and they can connect outside the classroom to deliver their own content. Students are encouraged to reflect, analyze, document, self-regulate, and develop cognitive skills that result in deep comprehension, knowledge, and experience. They share their experience through conferences on engagement creating networks and collaboration to transfer their skills to their academic and teaching environment sharing experiences that they might choose as future careers. This approach requires more effort from the teachers and commitment from students, yet it is worth the effort as it helps students get engaged with people and cultures beyond traditional classrooms that helps students live in a connected world.

Utilizing active learning strategies is not only to help struggling students, but it also contributes in the adjustment of high achievers (Clark, Schwitzer, Paredes, & Grothaus, 2018). Clark et al. (2018) focused on the adjustment factors of high achieving learners in their first year of honors college. Students in this college need to take several honors classes which are similar to regular classes, yet they are taught by selected faculty. Clark et al. used a nonexperimental ex post facto design with data archives between 2007 and 2010 of one institution. For comparison reasons, 200 participants were selected randomly from outside the honors college. The academic success during the first semester was predicted and measured against eight adjustment factors these factors are college involvement, influences on college choice, student role commitment, personal and academic concern, self-confidence, institutional commitment, athletic orientation, and socialization.

Clark recommended that students get support from instructors, peer community affiliation, and active learning. Honors students were distinguished for two factors related to self-confidence and college choice. It was found that honors students set unrealistic high expectations for their experience in college and they overestimate their abilities. As for college choice, students tend to be more realistic because they usually follow the advice of parents and school counselors in their choice of university. Advisors can help faculty create such classrooms as well as faculty mentoring. Advisors should also encourage students to be actively engaged in their learning through motivational interviewing and use of available information. Clark et al. suggested additional research to confirm the factors that distinguish honors students.

Meier (2016) studied the use of technology to enhance active learning and the importance of utilizing technology to promote active learning in higher education. Meier explored ways that knowledge acquisition, sharing, and organization can be enhanced through the correct employment of blended learning. The role of instructors to guide students to develop knowledge especially in universities and adult learning settings was also highlighted in the study. Meier focused on the transformation from leadership to teaching styles. Blended learning is an e-learning method, it can include web-based learning, computer-based training, e-tutor and e-mentoring, and learning management systems. Meier also related blended learning to three concepts of teaching and learning such as behaviorism, cognitivism, and constructivism.

The constructive approach helps in developing the learners' ability to develop the flexibility to acquire different kinds of knowledge. Meier (2016) asserted that blended learning can be applied by transforming situational leadership theory into a teaching-learning model for blended learning that requires changing leadership styles into teaching styles. The lecturer uses different teaching styles based on the maturity level of the learner. Meier presented a model that allows instructors to choose learning goals and teaching methods within a blended learning framework based on the students' needs.

Using technology for academic purposes helps students develop skills that they need to meet the demands of the 21st century. Kivunja (2015) conducted a study at a university in Australia that investigates the usage of Google Circles Learning Communities (GCLC) among 2nd year Bachelor of Education Students and ways that this technology can facilitate the development of the curriculum as well as teaching and

learning. Kivunja showed that although students are anxious about using social media for academic purposes, yet they are willing to try it out. Using technology can help students develop the Super 4Cs skills required for the 21st century these skills are critical thinking, collaboration, creativity, and communication. Data were collected during the first 5 weeks of the second trimester.

Kivunja (2015) presented reasons why social media can help in facilitating learning and teaching of the 4Cs because it is not expensive, and students can have easy access without extra financial cost. This technology can be easily adjusted to allow students to develop their own content whether share ideas, images, or data. Students can also publish and exchange their produced work using the internet. Social media can be easily accessed using smartphones, tablets, and iPads. Kivunja presented a theoretical framework to the study that included social constructivist theory, participatory theory, critical thinking theory, cognitive processing theory, multiple intelligence theory, and connectivist learning theory to support the use of social media as a teaching approach.

The methodology used in the study is a case study approach to better understand the efficacy of social media and the ways that students can benefit from this pedagogy. One hundred and six participants used their smartphones to participate in the study. Qualitative analysis was conducted, and the results suggested that virtual classrooms helped students build collaboration and enhance communication as well as the role of social media that help students study together. Students found social media technology interesting which helped them get engaged in this technology. They were able to share information, create products, and develop good communication skills. The use of social

media gives students the ability to connect with others and increased their participation rates saying that this new pedagogy is cool and amazing. It is important to use well designed social media technologies in teaching and learning and use its benefits.

Active learning using technology through e-learning and social media is a motivational factor among postgraduate students. Rosli, Saleh, Aris, Ahmad, Sejzi, and Shamsudin (2015) conducted a study about these factors in the faculty of education due to limited research on motivational factors of e-learning and social media. Rosli et al. used a cross-sectional survey research design and data were analyzed using inferential and descriptive statistics approach. Seventy participants were involved in the study and answered a questionnaire through Structural Equation Modeling (SEM) studying four factors: technology, exposure, social influence, and content.

The results showed that students were motivated by the factor of content and technology and a positive relation was found between using e-learning and social media that suggests that social media can be used as supporting material for e-learning. Rosli et al. (2015) suggested that educational organizations and policymakers need to consider the technology element that might improve the effectiveness of implementation and to use technology to connect e-learning with social media in education. The content of e-leaning needs to be suitable for users and the implementation of social media needs to support social influence to promote learning.

Students interact through social media. Nadelson et al. (2016) conducted a survey with 83 American college students about their preferred information-seeking forms. Nadelson et al. found that students get engaged and interact through social media, like

Facebook and Instagram, and considered the information they got from this interaction as facts. Students were also found to be spending time browsing the Internet, reading, or watching television without a specific purpose. As sources of information are rapidly increasing, Nadelson et al. were interested to know more about the ways that students engage in self-determined learning and what sources of information that students use the most as well as the trust they have in these sources.

Nadelson et al. (2016) presented the term, *heutagogy*. Also known as self-determined learning, heutagogy is related to the way that people access information to get answers to questions or solve problems as an alternative way of being engaged in courses that they might find irrelevant or not interesting. Nadelson et al. tried to understand what motivates people to choose different kinds of sources, the information they seek, and frequency of use. Nadelson et al. noticed that students are engaged in media with no purpose and they are using it for entertainment. Platforms like Facebook are considered as a good way to connect with others and get information about events. Although students are usually using the Internet without a goal, they would eventually come across information that would result in their learning.

Results of the study showed that the most accessed media were social media and internet news feeds. Students also considered the source of information to determine the accuracy of information, they also trusted professional journals, professionals in the field, and professional organizations as trusted and accurate sources to provide information (Nadelson et al., 2016). The results also showed that students have a preference to use electronic sources like Facebook and other Internet-based sources because of their control

of this media and various ways that information is presented. It also allows them to be producers and not only users of media. They are also more exposed to content and not limited to specific information. The study had some limitations that it was done in one institution and the data collection did not allow follow-up questions and the dynamic nature of media. Nadelson et al. (2016) recommended further research related to self-determined learning, trust of information, and accessed sources.

The utilization of students' interest in social media to enhance their learning experience is important because they can determine their learning through heutagogy as contented by Nadelson et al. (2017). Social media gave students the opportunity to interact with others and use various information. The interaction through social media is an opportunity for heutagogy or self-determined learning as students decide what to view and the duration of viewing. Nadelson et al. could not find any reports that investigated the self-determination of using social media. A mixed-methods study of self-determination and challenges related to self-regulation and antisocial behavior. Data were collected from 71 undergraduate students who participated in a survey and the results showed that students have the capability to self-determine their engagement.

Results showed that daily social media average use was 2.5 hours. Students felt that it was moderately unacceptable to use social media in class or at mealtimes (Nadelson et al., 2017). A small number of students responded that they did not appreciate the lack of privacy and the data revealed that social media might have a negative effect on relationships and the readiness to engage in risky antisocial behavior related to the use of social media (Nadelson et al., 2017). The literature reviewed was

related to heutagogy and social media engagement, potential academic benefits of students' engagement in social media, potential detriments of social media to college students, and social media limiting opportunities. The results of the study also showed that students are engaged in social media to stay informed and connected and they are aware that their engagement with social media is taking a lot of their time and it can be considered as a distraction that can lead to possible complication such as being addicted to the internet and low academic achievement. The engagement of students in heutagogy may lead to knowledge that can exceed personal use and students need guidance to seek information that can improve their achievement as students. The study had some limitations related to the sample size, location, and nature of data collection; but Nadelson et al. (2017) considered how social media is affecting students and ways that students can practice heutagogy that might go beyond personal entertainment to acquiring new knowledge.

Students can access social media using many devices; smartphones are their favorite device. Migdalski (2017) studied smartphones when as a part of the curriculum to enhance academic success. Educators need to utilize this technology to enhance lesson planning, application, and assessment. They need to design teaching activities that align with the students' needs utilizing technology. Students are considered digital natives who can access unlimited information through their smartphones.

Migdalski (2017) presented different perceptions of educators regarding using smartphones as some educators favored the use of smartphones while others considered it as a distraction. The literature that Migdalski used indicated that students' addition to

smartphones is becoming evident and future researchers need to investigate institutional policies that can promote the use of smartphones in a productive manner. Student multitasking is linked to the usage of smartphones without a negative impact on academic achievement. Migdalski stressed that regardless of the policy set for using smartphones in the educational setting students' usage of smartphones will continue as they are used to these devices and are in contact demand to access information as there are many options to gather information free of charges like Wikipedia, ask.com, Google, Safari, and Yahoo.

Students also can create information and share it with others enhancing collaboration to achieve the objective of their course. Collaboration through group projects, multimedia assignments, and lesson presentation through podcast application are other possibilities (Migdalski, 2017). Due to the low cost of using mobile technology, educational institutions are seeking ways to integrate these technologies to support learning. Migdalski (2017) showed that professors used an application called *learning pills* sent to students' smartphones. Learning pills are exercises that summarize the key concepts that were explained in class which helped in enhancing students' achievement. Migdalski presented the students' positive attitude that they have regarding the use of smartphones. Students prefer to use their smartphones at any time as they are able to communicate, research, gather data, and collaborate making the smartphone a student companion that helps them face the challenges of their college study. A well-planned technology application can enhance students' academic achievement and educators need

to provide meaningful learning through technology which will encourage them to stay engaged through effective lesson preparation.

Online learning combined with face-to-face interaction is becoming popular among learners. Blended learning, which is a combination of face-to-face and online learning, was presented by Eryilmaz (2015). Online learning includes collaboration and real-time extended period interactions. Courses were divided into modules that include learning content such as PowerPoint, text readings, lectures, and activities such as discussions, projects, simulations, and scenarios. Eryilmaz presented a study that measures blended learning effectiveness. The study included 110 students at Atilim university who expressed that they learned in a more effective way in their blended learning environment. Eryilmaz presented the advantages of blended learning like flexibility, online sources, and interaction with others.

Blended learning also provides educators with the opportunity to deal with students on one-to-one basis, students can always access the course material, and learning opportunities are available without any limitations. In a blended learning environment, students get the information before coming to class and they can reach many sources in advance. In a blended learning program, the educator can prepare course material and upload them before class, students during class can discuss, or revise some points with the educator. The educator can ask students to practice what they learned.

The educator is a guide and students are more engaged than in a face-to-face environment. The students have control of the material, they can stop the lesson anytime and repeatedly watch the lesson, they improve their interaction with the educator to

develop a better understanding of the topic (Eryilmaz, 2015). Blended learning provides students with active learning and quality which was found to enhance students' achievement than face-to-face learning, as learners cooperate in an active way through cognitive activities. The students have a positive opinion about blended learning in comparison to other learning environments as they found it useful learning, increasing their motivation, attention, and contentment.

A comparison between grade-based learning outcomes of online and face-to-face students was presented by Cavanaugh and Jacquemin (2015). The data set included 5000 courses taught by more than 100 faculty members throughout ten academic terms at a large 4-year university. Courses were taught by the same instructor in both online and face to face format during the same period. A statistical difference between course format and students' GPA was shown, as students with high GPA performed even better in an online course. In the past 10 years, the percentage of leaders in the academic field that rated online classes as equal or even better than face to face increased from 52% to 77%.

Cavanaugh and Jacquemin (2015) suggested that students in an online course receive a grade point average of 0.39 points which is 40% of their letter grade in an online course than face to face format. Results also showed that students in an online class tend to be older in age, females, nonminority, and have higher GPAs while students who are struggling get lower grades in an online course. Cavanaugh and Jacquemin suggested further studies that separate the type of courses according to the subject including courses that were taught in both formats. Online education is growing, and the

success and failure of a program are related to grades, completion rates as well as qualitative aspects of higher education.

Another online educational model that can enhance higher education active learning is called *fractal* (Enríquez, 2017). Fractal is an online educational model that follows the principle of fractal geometry that is when a rule is applied an infinite self-similar figure is obtained. The educational model is based on four elements to help higher education institutions to develop in areas such as teaching, knowledge, personal development, and access. The model is made of elements such as student-centered teaching, concept-based design of curriculum, openness, and heutagogy (Enríquez, 2017). This pedagogy suits the current time, and this model should be adopted by universities to be in line with the current time. This method enhances student-centered teaching, self-directed work, flexibility of curriculum, and personal learning in formal and informal settings where teaching and learning can be optimized to achieve deep understanding (Enríquez, 2017).

The role of the teacher shifts from being a transmitter of information to the role of a guide. The student-centered model promotes active participation and enhances self-directed learning (Enríquez, 2017). Technology allows students to develop content, develop communication skills, teamwork, and creativity. Openness is related to the flexibility that is provided by digital technologies will help in the development of active and responsible students. Fractal model is a figure made of four elements (concept-based curriculum design, student-centered teaching, heutagogy, and openness).

The core elements of fractal are concept-based curriculum design. A concept domain is named according to the specific educational program creating a map that shows the concept of a course. The concept domain provides multiple dimension study of a concept and relation with other concepts (Enríquez, 2017). Some of the concepts are suggested by the teacher and others by students which enhance students centered approach and heutagogy. These two different concepts can help in establishing a learner teacher contract (Enríquez, 2017). Fractal can open new opportunities for institutions to find new ways to provide a significant academic program for students using potential offered by technology to connect students with external groups expanding the options of the university in formal and nonformal education and enhance participation that takes place outside the classroom.

Although students can use their smartphones for academic purposes, they seem to have the ability to use their devices in an OTEM behavior in the classroom (Qian & Li, 2017). Qian and Li (2017) conducted research in an attempt to better understand factors related to OTEM) The unlimited and easy access to electronic devices, like laptops and smartphones, urges students to be engaged in text messaging, Internet surfing, and e-mail checking. Students are constantly using their mobile devices for activities relevant and irrelevant to their studies. The research included two studies and four factors were found: lack of class relating, technology dependence, class easiness, and feeling overwhelmed.

Qian and Li (2017) presented external and internal forces related to OTEM. The external forces are related to the behavior of the teacher that could enhance the task-related learning activities and decrease student off-task behavior. Student engagement in

class decreases their OTEM behavior. Students who feel overloaded can engage in OTEM to relieve themselves from the load. As for the internal forces on OTEM, five internal gratifications were measured in the study: affection, escape, inclusion pleasure, and relaxation. When people are cognitively engaged in technology, they do not feel that time is passing and do not engage in on-task activities.

According to Qian and Li (2017), no studies were done to investigate causes of electronic multitasking and the study will fill a gap in the literature through a scale that measures electronic multitasking in classrooms. Teachers play a significant role in reducing OTEM by close interaction with students and make sure that lectures relate to students' life. Teachers also need to present topics that are challenging and vary their teaching ways to prevent students feeling overwhelmed and they need to get students involved and engaged in their classroom activities instead of teachers trying to monitor the off-task multitasking behavior they need to direct students towards on task activities that are integrated in class.

Technology can also be used to create international collaboration among students from different countries. A global project among students from Russia, China, and the United States was presented by Duranczyk and Pishcherskaia (2018). Duranczyk and Pishcherskaia examined about 45 students from universities in these countries who were engaged in conversation about their future as people, workers, or leaders. The project helps students develop student-centered international research designed to develop cultural competencies among students. The purpose of internationalization of curriculum in the US is to prepare students for the skills required for the 21st century. In Russia, this

program is intended to overcome national isolation and help students get an international perspective.

Virtual activities included in the program are of low cost and it helps connect students with others from other cultures to learn whether students have the same kind of knowledge and whether their experiences are related to this knowledge. The technology of communication like video chat, Skype conferences, and one-to-one contact can provide students with the opportunity to get engaged with international students (Duranczyk & Pishcherskaia, 2018). The design of the first video conference was based on the principles of multicultural instructional design these principles are student-centered, collaboration, communication, and online platforms meeting the standards. In this program, students were the center of activities and faculty were guides. The program provided students with the opportunity to interact with others to develop global understanding and make practical use of the theocratical knowledge they learn in class.

Active Learning Using Technology in The Middle East

The development in the e-learning field in the Middle East and the reactions of the political and educational systems related to e-learning were highlighted by Rashidi, Arani, and Kakia (2012). In the past 50 years, the Middle East underwent a social transformation with a new medium that raised tension in teachers, parents, and politicians. It also increased the misunderstanding between generations. Parents are anxious because they cannot control the online behavior of their children, teachers are also worried about their status as the only source of information, and politicians worry that young children can be influenced by ideas from opposite sides (Rashidi et al., 2012).

The younger generation is excited about learning through the Internet because of the low cost of using the Internet, various attractions, and positive views about the benefits of the internet.

Due to traditional societies in the Middle East, the old ways of providing information was not enough to provide people with learning opportunities. This issue has been solved by e-learning as the Middle East witnessed significant growth in internet usage between the years 2000 and 2007 (Rashidi et al., 2012). Teachers in the Middle East noticed that using the Internet is popular among young people. Rashidi et al. (2012) called for considering regional differences and avoiding exaggeration about the effect of the internet on young people in the Middle East as using the internet is related to family income and set of skills that young people have and this might not be available for all people.

The experience of Saudi students' use of digital devices among students from the Middle East was studied by Stephens (2016). Students consider mobile phones and technology as a gateway to cultures that they cannot access in their traditional culture. Stephens observed that digital technologies can help students enhance their self of sense. In Saudi Arabia, female students are more confined than males and they find their escape through digital means. University female students are required to sit in a separate area, behind smoked glass, and it is not possible to monitor what they are doing.

After reviewing students' journals three themes were extracted: There is an effort to minimize their addiction to digital technologies, the way that Saudi families are being reconstructed through digital means, and the effects of digital and physical travel can

cause to students. Stephens presented some entries of journals that students expressed their thoughts about digital technologies that female users like to watch short videos it can enhance group thinking, students spend 5-6 hours a day online, students expressed that they are becoming addicted to using digital devices and it does distract them from their studies, exercise, or reading books. Stephens shared what he learned from his students and that they advanced in their online mobilization process which will increase using technology in the Middle East more in the coming years.

Abdelouarit, Sbihi, and Aknin (2015) studied the use of online research by students in the UAE and explored new methods for a solution of open massive data to develop research in the UAE. Users are exposed to a large amount of heterogeneous data that might not improve learning in the academic community. This kind of data might not meet the requirements of students and can add to their confusion in relation to the reliability of sources.

Abdelouarit et al. (2015) proposed a tool that can make the consumption of data easier and enhance research and self-learning of students in the UAE. Using a support system for online retrieval of information has many positive aspects. Abdelouarit et al. presented a case study to explore new ways of learning in the UAE by proposing a new way of restricting and presentation of data. The case study was based on a scenario of using online search engines for a specific topic. A detailed analysis of results collected from the questionnaire will specify the requirements of future solutions with the development of a tool to process the massive amount of information provided by the big data into single data layers to provide an ergonomic presentation of learners' search

results. The method proposed is to capture and classify metadata according to search results which will support learners' online research in the UAE.

The ease and usefulness of information literacy skills (IL) of teacher training in the UAE were presented in the study by Fidalgo and Thormann (2017). Most teachers found the IL was useful and easy to learn. IL skills are becoming essential in a technology-based environment. The study was conducted after the completion of a course called Information Literacy that lasted for 15 weeks in an education college in UAE. The course provided students with information related to information and communication technology (ICT). IL skills, such as using the school portal, learning management systems, e-mails, digital ethics, security and privacy, online podcast, resources,and editing videos and audios. Data were collected through a survey that contained open and closed questions completed online by students. The results of the study showed that most students found IL useful and easy to learn (Fidalgo & Thormann, 2017). Fidalgo and Thormann are also aware that these technologies can enhance many aspects of their lives. Fidalgo and Thormann also found that classroom strategies and instruction were very useful, and they learned skills related to online behavior and ways to protect their data and devices.

Halaweh (2017) studied student behavior related to the use of smartphones in the classroom in a university in Dubai-UAE. Halaweh reflected on the number of smartphone users is increasing in the UAE. Smartphones are becoming a part of daily life, which includes learning and instruction. Halaweh investigated ways to use smartphones in the classrooms and ways to know how students are using phones to enhance their learning as

well as implications and restrictions of using smartphones. Halaweh's reflection was based on personal experience in a university where students used their smartphones in the classroom in an unplanned manner. The university set a clear policy that using mobile phones is not allowed in classrooms and most courses are taught through a laptop used by the instructor and a projector to present course material.

Halaweh (2017) shared specific cases related to using smartphones and his reflection of these cases as well as key issues related to his observation related to using smartphones in classrooms. Halaweh suggested ways that instructors can encourage using mobile phones in the classroom such as asking students to find information using their phones, using calculators for mathematical calculations, reading related to presentations, viewing PowerPoints from their phones to enhance discussion, questions posed by educator, and encouraging students to find answers in addition to the privacy of information security. Halaweh suggested regulations for using the smartphones in class that the instructor would ask students to keep phones silent unless they are instructed to use them. The instructor would remind students at the beginning of the class of the ethics related to using smartphones as well as increasing awareness related to using smartphones in class. Halaweh also highlighted technical issues related to facilitating the use of mobile phones in class such as the installation of chargeable devices and ensure compatibility of files. Halaweh recommended that university policies and teaching tools used by instructors need to integrate the use of smartphone technologies and try to regulate and not prevent the use of smartphones in classrooms.

Active Learning Challenges

Teachers face challenges to create a digital learning environment and meet the requirements of the 21st century. Barber and King (2016) explained that educators need different levels of competencies to what was used in traditional learning. Barber and King examined this issue through a qualitative method with two groups of 30 students answered a Likert-style questionnaire to express their level of comfort and engagement in an online community. Barber and King explored problem-based learning (PBL) and ways it can help instructors to form groups of students that are capable of taking responsibility for their learning, in addition to strategies that instructors can use to create communities of practice as well as teachers' perception of the benefits of high-quality PBL. PBL is student-centered collaborative learning that requires feedback from peers and instructors with a shift in student-teacher role.

Students can take a part in their learning, assessment process, and defining their own courses. This will prepare students to join the workforce and build competencies needed for the 21st Century economy, the 21C skills are fundamental, teamwork skills, and personal management skills (Barber & King, 2016). The results showed that students' responses were positive, yet students who were taught in a traditional environment found the PBL frustrating because they lack self-direction skills. Younger students sometimes needed to be told what to do while mature students who were working and trying to get their degree online found PBL very engaging and prepared them to work as a part of a team (Barber & King, 2016). As for instructors with little

experience in PBL, Barber and King (2016) found it to be challenging and they needed time to adapt.

Barber and King (2016) recommended that colleagues share experiences, assessment strategies, challenges, and discussions related to the implantation of PBL strategies. The challenges that a private university is facing in the UAE were examined O'Sullivan (2015). One of the challenges is meeting the needs of the educational system in the UAE as well as the requirements of national measures and international accreditation. Interviews were conducted with students, faculty, and administration to understand their perception of challenges to meet international standards in the local environment. Most of the participants had experience in other higher education institutes in the UAE and said that these challenges are common in all other institutes. One of the challenges is the *commercial dimension,* which is related to securing the needed finance to improve standards. As it is important for the institution to rely on accreditation as a method of ensuring quality. *Standardization* is another challenge in UAE universities as faculty tend to follow standards rather than focusing on effective learning as well as *sustainability* related to the high turnover of faculty who do not have job security as commented by accreditation bodies.

Governance and *local culture* are challenges that faculty face at UAE universities. O'Sullivan (2015) concluded that faculty in the Middle East have a heavy teaching load and do not have academic freedom. They rely on a 2- or 3-year contract that can affect the standard of higher education. The competition between sources of authority whether national or external puts the students and faculty as the least priorities.

The psychological well-being of professors in UAE universities was explored by Rile, Tan, Salazar, and Perez (2015). Rile et al. used a mixed-method approach in the study that was grounded on theories of positive psychology. The study included 169 professors in the UAE. The results showed that professors scored high on autonomy, purpose in life, and trust; yet, during focus group discussions, professors noted lack of support from management, lack of funding for purposes of professional development, research, and publications. Students showed concern about teachers that lack the drive to achieve the needed outcome related to students' engagement, especially students that can be unmotivated or difficult to deal with. Rile et al. showed that professors can self-regulate their behavior and they can adapt to people around them. Professors showed concern related to the overwhelming demands of the job that affect the way they manage their daily affairs. Rile et al. recommended that there is a need for scanning of school environments and system analysis to check factors that might affect the psychological well-being of professors, overall faculty development program, providing faculty with control on workload and self-management, conducting job audits to ensure that faculty's job is suitable, and can enable them to utilize their skills.

A study at a UAE public university with gender-segregated students was conducted by Schoepp and Danaher (2016). The system followed by the university focuses on the learning outcomes of students and the degree is awarded to recognize this achievement of learning outcomes rather than proof of successful completion of program or participation. Most countries in the Gulf region focus on the learning outcomes and students' employability and learning. Schoepp and Danaher presented the Ater Kranov

method that is considered a reliable method to test professional skills of engineering students which helped in the development of this project in order for the researcher to know if this method can be implemented in the UAE .27 native speakers of Arabic participated in the study the results of the study showed that the Ater Kranov method is effective and the results of using this method showed the strengths and weaknesses of students.

Thangeda, Baratiseng, and Mompati (2016) studied sustainable education. Thangeda et al. focused on the importance of education quality that needs to meet the standards of the market as well as the importance of preparing quality graduates that can be employable and suitable for future jobs. They focused on Botho University and whether it provides quality education from the perspective of students. Maintaining quality is usually related to a financial challenge, time, and devotion. The quality can vary for many reasons, one of which is the selection of expert lecturers who teach a system that encourages research. Quality education enhances students' creativity and the economy of nations. Data were collected through a questionnaire completed by students, and participants had the opportunity to answer honestly and freely when they know that their identity would not be revealed. Thangeda et al. showed that students rated that their studies prepare them for their future jobs as 83% agreed to that statement. Students are aware that the quality of their education affects their future employability, and they appreciate the effort done to provide them with quality education. The study also highlighted the role of the educator as a facilitator and the way that their qualifications

affected their performance, students consider the lecturers with added value to their performance.

Masri (2018) explored the effects of a lack of professional development and the challenges that adjunct faculty face in UAE due to lack of professional development. The absence of such professional development affects their quality of teaching and the institution where they work. Teachers' self-esteem and job satisfaction are affected. Despite the fact that educational institutions cannot function without adjunct faculty who do not get any benefits, the role they play is only in classrooms and they have flexibility especially when enrollment of students is low. They are deprived of professional development and participation in their workplace, which leads to feeling inferior. Adjunct faculty also feel vulnerable in their classrooms as they are anxious about revealing to students that they are adjuncts. The lack of training leads to the freedom of adjuncts in designing their material without guidance or support especially if they do not have prior experience in teaching which will consequently affect the quality of their teaching.

The Freirean pedagogy and various challenges against critical pedagogy in the Gulf region and the Middle East and North Africa (MENA) were studied by DeGenaro and Raddawi (2017). Freire suggested that students should receive information and have the ability to investigate the content which helps students play an active role in their learning. Various approaches used in English courses were described and interviews were conducted with department chairs and course directors at three universities in the UAE to try to better understand whether the Freirean teaching methods were implemented. In addition to the interview, an online survey was completed by course instructors to explore

the teaching strategies. Raddawi and Degenaro showed that there are restrictions that the instructors face regarding discussing certain topics that are considered a taboo or of a religious or cultural sensitivity in the region. Some instructors avoid students' reflection on their own experience or putting effort to include culture in the course unless it was a reading activity. Some instructors said that they are only visitors in the country, so they need to be careful about subjects they bring up to class. The Freire pedagogy is rarely used in the MENA and the gulf region because it is seen as a risky proposition.

Faculty Learning Community (FLC) as a model for professional development in higher education institutions was presented by Engin and Atkinson (2015). The goal of FLC is to help faculty learn together, develop a project, develop-problem solving, and professional activities. The goal of the FLC is to keep up with the technological change and utilize I pads as a teaching tool. Eight members of the FLC at an English medium university in the UAE participated in the qualitative study and data were collected using posts on blogs, notes of meetings, and a questionnaire. Engin and Atkinson showed that faculty face a crisis of confidence when it comes to using new technologies as they lack the knowledge and experience as well as lack of creativity, technical issues related to infrastructure, and other technical problems. Faculty usually start with enthusiasm about using new technology; but, due to the challenges they faced, they tended to prefer using strategies that they used before and they were confident that they work. The FLC provided an opportunity for faculty to develop professionally and discuss the use of I pads in their classrooms.

Lababidi (2016) investigated foreign language anxiety among students. These students studied English as a foreign language at a university in the UAE. The case study was divided into two phases, the first one explored language anxiety severity and aimed to establish a deeper understanding of possible sources of anxiety and strategies that can reduce the negative effects of anxiety. The research questions of the study were related to the perception of students on ways that classroom environment contributes to a feeling of anxiety, how it manifested, and strategies that students believe are effective to reduce the level of anxiety. Phase 1 of the study, the Foreign Language Classroom Anxiety Scale (FLCAS), showed the highest scores of anxieties through a collection of quantitative data on anxiety. Phase 2 was focused on classes with a high level of anxiety using focus groups and interviews.

According to Lababidi (2016), a pilot study was also conducted to test the validity and reliability of data collection tools. This revealed that the data collection instrument and the interviews had to be translated into Arabic. The participants were male Emirati students who used to attend institutions with traditional ways of teaching. The results were analyzed through descriptive and thematic analysis. The findings of the case study showed that students are motivated to learn and willing to take additional L2 classes. Students also showed worry related to their academic performance and the possibility of failing the class. Students also mentioned a number of fears related to confusion, consequences of failing, being unable to understand the teacher error correction, and the number of rules to be learned as well as peers' disrespect. Another finding was related to the effects of language anxiety related to self-confidence, academic effects, and

behavioral effects. Categories and subcategories were extracted related to causes, effects, the manifestation of language anxiety, and coping strategies.

A qualitative case study about educators' excessive talking was conducted by Chen (2018). Chen focused on students' experience in their undergraduate degree as well as recommendations for instructors to avoid and to encourage students to participate in discussions that will help them be successful in their life after they graduate. This study can be useful for instructors that use traditional and active learning classrooms. Students and instructors were interviewed three times, interviews were recorded and transcribed, and participants were able to review the transcripts. A thematic analysis was conducted and one of the themes was excessive talking. Students reflected on their experiences. Three cases showed that when excessive talking was reduced, students had a better opportunity for discussion, and to become more open-minded. Both students and instructors in this case study focused on the role of the instructor to ensure the success of the learning experience. It was important for the instructor to have certain traits like keeping discussions on track, management of small and large group discussion, validation of students' responses, ask for clarification, input and maintaining a routine of 2-3 discussions in every class, balance participation, instructors self-check about their teaching strategies and whether they are successful in getting all students engaged, whether space is utilized properly, being mindfully engaged with students, and the way they explain to ensure deep and significant learning.

A qualitative theoretically based case study was conducted by Rands and Gansemer-Topf (2017). Rands and Gansemer-Topf used a cross-sectional design to

explore the ways that classrooms can be used for effective student engagement. Classrooms were redesigned from the traditional way that had no use of technology and fixed seating to a more flexible design with added technology. Active Learning Classrooms (ALC) was designed to enhance active collaboration as well as individual, small group, and large group work. The participants of the study were four faculty and nine students who used the ALC. Data were collected through focus groups as well as private interviews. Three focus groups were formed for data collection purposes. Participants were asked to answer semi structured questions about their interaction, their perception of motivation, and their engagement. Data were analyzed using two cycles of coding and various strategies were used to ensure trustworthiness. The results of the study showed that the physical design of the classroom can help in creating a classroom community, which helps students face challenges and learn holistically. Rands and Gansemer-Topf also found that audiovisual tools help learners with their learning as well as the removal of the barrier between teacher and students facilitated student's faculty interaction.

Active listening skills were highlighted by Canpolat, Kuzu, Yildirim, and Canpolat (2015). Canpolat et al. conducted a qualitative research study to investigate the perception of eight academically successful university students. Canpolat et al. did not intervene with the evaluation of students. The findings were categorized under three subheadings: cognitive, affective, and psychomotor. Throughout the data collection process, students were observed in their learning environment. Then they were interviewed and asked eight questions related to listening strategies. The interviews were

recorded and transcribed. Data were analyzed using content analysis coded and categorized.

The researchers ensured validity by continuously staying in contact while coding to examine the coding and themes. Canpolat et al. (2015) showed that students try to make meaning of their listening and these students are not passive learners, but they have the ability to evaluate meaning. The process of listening includes the purpose of listening, making inferences, and creating meaning. The positive behavior of learners and their motivation helps in achieving active listening. Students who are academically successful used cognitive, affective, and psychomotor-based strategies to achieve active learning. The passive learning culture prevents students from developing these skills and leads to a lack of confidence in their own ideas or knowledge. The learning environment should be designed in a way that enhances active learning and tasks are designed based on student needs.

Summary and Conclusions

Active learning strategies have been the interest of many researchers in the higher education field. Researchers indicated the importance of active learning to enhance students' collaborative skills that would lead to deep significant learning. Knowles's model of andragogy has been researched and studies were conducted to test the effectiveness of implementing the model in higher education settings. Although Ntombela (2015) focused on the andragogical approach that promotes active learning, researchers have not provided evidence on strategies that faculty use to promote active learning.

Studies by many researchers in the literature review were conducted to measure the effectiveness of using technology like smartphones and social media; yet, the strategies that faculty use to help learners improve their achievement and utilize these technologies are not mentioned in the UAE context. There is a gap in the literature pertaining to strategies that faculty use to promote active learning in the context of higher education in the UAE. The strategies that faculty use in UAE higher education have not yet been explored.

The major themes found in the literature review were related to Knowles' model of andragogy: active learning strategies and utilizing technologies to promote active learning. The challenges that faculty working in the UAE were also highlighted by many researchers, and it was evident that the lack of professional development and dependence on traditional methods of assessments and planning were the main challenges faced by faculty members in the UAE. This study hopefully contributed to filling a gap in the literature in relation to the strategies that faculty use to promote active learning at 4-year universities in the UAE.

I provided information related to faculty members' practice that can be useful to stakeholders like university deans and academic administrators who supervise faculty. In this qualitative study, faculty members were invited to complete a survey that provided information on how university faculty choose their teaching strategies to enhance university students' engagement and improve their achievement. Data were analyzed through a qualitative data analysis software and the results included concepts that are central in the essays and converge with Chi and Wylie's (2014) framework.

Chapter 3: Research Method

Because the purpose of this study was to better understand how university faculty support student achievement, I selected a qualitative approach. The qualitative study provided information to better understand the phenomenon being investigated. Sections in this chapter include descriptions of the research approach and design that was used for this study, and the rationale for choosing a qualitative study. The setting, participants, and the role of the researcher are highlighted in this chapter. Further, the data collection plan, the instruments, the strategies to ensure validity and reliability, and the ethical issues are also addressed in this chapter.

Research Design and Rationale

The qualitative approach was considered appropriate for this study, as I sought to explore and describe how faculty members choose teaching strategies that enhance student engagement in the teaching and learning process at 4-year universities in the UAE, as well as what faculty members perceive to be teaching strategies that can successfully support student engagement. In this study, I employed a basic qualitative methodology to help explore low achievement of students at UAE universities and to explore strategies believed to be related to this phenomenon in a real life context. Understanding the perception of faculty members required the collection of data through an online questionnaire.

I chose a qualitative study design to help better understand the perception of participants in relation to supporting student achievement, in this study, faculty members at UAE universities. As Ravitch and Carl (2016) established, a qualitative study is

appropriate for providing explanations of how faculty members choose teaching strategies that enhance student engagement in the teaching and learning process at 4-year universities in the UAE, and what faculty members perceive to be teaching strategies that can successfully support student engagement. These questions are related to the strategies used by faculty members at universities in the UAE and the way that these strategies can enhance students' active learning and academic achievement.

Role of the Researcher

I work as an adjunct faculty member and have taught at a branch university since 2015 and at another local university since 2018. The courses that I teach at both universities are similar in their structure. These courses require enhancing students' academic skills, which include essay writing, presentations, and reading skills. I work closely with my colleagues from the English department, but due to the nature of my position being an adjunct, I do not spend much time dealing with faculty members from other departments.

The data collection method that I chose was an online survey that was sent to various participants from other universities in the UAE that did not include the two universities that I worked at. This ensured that I had no influence on participants whose identities remained anonymous, and I was able to minimize research bias. Information that participants provided remained private and was not linked to their identity; results will be shared with them in an accurate manner (see Babbie, 2013). I was able to avoid bias related issues using an online anonymous data collection tool that protected the participants and the universities.

It is advised that researchers frame their work in an exploratory manner to manage bias (Gerring, 2017). I avoided collecting data in my workplace, and scripted interviews were sent to faculty members in other universities to reduce the chance of bias. Ethical issues related to the study could be related to collecting data at the two universities where I currently teach as I might have faced a conflict of interest or power. To resolve these issues, I collected data from faculty members who worked in other universities and with whom I had no personal or professional relationship.

Methodology

Participant Selection

The participants selected for this study were faculty members teaching at 4-year universities in the UAE. Participants were selected randomly with an equal chance of participation (see Gerring, 2017). Random sampling was an appropriate approach to this qualitative study because the number of participants taking part in this study exceeded the usual number in other studies. The selection of participants was based on the inclusion criteria that helped in understanding the problem and developing knowledge in the context of the study. The position that faculty members hold in their working environment affects their concept of the world as well as their ways of knowing (Avci, 2016), which contributed to the examination of the research question. The number of participants reached 106; the rationale for this number was to get as many insights as possible from faculty members at various universities.

In order to invite the participants, I contacted research committees at various universities to present the study and discuss the procedure for contacting faculty

members. The survey was e-mailed to either the committee or directly to faculty members, depending on the agreement reached with the research committee. I used Social Networking Service (SNS) to reach out to faculty members teaching at various universities in different emirates in the UAE.

Instrumentation

The instrument that was used for data collection was an online open-ended questionnaire. The qualitative questionnaire was researcher-developed; it included open-ended questions that addressed the research questions. The first few questions were demographic questions that helped in identifying demographic information about the participants. Questions 4 and 5 were open-ended questions that participants could answer in a long answer format and provided data that helped me in extracting codes and categories to answer the research questions. The questions were worded in simple sentences addressing one piece of information per question; they were precise and suitable for the level of experience and knowledge of faculty members. The questionnaire is provided in the Appendix section. IRB Approval number is 03-19-20-0403890.

Procedures for Recruitment, Participation, and Data Collection

Participants were selected through purposeful random sampling in a way aimed to ensure ability, experience, and knowledge related to the problem so that participants could provide the information needed to answer the research questions. I contacted the research committee at the university that participated in the study and obtained the needed approval to invite participants to my study. I also used SNS to create a contact list

of faculty members teaching in UAE universities. Those who were added to my contact list were sent a link to the study embedded in an invitation letter.

Data Analysis Plan

The research questions of this study were addressed by thematic analysis using QDA Miner Lite 2.0.7, an analysis software for qualitative and mixed data (see Onwuegbuzie, Frels, & Hwang, 2016). The software allowed automatic sorting of codes, which helped in easily identifying codes before running the analysis. QDA Miner Lite provided the statistics related to the codes as displayed in the following section. Participant answers were saved in an Excel sheet that was subsequently converted to a text file. Spelling errors were eliminated, which was important to obtain accurate results and extract the most frequent words (see Cook, Chen, & Griffin, 2019). A second coder and myself selected codes that helped us develop themes and categories that were used for the analysis (see Onwuegbuzie et al., 2016). Once codes were extracted from the text, and after a consensus on coded data was reached and codes were similar, then data analysis was done using QDA Miner. Results were then displayed in a table or tree chart, showing frequencies and percentage of comments.

Trustworthiness

In qualitative research, it is important to consider different criteria to assess validity. The following standards were considered to achieve trustworthiness of this study. Credibility in qualitative research is closely related to the design, data, and instruments of the study. In order to establish credibility, it is important to closely link methods used in the study with the findings. It is important that the research design

addresses real life complexities within a group or setting as well as site selection, methods, level of engagement of the researcher, role of participants, and the ability to make sense of the data while challenges of bias and assumptions (Ravitch & Carl, 2016). In order to achieve credibility in my study, I designed the questionnaire in a way that would provide me with answers of high quality and rich information, focusing on the quality of data rather than the amount of data collected. Work experience of faculty teaching at UAE universities provided evidence that helped in answering the research question in this study.

Transferability in qualitative research can be applied or transferred to a larger context. Qualitative research aims to develop descriptive statements related to the setting and not to generate statements that can be generalized to other contexts. It is important to determine if the findings of a study can be applied in other contexts. To achieve transferability, it is important to provide a clear description of data and context to enable readers to compare to other contexts based on the information provided. It is important to describe contextual factors, data, participants, and relevance of the setting to be able to contextualize the findings of the study (Ravitch & Carl, 2016). To maintain transferability of this study, I provided specific details related to the methods and context of my study so that readers are able to compare the findings in similar contexts. Data collected from participants were clearly described in addition to a clear description of the universities where the study was conducted.

Dependability of a qualitative research study is related to its consistency and stability. It is related to ways that data are collected, and the data are aligned with the

argument. Data are considered dependable when they answer the research question using the appropriate methods; methods for achieving dependability are sequencing and triangulation, creating a rationale for the data collection that answers the research question. Well-designed research is the key to achieve dependability. It is important to consider the research methods that answer the research questions, as well as study design and various challenges related to data collection to ensure achieving dependability (Ravitch & Carl, 2016). To achieve dependability in my study, I analyzed and presented the findings in a detailed manner so that other researchers can repeat the research to achieve results that are similar to the findings of my study.

Research methods chosen for this study were designed to answer the research questions of this study and to achieve dependability. Confirmability is to be able to explore ways that bias is controlled, and interpretations are mapped. Although qualitative research is not about being objective, the findings should be confirmed. The researcher is usually the primary instrument in data collection; therefore, the researcher is constantly challenged not to influence the findings (Ravitch & Carl, 2016). To achieve confirmability, I ensured that the collected data enhanced the research findings to reduce the chance of bias and to add a new perspective to my study. The reason that I chose a questionnaire as a data collection method was to try to avoid bias as participants could freely answer open-ended questions without me having any influence on their answers.

Ethical Procedures

Because data were collected through an online questionnaire, it was important to consider issues related to participants' informed consent and privacy (Ravitch & Carl,

2016). Participants were invited to take a part in the study through an invitation letter and a consent form that included background information, purpose of the study, and procedures that will be in place if they decide to participate in the study. They were also made aware that the study would take between 15-20 minutes and they were able to withdraw, pause, and resume completion of the questionnaire at their convenience.

Sample questions were also provided as well as risks and benefits of the study. Participants were also informed that there would be no payment or reimbursement offered to them for their participation. The consent form also included privacy section that ensured participants that their identity will remain anonymous and data will be protected in a secure external file. It was important to maintain transparency by providing participants with all information related to various aspects of the study like research goals, expectations from their participation, and ensuring anonymity and confidentiality (Ravitch & Carl, 2016). To protect the identity of the participants, faculty members were informed that their identity will remain anonymous and the identity of the university that participated in the study will be masked.

Data storage and management are part of a researcher's ethical responsibility. It is important to maintain security, confidentiality, and anonymity to protect participants, especially that there is always a threat of a security breach. Data collected for the study were stored in a password-protected computer file. Backup files were stored on an external hard drive that was also password-protected. The data will be saved for at least 7 years after last use. In case I need to respond to any issues related to my study; I can always retain the information as needed.

Ethical considerations to be addressed when conducting the study are related to protecting the participants and ensuring them that the research is ethical and well designed and that the participation is voluntary after getting their prior consent to take part in the study. I ensured participants that their identity will remain anonymous and the information they provide will be kept confidential as well as explaining potential risks and benefit from the study. Participants were also informed that they can withdraw their approval to participate in the research at any time.

Summary

This chapter included the qualitative tradition used for this study as well as the rationale for selecting the qualitative study design as well as the methodology of the study. The role of the researcher was also highlighted as well as procedures of data collection and analysis. The setting and selection of participants were described in addition to strategies to ensure reliability and validity were explained. Ethical issues related to protection of the participants were presented and data security was also presented in this section.

Chapter 4: Results

The purpose of the study was to explore how university faculty support student achievement in UAE universities. The research questions of this study were related to the ways that faculty members choose their teaching strategies and effective teaching strategies as perceived by participants in the study to enhance student engagement. This chapter contains the description of the setting in which the data were collected, data collection and analysis, and the main point is the presentation of results. I conclude the section with a discussion of the trustworthiness of evidence and a summary of findings.

Setting

The UAE is a rich oil country that focuses on building an educated society to make progress in the context of the digital worldwide economy. The UAE invested in building higher education campuses in main cities as well as in rural areas (Al Kaabi, 2016). In the UAE, there are federal universities as well as 75 private higher education institutions. In the emirate of Dubai, there are 30 branch universities that represent universities from various countries (Ashour & Fatima, 2016). Table 1 indicates the number of faculty members from different types of universities that participated in this study. Participants from government, semi government, and branch universities also took part in this study.

Demographic information of participants is displayed in Tables 1 to 4 which illustrates age, teaching experience, position, and university type. Data collected provided different views from participants working at different types of universities with different positions, age groups, and years of experience, which helped in obtaining responses that

represent multiple views related to the perception of faculty members regarding the successful teaching strategies that they choose to enhance student engagement.

The majority of participants were between 30 and 49 years, while 20% were in their 50s and 60s and some were in their 20s (Table 1). Regarding gender, 45.5% of participants were females, and 53.8% were males. They were from various departments, including Business and Economics, Humanities and Social Sciences, Information Technology, Engineering, Education, Science, Medicine and Health, and Hospitality. Most participants held positions of associate professor, assistant professor, and consultant (see Table 2). One third of the participants had more than 20 years of experience, and almost half of the participants had between 6 and 15 years of experience (see Table 3) and worked in private universities while the other half worked at government or semi government universities (see Table 4).

Table 1

Age Distribution of the Participants

Age	Number
30-39	39
40-49	38
50-59	14
60+	8
25-29	4
Under 25	1

Table 2

Position Held by Faculty

Position	Number
Assistant professor	27
Instructor	27
Associated professor	26
Consultant	12
Professor	7
Doctoral student	2
Dean	1
Educational lecturer	1
Library manager	1
Teacher	1

Table 3

Years of Teaching Experience

Number of years	Number
6-10 years	26
More than 20 years	23
11-15 years	20
16-20 years	16
3-5 years	12
1-2 years	5
First year	3

Table 4

University Type

University type	Frequency
Private	52
Government	27
Semi government	22
Branch	4

Data Collection

At the time of this study and during the data collection period, the UAE, like the rest of the world, was fighting the Coronavirus pandemic. Universities and schools were closed, and faculty had to work from home and teach online. Only one of three

universities participated in the study. I collected the remaining responses through SNS. Despite these special circumstances, I managed to obtain the responses needed to meet the required sample size. I connected with faculty members teaching at UAE universities. Once they accepted my connection request, I sent them the invitation letter that included the link to my study. Eventually, I reached the number of $N = 106$ participants, slightly more than the initially required sample size of 100 participants.

For data collection, the duration of data collection was 2 months, and participants were requested to answer an online questionnaire one time only. I used Google forms to create the questionnaire, and the link to the form was included in the invitation letter. Responses were first recorded online using Google forms; then, I downloaded the responses as a spreadsheet on an external, password-protected drive to start with the coding process. This instrument allowed data to be collected from participants at different sites, no extra costs were required, and participants remained anonymous. The use of an online data collection tool helped in recording responses without any expenses, and participants were able to answer the questionnaire at their own convenience, with the ability to stop at any time and resume their answers later as they deemed appropriate.

Data Analysis

When I started coding the data, I was assisted by a second coder who went through the responses of the study. With the assistance of the second coder, I identified codes and categories individually; then I compared the codes to check for any discrepancies. I had some slight differences in the naming of codes, but I reached consensus on the best codes to be used for the analysis of data. Afterwards, I read the

responses of participants, used the agreed upon codes, and ran the analysis to identify code occurrences. I then compared our analysis results to identify any further discrepancies and reached final consensus of the results. Together with the second coder, I inductively analyzed 272 pieces of coded data in relation to the main themes of ways that faculty members choose their teaching strategies.

Results were analyzed using QDA Miner Lite, and the coding prior to the analysis was done by myself and a second coder; thus, there were no notable effects on validity and reliability (see Ravitch & Carl, 2016). The analysis resulted in the identification of codes relating to the choice of teaching strategies and successful strategies used by faculty. After codes were identified, categories were established to group codes that enabled me to create themes related to each question. Discussion of the codes, categories, and themes resulting from that data follows the presentation of tables.

The main codes that emerged from answers from faculty about the factors that influence their choice of teaching strategies were students' skills and previous experience, which were categorized as student-related factors. In addition to faculty experience and self-development, their own research, using literature, consultation with colleagues, and attending workshops and seminars were other codes. Many participants commented that their choice of teaching strategies was based on the course content and the knowledge gained from attending workshops. However, some faculty members felt that they made no choice in selecting strategies and felt that strategies were imposed on them. Some also preferred to use traditional teaching in their classrooms without considering any other strategies.

Faculty members also shared their perception of teaching strategies that they considered successful to engage students. The main categories that emerged were based on the ICAP framework. The categories were (a) interactive, (b) constructive, (c) active, and (d) passive. The interactive category included codes such as (a) collaboration, (b) discussion, (c) interaction with peers, (d) creating sense of social and academic inclusion, (e) interaction with peers, and (f) receiving feedback from faculty members. Constructive knowledge generating activities included (a) case studies, (b) presentations, (c) real life experience, (d) creating a sense of achievement, and (e) problem solving. Active learning included (a) learner-centered approach, (b) student inquiry, and (c) encouraging students to complete assignments and projects. Passive receiving of knowledge was promoted by motivating students by (a) marks or grades, (b) using traditional teaching, and (c) the use of technology by faculty members while students remain passive in the process. Some faculty members showed discrepancy in their responses as they extrinsically motivated their students by awarding marks or grades, and others preferred to use traditional teaching.

Results

RQ1: Faculty's Choice of Teaching Strategies

The first objective of this study was to better understand the ways how faculty members choose teaching strategies to help students get engaged in their studies and consequently improve their achievement. Related to this question, 142 coded pieces of data could be identified and extracted from the recorded interviews. The derived themes are presented in Table 5.

Table 5

Faculty Members Choice of Teaching Strategies

Cover and included terms	Occurrence frequency	Percentage of comments
1.Experience and self-development	53	37.3%
1.1 Own experience	30	21.1%
1.2 Own research	15	10.6%
1.3 Consultation with colleagues	4	2.8%
1.4 Workshops/Seminars	4	2.8%
2.Student-related factors	45	31.7%
2.1 Student needs	26	18.3%
2.2 Student previous experience and skills	19	13.4%
3.Teaching content	36	25.4%
4. No choice	8	5.6%
4.1 Imposed on faculty	5	3.5%
4.2 Traditional seminars	3	2.1%

Approximately one third of the interviewed faculty (53 participants, or 34.5%) stated that they rely on their experience and self-development to choose teaching strategies that promote student engagement (Category 1). Another third (45 participants, or 31.7%) chose their teaching strategies based on students related factors (Category 2) and one quarter (36 participants, or 25.4%) on content characteristics (Category 3). A few (8 participants, i.e., 5.6%) felt they could not choose their teaching strategies themselves (Category 4).

More in detail, Category 1 Experience and Self-Development included in first place (30 participants, or 21.1%) faculty's past experiences with teaching during each they could observe the effects of various teaching strategies on their students. Many of them (15 participants, or 10.6%) use literature to enhance their knowledge about best strategies that can promote active learning. A few (four participants, or 2.8%) consult

with colleagues, others (four participants, or 2.8%) take part in workshops and seminars in order to learn how to make the right choice.

Category 2 Student-Related Factors comprised statements that faculty choose teaching strategies according to the needs of their students. Many faculty (26 participants, or 18.3%) knew the needs of their students and chose their teaching strategies accordingly. Others (19 participants, i.e., 13.4%) observed their students' previous knowledge as well as cognitive and personal skills as a first teaching approach.

Category 3 Teaching Content consisted of all statements (36 participants, or 25.4%) that teaching strategies were chosen to suit the course content. Finally, Category 4 No Choice was the smallest category. Here, a few interview participants (five participants, or 3.5%) stated that teaching strategies were imposed on them by institutional requirements. A few others (three participants, or 2.1%) regarded the traditional methods as a successful way of teaching; therefore, they did not consider using other teaching strategies.

Examples of citations illustrating these categories are provided in Table 6.

Table 6

Examples of Participant Responses for RQ1

Category 1	Experience and self-development
Subcategory 1.1	Own experience
	My own experiences of engagement and disengagement as a learner (Participant 9). Based on what I saw effective as a student (Participant 71). It is impossible to make them work. I focus on my 10% of students really great and I work with them (Participant 45). I can judge, after some years of teaching, whether the current method of teaching can enhance student engagements (Participant 48).

	Some trial and error of other strategies (Participant 97). Normally I experiment with each class and see what works best with them (Participant 56). It is not easy to reach an effective one but through experience you start choosing the best strategy in teaching (Participant 63).
Subcategory 1.2	Own research
	From experience and reading about active teaching techniques (Participant 13) By staying updated with the latest strategies (Participant 4). From the news (Participant 40).
Subcategory 1.3	Consultation with colleagues
	Discussion with colleagues (Participant 14). From regular student feedback and from peer observations of fellow faculty members (Participant 32.) To collaborate with other teachers to develop lesson materials for the students (Participant 88).
Subcategory 1.4	Workshops/Seminars
	Conferences and workshops (Participant 4). Training (Participant 10). From teaching workshops (Participant 52). Conferences attended (Participant 55).
Category 2	Student-related factors
Subcategory 2.1	Students' needs
	By deciphering the needs of my adult learners (Participant 2). I also ask students to see how they like my method of teaching and adjust accordingly (Participant 53). According to students' interaction during lecture (Participant 60). As an educator, I am not simply teaching a lesson. I gauge students' interests and moods. I consider what they like and how they feel. This allows me to reach out to them and trigger their engagement (Participant 67). Students at the end are interested in the grade so quizzes, homework, small projects make them engaged (Participant 86).

Subcategory 2.2	Students' previous knowledge and skills
	Depending on the competence of the student, communication skills (Participant 46). Based on the set of cognitive and personal skills of my students (Participant 1). According their levels and learning style (Participant 8). Based on the type of students grasping power and tune in my strategies (Participant 28).
Category 3	Based on content characteristics
	Choosing what is most appropriate to the course material and nature (Participant 4). Based on the need and objectives of the courses (Participant 11). Concepts to be discussed in the classroom (Participant 18). Chosen according to the description of the scientific course itself. This does not prevent the teacher from developing some new mechanisms that motivate students and increase their interaction (Participant 26). The hours of delivery, the mode (lecture/ tutorial) workshop, simulation" are factors that influence the choice of strategies in addition to the course itself (Participant 87).
Category 4	No choice
Subcategory 4.1	Imposed on faculty
	Institution's requirements and specifications (Participant 3). Somewhat forced on me by the situation (Participant 6). I do not. The teaching strategies are defined by antiquated regulation (Participant 27). Some strategies are part of the university's mission (Participant 31). Based on best management practices (Participant 34).
Subcategory 4.2	Traditional teaching
	Traditional classroom teaching (Participant 25). Defined by antiquated regulation (Participant 27). Direct questions through the PowerPoint and the assignments (Participant 102).

Table 7

Successful Strategies as Perceived by Faculty Members

Cover and included terms	Occurrence frequency	Percentage of comments
1. Interactive	64	49.2%
1.1 Collaboration	22	16.9%
1.2 Discussions	14	10.8%
1.3 Interaction with peers	11	8.5%
1.4 Create sense of social and academic inclusion	7	5.4%
2. Constructive	30	23.1%
2.1 Case studies	9	6.9%
2.2 Real life experience	7	5.4%
2.3 Create sense of achievement	6	4.6%
2.4 In class/informative presentations	4	3.1%
2.5 Problem solving	4	3.1%
3. Active	20	16.1%
3.1 Learner-centered approach	8	6.9%
3.2 Student inquiry	6	4.6%
3.3 Projects/assignments	6	4.6%
4. Passive	15	11.4
4.1 Motivation by grading	5	3.8%
4.2 Traditional teaching	5	3.8%
4.3 Use of technology by faculty	5	3.8%

RQ2: Teaching Strategies Promoting Student Engagement

The second objective of this study was to understand which teaching strategies faculty members perceive to be successful in engaging students in the learning process. Related to this question, 130 coded pieces of data could be identified and extracted from the recorded interviews. The derived themes are presented in Table 7.

Almost half of the interviewed faculty (64 participants, or 49.2%) considered Interactive dialoguing through collaboration, discussions, interaction with peers as successful to support student engagement (Category 1). Around a quarter of participants

(30 participants, or 23.1%) regarded constructive generation of knowledge as a successful strategy to get students engaged in learning. This included case studies, problem solving, relating learning to real life experience as well as creating a sense of achievement, and encouraging students to present their work in class (Category 2). Some faculty members (21 participants, or 16.1%) encouraged students to be involved in active learning and get engaged in their learning through completing assignments, projects, and student inquiry (Category 3). Some others (15 participants, or 11.4%) considered passive receiving of information by students as an effective way to engage them in the learning process or, as well, motivating them with marks (Category 4).

More in detail, Category 1 Interactive included responses from many faculty members (22 participants, or 16.9%) who believed that collaboration among students as an effective way to get students engaged in their learning. Others (14 participants, or 10.8%) encouraged students to take part in class discussions related to the topic and share their ideas with others. Several (11 participants, or 8.5%) considered promoting interaction with peers as a successful way to get students engaged in their studies. Some (seven participants, or 5.4%) believed that creating a sense of social and academic inclusion in their classes is successful and can help students get more engaged in their learning. A few (five participants, or 3.8%) considered the use of technology is an effective strategy to encourage engagement through online interaction among students. While others (five participants, or 3.8%) believed that giving continuous feedback to students can be an effective way to enhance their engagement through teacher-student interaction.

Category 2 Constructive included responses from faculty members that adopted constructive strategies to enhance student engagement. Some (nine participants, i.e., 6.9%) considered case studies as an effective way for students to get engaged in their learning and construct knowledge. While several (seven participants, or 5.4%) believed that this can be achieved through getting students involved in real life experiences that relate to their course content. Some faculty members (six participants, or 4.6%) focused on the importance of giving value to students' work to foster their sense of achievement which can motivate them to learn more. Few (four participants, or 3.1%) encouraged problem solving while the same number of faculty members (four participants, or 3.1%) got their students engaged through presenting their work in class using PowerPoint presentations.

Category 3 Active included faculty member statements related to active learning. As some faculty members (nine participants, or 6.9 %) used the learner centered approach to enhance student engagement, while a few (six participants, or 4.6%) encouraged students' inquiry about the topic. Others (six participants, or 4.6%) asked students to complete assignments and projects to get them actively engaged in their learning during and after class time.

Category 4 Passive comprised statements from a few faculty members (five participants, or 3.8%) who believed that motivation by marks or grades was a successful way to engage students. Others (five participants, or 3.8%) chose traditional methods of teaching to be used in class and did not consider any other strategy. Similarly, few (five participants, or 3.8%) chose to use technology, yet in a way that students were still

passively receiving information provided by the technology used by faculty members.

Examples of citations illustrating these categories are provided in Table 8.

Table 8

Examples of Participants Responses for RQ2

Category 1	Interactive
Subcategory 1.1	Collaboration
	Being able to work closely with others (Participant 2). Engaging activities, group work, asking students to be volunteers for different tasks in the class (Participant 13). Team projects (Participant 81). Working in groups (Participant 31). The strategies that involve group tasks rather individual tasks perform better (Participant 20). Projects and field trips (Participant 88). Cooperative learning (Participant 62). Critical thinking collaboration and communication (Participant 70).
Subcategory 1.2	Discussions
	Discussions, questions, debate (Participant 11). Role Plays, Discussions (Participant 37). Discussion instead of spoon-feeding information (Participant 61). Class discussions based on their research into topics (Participant 98). Debates and discussions sometimes could be useful for them to express freely their thoughts (Participant 65).
Subcategory 1.3	Interaction with peers
	Engaging them in peer-supported learning (Participant 40). The best strategy is flexibility - maintaining interaction with the student (Participant 89).
Subcategory 1.4	Create sense of social and academic inclusion
	Create knowledge by contributing in class and feeling that their ideas are important and valued (Participant 2). Helping them to plan everything around the course (Participant 34).

	Suggest activities That way I know what works for them and they realize that their opinion matters (Participant 56). Engaged, especially shy students, or students with low retention" (Participant 48). I believe that if students feel safe and encouraged to discuss their ideas they will participate in a lesson" (Participant 55).
Subcategory 1.5	Faculty member feedback
	Individual one to one feedback (Participant 104). Answer their questions through emails frequently and punctually (Participant 49). Formative feedback (Participant 1). Timely feedback is essential for students (Participant 3).
Category 2	Constructive
Subcategory 2.1	Case studies
	Case studies and group working (Participant 5). Case based teaching (Participant 11). Case studies are critically important to develop fundamentals (Participant 104). Case study mode of strategies are best in the academic world across the globe and it helps a lot in learning (Participant 22). Case studies with my best students. With the other 90% of students, nothing (Participant 45).
Subcategory 2.2	Real life experience
	Trying to reflect the nature of the topic on the reality by presenting problems from the reality surrounding us and then presenting the problem to students, which increases the chances Interact and share (Participant 26). Alternation between the classroom and real world (Participant 27). Show direct connection of what students' study to real life (Participant 96). Using real life examples to relate to the topic (Participant 99).
Subcategory 2.3	Create sense of achievement
	Anything that empowers them (Participant 57). Anything that is active and contributes to sense of achievement to feel value in their work or effort (Participant 3).

	Freedom to make mistakes and learn from them, then giving them the opportunity to grow and improve through targeted activities with very specific and very achievable outcomes (Participant 87). Motivating them by giving appreciation for their work (Participant 38). Any strategy that will make them feel responsible and trustworthy (Participant 29).
Subcategory 2.4	Problem solving
	Problem solving, critical thinking (Participant 72). A topic of their interest and then observe their way of solving the problem (Participant 69). Problem-solved learning (Participant 100).
Subcategory 2.5	In class/ informative presentations
	Class presentations (Participant 12). Active preparation of presentation (Participant52).
Category 3	Active
Subcategory 3.1	Learner-centered approach
	Practical approach where the learners directly apply what they have learned (Participant 4). Practical assignments, effective implementation of these plans in a well-designed. Learning by doing classrooms (Participant 33). Student centric. Learning by doing (Participant 63). Student-centered class should be the potential of every teacher. I try to give them the floor to talk and express themselves (Participant 65). When I provide choices and encourage autonomy, I feel students are more engaged (Participant 66).
Subcategory 3.2	Students' inquiry
	Question and answer based on the topics (Participant 28). Give them time to ask questions (Participant 49). Inquiry learning (participant 72).
Subcategory 3.3	Projects/ assignments
	Project-based work (Participant 27).

Projects (Participant 57).

Category 4	Passive
Subcategory 4.1	Motivation by marks (Grading)
	Marks were proven to be the number one factor (Participant 14). The activities which reward with marks or bonus to the students (Participant 76). Students will be engaged through Assessments (Participant 34).
Subcategory 4.2	Traditional teaching
	Asking questions most of the lessons/lectures and at all times keep students alert and this keeps students on task (Participant 16). Inviting them to solve a problem on the board, randomly calling a student to answer a question will keep them alert (Participant 40). Students will receive a set of tutorial questions with strict rules not to attempt on their own and solve example problems and ask students to solve tutorial questions during tutorial session (Participant 41). Narrative strategy (Participant 70). Nothing much in fact, just using the board to explain everything. Students love old fashion teaching (Participant 87).
Subcategory 4.3	Use of technology by faculty
	Online teaching (Participant 19). Super high-quality slides with professional photos and very clean design is the most important starting point (Participant 48). Interesting strategy like using technology (Participant 53). Visualization (Participant 64) Videos (Participant 83).

Discrepant Cases

Data suggested that there is a relation between faculty choice of teaching strategies and successful strategies that they perceived as effective to enhance students' engagement. However, data from the questionnaire indicated discrepancies related to the perception of choosing teaching strategies and effective ways of engaging students in their learning. When faculty members were asked about the ways that they choose teaching strategies, faculty members elaborated on meeting the needs of students based

on their skills and abilities while Participant 86 had a different perception related to the needs of students as “Students at the end are interested in the grade so quizzes, homework, small projects make them engaged.”

Evidence of Trustworthiness

In Chapter 3, I presented my plan to follow specific standards to achieve trustworthiness in my study. To achieve credibility the questions in my study were designed to ask participants specific questions that are related to their work experiences. Participants were informed that their identity will be kept anonymous and the identity of the university that participated in the study will be masked. The questions in the questionnaire were divided into two sections. The first section included demographic questions; section two included seven questions that were designed as open-ended questions that lead to answering the two research questions of this study. Questions focused on specific aspects related to active learning and ways that faculty members choose teaching strategies that enhance student engagement and teaching strategies that are perceived by faculty members to be successful in engaging students in learning. Answers that faculty members provided were based on their teaching experience as 20.30% of faculty that participated in the study had a teaching experience of more than 20 years.

To achieve transferability, the data collected in this study were clearly described and analyzed to enable readers to compare the data to other contexts. I provided details of the methods I used and challenges I faced, as well as to the context of the study to facilitate comparison in other contexts. To ensure dependability, Questions 4 and 5 of the

seven questions in Section 2 of the questionnaire were carefully designed to answer the research question. Data were analyzed using triangulation analyses as a second investigator was engaged in developing themes, evaluating, and analyzing responses. Codes resulting to emerging categories and themes of the study were analyzed and presented in a clear manner to allow other researchers to repeat the research and achieve similar findings.

To achieve confirmability, I tried to limit opportunities for bias in my study. To do that I did not collect data from my workplace, identities of participants were anonymous, and the identity of the university that took part in the study was masked. I had no personal or work relation with participants working at that university. As for the SNS participants, they were also aware that their identity is protected, and they were able to answer questions based on their own experience and knowledge without being influenced by me or any other party. They had the right to accept or reject my connection request and then they were also free to decide whether to take part in the study or not. They also had the freedom to stop answering the questions and withdraw from the study at any stage while answering the questions, which gave them a full freedom to answer as many questions as they wanted to answer. The data that were collected enhanced the findings and a reduction in potential bias issues was achieved in the mode of investigation in that participants answered an online questionnaire with open ended questions without me as the researcher influencing their decision to participate or complete the questionnaire.

Summary

To further explore how faculty members, choose teaching strategies to enhance student engagement and what are the strategies that they perceive as successful to engage students in the learning process. Data collected for this study were based on the information provided by $N = 106$ faculty members teaching at 4-year universities in the UAE. The findings suggested that most faculty members choose their teaching strategies based on faculty experience and self-development, students related factors, and course content.

The findings of the study suggested that the teaching strategies that faculty members perceive as successful in enhancing student engagement are through interactive dialoguing, like collaboration, discussion, and face-to-face and online interaction and promoting student inclusion in classroom environment were considered effective ways to enhance engagement. Construction of knowledge among students, active learning through learner centered education, as well as projects, assignments, and inquiry. Passive receiving of information was still experienced by students as faculty members motivated them by marks and grades and others used traditional teaching methods. Although some faculty members used technology, students were still passive learners as they watched PowerPoints and videos without doing anything.

Section 5 is a presentation of the interpretation of findings that address the research question. A relationship between these findings and the ICAP framework and active learning will be presented. Section 5 will also include implications of social change and recommendations for future research. The last part of Section 5 will include a

reflection of my experience, impact of the study and ways that I have impacted the participants.

Chapter 5: Discussion, Conclusions, and Recommendations

This study was conducted to better understand how faculty members teaching at UAE universities choose teaching strategies to support the engagement of students, and which ways faculty perceive as successful to support the engagement of students. This was a qualitative study based on Chi and Wylie's (2014) conceptual framework, ICAP. Data were collected through an online questionnaire, and the inclusion criteria were faculty members teaching at 4-year universities in the UAE.

The key findings of the study suggest that faculty members choose teaching strategies that (a) enhance student engagement based on faculty experience and self-development, (b) student-related factors, and (c) content, while only a few faculty felt they had no choice of teaching strategies as the strategies were imposed on them or they decided to use traditional ways of teaching. The strategies perceived by faculty members to be successful in supporting student engagement were closely linked to the ICAP framework through (a) promoting interactive dialoguing, (b) constructive generation of knowledge, (c) active learning, and (d) learner-centered education. Passive receiving of knowledge was experienced by university students due to traditional ways of teaching and use of technology that is only utilized by faculty. Participants also believed that motivating students by marks or grades can get them engaged in their learning.

Interpretation of the Findings

The interpretation of findings of this study was done based on the conformity between codes, categories, and findings of this study with major themes found and presented in the peer-reviewed articles in Chapter 2 of this study. The findings derived

from the analyzed data related to how faculty members choose teaching strategies to enhance student engagement suggest that faculty members choose their teaching strategies based on faculty experience and self-development This in line with Sogunro (2017), who reported that the quality of instructions is related to attributes of the instructor, preparation, effective organization, and knowledge of resourceful instructors who are teaching skills that improve student motivation to learn. Rile et al. (2015) suggested that professors in the UAE have high autonomy, trust, and purpose in life, yet they lack funding, management support, and professional development.

Student-related factors that faculty members commented on included their teaching strategies based on students' needs and set of skills and experience. This was evident in the study conducted by Bugge and Wikan (2016), who showed that students have different skills and needs that are appropriate for their learning. Bugge and Wikan revealed that diverse students were more engaged in flexible learning than campus-based students. Assessing the needs of students was also highlighted by Leigh et al. (2015) who presented the elements of andragogy, one of which was assessing the needs of learners. The situational leadership theory was presented by Meier (2016) to allow instructors to choose teaching methods based on students' needs.

Learners' needs were also presented in Migdalski's (2017) article, including the importance of designing learning activities that meet students' needs. As for workshops/seminars, few faculty members indicated that they choose their teaching strategies based on knowledge gained while attending seminars and workshops. However, the literature suggested that professors in the UAE lack needed support from

their management and funds for professional development. The effects of lack of professional development were also explored by Masri (2018), who noted that adjunct faculty are deprived of participating in workshops and lack training, which leads to a higher quality of teaching and increased job satisfaction. Engin and Atkinson (2015) presented a model for professional development in higher education. This model helps faculty get involved in developing projects, problem-solving, and using technology. Based on content, faculty members indicated that they choose their teaching strategies based on the content and learning outcome of the course. These findings are supported by Nikolaros (2015), who wrote about active learning and highlighted effective methods of teaching and the importance of examining the ways teaching and change in the curriculum can improve college teaching.

Many faculty members responded that they choose their teaching strategies based on the course content and curriculum. This is in line with literature by Leigh et al. (2015) that stressed the importance of including andragogical elements in the adult learning curriculum as well as Sogunro (2015) who presented quality of curriculum as one of the top five motivational factors that impact student learning. Kivunja (2015) suggested using Google Circles Learning Communities in higher education and ways that this technology can facilitate curriculum development, teaching, and learning. Migdalski (2017) suggested the use of smartphones as a part of the curriculum to improve academic success. A concept-based design of curriculum was presented by Enríquez (2017) through fractal, an online educational model that enhances student-centered teaching and provides flexibility of curriculum. Although curriculum was considered as a way to help

faculty members choose their teaching strategies, yet some faculty members indicated that they did not make any choice related to strategies they use in class.

A few faculty members indicated that they do not have much choice when choosing teaching strategies and that strategies are imposed on faculty. This finding confirmed the challenges that faculty members face in the Middle East and the UAE. According to O'Sullivan (2015), a challenge that faculty face is the teaching overload and the fact that they do not have academic freedom. A significant challenge that faculty members also face is related to overwhelming demands of the job, lack of support from management, and lack of professional development (Rile et al., 2015). These challenges might lead to faculty members' lack of motivation to make any choice of teaching strategies that promote student engagement.

Some faculty members considered traditional teaching as a way to choose their teaching strategies and as a successful strategy that they used in the classroom. These findings are in line with the study conducted by Al Kaabi (2016), which indicated that educators rarely change their traditional lecturing mode, as educators use a teacher-centered approach and traditional teaching, which may negatively impact student performance. Al Kaabi showed that traditional ways of teaching reduced student motivation and engagement. Al Murshidi (2014) also contented that faculty members use traditional methods that focus on memorizing rather than understanding concepts. Similarly, Chen (2018) presented a study that showed that students reflected on their learning, especially when faculty members used traditional ways of teaching. The study showed that when teacher talking time was reduced, students had a better opportunity for

discussions (Chen, 2018). This can indicate that moving away from traditional ways of teaching can provide students with better learning opportunities.

Data suggested that successful strategies perceived by faculty to support student engagement included interactive dialoguing. through collaboration and discussion Rismiyanto et al. (2018) also highlighted the importance of discussion as an effective andragogical method that includes small group discussion and interactive lectures Also, Eryilmaz (2015) presented information about blended learning, which combines face-to-face interaction with online learning courses. This method incorporates discussion, projects, and simulation activities. Similarly, Chen (2018) urged instructors to encourage students to take part in discussions that are kept on track by educators and that students' participation will help them succeed in their future. A study by Sogunro (2015) revealed that interactive classrooms were within the top five motivational factors as perceived by students.

Faculty members also considered using technology as an effective tool to enhance student engagement, which aligned with the findings of Rosli et al. (2015), showing that content and technology can promote active learning. Duranczyk and Pishcherskaia (2018) also stressed using technology to promote collaboration among students from different countries. The usefulness of information literacy skills (IL) of teachers in the UAE was also presented in a study by Fidalgo and Thormann (2017). Skills like using the school portal, learning management systems, e-mails, digital ethics, security and privacy, online podcasts, resources, as well as editing videos and audios are essential in a technology-

based environment. The study revealed that most teachers found IL useful and easy to learn and can enhance many aspects of their lives (Fidalgo & Thormann, 2017).

Constructive generation of knowledge provides a communal framework for learning. Faculty members stressed the importance of using case studies and problem solving, and this finding aligned with the literature by Ahmed and Ahmed (2017), who examined the preference of students regarding their learning style. Learning skills like critical thinking, problem-solving, and creativity are essential for students to meet the 21st Century demands. Furthermore, Rismiyanto et al. (2018) contended that students are highly dependent on teachers, which affects their achievement. Rismiyanto et al. revealed that andragogical-oriented methods including case studies, problem-based learning, and peer review of writing are considered effective methods to improve student achievement. In addition, Halaweh (2017) presented the use of smartphones to help students read and view their presentations from their phones to enhance discussion. Faculty members considered promoting a positive classroom community as an effective way to enhance engagement and constructive generation of knowledge as Nikolaros (2015) contended that feedback from instructors can increase student value of their work, which could, in turn, enhance their academic growth. Similarly, Giannoukos et al. (2016) presented a model that focuses on the educator's ability to encourage students. Ismail et al. (2015) highlighted the importance of encouraging personal development of students involved in activity-based learning. Clark et al. (2018) commented on the role that advisors can play to motivate and encourage students to be engaged in their learning. Sognuro (2017) commented that instructors can motivate students to learn and improve retention. When

faculty members create a positive classroom environment, students will be motivated and engaged in their own learning.

Active learning is essential, as some faculty members perceived that using learner-centered education that focuses on a student-centered approach, providing feedback, and connecting students' learning with real-life experience is in line with Gawronski et al.'s (2016) article that indicated that inclusive instruction training had a significant effect on students' perceptions and helped them overcome barriers, especially in a diverse classroom. Findings were also in line with Munoz-Luna and Jurado-Navas's (2016) perception of the role of teachers and the dynamics that the teacher creates in the classroom, paying special attention to the level of attention and concentration of students during class, which leads to enhancing motivation and academic achievement. Leigh et al. (2015) also added that faculty sensed that learners were involved when they are engaged in activities that relate to their personal life. The cultural variety of students can affect the intrinsic and extrinsic motivation of students, which is an area suggested for further research (Sognuro, 2015) and aligns with the data that faculty members struggle to get students to be engaged in class due to a lack of motivation.

Projects and assignments were considered as an effective teaching strategy that promotes engagement in a survey by Mohammed (2017) which showed that 92.2% of students considered working on projects as an effective way of learning. Ntombela (2015) presented project-based learning as an active learning strategy that promotes the ability of students to succeed in the global economy. It was also considered an effective andragogical approach. Ritchie (2018) observed that when students are engaged in a

project, they can achieve high level of co-learning and personal achievement. Duranczyk and Pishcherskaia (2018) also highlighted that when students are involved in projects, they develop student-centered learning which could help them gain an international perspective when dealing with other students from other countries.

Student inquiry plays a role in performance. Nikolaros (2015) noted that when students seek feedback it helps them in academic growth and improves the efficacy of student performance, and feedback can enhance the value of their subsequent work. It is important that instructors help students to clear any doubts or uncertainty about their suggestions. Barber and King (2016) also considered feedback from peers and instructors as student-centered collaborative learning which will prepare students to build competencies needed for the 21st Century. This can indicate that when students are given the opportunity to ask questions and are given the time and attention they need; they will get engaged in their learning and improve their academic achievement.

Passive receiving of information was used by some faculty members to encourage students to be engaged through motivating them with grades as many students score low grades in tests or sometimes, they fail according to Ismail et al. (2015). Cavanaugh and Jacquemin (2015) reported that the success or failure of an online course can be related to the grades and completion rates. Al Kaabi (2016) highlighted that when students were at the high school level, they used to receive full credit even if they copied their assignments from the Internet. Many students drop out of university because their grades do not qualify them to start their program of study. Some faculty members chose traditional ways of teaching that do not promote interactive student engagement (Moeder-

Chandler, 2017). Interpretation of the findings in the context of the ICAP conceptual framework Hyun et al. (2017) article about the application of ICAP framework in STEM (science, technology, engineering, and mathematics) stressed the role that faculty members play to develop students' engagement.

Limitations of the Study

The limitations to trustworthiness that arose from the execution of the study were related to the credibility of answers. Although this limitation was taken into consideration and the credibility of the research was considered when designing the questions, due to the nature of the research that addresses real-life experiences of faculty members teaching at a 4-year university in UAE, some of the responses were incomplete or did not provide enough information to efficiently answer the question. Some faculty members withdrew from the study and others indicated that they did not clearly understand the questions. However, these were very few cases that did not affect the overall analysis of the data and did not prevent emerging categories that led to answering the research questions of this study.

Recommendations

The review of the literature for this study presented scholarship related to active learning and successful strategies that promote student engagement. However, the literature presented a study that examined the wellbeing of faculty members in the UAE that showed that faculty members have high autonomy, yet they lack professional development opportunities and needed more funding to support their professional development. The literature did not present studies that explored ways that faculty

members choose teaching strategies to enhance student engagement nor successful student engagement as perceived by faculty members in the UAE.

I addressed a gap in the literature related to the ways that faculty members choose teaching strategies that enhance student engagement and successful strategies that are perceived to be useful by faculty members working at 4-year universities in the UAE. Further studies might include exploring the role that university management plays in supporting faculty members by providing proper training and professional development. Targeted professional development could provide faculty members with suggested ways to enhance student engagement and consequently improve student academic achievement.

Implications

A potential impact for social change can be achieved when the results of this study are shared with deans of faculties. By presenting data that describes ways that faculty members choose their strategies to promote student engagement (as well as strategies that faculty members perceive to be successful to promote student engagement), it could create momentum towards more student-centered exchanges in the classroom. The deans of faculties may decide on what kind of action could be taken and their decision can bring benefit to the practice of faculty members which might result in improving strategies and consequently promoting student engagement. Increasing student engagement might help students to develop their learning skills, improve their academic achievement, and prepare students to apply their learning in their personal and professional future, and contribute to positive social change in these settings.

Conclusion

I have always heard comments from my students complaining that they feel so disengaged in their classes and feel that they are burdened by excessive lecturing. It was my pleasure to teach at universities in UAE for 6 years, and I always used strategies that I learned from my master's degree that I received from Walden and my current Doctoral degree. I implemented the knowledge related to active learning in my classes and the feedback from my students was positive. My students learned well, they enjoyed their learning and were motivated to plan for a bright future ahead. I was proud of their achievement and happy that I could help them improve their academic outcomes and motivate them to seek more knowledge even after they complete my course. I was hoping that this study could guide stakeholders to make decisions that would provide as many students as possible the opportunity to have the same experience as my students did. I can only say that I tried and will keep on trying to provide learners with an experience that they deserve. I hope I will be remembered as an educator who hopefully helped them improve their future.

References

Abdelouarit, K. A., Sbihi, B., & Aknin, N. (2015). Big data at the service of teaching and scientific research within the UAE. *Journal of Education and Vocational Research, 6*(4), 72-75. doi:10.22610/jevr.v6i4

Ahmed, A., & Ahmed, N. (2017). Comparative analysis of rote learning on high and low achievers in graduate and undergraduate programs. *Journal of Education and Educational Development, 4*(1), 111-129. doi:10.22555/joeed.v4i1.982

Al-Hadithy, T. M. (2015). The traditional vs. the modern translation classroom: A need for new directions in the UAE undergraduate translation programs. *Procedia-Social and Behavioral Sciences,* 192, 180-187. doi:10.1016/j.sbspro.2015.06.026

Al Kaabi, S. A. R. A. (2016). *Determinants that impact first year male students' motivation to learn at UAE public colleges* (Doctoral dissertation, University of Southern Queensland). https://eprints.usq.edu.au/28742/1/Al%20Kaabi_2016_whole.pdf

Al Murshidi, G. (2014). Emirati, Omani and Saudi students' academic literacy socialization. *International Journal of Education and Literacy Studies*, *2*(2), 69-79. https://files.eric.ed.gov/fulltext/EJ1149625.pdf

Ashour, S., & Fatima, S. K. (2016). Factors favouring or impeding building a stronger higher education system in the United Arab Emirates. *Journal of Higher Education Policy and Management*, *38*(5), 576-591. doi:10.1080/1360080X.2016.1196925

Avci, O. (2016). Positionalities, personal epistemologies, and instruction: An analysis.

Journal of Education and Training Studies, *4*(6), 145-154. doi:10.11114/jets.v4i6.1462

Babbie, E. R. (2013). *The basics of social research*. Cengage Learning.

Barber, W., & King, S. (2016). Teacher-student perspectives of invisible pedagogy: New directions in online problem-based learning environments. *Electronic Journal of e-Learning*, *14*(4), 235-243. https://issuu.com/academic-conferences.org/docs/ejel-volume14-issue4-article509/2

Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *Qualitative Report*, *13*(4), 544-559. https://nsuworks.nova.edu/tqr/vol13/iss4/2

Bugge, L. S., & Wikan, G. (2016). Flexible studies as strategy for lifelong learning. *Turkish Online Journal of Educational Technology*, *15*(4), 46-52. http://www.tojet.net/articles/v15i4/1545.pdf

Burton, G., & Warner, R. (2017). A fertile oasis: The current state of education in the UAE. *UAE Public Policy Forum*. http://www.mbrsg.ae/getattachment/658fdafb-673d-4864-9ce1-881aaccd08e2/A-

Canpolat, M., Kuzu, S., Yildirim, B., & Canpolat, S. (2015). Active listening strategies of academically successful university students. *Eurasian Journal of Educational Research, 60,* 163-180. doi:10.14689/ejer.2015.60.10

Cavanaugh, J., & Jacquemin, S. (2015). A large sample comparison of grade based student learning outcomes in online vs. face-to-face courses. *Online Learning, 19*(2). doi:10.24059/olj.v19i2.454

Chen, V. (2018). Please stop blabbing: Prescription for verbal diarrhea. *Collected Essays on Learning and Teaching*, *11*. doi:10.22329/celt.v11i0.4960

Chi, M., & Wylie, H. (2014). The ICAP framework: Linking cognitive engagement to active learning outcomes. *Educational Psychologist*, *49*(4), 219-243. doi:10.1080/00461520.2014.965823

Clark, C., Schwitzer, A., Paredes, T., & Grothaus, T. (2018). Honors college students' adjustment factors and academic success: Advising implications. *NACADA Journal*, *38*(2), 20-30. doi:10.12930/NACADA-17-014

Conole, G., & Brown, M. (2018). Reflecting on the impact of the open education movement. *Journal of Learning for Development*, *5*(3), 187-203. https://jl4d.org/index.php/ejl4d/article/view/314

Cook, J., Chen, C., & Griffin, A. (2019). Using text mining and data mining techniques for applied learning assessment. *Journal of Effective Teaching in Higher Education*, *2*(1), 60-79. https://jethe.org/index.php/jethe/article/view/39

DeGenaro, W., & Raddawi, R. (2017). “I don’t want to be imported or exported”: Critical pedagogy and the English writing and research course in the UAE. *International Journal of Critical Pedagogy, 8*(1). http://libjournal.uncg.edu/ijcp/article/view/108

Duranczyk, I., & Pishcherskaia, E. (2018). Bridging countries and cultures through accessible global collaborations. *Education Sciences*, *8*(4), 199. doi:10.3390/educsci8040199

Engin, M., & Atkinson, F. (2015). Faculty learning communities: A model for supporting

curriculum changes in higher education. *International Journal of Teaching and Learning in Higher Education*, *27*(2), 164-174. doi:10.1080/00221546.2018.1441108

Enríquez, L. (2017). Fractal: An educational model for the convergence of formal and non-formal education. *Open Praxis*, *9*(4), 375. doi:10.5944/openpraxis.9.4.699

Eryilmaz, M. (2015). The effectiveness of blended learning environments. *Contemporary Issues in Education Research*, *8*(4), 251. doi:10.19030/cier.v8i4.9433

Fidalgo, P., & Thormann, J. (2017). Information literacy in the 21st century: Usefulness and ease of learning. *International Association for Development of the Information Society*. doi:10.1007/978-3-319-14136-7

Gawronski, M., Kuk, L., & Lombardi, A. R. (2016). Inclusive instruction: Perceptions of community college faculty and students pertaining to universal design. *Journal of Postsecondary Education and Disability*, *29*(4), 331-347. http://www.ahead-archive.org/uploads/publications/JPED/jped_29_4/JPED29_4_FullDocument.pdf#page=21

Gerring, J. (2017). *Case study research: Principles and practices*. Cambridge, United Kingdom: Cambridge University Press.

Giannoukos, G., Hioctour, V., Stergiou, I., & Kallianta, S. (2016). Andragogy: Prerequisites for adult educators. *World Journal of Education*, *6*(4), 53-57. doi:10.5430/wje.v6n4p53

Godwin, S. M. (2006). Globalization, education. and emiratization: A study of the United Arab Emirates. *EJISDC, 1*(27), 1-14. doi:10.1002/j.1681-4835.2006.tb00178.x

Halaweh, M. (2017). Using mobile technology in the classroom: A reflection based on teaching experience in UAE. *Techtrends, 61*(3), 218-222. doi:10.1007/s11528-017-0184-2

Hatherley-Greene, P. (2014). The border crossing index: Implications for higher education teachers in the UAE. *Learning and Teaching in Higher Education: Gulf Perspectives*, *11*(2). http://Ithe.zu.ac.ae

Hilal, K. T. (2013). Between the fears and hopes for a different future for the nation-states: Scholarship programs in Saudi Arabia and United Arab Emirates from a public policy standpoint. *International Journal of Higher Education*, *2*(2), 195-210. doi:10.5430/ijhe.v2n2p195

Hyun, J., Ediger, R., & Lee, D. (2017). Students' satisfaction on their learning process in active learning and traditional classrooms. *International Journal of Teaching and Learning in Higher Education*, *29*(1), 108-118. http://www.isetl.org/ijtlhe/pdf/IJTLHE2452.pdf

Ibrahim, B., & Mishra, N. (2016). College radio as a mechanism for participatory learning: Exploring the scope for online radio based learning among undergraduates. *Higher Learning Research Communications*, *6*(1), 21-34. doi:10.18870/hlrc.v6i1.292

Ismail, N. S., Atek, E. S. E., Azmi, M. N. L., & Mohamad, M. (2015). The role of peer facilitator in enhancing english language proficiency in a simulated environment. *English Language Teaching*, *8*(2), 78-85. doi:10.5539/elt.v8n2p78

Khiat, H. (2015). Measuring self-directed learning: A diagnostic tool for adult learners.

Journal of University Teaching & Learning Practice, 12(2), 2. http://ro.uow.edu.au/jutlp/vol12/iss2/2

Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy* (revised and updated). Englewood Cliffs, NJ: Cambridge Adult Education

Kivunja, C. (2015). The efficacy of social media technologies in academia: A pedagogical bliss or digital fad? *International Journal of Higher Education*, *4*(4), 33-44. doi:10.5430/ijhe.v4n4p33

Koç, C., & Köybasi, F. (2016). Prospective teachers' conceptions of teaching and learning and their attitudes towards multicultural education. *Educational Research and Reviews*, *11*(22), 2048-2056. https://academicjournals.org/ebook/journal1479828385_ERR%2023%20November%202016%20Ebook.pdf#page=20

Lababidi, R. A. (2016). Language anxiety: A case study of the perceptions and experiences of students of English as a foreign language in a higher education institution in the United Arab Emirates. *English Language Teaching*, *9*(9), 185-198. doi:10.5539/elt.v9n9p185

Leigh, K., Whitted, K., & Hamilton, B. (2015). Integration of andragogy into preceptorship. *Journal of Adult Education*, *44*(1), 9-17.

Mahrous, A. A., & Ahmed, A. (2009). A cross-cultural investigation of students' perceptions of the effectiveness of pedagogical tools: The Middle East, the United Kingdom, and the United States. *Journal of Studies in International Education.*

14(3), 289-306. doi:10.1177/1028315309334738.

Masri, T. I. (2018). The professional identity of adjunct faculty: Exploratory study at a private university in the UAE. *English Language Teaching, 11*(10), 16-29.

McEwan, H., & Reed, G. G. (2017). Artistry in practitioner-inquiry. *Journal of the College of Education/University of Hawai'i at Manoa, 42.* https://coe.hawaii.edu/sites/default/files/field/attachments/publications/Educational%20Perspectives%20Volume%2049_2017.pdf#page=48

Meier, D. (2016). Situational leadership theory as a foundation for a blended learning framework. *Journal of Education and Practice*, *7*(10), 25-30. https://iiste.org/Journals/index.php/JEP/article/view/29818/30635

Migdalski, S. T. (2017). Smartphone and curriculum opportunities for college faculty. *Journal of Learning in Higher Education*, *13*(2), 59-64. https://www.learntechlib.org/p/189976

Moeder-Chandler, M. (2017). School counselor lead initial individual career and academic plan implementation design. *Journal of Education and Practice*, *8*(19), 198-207. https://www.iiste.org/Journals/index.php/JEP/article/view/37896/38978

Mohammed, N. A. (2017). Project-based learning in higher education in the UAE: A case study of Arab students in Emirati studies. *Learning and Teaching in Higher Education: Gulf Perspectives*, *14*(2). http://lthe.zu.ac.ae/index.php/lthehome/article/view/294/181

Muneja, M. S. (2015). A theoretical basis for adult learning facilitation: Review of selected articles. *Journal of Education and Practice*, *6*(31), 54-61.

https://iiste.org/Journals/index.php/JEP/article/view/27299/27982

Munoz-Luna, R., & Jurado-Navas, A. (2016). Routine breakers for emotionally active learning: "A case study". *International Journal of Higher Education*, *5*(4), 52-62. doi:10.5430/ijhe.v5n4p52

Nadelson, L., Berg, W., Fox, B., Grandbouche, P., Harris, M., Kroschel, T., & Sandoval, S. (2017). Snap, tweet and post: College student social media perceptions and heutagogic practices and uses. *International Journal of Higher Education*, *6*(4), 11. doi:10.5430/ijhe.v6n4p11

Nadelson, L., Sias, C., Matyi, J., Morris, S., Cain, R., & Cromwell, M. (2016). A world of information at their fingertips: College students' motivations and practices in their self-determined information seeking. *International Journal of Higher Education*, *5*(1). doi:10.5430/ijhe.v5n1p220

Nikolaros, J. (2015). College philosophy and teaching**.** *World Journal of Education*, *5*(1), 144-148. doi:10.5430/wje.v5n1p144

Ntombela, B. (2015). Project based learning: In pursuit of andragogic effectiveness. *English Language Teaching*, *8*(4), 31-38. doi:10.5539/elt.v8n4p31

Onwuegbuzie, A. J., Frels, R. K., & Hwang, E. (2016). Mapping Saldana's Coding Methods onto the Literature Review Process. *Journal of Educational Issues*, *2*(1), 130-150. doi:10.5296/jei.v2i1.8931

O'Sullivan, K. (2015). Challenges and constraints in meeting international standards in UAE education: External objectives versus local realities. *Near and Middle Eastern Journal of Research in Education*, *4.* doi:10.5339/nmejre.2015.4

Plush, S. E., & Kehrwald, B. (2014). A supporting new academics' use of student-centered strategies in traditional university teaching. *Journal of University Teaching and Learning Practice*, *11*(1). https://ro.uow.edu.au/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1340&context=jutlp

Qian, Y., & Li, L. (2017). Student off-task electronic multitasking predictors: scale development and validation. *Journal of the Scholarship of Teaching and Learning*, *17*(2), 53-73. doi:10.14434/josotl.v17i2.20682

Rands, M. L., & Gansemer-Topf, A. M. (2017). The room itself is active: How classroom design impacts student engagement. *Journal of Learning Spaces,* 6(1), 26. https://lib.dr.iastate.edu/edu_pubs/49

Rashidi, H., Arani, A. M., & Kakia, L. (2012). E-learning, state and educational system in Middle East countries. *Bulgarian Comparative Education Society*. https://www.learntechlib.org/p/194933/.

Ravitch, S. M., & Carl, N. M. (2016). *Qualitative research: Bridging the conceptual, theoretical, and methodological*. Thousand Oaks, CA: Sage Publications.

Rhodes, C. M. (2017). A validation study of the culturally responsive teaching survey. *Universal Journal of Educational Research*, *5*(1), 45-53. doi:10.13189/ujer.2017.050106

Rile, L. G., Tan, N. L., Salazar, N. J., & Perez, A. G. O. (2015). Expat university professors state of psychological well-being and academic optimism toward university task in UAE. *Systemics, Cybernetics and Informatics*, *13*(3), 28-33.

http://www.iiisci.org/journal/CV$/sci/pdfs/HA012IE15.pdf

Rismiyanto; S., Mursid, M., & Januarius, W. (2018) The effectiveness of andragogically oriented teaching method to improve the male students' achievement of teaching practice. *English Language Teaching*, *11*(2), 113-121. doi:10.5539/elt.v11n2p113

Ritchie, L. (2018). Opening the curriculum through open educational practices: International experience. *Open Praxis*, *10*(2), 201-208. eprints.chi.ac.uk/3928

Rosli, M., Saleh, N., Aris, B., Ahmad, M., Sejzi, A., & Shamsudin, N. (2015). E-learning and social media motivation factor model. *International Education Studies*, *9*(1), 20. doi:10.5539/ies.v9n1p20

Schoepp, K., & Danaher, M. (2016). An innovative approach to assessing professional skills learning outcomes: a UAE pilot study. *Learning and Teaching in Higher Education: Gulf Perspectives*, *13*(1). doi:10.18538/lthe.v13.n1.213

Simon, M. K., & Goes, J. (2013). Assumptions, limitations, delimitations, and scope of the study. http://www.dissertationrecipes.com/wp-content/uploads/2011/04/Assumptions-Limitations-Delimitations-and-Scope-of-the-Study.pdf

Sogunro, O. A. (2015). Motivating factors for adult learners in higher education. International *Journal of Higher Education*, *4*(1), 22-37. https://www.semanticscholar.org/paper/Motivating-Factors-for-Adult-Learners-in-Higher-Sogunro/092ab889f5197e423c30f811821f8c9631265792

Sogunro, O. A. (2017). Quality instruction as a motivating factor in higher education. *International Journal of Higher Education*, *6*(4), 173-184.

doi:10.5539/hes.v8n2p47

Stephens, G. (2016). Digital liminality and cross-cultural re-integration in the Middle East. I*CEA Forum*, *45*(1), 20-50. https://journals.tdl.org/ceaforum/index.php/ceaforum/article/view/7085

Thangeda, A., Baratiseng, B., & Mompati, T. (2016). Education for sustainability: quality education is a necessity in modern day. How far do the educational institutions facilitate quality education? *Journal of Education and Practice*, *7*(2), 9-17. https://files.eric.ed.gov/fulltext/EJ1089752.pdf

Wiggins, B. L., Eddy, S. L., Grunspan, D. Z., & Crowe, A. J. (2017). The ICAP active learning framework predicts the learning gains observed in intensely active classroom experiences. *AERA Open*, *3*(2). doi:10.1177/2332858417708567

Appendix: Questionnaire

Thank you for agreeing to complete this questionnaire about active student engagement in UAE universities. Your answers will help gaining deeper knowledge related to providing students with long lasting learning. The following questions will take as little as 15-20 minutes to complete, but please consider the questions thoroughly and do not feel pressured by time in providing the answers as you can save and complete this scripted interview at your convenience. Participants have the right to refuse or stop their participation in this study without any consequences. Be assured that your anonymous answers will be dealt with utmost confidentiality and will be protected and safely kept in a password protected file for the duration of seven years, after which they will be deleted.

Firstly, please provide the following demographic information about yourself.

1. Age:
2. Gender:
3. Years of teaching experience:
4. Position (e.g., Professor, Associate Professor, Lecturer… etc.):
5. Faculty of… (e.g., Business, Engineering, Education… etc.)
6. University (e.g., Government, Semi-government, Branch... etc.):

Now the main questions of the study follow; they address your idea of student engagement. Please answer these questions altogether in essay style, writing a brief text of approx. 250 words (in English language). Use the text box provided below.

1. How would you define student engagement?

2. Please describe typical students being engaged in their learning (e.g., what would you expect them to do, for how long, how often, etc.).

3. As a faculty member, which teaching strategies do you use to enhance student's engagement in the sense of your above descriptions?

4. How do you choose these teaching strategies?

5. Which teaching strategies do you perceive to successfully support students' engagement?

6. Which modern teaching strategies do you use in your classrooms to help students get engaged in their learning?

7. Do you consider using technology-based tools in your teaching?

8. If yes, which technology-based tools would you use in your classroom?