

**Investigating Perceptions of Pre-Service Teachers and
Instructors about Field Experience: An Explanatory Study
from a Federal University in the UAE**

**الميدانية الخبرة حول المدربين و الخدمة قبل ما معلمين تصورات في التحقيق
المتحدة العربية الإمارات في اتحادية جامعة من توضيحية دراسة**

by

FATIMA AL MOHSEN

**A thesis submitted in partial fulfilment
of the requirements for the degree of
DOCTOR OF EDUCATION**

at

The British University in Dubai

October 2022

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التحقيق في تصورات المعلمين ماقبل الخدمة والمدرسين حول الخبرة الميدانية: دراسة توضيحية من
جامعة اتحادية في الإمارات العربية المتحدة

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ABSTRACT (in English)

Quality of the field experience provided to pre-service teachers is a decisive factor in producing efficient and skilled teachers after graduation. To implement field experience of quality in pre-teacher training, it is first important to understand stakeholders' perceptions about it. If any drawbacks in the programme are identified, then proper measures, programs and courses should be applied to enhance effectiveness of the field experience program. In federal universities in the United Arab Emirates (UAE), research work on pre-service teachers' perceptions of pre-service training is lacking. Therefore, the present study attempted to investigate the perceptions of pre-service teachers and instructors about their field experience. To do so, this research work employed Bem's self-perception theory and Danielson's framework for assessing the efficacy of the pre-service teachers' teaching quality. Using these theoretical backgrounds, this research work used mixed methodology of quantitative surveys, followed by qualitative open-ended unstructured interviews in which 113 pre-service teachers and 13 instructors provided their perceptions about the field experience. Further, suggestions for improving the program were also collected. The surveys and interviews were conducted as per international ethical guidelines. After analysing the collected data, it was revealed that most of the pre-service teachers and instructors have highly positive perceptions about the field experience. However, some areas were identified which needed improvement, as a considerable fraction of the pre-service teachers and instructors provided negative feedback about these areas. These crucial drawbacks identified were discussed and suggestions for rectification are provided in the present study. Based on the results, the present study made proposals for improving field experience programs in UAE, which can be optimized further to provide world-class training for pre-service teachers in the UAE before they graduated as certified teachers. It is anticipated that the findings of the present research study will also help policymakers in the education sector to implement appropriate programs and training to achieve the highest skill levels, to strengthen the pre-service teachers' preparation program. Furthermore, it is expected that the present study will add on to the essential knowledgebase for achieving the goals set for the education sector in the UAE's Vision 2030.

ABSTRACT (in Arabic)

تعد جودة الخبرة الميدانية المقدمة لمعلمي ما قبل الخدمة عاملاً حاسماً في تكوين معلمين أكفاء ومهرة بعد التخرج. لتنفيذ تجربة ميدانية ذات جودة في تدريب ما قبل الخبرة العملية في التعليم، نحتاج أولاً إلى فهم تصورات المعلمين حول هذا الموضوع. من خلال هذه الدراسة إذا تم تحديد أية عيوب في هذا البرنامج، فسنقوم بتطبيق التدابير اللازمة والبرامج والدورات المناسبة لكي نعزز فعالية برنامج الخبرة الميدانية. في الجامعات الفيدرالية لدولة الإمارات العربية المتحدة، هناك نقص في العمل البحثي حول التصورات المعرفية لما قبل الخبرة الميدانية من قبل المعلمين حول عملية وطريقة التدريب ما قبل الخدمة. لذلك، حاولت الدراسة الحالية التحقق من هذه التصورات لدى المعلمين (ما قبل الخدمة) حول ما ستؤول عليه خبرتهم الميدانية.

للتصور الذاتي وإطار عمل دانيلسون لتقييم فعالية جودة التدريس لمعلم Bem للقيام بذلك، استخدم هذا العمل البحثي نظرية ما قبل الخدمة. باستخدام هذه الخلفيات النظرية، استخدم هذا العمل البحثي منهجية مزدوجة تضم كلا من المسوحات الكمية ويتبعها المقابلات النوعية المفتوحة غير المنظمة حيث قدم 113 معلماً قبل الخدمة و15 معلماً تصوراتهم حول التجربة الميدانية. علاوة على ذلك، تم أيضاً جمع اقتراحات لتحسين البرنامج. تم إجراء الاستطلاعات والمقابلات وفقاً للمبادئ التوجيهية الأخلاقية الدولية. بعد تحليل البيانات التي تم جمعها، تبين أن معظم المعلمين ما قبل الخدمة لديهم تصورات إيجابية للغاية حول الخبرة الميدانية. ومع ذلك، تم العثور على بعض المجالات التي تم تحسينها لأن نسبة كبيرة من المعلمين ما قبل الخدمة قدموا ردود فعل سلبية حول هذه المجالات. تمت مناقشة هذه العوائق الحاسمة التي تم تحديدها وتقديم اقتراحات لتصحيحها في هذه الدراسة. بناءً على النتائج، قدمت الدراسة الحالية مقترحات لتحسين برامج الخبرة الميدانية في الإمارات العربية المتحدة، والتي يمكن تحسينها بشكل أكبر لتوفير تدريب عالمي المستوى لمعلمي ما قبل الخدمة في الإمارات العربية المتحدة، قبل تخرجهم كمعلمين معتمدين. من المتوقع أن تساعد نتائج الدراسة البحثية الحالية صانعي السياسات في قطاع التعليم على تنفيذ البرامج والدورات التدريبية المناسبة لتحقيق أعلى مستويات المهارة ولتعزيز برنامج إعداد المعلمين قبل الخدمة. علاوة على ذلك، من المتوقع أن تضيف الدراسة الحالية إلى قاعدة المعرفة الأساسية لتحقيق الأهداف الموضوعية لقطاع التعليم في رؤية الإمارات.

DEDICATION

I dedicate this work to my husband Mr. Ali Shaddad, my children Fares and Dana and my colleague, Dr Laila Mohebi. for their continuous support, encouragement and love. Without them this thesis would have not happened. Also, my deepest gratitude and appreciation goes to my teachers, and colleagues for their time and effort to assist me with my responsibilities.

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Chapter 1 : INTRODUCTION

Overview of the Chapter

This chapter is intended to provide the basic background and outline of this thesis. By explaining the background of the present research work, this chapter draws a discussion about why studies in the selected area are important. Thereafter, the research problem is presented with the support of relevant literature, followed by the aim and objectives of the study along with the related research questions. The relevance of the study is described in the section entitled ‘rationale of the study’, and finally, the overall structure of the thesis work is given at the end of this chapter.

1.2 The Basic Principles of Pedagogy

The teaching profession is one of the oldest and highly appreciated professions among human kind. The development of the teaching profession dates back to pre-historic times. As humans evolved and society started to shape itself in a systematic way, requirement for disciplined citizens and skilled people came into existence. The realisation that adults cannot be perfectly moulded to meet the requirements led to the need for people to train children into required stereotypes. This scenario could have led to the beginning of the teaching profession. Although the way of teaching, teaching methods and effectiveness have changed over time, the need for a teacher to prepare disciplined citizens remains the same. High-quality education is the foundation of developed nations, with high productivity and disciplined citizens. Indeed, the after-effects of poor-quality teaching and technically and politically biased curriculum is long-lasting. Since teachers act as the mediators of the topics covered in the curriculum, overly depending on the curriculum without paying adequate attention to improving to improving the

quality of teaching' will lead to unfavourable outcomes (Darling-Hammond & Snyder, 2000; Darling-Hammond & Bransford, 2005; Balwaria & Gupta, 2014; Encyclopedia Britannica, n.d). The quality of the citizens depends upon two aspects of the education system. First, education has the capacity to train and mould the pupil's mind and thereby influences character formation (Osher et al., 2014). Further, proper education promotes logical thinking, which in turn helps educated persons to make better decisions under stressful scenarios (Cornell University, 2018; Kim et al., 2018). Secondly, proper education allows persons to accept and analyse new concepts and ideas from all over the world and make use of these for the management of their present situation. Thus, effective education empowers people through making them self-dependent and by providing them with a clear vision for their life. Therefore, student achievements may be regarded as an important criterion for assessing the quality of teacher education rather than the class sizes at an institute and overall spending levels on the education sector (Darling-Hammond & Snyder, 2000; Darling-Hammond & Bransford, 2005; Balwaria & Gupta, 2014; Encyclopedia Britannica, n.d.).

The importance of the teaching profession for the human race is mentioned by various pioneers and national leaders. According to the former Indian President Dr. A P J Abdul Kalam, "Teaching is a very noble profession that shapes the character, calibre, and future of an individual. If the people remember me as a good teacher, that will be the biggest honour for me" (Brainyquote.com). William Arthur Ward described different stages of teachers by stating "The mediocre teacher tells. The good teacher explains. The superior teacher demonstrates. The great teacher inspires." Furthermore, Sir Albert Einstein stated, "It is the supreme art of the teacher to awaken joy in creative expression and knowledge." According to the famous American politician and former Governor of Oklahoma, Brad Henry, "A good teacher can inspire hope,

ignite imagination and instil a love of learning.” Lastly, the celebrated American writer Maggie Gallagher admired the teaching profession by saying “Of all hard jobs around, one of the hardest is being a good teacher” (Somasekhar P, 2019) During UNESCO’s 16th World Teachers' Day, UAE leaders praised teachers' virtues and importance. Sheikh Mohamed Bin Zayed, the president of UAE elaborated, calling teachers "the makers of tomorrow's generations, the pillars of nations, and the trustees of their future and the future of their children (The National, 2020).

Thus, we can say that good teachers shape the future of the nation. Therefore, one must understand the fact that the future of the nation is largely dependent upon the skills and efficiency of its teachers. The teachers mould the pupils’ characters through continuous efforts made in the classroom and by interacting with parents and responsible community members. Therefore, teachers need to be well-trained and skilled to execute their jobs. Notably, the personal and professional skills of the teacher are important for realising high-quality learning through affecting the intellectual, emotional and psychomotor areas of the students (Camp, 2011; Maranan, 2017). Therefore, effective pre-service teacher programs are essential for improving teaching performance and for solving many educational problems. Since the responsibility of a teacher is of great importance, the policymakers should attempt to impart personal and professional qualities of the highest order to its teachers. Various educational commissions and national leaders have openly accepted that quality of education is largely dependent upon the quality of teachers. Therefore, effective education is realised by high-quality teachers. In almost every nation, the pre-service teacher training institutions play a vital role in moulding good-quality teachers by providing quality training to prospective teachers who are creative, adaptive and are able to guide the students (Kamlesh, 2015; UNESCO IIEP Learning Portal, 2021; NAAC, 2021).

For establishing a fruitful education system, the policymakers and stakeholders must be clearly aware about the terms and definitions like ‘Who is a teacher?’, ‘What do students and society expect from a teacher?’, ‘How do you become a good teacher?’, ‘What is the role of pre-service teacher training in moulding good teachers?’ and ‘How can a good understanding about pre-service teachers’ perceptions be useful in implementing and improving the pre-service teacher training program?’ (Ado, 2016; Kaur, 2019; Orland-Barak & Wang, 2020; Carnegie Mellon University, 2022).

Although the role of a teacher in the classroom cannot be questioned, the arrival of the Coronavirus (COVID-19) pandemic in 2020 changed teaching platforms considerably. The COVID-19 pandemic enforced the closure of schools and colleges in almost every part of the world. Hence, most of the institutions have changed the requirement of being physically present in the classroom to taking part in online classes. Although this requirement seems easier than the requirement of being present in classes, teachers suffer from an unprecedented responsibility of maintaining the effectiveness of classes through online platforms - which is never easy. First, the teacher has to ensure that continued learning - of the student and oneself - doesn’t stop, despite the educational institutions being closed. This scenario demands a new avatar of the teacher, one who is technology driven, more patient and rapidly learning. Although teachers at many urban schools were already using technology for their teaching and were proficient in using online platforms, teachers as well as students at many federal universities and colleges were least exposed to entirely depending on online platforms for the teaching-learning process. Even though some urbanised/modernised educational institutions were used to the usage of technology and online platforms, they were also not prepared for 100% dependency on the technology-based learning-teaching process. Many teachers, who had no previous exposure to

online teaching methods, suffered considerably. However, they started to learn the basics, prepared lessons in the modern medium and delivered lectures for the well-being of their students and the society (Masoud et al., 2020; Ridge & Erfurth, 2020; Alshaikh et al., 2021; Dawson & Heylin, 2022; Maatuk et al., 2022).

Thus, both pre-service and in-service teachers need to be equipped with the technological skills and scientific knowledge to impart identity to pre-service and in-service teachers. This will help them to adapt to and will help them to make the students aware of rapidly changing socio-economic situations. Therefore, to be an effective teacher in this post-COVID-19 era, the teachers need to gain technological literacy (Shishakly & Sabah, 2019; Maatuk et al., 2022). There are many areas and aspects of the education system into which technology can be incorporated. Some examples of teaching-learning environments that need technology incorporation in the modern era include designing and implementing the curriculum, organisation of the class, teacher-student interactions, implementing the learning activities and assessment and feedback systems (Ertmer et al., 2012; Tondeur et al., 2012).

However, one must agree that during online classes, a teacher may suffer to instil all the four Cs (creativity, critical thinking, collaboration and communication) in the students. Particularly, communication and collaboration are less effective in online classes. The question is whether pre-service teacher training programs are efficiently preparing pre-service teachers for the changed teaching world in the 21st century and whether the training provides pre-service teachers with the right tools to learn, unlearn and relearn digital skills required for survival in this changed world. Therefore, in the era of online digital learning, using the definitions prepared in the pre-digital era of learning for defining a good teacher may not be accurate. Thus, the policymakers in the education sector must consider providing appropriate training to pre-service

and in-service teachers to meet the requirements of the new generation of learners who are technology-driven and want to apply these technologies during learning. Since the aforesaid learners have education needs, that are different from the older generations; old concepts of teaching-learning processes are not relevant at present. Therefore, during digital learning, the traditional ‘chalk and talk’ method of teaching and learning will make students unsatisfied and distant from educational involvement (Lowther, Inan, Strahl & Ross 2008).

Although teachers are the ones who are responsible for implementing technology in the classrooms, their opinion is often ignored by the policymakers and experts when putting together the curriculum. Hence, pre-service teachers and in-service teachers must be trained well to use the technologies that are supposed to be taught and used in the classroom, otherwise, the goal may not be attained (Bitner & Bitner 2002). Thus, developing new skills and competencies will ensure the continued learning and development process, which will ultimately lead to improvements in teachers’ identity and the effective implementation of their skill sets. To sum up, the teacher must possess professional knowledge on how the technology being taught is useful in practical life, and will help the teacher to explain its use during the particular learning activity. Thus, the transfer of knowledge from the teacher to the student is dependent on the teacher’s professional knowledge on the subject (Niederhauser & Stoddart, 2001; Tondeur et al., 2008; Ertmer & Ottenbreit-Leftwich, 2010).

According to Fullan (1982, p.107), “educational change depends on what teachers do and think - it’s as simple and complex as that”, Previous research studies show that great teachers have superior intellectual and verbal skills and they have a deeper knowledge of the subject area of concern. These features, along with the thirst to learn new things, enables them to adopt different teaching methods and to establish a good relationship with the learners. The aforesaid

characteristics of the teachers make the teacher a role model for the learners and motivate the learners to learn new things (Hanushek, 1989; Monk, 1994; Gustafsson, 2003; Rice, 2003; Darling-Hammond, 2006, a; Immordino-Yang & Damasio, 2007; Hinton & Fischer, 2010). Hence, in the modern era of pedagogy, it is necessary to provide pre-service teachers and in-service teachers adequate training to make them proficient in integrating information and communication technology (ICT) in classrooms. Otherwise, the system may fail because the teachers' knowledge and expertise have a high influence on developing the students' intellectual levels, ethical/moral values, attitudes and beliefs (Hu, Clark & Ma, 2003, p. 228).

According to Finger, Jamieson-Proctor and Albion (2010, p. 114), the emergence of computer and online learning platforms has changed the education systems considerably. Although policymakers develop policies and simply expect that schools will make use of ICT in classrooms to enhance the process of teaching and learning, these expectations are not always fulfilled. This 'lack of translation into practice' points toward the need for improvement in pre-service teacher education systems and training for in-service teachers. Therefore, universities should arrange extra learning events, bootcamps, learning experiences and assessments, while moulding the pre-service teachers into qualified in-service teachers who can make use of/teach with technology in classrooms. Teaching and learning in the 21st century demand that teachers promote digital citizenship and that they engage themselves in ongoing developments in technology use (ISTE 2015; Kennisnet, 2012; Tondeur et al., 2012).

Therefore, pre-service teacher training may be regarded as a beginning point of a teacher's career. As the pre-service teacher education program provides the skills, beliefs, attitudes, self-realisation and identity to the prospective teachers, this training can be looked upon as an important chapter in becoming a good teacher. This program helps the pre-service teacher to

self-realise, understand and self-reflect to make them a teacher after graduation. The pre-service teacher education programs across the globe aim to build teacher knowledge, beliefs, and identity so as to prepare the teachers, who can take over the baton from the predecessors, start educating the future citizens and take part in the task of nation building (Mufidah, 2019; Nelson & Voithofer, 2022; Buchner & Hofmann, 2022).

Generally, the three-tiered conceptual design is used for the purpose of teacher training, which includes normative, speculative and analytical functions. As per the suggestions of the first conceptual tier, preparation of a pre-service teachers' learning program curriculum should be designed to instil the qualities of creative and innovative thinking in the prospective teachers. As per the second conceptual tier, the training system should aim to develop adequate skills and analyse and understand the context-dependent educational problems and issues related to teaching and learning. This situation demands that pre-service teachers must be trained to find logical solutions to such context-dependent issues. In the third tier, the goal is to establish action plans to adapt and manage the professional issues and endure professional norms and standards in the context of the teaching-learning process, aimed at the betterment of individuals and the community (Feimen-Nemser, 2001; Ishumi, 2009, p.10; Nzilano, 2013). However, most of the traditional pre-service teacher education programs placed emphasis on gaining knowledge that is specific to the teaching subject and in attaining classroom presentation skills. This scenario can backfire because teachers' professional identity, ethical and moral values, beliefs and attitudes are as important as domain knowledge and teaching skills. Inadequate training in these areas can make the teacher less effective in the classroom as well as in society (Feiman-Nemser, 2001; Beauchamp & Thomas, 2009; Rogers, 2011; Sutherland & Markauskaite, 2012).

Therefore, all the institutions for pre-service teacher training should be professional bodies equipped with the latest facilities, teaching facilities for ICT and a clear vision to cultivate great teachers. However, many of the federal and private pre-service teacher training institutions are not adequately equipped with the aforementioned facilities to provide quality pre-service teacher training programme. Many centers across the world function as independent entities and this makes pre-service teachers ‘unaware’ about the latest developments, up-to-date technology-related facilities as well as basic research and developments in the field of education (Ryan, 2011; Holmqvist, 2018; Tasdemir et al., 2020). Therefore, policymakers should take adequate measures to ensure that the pre-service teacher gets adequate exposure to the latest theoretical and technical aspects of teaching and learning. This will warrant the transformation of potential pre-service teacher candidates into great in-service teachers with great skills, knowledge-base, well-defined pedagogic capacities, and logistic attitudes.

1.3 Background of the Research

The United Arab Emirates (UAE) have set the national agenda on reforming the current education system, for accomplishing international standards in the education sector in the UAE (UAE, 2009). Although the UAE already have excellent infrastructure and adequate funding in the education system, the UAE often fail to perform well in the education sector when compared to global competitors. Indeed, the UAE’s attempts to enhance the quality of pre-service teacher skills, education policies and performance to the international level shall be regarded as the foundation for transforming the education system. Furthermore, in the UAE’s 2030 Agenda for Sustainable Development (2017), the focus was on developing a world-class education system.

As an attempt to supply a sufficient number of qualified teachers in future and to improve the education sector, UAE authorities aim to establish undergraduate education programs in UAE federal universities, which will prepare potential teacher candidates to become the future in-service teachers. These undergraduate students who take on the ‘prospective teacher’ education programs are called ‘pre-service teachers’ during their final year. These education programs provide the pre-service teachers with four years of theoretical/practical experience, followed by a full-semester of training to apply the theoretical knowledge gathered during the previous semesters of the course. The application of theoretical knowledge is done in the classroom setting, under the guidance of a supervising teacher (instructor). This portion of the pre-service teacher education program is referred to as ‘field experience’ in UAE universities. The present study focused on the perceptions of pre-service teachers undertaking the field experience part of the pre-service teacher education program, conducted in a Federal University in the UAE.

As mentioned above, this study focuses on field experience of pre-service teachers because this is a critical part of their transformation into a qualified teacher. According to Hill et al. (2015), the efficiency and effectiveness of pre-service teachers who are in the first five years of their careers can be greatly improved through field experience. The Marzano Model for Teachers (2013) has laid down a four-step plan for effective evaluation of a teacher’s field experience. These include a rigorous standards-based system in the classroom, followed by student results and evaluation of student needs. The third domain is responsive teaching followed by revitalised access to resources for growing teacher practices. (Marzano Center, 2017). The end result of the Marzano Model is for teachers to reflect on their experiences, revitalise themselves and to try to improve the resources before resuming the task in the following term. Field experience, defined as being in ‘actual contact’ and ‘acting as team leader in the classroom’, is indispensable to the

Marzano Model. Field experiences are structured in a way that includes pre-service teacher preparatory courses, which moderate the attainment of the recommended directions for a teacher's pedagogy.

However, a word of caution is necessary while narrating field experiences as an indispensable tool in improving teaching standard. Morello (2012) reported that Indiana legislators had found inconsistencies in the system. Logically, the students' achievement is regarded as the teacher's success. However, they found that teachers scored highly on the models described above, yet the test scores of students in some schools were poor. Nevertheless, empirical investigation about the value of field experience in teacher education and its impact on preparing them to be qualified teachers remains positive. However, there are various studies which have showcased the impact of field experience on the progression of pre-service teachers under specific conditions, but there is a great deal of debate required in the field about the impact of field experience on the teachers' professional development and its contribution to individual development. Although there are researchers (Al-Qirim et al., 2017; Hill, et al., 2015) who argued that field experience programs play little to no part in developing the effectiveness in the teachers' professional context, on the contrary, some scholars (Blazar et al., 2016) disagree and state that field experience has substantial impact on preparing pre-service teachers to pursue their future career as successful teachers.

The problems mentioned above have been replicated in the Middle East as well. Field experience usually refers to pre-service teachers undergoing classroom teaching practice, called 'practicum'. Recent research by Alamri (2018) in Saudi Arabia "showed that early field experiences in teacher education remain problematic and might be challenged and reconfigured to better prepare pre-service teachers for teaching students in schools." Pre-service teachers'

experiences in Turkey revealed serious problems as well. Alamri (2018) stated these problems were related to classroom management, the place and duration of the practicum, regulations and inefficient feedback. Field experience includes observation of the experienced teachers, an eight-week preparation before being deployed to take over a class. Alamri (2018) states that the design and implementation of the field experience period was inadequate to activate essential skills in pre-service teachers, which is needed for managing real classrooms and the school environment (Alamri, 2018, p. 148). It is necessary to mention that Alamri's observations referred to teachers of the English language to Arabic students. Therefore, the social and cultural hurdles that the teacher faces are key in this context. However, these hurdles are not limited to teachers in English; schools in the UAE are multi-cultural and are a replica of the United States. Due to these cultural differences and inappropriate behaviour of the students, the pre-service teachers -especially the female pre-service teachers - battle to manage their classrooms in the UAE (OECD, 2020; Dukmak & BanyIssa, 2020).

In a relevant study on the perceptions of pre-service teachers regarding their educational preparation for the classroom, Khaled, Dukmak and Ishtaiwa-Dweikat (2016) reported that most of the pre-service teachers perceived themselves as highly-prepared or well-prepared for the classroom. The authors did not find any gender-wise difference in this perception. The work done by Almughyiri (2021) on the perceptions of pre-service special education teachers in Saudi Arabia revealed that there are five areas of concern with regards to a teacher training program. They are limitations in educational strategies and evidence-based practices, one-sided classroom communication from the supervisor, superficial and less useful textbooks, more stress on theory than practical knowledge and lack of proper supervision from their faculty adviser during the practicum. Similarly, a study by Forawi, Almekhlafi and Al-Mekhlafy (2012) showed that pre-

service teachers have a positive perception about e-portfolios and most of them perceived e-portfolios as a vehicle to adopt technology into K-12's learning to enable them to share their work. Although the number of studies on the perceptions of pre-service teachers regarding their training experiences is limited, it is clear that such studies can provide valuable insight into the pitfalls of the program. As mentioned previously, the infra-structure at UAE universities is of international standards, yet they fail to achieve students' satisfaction and expression (Ashour & Fatima, 2016; Almaghaslah & Alsayari, 2022). Therefore, serious efforts are needed to address the issues in pre-service teachers' education programs in the UAE.

1.4 Statement of the Problem

Whilst implementing field experience, there is no uniformity across different institutions in the UAE; different approaches are prevalent in the implementation and organisation of field experience in different university courses and its deleterious effect is exhibited by pre-service teachers (Al-Qirim et al., 2018; Alvarez & Anderson-Ketchmark, 2011). Because of the higher diversity in the educational perspective, Becker et al. (2014) observed that although pre-service teachers considered field experience indispensable for increasing their competencies, the practicum part presented some problems. Becker's observation is significant to the UAE context in two ways. First, because of the global nature of the classroom setting in the UAE, pre-service teachers in training always have to adapt to and deal with multiple challenges, cultural, technical and language-related situations, all at the same time. In this scenario, knowledge alone does not make things perfect. Becker et al. (2014) stated that "For instance, (it was found) that student teachers could not handle the classroom pressures (e.g., pupil management) in an unsupervised teaching practicum and were overwhelmed by handling their experiences alone." Second, pre-

service teachers often reflected on the quality of perceived support they received from the supervising teachers or from the school administrators. The authorities rarely understand this part of the field experience from the perspective of pre-service teachers. Thus, Marzano's Model overemphasises field experience from the perspective of the authorities rather than from the side of the pre-service teacher.

There is a gap in the experiences of the pre-service teachers and teacher development (Marzano, 2012). Further, the Marzano Model has not provided information that showcases the complex interaction between the individual components of the pre-service teacher training program. The attitude towards field experience and the state standards that are part of the teacher program has been mentioned above (Indiana Department of Education, 2012). They were critical of the common practice of field experience and examined the changes in the behavioural pattern of the pre-service teachers after their participation in student teaching or field experience. They argue that student teachers are influenced due to their participation in the field experience, but it is unclear how much the pre-service teachers are influenced and how beneficial the field experience program is for moulding the pre-service teachers in a particular way.

The previous literature (Thomas, 2010; Becker et al., 2014) has recognised that if the pre-service teachers are evaluated based on their potential to grow and improve under strict instructions and guidelines during field experience, their actual efficacy may not be realised unless there is a continued evaluation program after the student teacher is being deployed. Further, various works suggest that this program is superficial and is not really connected to the teachers' learning process nor does it help teachers in their professional context (Health, 2003; Institute, 2011). Therefore, in many cases the pre-service teachers perceive themselves placed in the passive part as a recipient of the external evaluation program and they believe that due to insufficient

feedback provided by the supervisors from the school context, they are unable to improve their pedagogical style in the professional context. Hence, understanding this dilemma is very important to enhance the experience and to prepare pre-service teachers for their teaching career. In brief, Becker et al. (2019) identified two major components of field experience which need attention. First, is the need for emotional support, which requires the senior teacher to listen carefully to the pre-service teacher's needs, build self-confidence in them and encouraging self-reliance. Second, Becker also mentions the significance of clear instructional support in improving the pre-service teacher's pedagogical skills. Because of the global nature of the classroom, pupil behaviours cannot be categorised into one group (Dukmak & BanyIssa, 2020). However, Ismail and Jarrah (2019) reported that pre-service teachers have a positive perception about pedagogical preferences and teaching skills. Further they reported that pre-service teachers are highly motivated for their profession. However, the study population used to reach such a conclusion was very small ($n = 12$). After careful observation, one can realise that research works in the UAE in the context of pre-service teachers' perception of their preparation lack strength and necessary attention must be given in this regard if the authorities of UAE higher education want to improve the situation. Therefore, it is clear that there is a big gap between the policymakers' expectations regarding the outcomes of pre-service teachers' field experience and the reality.

1.5 Aim of the Research

Since the previous literature suggests there are pitfalls in the field experience program, it needs to be improved. Since pre-service teachers and the instructors are the stakeholders of this program, their perceptions regarding the implementation of pre-service teachers' field

experience in UAE federal universities are of great importance. Hence, this study aims to explore perceptions of pre-service teachers and instructors (stakeholders) regarding the process of becoming a qualified teacher through the field experience program. Further, their suggestions for improving the structure and implementation of the field experience are also collected. By doing so, the present study aims to gain deeper insight into the drawbacks in the pre-service teacher education program in its present structure. Further, it aims to contribute towards developing an understanding of the pre service teachers' perceptions regarding their identity and beliefs in teaching and learning. Since this study is conducted in a federal university in the UAE, this study aims to make policymakers in UAE higher education aware about the drawbacks of the present format of pre-service teacher education. Furthermore, this study aims to formulate suggestions for improving the pre-service teachers' education program in the UAE. In brief, the aim of the study is to collect, analyse and report the perceptions of the pre-service teachers regarding field experience as well as the opinions of their supervisors (where applicable).

1.6 Research Objectives and Research Questions

This research will focus on exploring preservice teachers' and their instructors' perspectives about field experience and in formulating suggestions and recommendations to enhance these. hence, the research objectives are as follows:

1. To understand the strategies used for field experience in the selected federal university.
2. To determine pre-service teachers' perceptions about their field experience.
3. To determine instructors' perceptions about field experience.
4. To recommend appropriate strategies for implementing field experience effectively.

Given the above research objectives the research will answer the below questions:

1. What are pre-service teachers' perceptions about field experience in their college?
2. What are instructors' perceptions about field experience in their college?
3. How can the experience be enhanced?
4. What are the suggestions from the pre-service teachers and instructors on enhancing the efficiency of field experience?

1.7 Rationale of the Study

As described above, despite having a good infrastructure, the performance of UAE in the higher education sector is not satisfactory. Previous studies in the UAE have shown that there are many pitfalls in the UAE education system (Ashour & Fatima, 2016; Thomas, 2021). As mentioned previously, many of the pre-service teachers fail to perform when they are deployed in a real classroom. This indicates that there are some issues in their practical classroom training - the field experience. Assessing the stakeholders' perceptions is the best method to get a clear idea about the problems in any system. Since stakeholders are the functional units during the implementation of the policies, they have the best viewpoints regarding the drawbacks and efficacy of a system under question (Sandholtz, 2011; Fernandes et al., 2014; Amankwah, Oti-Agyen & Sam, 2017). However, care must be taken when collecting data from stakeholders to avoid bias. The research studies in the UAE in this regard are few and many of them lack the required sample strength which makes the results less reliable. These studies mainly used structured/closed-type questions for data collection, which made it difficult for stakeholders to make suggestions and give opinions about the subject under question. Furthermore, research studies in the UAE are only focused on the perception of pre-service teachers and these studies

totally missed an important stakeholder entity of the pre-service teachers' education program - the instructors (supervising teachers). Therefore, the researcher proposed to perform a survey on the perceptions of the stakeholders in pre-service teachers' field experience - the pre-service teachers and the instructors.

1.8 Significance of the Study

According to Becker et al. (2019), pre-service teachers place more emphasis on emotional and instructional support from supervisors than from other parts of their field experience. Previous research studies related to pre-service teachers' perceptions conducted in other countries showed that such research can yield valuable information that is useful in improving the education system. The aforesaid studies have been conducted in countries which perform better than the UAE with regards to higher education. Although some studies were conducted in this regard in universities in the UAE as well, these studies were narrowed down to particular sub-topics within the broader areas of concern. Furthermore, the number of issues that were identified during the pilot study was much larger than the issues revealed in previous research studies. In addition, the current study aims to collect and analyse feedback from the instructors as well, which adds a new dimension to the proposed study. Therefore, this study will provide insight into what pre-service teachers think about field experience in terms of its positive aspects and challenges. Also, it will give instructors' perspective about it, again in terms of positive and negative aspects of the program. As per various models, the feedback from the stakeholders is useful in generating valuable insight about the programs and can be useful in drawing a road map towards enhancing the pre-service teachers' field experience program. While there is extensive research on field experience as a crucial part of teacher preparation in Europe and in

the US, very little of this research relates to the UAE. In brief, there is a dearth of research studies that investigated the pre-service teachers' perceptions about field experience and how it can influence their professional pedagogical context. Therefore, more research work is needed to understand how field experience is influencing in-service teachers' efforts, their classroom activities and their overall effectiveness in their professional growth. Considering the research gap identified from the previous studies, the present study is designed to understand the perception of pre-service teachers and their instructors about field experience in federal universities in the UAE. Based on the results of the surveys used in the present study, recommendations are made to strengthen the training.', the study will make recommendations to strengthen the training. For this reason, the present study will have a positive impact on drawing the attention of the national policymakers to address the issues in the pre-service teachers' training program. Thus, the present study has value in relation to pre-service teachers' field experience because it can provide insightful information to improve the education sector across UAE educational institutes.

1.9 Structure of the Thesis

This thesis comprises an abstract of the thesis, followed by five chapters a list of references in APA format and relevant appendices.

Chapter One provides detailed background information on the research topic, an overview of the present scenario on global and UAE contexts, and describes the problem statement of the research. In addition, Chapter 1 identifies the gap areas in the research in the UAE and provides the rationale for undertaking the present study, along with aims and objectives of the study. Further, the overall structure of the thesis is briefly discussed.

Chapter Two is the detailed review of the relevant literature in the area of the study. The concepts of teacher education, pre-service teacher training programs, major policies in UAE higher education, as well as theoretical and preliminary conceptual framework for the study are discussed in this chapter. Further, this chapter searches for studies in the area of concern as a precautionary measure in order to avoid duplication of the work. This chapter describes previous research and theoretical works which support the preliminary conceptual framework of the present study.

Chapter Three provides the detailed description of the methodology used for the study. Further, this chapter explains why a particular method is selected for achieving the aims and objectives of the study. Methods, procedures, how qualitative and quantitative data is collected, how data is processed, and so on are also described in detail in Chapter 3. Finally, the analytical methods and tools used for the study are described, with a justification of selecting the particular method of analysis.

Chapter Four narrates key findings and results of the present study. Both quantitative and quantitative study results are provided. Detailed narration of the results - pictorial, tabular and descriptive narration in words - is provided in this chapter. The relationship between the preliminary conceptual framework and the findings is also provided. The chapter then summarises the research findings.

Chapter Five provides the detailed constructive discussion of the research findings made in the present study. The results are also discussed in relation to the preliminary conceptual framework. Further, the limitations of the study, strength of the study findings and conclusions drawn from the research are also provided. Recommendations for a brighter future in the UAE education sector are also included. The chapter then presents the conclusions of the study.

Finally, it narrates key areas of the study and provides recommendations for further research and study in the same field.

1.10 Summary of the Chapter

This chapter provided a detailed introduction to the thesis and described the focus areas of the present study. This chapter commenced with background information about the general thematic, conceptual and contextual topics which are related to the main topic of the research - pre-service teachers' perceptions of the pre-service teacher training program in a federal university in the UAE. Thereafter, the relevance of the research study with regards to the present context was also presented. In addition, this chapter also defined the study's relevance, with regards to the present scenario in the UAE and the existing educational policies on the subject. Then the research problem was stated clearly, including both the international context as well as the UAE context-based points of view. The rationale of the study, aims and objectives, as well as main research questions related to the study were also discussed in brief. The detailed discussion and methods used for achieving the aims and objectives will be discussed in detail in the 'materials and methods' section. An outline of the thesis structure was also provided towards the end of this chapter.

Chapter 2 : LITERATURE REVIEW

2.1 Overview of the Chapter

The objective of this chapter is to review all the relevant literature in the area of concern. Review of literature can ensure that the researcher has adequate background information about the study. Further, through proper literature review, the researcher can identify important gap areas in the topic under study. Furthermore, it can avoid the unnecessary duplication of research works (Bolderston, 2008; Paré & Kitsiou, 2017). In the present context, the chapter evaluates literature on the teacher preparation policies and training programs in the UAE as well as across the globe. In addition, it searches for information on the challenges faced by pre-service teachers as well as in-service teachers in the ‘UAE as the global population’ context. Studies on the perceptions of pre-service teachers, in-service teachers and instructors about their field experiences are also compiled. By doing so, the present chapter attempts to gain a deeper insight into the UAE scenario, which can be applied during the study progress to achieve the study objectives and for successful completion of the study.

2.2 The Role of Teachers in Education

The calibre of a nation’s teachers determines its progress, making teaching the noblest of all professions. Various education reforms across the world, including the UAE, have made considerable progress with reference to overall human literacy, educational infrastructure and universal access and improved enrolment in schools (Ministry of Education, 2018; Rajagopalan, 2019). The teacher must now be equipped not only to teach but also to understand the student and the community of parents so that children regularly attend schools and learn. All the

countries need to supply well-qualified and professionally trained teachers in larger numbers over the coming years to meet the changing educational requirements. It is well known that teacher competence, sensitivity and motivation play a major role in determining the quality and extent of student achievement. Teacher education is a programme that is aimed at the development of teacher proficiency and competence that would enable and empower the teacher to meet the requirements of the profession (Ministry of Education, 2014; Ministry of Education, 2018; Dinesh Kumar, n.d.; Rajagopalan, 2019). According to the Dictionary of Education, teacher education means “all the formal and non-formal activities and experiences that help to qualify a person to assume responsibilities of a member of the educational profession or to discharge his responsibilities more effectively” (Good, 1945).

According to experts in the education field, teacher quality is an important factor in determining the student’s achievement, accounting for student learning and family background characteristics. Class size, certification, type of qualification, degrees obtained and years of experience are common predictors of teacher quality. However, the relationship between the pedagogical skills of teachers and teacher quality is a less explored area. Pedagogical knowledge can be defined as the specialised knowledge and ability of teachers to generate effective teaching and learning environments in the classroom for all students (Guerriero, n.d.; Rajagopalan, 2019).

The Teaching and Learning International Survey (TALIS) asks teachers and school leaders about working conditions and learning environments at their schools. The beliefs about the nature of teaching and learning in TALIS include “direct transmission beliefs about learning and instruction” and “constructivist beliefs about learning and instruction” (TALIS, 2018). The dimensions of these beliefs are well-established in educational research at least in Western countries (Kim, 2005). The direct transmission view suggests that a teacher’s role is to transfer

knowledge to the student in a clear and structured way, with correct solutions, to provide the students with clear and resolvable problems and to warrant calmness and concentration in the classroom. However, the constructivist view considers students not as passive recipients but as active participants during the process of learning. Teachers who subscribe to this viewpoint place an emphasis on encouraging student inquiry, favour giving students the freedom to come up with solutions to issues on their own and let students participate actively in learning activities. In this context, the teacher should aim at the development of thought and reasoning processes in students rather than emphasising the acquisition of specific knowledge (Staub & Stern, 2002). It is significant to recognise the distinction between practices and beliefs. Traditions in education and culture have an impact on both practices and beliefs. They represent diverse yet connected elements of the pedagogical context for students' learning.

2.3 Teacher Code of Ethics - International Perspectives

Two elements that form the foundation for change in the multicultural, international classroom were mentioned by Washburn-Moses, Kopp and Hetttersimer (2012). The first was the increasing focus on student populations that are deemed to be academically at risk. These populations currently make up a sizeable share of the urban student population in US public schools. The second part of the observation was that non-traditional students and future non-traditional instructors were increasingly being brought into the traditional classroom, which had previously been dominated by white, female, middle-class teachers. Due to this new reality, either the existing code of ethics needs to be strengthened or the process for preparing new in-service teachers needs to be reviewed.

Freeman (2010), a former director of field experience in North Carolina, did a great job of illuminating the new reality in US classrooms. The necessity for more thorough preparation of the incoming pre-service teachers before they reach the classroom is underlined by Freeman, due to a couple of field experiences while performing that position. As the director of field experience, Freeman received a variety of grievances from principals. One such situation included “where a pre-service teacher forgot to turn off her phone while she delivered lessons, wore inappropriate dress, the student teacher fell asleep and there was even sometimes bizarre ordering and having a pizza delivered in class.” In another incident, the pre-service teacher complained to teacher that she had not been allowed on school grounds “because of her purple hair and numerous body piercings.” The pre-service teachers were not aware of nor did they comprehend the idea of ‘contextual self’, a pattern of behaviour governed by what a particular situation requires. Freeman advised that in preparing pre-service teachers, a copy of the “Teacher Code of Ethics” should be given them. Most US Departments of Education provide these free of charge. (Freeman, 2010, p. 16-17).

According to Freeman (2010), a universal understanding or acceptance of the conventional code of ethics does not exist at present. Therefore, the field representative must provide the pre-service teacher with thorough training prior to their pre-service teaching experience. The supervisor cannot assume that the pre-service teacher is aware of or has any prior knowledge of simple requirements like signing in and out of the school site, what to do on teacher workdays, what to do when the weather is unfavourable, administering assignments and assessing them, finishing pre and post tests before and after a lesson, keeping a daily journal and engaging in self-evaluation. Freeman suggests that inviting previous students who are now teaching in the classroom to return early in the semester and participate in a question-and-answer session is the

greatest approach to grab pre-service teachers' attention. The goal of partnerships between teacher preparation programs, community, and neighbourhood schools should be to gather information about how senior teachers serve as the finest role models for aspiring teachers (Richmond, 2017).

The global classroom requires that incoming teachers be acquainted with diverse cultures and backgrounds of students. A university should: "require pre-service teachers to participate in different placements in order to confront issues of diversity (exceptional students and students from different ethnic, racial, gender, socioeconomic, language and religious groups" (Freeman, 2010, p. 18). Freeman concluded by saying that thorough pre-service teacher training, which includes criminal background checks at the Sheriff's Office prior to deployment, is just as crucial as actual classroom experience.

2.4 Important Systems and Policies in Education across the World

The educational policies of various countries are being evaluated and monitored by the Organisation for Economic Co-operation and Development (OECD). OECD's work offers fresh insight into how different educational systems are performing through the TALIS. TALIS offered the first globally comparative perspective on the conditions of teaching and learning. As a part of the OECD Indicators of Education Systems (INES) project, TALIS was created. TALIS aims to assist nations in reviewing and developing policies to make the teaching profession more appealing and effective. It draws on the OECD's 2005 review of teacher policy, which identified significant gaps in international data and emphasised the need for better national and international information on teachers. This was the centrepiece of the 2005 OECD strategy. TALIS is envisioned as a series of surveys with subsequent rounds intended to address policy-

relevant issues determined by the participating nations (OECD, 2009). TALIS examined major aspects of teachers' professional development, including the teachers' beliefs, attitudes and practices, teacher appraisal and feedback and school leadership. The sample size was 200 schools per country, including 20 teachers in each school. Over the course of the survey, nearly 89 %t of teachers on average across the 23 participating countries reported participating in some professional development (defined as having attended at least one day of development in the previous 18 months). This shows that most teachers in these countries actively participated in their professional development. However, the fact that 11% of lower secondary teachers did not participate in any structured development activities should not be deemed insignificant (OECD, 2009).

Globally, inclusive education is recognised as an effective strategy for fostering all children's learning. Minority groups in society, including students with disabilities, are subject to systematic discrimination. In light of this, numerous nations, including the UAE, have complied with the global call to practise inclusive education and put in place mechanisms to enhance equal access. These nations have done so through the use of policy developments that communicate international advocacy and campaigns. Promoting acceptance and peaceful coexistence between students with disabilities and peers is one of the main goals of implementing inclusive education. The UAE federal government has created policies since 2006 with the goal of achieving inclusive education at all academic levels (Gaad, 2019). However, the association between normal students' perceived knowledge of inclusive education and their attitudes towards their peers with disabilities is not well-managed in the UAE context.

For instance, Alzyoudi, Opoku and Moustafa (2021) examined the attitudes of typically developing university students in the UAE toward their disabled peers. A total of 233 college

students completed the updated Chedoke-McMaster Attitudes towards Children with Handicaps (CATCH) scale. The study found that typically developing students in UAE classrooms had negative attitudes toward their peers who have disabilities. The authors came to the conclusion that creating an environment that is conducive to learning is essential to achieving the objective of having all students study in one classroom as well as methods to foster friendly relationships between students with disabilities and their peers. However, more specialised educational programmes may be necessary in the UAE because of global nature of UAE classrooms, which have students of different social, economic and cultural backgrounds.

2.5 Education Policies of the UAE - The Education Reforms of the UAE in the 21st Century

Education has recently been prioritized in the UAE, as shown by the development of a framework for school inspections that serves as the foundation for a system of school evaluation that is meant to encourage and support effective school reform and performance (Ministry of Education, 2014; Ministry of Education, 2018; OECD, 2019).

The UAE's Ministry of Education (MOE) has started a number of educational reforms since the early 1990s, during a period of significant economic and social change in the UAE and rising foreign cultural influence (Matsumoto, 2019). The largest and richest of the UAE's seven emirates, Abu Dhabi, has a public education system that is overseen by the Abu Dhabi Education Council (ADEC), a government organisation founded in 2005. The New School Model (NSM) was developed by ADEC in 2009 as its largest reform initiative (ADEC, 2009a). The NSM program adapted elements of the global reform movement, such as focusing on ongoing assessments and standardised testing and organising the curriculum around learning standards

and outcomes (ADEC, 2009a). The introduction of the Public-Private Partnership (PPP) in 2006 was a pivotal development in the education reforms. To help schools with professional development, foreign consultants were hired, which enhanced the pedagogical outcomes. The adoption of an Australian curriculum was the first phase of the PPP. Local teachers were trained in this new educational infrastructure on-site by advisors, with an emphasis on improving English proficiency. The central goal of ADEC's extensive strategic plan was to standardise education in order to exceed global performance standards (Dickson et al., 2013).

The MOE in the UAE continues to rely on outside knowledge for the creation of educational policies, much like ADEC. The UAE's policy is shaped by the tenets of the global reform movement, which places a strong focus on standardisation, competitiveness and external responsibility (O'Sullivan, 2013). ADEC employed tens of thousands of teachers from English-speaking nations, including the United States, the United Kingdom, Ireland and South Africa, after NSM was established in 2009 (ADEC, 2009b; Dickson et al., 2013). In reality, ADEC talks extensively about its aim for global partnerships and has consistently been receptive to input from other nations. When referring to potential 'business models' that international partners might provide, ADEC's thoughts before entering into a collaboration reflect their priorities, which are obviously inspired by the global reform movement.

Qudwa is a forum that was established in 2016 with the goal of elevating the teaching profession in the UAE and enhancing the direction of education. Qudwa views teachers as the system's change agents and taps into their knowledge to encourage collaboration, creativity and innovation. In that regard, it is an occasion put on by teachers for teachers. The third edition of Qudwa continued to put teachers at the centre of the discussion about preparing schools for the future under the theme of "Teaching for Global Competence." The ability of teachers to instil a

new set of global competence skills, such as the capacity to seek and evaluate information, consider various points of view and apply critical thinking to make a difference in their communities, is becoming increasingly important for students to thrive in a rapidly changing global context. Teachers in the UAE must learn to continuously update their own knowledge and skills in order to model lifelong learning for their students. The UAE strives to create an educational environment where teachers are respected, supported knowledge workers who have opportunities to advance professionally and collaborate with one another. Qudwa 2019 promoted a vision of Continuous Professional Development for teachers as a crucial component of quality teaching. The forum developed a culture of collaboration among teachers to support teaching for global competence, building on a series of focus groups held in 2019 (OECD, 2020; QUDWA, 2022).

Matsumoto (2019) offered an insightful narration on the education reform in the UAE and the benefits and negatives of UAE's education policy borrowing, without considering the cultural and socio-economic views. In fact, the UAE government employed worldwide standards to gauge its objectives and has subsequently attained levels comparable to those found outside in industries including business, tourism, aviation and architecture. However, similar rates of advancement in education have lagged behind the nation's social and economic development (Harold, 2005). Ninety-five percent of graduating seniors in the Emirate of Abu Dhabi, according to research data from the Abu Dhabi Education Council's Road to 2030, do not meet university standards and authorities need to take corrective measures to overcome this issue (Matsumoto, 2019). Additionally, the OECD (2015) survey outlines the significance of enhancing educational outcomes in the UAE as follows:

The United Arab Emirates is identified by the Programme for International Student Assessment (PISA) as one of the most rapidly improving education systems in the world. However, its students still perform well below the levels expected in advanced economies. The future prosperity of the United Arab Emirates and other countries will depend, to a large extent, on the country's success in strategically developing and optimally using its skills potential (OECD, 2015, para. 3).

For countries like the UAE, whose mission statement is to acquire policies from top-performing countries (United Arab Emirates, 2010), more weight should be given to how the origin country executed an idea rather than how well that idea translated to international benchmark data. However, examining data and formulating a theory based on it requires far less work than conducting a thorough analysis of the visible and invisible aspects of daily intricacies. The level of organisation required to take an idea and work backward to realise goals is beyond the ability or willingness of most governments (Gaad, Arif & Scott, 2006). Research continues to demonstrate the damaging impact disorganisation and unclear communication have on the teachers' output. When communication lack structure and cohesion, instability often follows. Education in the UAE has undergone constant change throughout its history (O'Sullivan, 2015).

The Road to 2030 prioritises improving university outcomes for Emirati students as it prepares students for the workforce (ADEC, 2012). One of the five goals of ADEC's higher education system is human capital. The focus of short-term objectives is on how people can contribute to the labour market. Long-term objectives place a strong emphasis on the need to measure progress under the heading of 'Social and Economic Gains'. The Global Education Reform Movement's influence is evident throughout The Road to 2030 and also shapes the nation's strategy to keep implementing foreign educational practises by forming alliances with universities from other nations. According to the higher education mission statement for Abu

Dhabi, education should be matched with labour market demands in order to lay the groundwork for a knowledge-based, innovative society.

The misalignment between labour market demands and the current academic standing of UAE university graduates is depicted in The Road to 2030. Universities with relatively low international rankings include Abu Dhabi University and the United Arab Emirates University (UAEU) (Times Higher Education, 2022). The government should set up a Committee for Human Capital Development with a focus on both academic and “commercial” outcomes, according to one of ADEC’s recommendations. The primary objective of educational policymakers in the UAE is to develop students’ skills so they can contribute to the national workforce, as is detailed in The Road to 2030. Although the aim of the UAE is to rely less on foreign labour and hydrocarbon capital, the reality is that: (a) only a small portion of the labour market in the UAE is made up of nationals; and (b) the skill sets of graduating students are currently subpar, and readdressing the needs of students is at a critical stage for this still-emerging industrial economy (OECD, 2015).

The framework employed to measure quality was found to have a favourable and relatively strong correlation with school quality assurance. The results also showed that the framework had a beneficial impact on student learning abilities, comprehension of Islamic principles and child safety (Hussein El Saadi, 2017). In the end, measuring school quality serves to ensure that all children enrolled in schools in the UAE have the chance to accomplish at a high level and develop into productive members of their society and the larger global community. Several strategies are being tried in states where there have been issues with teacher retention and recruitment, such as rewarding teachers who work in areas where there is a persistent shortage with bonuses, developing new career paths that include opportunities for teacher leadership roles

and higher pay and increasing funding and incentives for teacher professional development (Aragon, 2016).

Those in charge of guaranteeing a steady supply of trained, dedicated teachers are very interested in learning why instructors chose teaching as a career and what factors may cause them to leave or stay in the profession. Overall, the opinions of teachers in the UAE were fairly similar to those of educators in other developed nations, as evidenced by the academic literature. They all reported a desire to advance their skills, work with other teachers and have their schools assist them in these endeavours. The authors proposed that it may be crucial to take into account a division of responsibility between the school system and policymakers for designing potential ways to support teachers in the UAE. School systems may allocate funds to frequent professional development opportunities, school leadership development, classroom observation and input from colleagues, as well as chances for parent-teacher and teacher-to-teacher collaboration. The best areas for policymakers to concentrate on are teacher assessment protocols and practices, teacher recruitment and hiring practises to support teachers who are trained to work with student populations that have been identified as underserved and policy changes affecting the profession as a whole. By expanding possibilities for teacher cooperation and professional development, the UAE may benefit teachers who are working to ensure that pupils receive the best possible education (Goe, Alkaabi & Tannenbaum, 2020).

It might be difficult to implement policies in a way that advances the goals set out in institutional documents. One of the biggest obstacles to achieving the intended outcomes of any educational institution is the failure to match the desired outcomes and policies, which has been acknowledged as a gap. The strategy of bilingual education has recently received a lot of attention in the UAE. According to Musmar (2018), this policy was developed and organised

top-down, which in turn prevented many stakeholders, mostly teachers, from actively participating in the policy's alignment with its execution. The findings demonstrated that a lack of scientific foundation in educational policy does not lead to effective learning. The benefits of bilingual education in promoting linguistic academic achievement have been demonstrated; however, this cannot be realised when students' actual English proficiency is critical (too low) and teachers' voices are not heard. It is advised that educational policymakers take the study's findings into account when adjusting the current educational strategy in order to create channels for communication between all parties concerned (Musmar, 2018).

Warner (2018) claims that there has been ambivalence towards the education reforms that the MOE announced in order to meet the UAE National Agenda goals by 2021. Most stakeholders will concur that public sector K-12 provision needs to undergo a systemic change. The proper strategy, nevertheless, continues to elude us. Through curricular changes, mandatory national tests for pupils and the requirement of a special stream for gifted kids, the MOE has adopted a more top-down strategy. The revised curriculum offers new courses in areas like health, science and technology, career counselling, innovation, design, general skills and business management. To strengthen national identity, foster critical thinking and innovation, teamwork and problem-solving, bilingualism will be gradually incorporated. Before implementing the policies, Warner (2018) argued that it is important to hear the opinions of the teachers because they will be at the centre of any agenda for reorganising or reforming education. To ensure a transition from conventional models of training to a more situated and constructive one, education policymakers in the UAE are required to revise the current paradigm of teacher training and professional development. By enhancing teacher empowerment, they must go further to advance the professionalisation of the teaching profession. The attainment of the reform goals is made more

feasible by reviewing the strategy for increasing teacher capacity. This policy brief offers suggestions for a new approach to teacher preparation and professional development based on research papers and concepts discussed during panel discussions at the UAE Public Policy forum, which was hosted by the Mohammed Bin Rashid School of Government.

Additionally, due to the UAE's rapid expansion of public education, more than 80% of male teachers employed in the public sector are expatriate Arabs from nearby nations. The UAE's requirement to evaluate teacher quality is made more difficult by the overreliance on foreign labour in the industry; as a result, studies from the West become less and less relevant, while studies from the area are currently non-existent (Ridge, 2010). All three of the public higher education institutions in UAE, namely the United Arab Emirates University (UAEU), Zayed University (ZU) and Higher Colleges of Technology (HCT), as well as the recently founded Emirates College of Advanced Education in Abu Dhabi, offer teacher preparation programs. Although many female Emirati students have been drawn into these programs, no male Emirati students have found them to be as successful, and at UAEU there are no males enrolled in the undergraduate education programs. In the 2009/10 cohort at the recently founded Emirates College of Advanced Education, there were just six male students. The gender-segregated workplace, which is culturally acceptable, the ease of finding work and job security have all served as incentives for Emirati women to pursue careers as teachers (Abdulla, 2007). However, there is speculation that fewer and fewer Emirati men are entering the profession due to the abundance of other jobs available to men and the comparably lower salaries. The MOE has been forced to continue hiring male teachers from the neighbouring Arab countries as a result of this and the rule that only men can teach boys at the secondary level.

Ridge (2010) noted some significant differences between the top-performing nations in the educational sector and the foreign teachers in the UAE. The first distinction relates to the need for teachers to finish a probationary teaching period. While top performing nations like Singapore, Chinese Taipei, England and Australia all demand a probationary period, none of the Arab nations (including the UAE) have a probationary period for newly appointed teachers. Secondly, the teachers in top performing countries require that all teachers undergo a pre-practicum session during their teacher education program. The pre-practicum provides pre-service teachers the opportunity to go into classrooms and practice teaching while being supervised by their professors. They can then consider their observations and discover how to develop their teaching abilities. This practice is absent from the three nations from which the UAE recruits the majority of its foreign teachers, raising questions about the level of pedagogical expertise these teachers bring with them to the UAE. There is typically no supervised practicum at any earlier stage of the teacher education process in any of the three countries - Syria, Egypt and Jordan - from which UAE hires male teachers, in addition to not requiring a pre-practicum session for either math or science teachers who are about to enter the classroom. This situation has a significant impact on the education sector in the UAE because these three nations do not place a strong emphasis on pedagogy and infrequently require practicum experiences, either during or after teacher preparation. This situation illustrates the need for the UAE to produce qualified teachers with UAE ancestry who are taught by teachers who have some sort of field experience or practicum experience during their teacher education.

2.6 Importance of Pre-Service Teacher Education

For teachers at all levels of education, teacher education is regarded as an essential concept. This includes teachers of pre-primary, primary, elementary, secondary, higher secondary and post-secondary education levels. At every level, the teacher educational system is unique. The main emphasis of teacher education is centred on the needs and demands of the students, which differ at each level. Therefore, while designing the teacher education curriculum, the needs and requirements of the pupils - who the teacher is supposed to be teaching in future - must be taken into account. Thus, it is crucial for teachers to receive level and stage-specific training. Indeed, teacher education programs significantly contribute towards the development of teaching skills among pre-service teachers (Kapur, 2018; Rajagopalan, 2019).

‘Who’ (instructors/teacher educators), ‘Whom’ (pre-service teachers), ‘What’ (teaching content) and ‘How’ (teaching strategy) are considered as the major components of teacher education. The calibre of teacher educators affects the quality of teacher education. A significant amount of the professional competence of teacher educators and the ways in which it has been applied to the improvement of the teacher education programs determines the quality of the pedagogical inputs within the teacher education programs and their effective utilisation for the purpose of preparing pre-service teachers (Kapur, 2018; Rajagopalan, 2019).

2.7 Importance of Field Experience Training for the Professional

Development of Pre-service Teachers

Apple (1992) asserts that teacher quality is one of the significant indicators of students’ degree of learning. In line with this idea, academic experts all over the world are highly focused on

developing policies and methods to improve the quality of the teaching-learning process. Indeed, the educational systems in Arab nations also have well-set teaching policies and strategic plans for all of their educational institutions, in order to utilise the influence of teachers' quality on the students' success. Aaronson, Barrow and Sander's (2007) study clearly emphasised the importance of teacher quality in Arab institutions. The evaluation of pre-service teachers' quality has previously been disregarded and left up to individual institutions. Therefore, better strategies are needed at the national level to raise the competence of teachers being trained in Arab countries. Researchers theorise that by giving pre-service teachers the chance to serve as in-service teaching trainees in schools, teaching practices could be enhanced. According to a notable suggestion by Aiken and Day (1999), chances for field experience as well as in-service training and development should be made available to both pre-service and in-service teachers. This will improve the skill sets of teachers and will also enhance their knowledge and pedagogy.

According to several academics (Bacher-Hicks et al., 2015; Al-Qirim et al., 2017), field experience is a system that connects teachers with students from different schools, encourages teachers to share knowledge and enables teachers to give students social and emotional support that inspires them to pursue challenging academic careers. The pre-service teacher frequently needs emotional and classroom assistance from the more experienced in-service teachers to lessen the feeling of isolation. One way that such policies can aid instructor teachers in improving their talents is by training them how to work together with other teachers within their allotted time. In return, the instructor teachers benefit from school and district-wide learning institutions in accessing training workshops and they are frequently given incentives/monetary

compensation. Further, they also receive promotions and certificates for taking part in the field experience training program and for professional education development.

As in many other Arab nations, there are significant issues in regards to teaching quality and in the professional development of high-quality teachers through field experience, mentoring and workshops in the UAE (Archer, 1995). As indicated by Blazar, Litke and Barmore (2016), a limited number of studies examined the pre-service teachers' field experience and their concerns. Further, those who conducted research in this subject area didn't give exact prospects of field experience. In reality, very little exploration is done in this regard. Pence and Macgillivray (2008) analysed the perception of students and concluded that students who have undergone the field experience training believed that they were well-prepared for their exams, as compared to those who didn't take part in the field experience. This scenario inspires the teachers to give quality education to the pupil.

In a study, Moulding et al. (2014) studied the pre-service teachers' attitudes and then compared them using the Minnesota Teacher Attitude Inventory (MTAI). This study reported that the early field experience of the pre-service teachers has a good impact on their positive attitude. Similarly, Blazar, Litke and Barmore (2016) concluded that early field experience during the pre-service teachers' preparation had a long-term effect on career development. Their findings showed that, in comparison to those who completed their early field experience, pre-service teachers who did not complete the early field experience did not show a significant increase in their quality of teaching skills. Further, Backes and Hansen (2015) found that pre-service teachers who participated in the early field experience had higher levels of self-perception than those who did not. According to the American Association of Colleges of Teaching Education, a higher number of pre-service teacher education field experiences are needed to educate pre-

service teachers about cultural diversity. According to Blazar, Litke and Barmore (2016), numerous programmes are being developed by schools of education around the world, in order to draw in the highly qualified pre-service teacher candidates for the field of education. These studies point out the importance of field-experience in transforming the pre-service teacher to a versatile in-service teacher. Further, it is clear that many educational institutions across the world view the field experience program as a very important tool to impart desirable qualities and experience to pre-service teachers.

In order to prepare candidate teachers for the future education market, field experience is regarded as the most important experience. The importance of field experience in training teachers for professional development is demonstrated by the above-mentioned facts. According to Clarke, Triggs and Nielsen (2014), knowledge regarding teaching pedagogy is imprinted on the teacher's job environment more so than in any other context because it is immediately used. According to Black and William (1998), exposing teacher candidates to early field experience enables them to engage in collaborative activities with teaching staff, carefully observe and put into practise their colleagues' areas of expertise, build trusting relationships and participate in problem-solving and task completion. According to a research study by Darling-Hammond and Snyder's (2000) research study, field experience effectively prepares pre-service teachers for work-based experiences that are full of chances, provide high-quality feedback and provide pre-service teachers adequate time to develop and display their pedagogical skills. Furthermore, field experiences expose teachers to research-based activities and boost self-efficacy (Danielson, 1996). Teachers also learn to study and serve outside the four walls of the classroom; these activities develop their leadership qualities. Therefore, the field experience can be regarded as a process of observing and sharing of knowledge among co-workers, which

guides the pre-service teacher toward professional development through active and cooperative decision-making.

There are several factors which have an impact on pre-service teachers' educational experiences. For instance, supervisory teachers who collaborate with pre-service teachers often serve as role models and have a significant impact on the teaching experiences of pre-service teachers (Hunzicker, 2012). Further, Roegman et al. (2015) claimed that cooperating in-service teachers support the pre-service teachers' professional growth by serving as a facilitator for them during their field experience. Martin and Dismuke (2017) described the value of real time in-person student-teacher contact in the classroom. The demands placed on the pre-service teacher enable them to develop their leadership and management abilities. In agreement with the aforesaid statement, Boyd et al. (2009) noted that the tight collaboration between pre-service teachers, cooperating in-service teachers and supervisors had an impact on the teaching methodology of the pre-service teachers. In a similar manner, Britzman (1991) asserted that scheduling weekly meetings between supervisors and pre-service teachers strikes a balance between the latter's ability to develop new approaches and the supervision offered by the former.

However, Newton et al. (2010) disagreed with the above studies. They argued that supervisors typically don't visit pre-service teachers very often to offer advice on their teaching methods. As a result, student teachers who don't have this tight monitoring may miss crucial tasks and feedback. This 'lack of close supervision' was particularly evident in colleges of education that adhered to the conventional methods of education. In such cases of the traditional approaches of field experience, cooperating instructors and pre-service teachers worked together in a less organised manner. This is in stark contrast to the approaches used in reform-minded teacher education programs, which place more emphasis on the work of university supervisors,

collaborating teachers and pre-service teachers (Koretz, 2008). This demonstrates unequivocally that pre-service teachers' field experience has profound impact on their teaching methods, as proposed by Jennings and DiPrete (2010), because it is regarded as a cornerstone for teacher preparation and aids students in relating theory with practice.

According to Koretz (2008), the classroom, behaviour, student teacher obligations and school environment all have a significant impact on the quality of student teaching. Hill, Kapitula and Umland (2011) affirmed the above suggestion by placing more emphasis on the discourse of students' behaviour, teaching moments and the realities of the school environment, because they play a significant role in affecting the quality of teaching. Additionally, Hill, Blazar and Lynch (2015) proposed that pre-service teachers' preparation directly affects how well they teach, particularly during their first year of field experience. Based on their practical experience as pre-service teachers, they develop particular perspectives on instructional strategies and learning. Therefore, teachers qualified from the traditionalist educational institutions will adopt their institutions' methods as their own, which in turn can adversely affect the quality of teaching. Martin and Dismuke (2017) further demonstrated that due to the influence of their supervising teachers, who are still operating within the traditional norms, the pre-service teachers do not implement reform-based concepts during their field experience. Whatever, it is essential that the cooperating teachers and supervisors should support pre-service teachers by offering constructive criticism on their teaching pedagogies and strengthening their knowledge on teaching subject.

2.8 Criticisms against the Field Experience

It is important to mention that not all academic experts emphasise the value of field experience in moulding pre-service teachers. For instance, Allinder (1994) reported that, there is no difference in learning achievement between participants in the observation learning program and non-participants. The issue of whether the extent of participation in field experience affects course success was addressed by Al-Qirim et al. (2017). Their findings demonstrated that the time spent in field practicum had no noticeable impact on the course performance of the students who took part in the observation. This demonstrated that in the final exam, people who served as tutors performed their activities at the same level as those who served merely as observers.

Similarly, Easterby-Smith, Thorpe and Jackson (2008) determined the effect of field experience on success in psychology coursework. Mentoring, small-group discussions and learning stations were considered as the study variables. There was no visible difference in performance between those who participated in class but did not participate in field experience. Additionally, when the pre-service teachers were put in groups and their self-concept for teaching quality during the field experience was examined, it did not show any difference from those counterparts who did not participate in the field experience (Bacher-Hicks et al., 2014). The authors concluded that field experience makes no significant difference in the pre-service teachers' attitude or expectations regarding roles and behaviour of the teachers. Another investigation was made to determine if any observational systems were in operation in advance of instructors' programmes that included field experience (Bassey, 1999).

The afore-mentioned studies demonstrated that field experience has no detrimental effects on students' cognitive performance in their concurrent coursework and education. The same

research did not indicate that their participation in field experience increased their cognitive achievement. The influence is probably delayed and it may help the prospective teachers to develop a meaningful purpose during their future teaching activities. In other words, throughout their field experience, teacher candidates observe their fellow educators and try to imitate their methods for teaching in the classroom. These candidates will recall and use these methods and tactics when they later became pre-service teachers. This shows that verbal learning also has higher potential of producing the desired learning, with a vision.

2.9 Role of Teacher Educators/University Instructors in Preparing the Pre-service Teachers

The classroom teacher's role in educating pre-service teachers is receiving more attention in the literature on teacher education (Feiman-Nemser, 1998; Korthagen, 2004; Bullough Jr., 2005; Koster et al., 2005; Whitehead & Fitzgerald, 2006; McNay & Graham, 2007). For pre-service teachers to succeed in their field experiences, the classroom teacher's mentoring role is essential. However, the university expects classroom instructors to fulfil the duties of teacher educators, which adds to the workload and complexity of their current roles as teachers for children (Bullough Jr., 2005). These additional duties include giving pre-service teachers constructive criticism and feedback, assisting pre-service teachers in professional development and being willing to invest their time in establishing a professional relationship with pre-service teachers (Feiman-Nemser, Parker & Zeichner, 1993; Feiman-Nemser, 2001; Young et al., 2005; Darling-Hammond & Bransford, 2005; Darling-Hammond & Hammerness, 2005). However, studies show that there are differences in how classroom teachers carry out the function of teacher educators. Some classroom teachers only offer a venue for pre-service teachers to convert what

they have learned in their curriculum into practise, offering support and guidance only when that is asked for (Feiman-Nemser, 1998; Bullough Jr., 2005). However, some classroom teachers form a strong mentoring relationship with the pre-service teachers, thereby offering constructive criticism and having reflective conversations about the field experience and the teaching profession (Feiman-Nemser, 1998; Young et al., 2005; Whitehead & Fitzgerald, 2006).

Teacher educators have collaborated with public and private organisations “which actively facilitate the (formal) learning of student teachers and teachers” as political and economic structures within nations have changed (European Commission, 2013). These operators include those in charge of professional learning initiatives, school mentors and teaching-practice supervisors (Dengerink, Lunenburg & Kools, 2015; Ping, Schellings & Beijaard, 2017). Teacher educators have been referred to as “teachers of teachers” and engage in a wide range of practices (Dengerink, Lunenburg & Kools; Kelchtermans, Smith & Vanderlinde, 2018). Most teachers lack a formal path to becoming teacher educators as well as an induction programme to learn from (Ping, Schellings & Beijaard, 2017; Meeus, Cools & Plackle, 2017). The opportunity for seasoned teachers to advance to a different stage of their careers and become teacher educators is referred to as “serendipitous” in some nations (Kelchtermans, Smith & Vanderlinde, 2018). In general, two main factors often lead teacher educators towards their role: they were good teachers and promoted into leadership roles and/or they possess specific expertise in a specialist area such as a subject or skill (Ben-Peretz et al., 2010, p.113). As the bulk of the population of the UAE are foreign workers, their journey to become an education professional in the UAE and as a teacher educator may not fit into any of the pre-defined boxes given above.

As teacher preparation partnerships rely heavily on classroom teachers acting as teacher educators, it is crucial to think about what factors affect how classroom teachers fulfil this role

and how the partnership prepares classroom teachers to do so in order for field experience to produce teachers who are well-prepared. University programmes shouldn't presume that declaring teachers as teacher educators or putting pre-service teachers in their classrooms will automatically make them capable of carrying out this role in an efficient manner (Feiman-Nemser, 1998; Bullough Jr., 2005). The way classroom teachers define this role or even acknowledge their role as teacher educators may have an impact on how or to what extent they function as teacher educators. To put it another way, a teacher's definition of this role could affect whether or not the field experience is a valuable learning opportunity that results in better-prepared teachers and improved academic outcomes.

The way the classroom teacher acts as a teacher educator is essential to field experience being high-quality experiences. However, research suggests that classroom teachers play this role in a variety of ways, which can ultimately affect the quality of field experience (Feiman-Nemser, Parker & Zeichner, 1993; Feiman-Nemser, 2001; Young et al., 2005). It's possible that how teachers in the classroom define the job of a teacher educator will affect how they carry it out. In a research study, Korth, Erickson and Hall (2009) examined the opinions of 79 teacher educators from four US schools. This study sought to ascertain whether the classroom teachers believed themselves to be teacher educators by examining their definitions of the term. The researchers discovered that 95% of the participants identified as teacher educators and had an experience of working with pre-service teachers. Nevertheless, how these individuals define themselves varies - the participants provided definitions of the phrase "teacher educator" as two broad categories, 'teacher of teachers' and 'general educator'.

Therefore, it is advised against assuming that merely working with in-service teachers will enable classroom teachers to serve as effective teacher educators is advised again. The

fundamental duty of classroom teachers is teaching students. This duty becomes complicated when the duty of supervising the pre-service teachers is added to their list of responsibilities (Bullough Jr., 2005). To be successful in their position, classroom teachers need direction and training, which can logically take place within the framework of a university-public school partnership. In any case, the findings of this study raise concerns about the interaction between classroom teachers and university programs for teacher preparation as well as about the training that classroom teachers receive before being asked to collaborate with pre-service teachers. In conclusion, university programs should not assume that simply placing a pre-service teacher in an experienced teacher's classroom will result in that teacher taking on a teacher educator role that is in line with the university program as they enter into partnerships with public schools for the benefit of pre-service teachers (Bullough Jr., 2005).

Similarly, program directors for teacher education should exercise caution before assuming that effective teachers are also effective teacher educators (Feiman-Nemser, 1998; Feiman-Nemser, 2001; Bullough Jr., 2005). It is possible that teachers who have used successful teaching techniques and classroom management techniques lack the knowledge, abilities and dispositions needed to serve as teacher educators. Even though a classroom teacher may be using "best practices" that a pre-service teacher would find useful to observe, he or she may not have much experience mentoring pre-service teachers beyond letting them observe and practice teaching techniques. To explicitly discuss roles and make sure that they are in line with expectations of teacher education programs, those in charge of managing teacher preparation programs need to work closely with the teachers and partner schools in their programs. In-service teachers who want to become teacher educators should receive the same level of training before working as the educators of the pre-service teachers. Therefore, these mentor teachers may be encouraged

to join in the discussion of what teacher preparation programs should involve in order to prepare classroom instructors to work effectively with pre-service teachers (Bullough Jr., 2005). Universities should try to assist classroom teachers in comprehending their position as teacher educators since classroom instructors have a key voice about the character of field experiences. If there is mutual respect, classroom teachers will value working with universities to improve both their own pedagogical methods and the academic performance of their pupils. To do this, the partnership would be operating at a level consistent with “simultaneous renewal” (Goodlad, 1994, p. 123).

Although teacher educators have institutional associations in the USA, Belgium, the Netherlands, Israel and Australia, recent research by Robison (2021) noted that no such associations or standards exist in the UAE. Such organisations have established standards and frameworks to assist professional development of the teacher educators while also elevating the industry’s professionalism. As a result, in the UAE context, intercultural learning and sensory awareness of the contextual variables that support the sector may give teacher educators the confidence to support pre-service teachers and their peers in a challenging social and political environment. Although there is a lack of research on teacher educators in the UAE, various trends are emerging from various contexts that acknowledge this profession as distinct. The afore-mentioned study by Robinson (2021) aims to highlight the characteristics of a potential framework for UAE teacher educators that have been identified as a result of research on authentic professional learning. Thus, identifying potential areas of professional learning may help in improving the professional knowledge of teacher educators in the UAE.

2.10 Field Experiences in a Global Classroom

In relation to a traditional environment, this study has outlined the arguments for and against teacher field experience. However, at the beginning of the 21st century, educators in the US and the UAE learned about a new global classroom where pupils came from different cultures, religions and socio-economic classes; a complicated scenario, which is discussed below. Additionally, it appeared that this new reality was becoming more prevalent in public schools. Numerous studies foresaw this shift and recommended modifying teacher preparation programs to reflect the new reality. The introduction of field experience as early as feasible in US institutions of education provided the foundation for a significant portion of those developments, which placed more of a focus on them. The UAE's educational authorities also attempted to adapt to these changes and they followed the US educational training approaches.

The claim made by Washburn-Moses, Kopp and Hettersimer (2012) that “pre-service teachers’ field experience is the most impactful learning experience for future teachers” is self-evident.

Typically, however, the pre-service teacher in training is thrown into the deep end of the pool as soon as he arrives. He is expected to be integrated as soon as possible in the pre-service program; be an integral part of the whole curriculum, be carefully planned and linked to course work; be sequential and developmental; and provide opportunities for students to experience a wide range of settings and learners who represent a variety of socio-economic backgrounds (Ribich, 1995, p.37).

The above statement implies that the pre-service teachers are burdened with a variety of experiences that may intensify even before they find their feet. This realisation, that if field experiences were scheduled during the last semester in teacher training, called the capstone course, the experiences themselves may be overwhelming to a novice teacher. Early in the

1980s, American education organisations started to promote “early field experience” with this viewpoint in mind. Early field experience was made mandatory in the 35 states of the US. Early field experience had the benefit of exposing the aspiring teachers to the realities of the classroom, giving them the option to drop out or continue. The second benefit was that the capstone course’s related shock might be lessened because the pre-service teacher only needed to take a few steps at a time, under supervision. “Many of these early field experiences not only provided a broader social learning experience but included tutoring to develop specific skillsets” (Washburn-Moses, Kopp & Hettersimer, 2012, p. 8).

Some universities decided to bring the schools to campus because of the distances pre-service instructors had to travel during the field experience program. The pre-service teachers could then watch students in a lab setting whenever it was convenient for them. The Montessori model was appealing because it promoted one-on-one tutoring. While this improved the field experience, such programs drew students only from wealthy families, thereby negating the purpose of exposing pre-service teachers to real-world situations.

These types of experiences revealed compelling evidence that on-campus laboratory experiences produce consistent and positive results in terms of teacher affect, knowledge and behavior, the cost and loss of real-life atmosphere remained. Emphasis should be placed on the fact that early field experiences served as a reality check to prospective teachers as to whether they wanted to stay the course. Complexities, caused by a diversity of variables that needed measurement remained, these included number of contact hours, types of students, resources, and supervision (Metcalf & Kahlich, 2006, p.98).

Traditional pre-service teachers do not enter the classroom with the skills necessary to manage new realities because of the shifting demographics in US classrooms and the increasing

percentage of learners described as at-risk diverse learners. Diverse learners were described as students of colour, low-income students, children who are learning English as well as students from low-income and rural areas. Students who have struggled academically for a large period of their school careers are referred to as 'at risk'. In early field experience training, the pre-service teachers are given an early exposure to this group of children, which can act as a reality check to see if the pre-service teachers really want to devote their lives to teaching in the new reality. In a two-year experiment with 233 second year teachers in training at a Mid-West US university, Washburn-Moses, Kopp and Hettersimer (2012) required that the pre-service teachers reflect on at least a ten-hour field experience. The pupils saw senior teachers helping specific high school students do their assignments both traditionally and online. Teachers in training observed senior teachers as:

... using positive reinforcement rather than punishment even with students who displayed difficult behaviours, such as inappropriate language, out of seat behaviour, refusal to stay on task. The teacher used praise and verbal redirection with individual students to reinforce academic and behavioural performance (Washburn-Moses, Kopp & Hettersimer, 2012, p. 13).

In order to foster healthy relationships, the senior teacher also engaged learners in conversation about their homes and urged them to participate in extracurricular activities. The next step was for pre-service teachers to think and decide if becoming a teacher was a good fit for them. According to the findings, 69% of the student instructors were still dedicated to a career in education. Around 29% of pre-service teachers had second thoughts (Washburn-Moses, Kopp & Hettersimer, 2012).

As previously mentioned, the majority of US teacher education colleges (77% elementary and 70% secondary programs) mandate that pre-service teachers should complete field experience in PK-12 settings during their first or second year of college. Additionally, 90% of the colleges stated that they gave pre-service teachers on-site supervision. In the survey referred to previously as the Eric Development Team Report, the question was asked whether increased emphasis on early field experience for teacher education candidates has made an impact on the training and quality of teachers (Huling, 1998). The results were encouraging and are summarised below.

(a) Principals regularly note that candidates who were trained in field-based programs perform more like second- or third-year teachers during their first year of teaching.

(a) Collectively, anecdotal accounts from applicants, pre-service teachers and employers support the idea that more and earlier field experience is beneficial for preparing the pre-service teachers in a better way.

(c) More crucially, the Fleener Report from Texas (1998) showed that candidates who acquire more field experience throughout their teacher preparation programs stay in the teaching field at considerably greater rates than those prepared only through campus-based programs. Of the 1959 candidates prepared through field experience and began teaching between 1993 and 1996, only 4% had left employment. In contrast, of those prepared through traditional methods, the loss was 12%.

d) These findings suggest that field experience is essential to teacher preparation and that candidates who receive more field experience throughout their preparation are more likely to stay in the field during their induction years than candidates who receive less field experience (Huling, 1998, p5).

2.10.1 Field Experiences in a Global Classroom - the UAE Scenario

Only a limited number of research studies are available on pre-service teachers' evaluations of their classroom experiences in the UAE context. Balfakih (2010) investigated pre-service science teachers' competencies as they relate to the proposed Integrated Science Process Skills (ISPS). The UAE Department of Education had previously recommended a number of efforts to enhance scientific instruction. One of the fundamental goals of science education is to impart to students the notion that they should be able to solve issues using scientific reasoning. To pursue this aim, the Department adopted a US program adapted to K-12 pupils called Footsteps. Over a period of two decades, science standards based on the US program were adopted. According to Balfakih (2010, p. 3111), the "replication went further when the ministry of education adopted commercial science textbooks as a national science curriculum. The textbooks were translated and AI supported materials (were) provided."

However, the evaluation results for primary school children fell short of the global standards. The comprehension and reasoning analysis questions received incorrect responses from students. Even though their textbooks were packed with activities, it was obvious from the results that pupils lacked science process skills. Two solutions were chosen after the review. A science project requires the student to observe, categorise, gather data, analyse, interpret and present the findings to classmates and to the teacher. The teacher was in charge of the second solution. Teachers should be aware of their pupils' abilities and provide projects for them that are appropriate for them to work on. The learner then gradually develops his or her skills going forward. The aforementioned activities involve the teacher guiding the student. However, the reviewers of the programs had other issues as well. It is probable that cultural barriers were

overlooked when translating the US materials into Arabic, which prevented Arab students from understanding the content the same way an American student would have.

According to Balfakih (2010), science education associations acknowledged and placed an emphasis on the teachers' preparation within the framework of the constructive learning theory.

Teachers should have the competencies that enable them to help their students to construct their scientific concepts. No doubt those teachers who have deep content knowledge, and know different teaching methods, and have a science process and thinking skills, (can) help their students achieve their maximum (Balfakih, 2010, p 3712).

However, in the constructive theory, there was a caveat. During the construction of new concepts, a learner begins with some preconceived knowledge on which they build these new concepts. As a result, one starts with the known and proceeds to the unknown. The review was significant because it restated what was obvious. According to Balfakih (2010, p 3712), "Science gives students the chance to construct their own knowledge. In the process, science students themselves must make their own observations, classifications, measurements, predictions and make their own hypothesis." Before they can accomplish this, the learner must undoubtedly possess the necessary tools (language proficiency and comprehension) to make such choices. The findings showed that UAE students' preparedness for scientific reasoning and their knowledge of science were both weak.

After reviewing 133 pre-service and 130 in-service teachers, Balfakih (2010) made the following postulates. Although there was no difference between pre-service and in-service instructors in terms of their ISPS (integrated science process skills), the latter did better on exams. Of course, the in-service teachers benefited from their experience. The most important

finding was that pre-service teachers were less adept at defining hypotheses than in-service teachers. Also, the in-service teachers significantly outperformed the non-in-service instructors in terms of explaining abilities. The overall finding was that while pre-service teaching experience is necessary, ongoing in-service training produces superior results because it blends previously acquired expertise with scientific information (Balfakih, 2010, p. 3714).

On the other hand, Takriti et al. (2022) call the first day of field experience in a UAE K-12 school as “complete” from the perspective of the teacher. For the children, this marks the start of a series of both vertical and lateral transitions in their life. A vertical transition occurs when a person leaves their home to attend boarding school full-time, much like when a person enters puberty, which signifies the vertical movement from childhood to adulthood. Every change involves both disturbance and continuity. When parents and teachers work together, youngsters quickly adapt to their new surroundings and form friends. The transition is now considered to have been successful.

But this similar transformation is rarely seen from the perspective of a teacher’ pre-service training. According to Fabian (2002), the pre-service teacher experiences the same discontinuities as the child, including physical displacement from his previous surroundings and adjusting to new expectations and obligations. A more structured work environment with a set schedule and the newly expected peer-level contacts with other teachers are examples of philosophical discontinuities that can be unsettling.

The experience was equally unsettling for the pre-service teacher in training, according to Takriti et al. (2022). While there are both public and private school systems in the UAE, the majority of Emirati students (75%) attend private institutions. Either an American or a British curriculum is used in the private schools. According to (Takriti et al., 2022, p. 8), “Within the

private schools, half the children are expatriates and the other half UAE nationals. The teachers in private schools are usually expatriates with English as their first language. Teaching in private schools is conducted in English.”

Takriti et al. (2022) emphasises two issues as they affect the pre-service teachers entering the field. They state: “The setting of private schools in the UAE is a unique one where the children in the class are made up of two broad groups; nationals of the country and expatriate children, further, these children are taught predominantly by Western teachers” (pp. 8-9).

While foreign children have attended daycare outside of their homes, the majority of Emirati citizens have attended childcare inside their homes.

At different stages, the teachers’ experiences were impacted. The earliest exchanges occur at the microsystem level, which Bronfenbrenner (1986) referred to as the instructor and student level. The second level of interaction is between the teacher and the parent, or the macrosystem level, and the third level is between the teacher and government and school officials.

According to Tikriti et al. (2022), the pre-service teachers’ first day in the classroom is summarised as: *Organized chaos. That is the best word I can explain that, is organized chaos because that is what it feels like. Like when you see it happening, it just looks like it is complete chaos and there is no control...whereas it is not that way...you have 20-25 children starting and this one screaming... You know it feels chaotic...it is crazy. But it is a system of crazy, do you know what I mean?* (p. 14).

It was clarified, though, that although things could seem chaotic, this was to be expected as a part of a system of change and transition that will finally settle down into an ordered structure. It was referred to by the teacher as “a system of crazy.”

Teachers’ pedagogical experiences were not always positive. She reported that:

So yeah. That is it. (chaotic). Like one little girl when she started, and they were playing outside...So that is an important thing as well, getting used to how to play outside in our little gardens. She was trying to crawl under the fence. Yes. She was like, "I am going. I had enough." So, it was like, "Oh my god." (Takriti et al., p. 15).

According to Takriti et al (2022), the macro-experiences and interactions between the teacher and parents are sometimes not distinguished from the micro-experiences between the teacher and the child. The time of transfer can be brutally difficult for students as they leave their parents' care and are placed in the care of the instructor. One teacher put it this way: "They usually can like be screaming coming in and (we) really must take them off their parents. And parents overall are good. But you have to say the parents, say, if I take them, you must just go, because if the parents stay around, they know they are there and they get more upset" (Takriti et al, p. 18).

If the new teachers made it through this orientation, they would still need to adjust to additional peculiarities of the UAE educational system. Notably, the younger grades, Kindergarten through Grade 3, cannot have non-female teachers. Female teachers predominate in these grades. Furthermore, only 11% of the teaching workforce is made up of Emirati citizens.

Before the COVID-19 outbreak, educational officials wanted to establish e-learning. The argument was that the UAE needed to embrace technology in all of its forms if it wanted to stay abreast with the global advancements. For a period, face-to-face instruction was outlawed and e-learning took its place. In order to investigate the legitimacy of such a procedure in the UAE and learn about the opinions of teachers who take part in such programs, Forawi et al. (2012) assembled a team of researchers. The outcomes showed that using e-learning was a practical

strategy for adopting new learning directions and that in-service teachers participating in the programme shared common perceptions that would help determine what was required to make it successful. Forawi et al. (2012) claim that UAE education authorities adopted the US method of using e-learning portfolios that are based on standards. The authorities would be able to determine whether the e-learning tools integrated into most topics in the UAE were yielding the desired results through performance-based assessment and curricula. The fundamental idea was to use information technology (IT) to give Emirati youngsters a competitive edge in the world. Furthermore, Forawi et al. (2012) noted that earlier research was inconclusive on the following topics. According to certain studies, in addition to providing new conveniences for the teachers, contemporary technologies could be utilised to replace conventional teaching methods. Being younger than older teachers, pre-service teachers were, nonetheless, more inclined to use contemporary technologies. On the other hand, Forawi noted that:

The experience with innovative technologies would suggest that one technology cannot be successfully swapped for another. The introduction of a new tool into human activity often changes that activity in unanticipated and sometimes profound ways. The rapid movement towards electronic medium will play a key role in the communications of teacher knowledge. However, we know extraordinarily little about the implications of using e-portfolios (Forawi et al., 2012).

It was unclear how the competencies of teachers in training could be measured, especially through mixed portfolios, despite the evident benefits of e-learning. Weblogs, for instance, allowed student teachers to present their work to other teachers. A portfolio may also feature animations, Flash Splash and other forms of artistic improvisation, as well as video streams,

artefacts and reflections. Although the advances made learning more exciting, the fundamental question remained unresolved.

The assumption that if e-portfolios were to be used in the assessment of pre-service teachers, they need to be successful in accomplishing their goals, worth the time spent in compiling them (portfolios and scrap books) and advance learning and completion of programs (Forawi et al., 2012).

Out of the 67 pre-service teachers in training, the majority of them had used computers for more than a decade. Each student spent four hours every day in the computer lab creating their e-learning portfolios. Their opinions were favourable. They claimed that using the computer library had improved their computer literacy and deepened their understanding of the topic they were researching. According to their findings, e-learning could be a beneficial tool for learning but should be based on standards. Through this experiment, they were better able to foresee how classroom technology would actually evolve (Forawi et al., 2012).

Some researchers (Huling, 1998; Freeman, 2010; Washburn-Moses, Kopp & Hettersimer, 2012) highlight changes in classroom dynamics brought on by widespread rural migration into inner-city areas of the US as well as widespread immigration of Hispanics. The new realities in inner city schools included students from all over the world whose first language was not English. The new students also came from different religious backgrounds and were unaware of the importance of Christian or protestant ideals in the American value system. Similar massive migrations had also been taking place in the UAE. The UAE classroom has already been referred to be distinct, but the combinations of varied populations from across the world mentioned above are also common in the UAE global classroom. In their recent study, Hojeji et al. (2021)

from Zayed University discovered that pre-service teaching experiences abroad and, in the UAE, have a lot in common.

Hojeji et al (2021) agrees that: “Field experience, or practice teaching, or practicum has become a cornerstone of teacher education. It is a high impact experience and a period of intense learning and growth if done professionally.” However missing link, however, “are the faculty supervisors and challenges they face during practicum courses.” As expected, Hojeji’s observations were in accord with Freeman (2010) and Washburn-Moses, Kopp and Hettersimer (2012), that preparation is crucial for making pre-service teachers ready to teach, not just in terms of subject matter but also in terms of attitude and demeanour. Therefore, the classroom experience itself and pre-service teacher preparation should both receive equal priority (Freeman, 2010; Washburn-Moses, Kopp & Hettersimer, 2012; Hojeji, 2021, p. 513).

As mentioned above, the pre-service teachers are typically expected to increase their pedagogical proficiency, plan for differentiated instruction and develop their communication skills. Differential education assumes that even while students are in the same grade level, they may be at different stages of learning to read, write and do math. Emotional intelligence and the capacity to express sympathy and empathy for a youngster from a dysfunctional family are examples of communication.

The new educational environment brings with it its own problem areas. According to Freeman (2010. p.5), pre-service teachers have encountered “a variety of problems, mainly in term of accessing school materials and equipment, identifying students’ needs, interests and motivation, meeting curriculum objectives and dealing with the overall classroom environment.”

The brand-new educational setting has its own set of issues. Additionally, the international pre-service teachers bring with them a few potential problems that pre-service instructors have to

solve. Although Hamaidi et al. (2014) found additional difficulties linked to pre-service teachers' personal issues and character dispositions that can impede their success in the field experience, Hojeji (2021) reiterates Freeman's experiences with the new generation global teacher in training (p.513). It is appropriate to compare this to Freeman's interaction with a pre-service teacher who had dyed her hair purple and had several body piercings. Separating her personal life from her professional life was difficult for the pre-service teacher (Freeman, 2010). Hojeji (2021) also mentions the time constraints imposed on the UAE teacher supervisors because they have to combine their teaching duties with off-campus monitoring responsibilities. Hojeji (2021) emphasises that the supervisor juggles both a full-time class and a group of off-campus pre-service teachers completing their practicum. As a result, the divided attention of the supervisors places the pre-service teacher at a disadvantage. Further, this scenario limits the relationship between the pre-service teacher and the instructor. The pre-service teacher would have benefited from a close relationship with the supervisor, whereas the present scenario limits the constructive feedback from the supervisors. Therefore, Hojeji (2021) advocated for a more intense and extended partnership between supervisors and pre-service teachers. In this way, the mentor can assist the pre-service teacher in bridging the gap between theory and practice, co-constructing lessons and adapting to the constantly-changing global classroom environment.

2.11 Redefining Field Experience

In 1998, Eric Development Team of Washington, D.C. Educational Services was asked to redefine and restate early field experience and its purpose. Before 1980, a college of education's course work was followed by a semester of student teaching as the main method of teacher training in the US. Pre-service students received a wide range of supervised early field

experiences in the interim, laying the groundwork for the ultimate capstone student teaching experience in the final year. Therefore, the field experience in which the pre-service teacher was given the opportunity to run a classroom in real-time while being supervised by a cooperating teacher and a university supervisor, is important for the pre-service teacher's preparation (Huling, 1998).

It was clear that this conventional teacher preparation system has its flaws. The student teacher's capstone course is scheduled at an irreversible point in their training. As required by their states, US colleges of education now need early field experience, which comes before the final capstone course indicated above.

The team restated the position as thus:

These early field experiences in teacher preparation are in a sense like the experience provided to medical students in the active participatory roles of internship and residences. Through this field experience, teacher candidates observe and work with real students, teachers and curriculum in natural settings (i.e. PK-12 schools). Field experience is typically distinguished from clinical experiences, which occur in more tightly controlled educational settings (i.e. clinics, laboratory schools, etc.). The culminating or capstone field experience in teacher preparation is typically student teaching in which the candidate gradually assumes total teaching responsibility under joint supervision of a cooperating teacher, who is the teacher of record and a university supervisor. Field experiences prior to the student teaching experience are commonly referred to as early field experiences (Huling, 1998, p.2).

The American educator Dewey established the justification for teacher training and the utilisation of field experience as a learning instrument for the student teacher (1904-1938).

Dewey promoted a learner constructivist theory while he was a student at Columbia University. As a learner, the pre-service teacher needs to be given opportunities to construct his or her own learning. The last semester's capstone field experience course was the sole experience offered to student teachers prior to the 1980s. Early field experiences were offered, but in an arbitrary manner and consisted of sending candidates to observe in classes and schools.

Different educational authorities, namely Carnegie Forum on Education and the Economy (1986), the Holmes Group (1986) and the National Commission on Teaching and America's Future (1996) recommended in favour of providing US teachers in training with more "rigorous preparation and more authentic experiences to enable them to cope with the increasing complexity, challenges and diversity of current schools and classrooms." These recommendations were followed by provisions of opportunities for learner teachers to experience real time classroom exposure early in their fresh years rather than late in their senior college years (Huling, 1998, p. 3).

Prior to their actual in-class observation and engagement with students, pre-service teachers must be prepared. Candidates need careful direction and mediation to assist them concentrate on important elements of classroom instruction and interactions and (help) to interpret what they see in order to benefit from field experience (Huling, 1998; Washburn-Moses, Kopp & Hetttersimer, 2012). In order to be successful, these experiences "should include tutoring individual and small group students, preparing instructional materials, grading students' work and supervising students at assemblies and on field trips" (Huling, 1998, p. 3).

2.12 Major Challenges Faced by the Pre-service Teachers of UAE

Classrooms in the UAE are generally ‘global’ in nature due to the cultural and language diversities. Additionally, a lot of the educational rules in the UAE are based on benchmarks established by British or American education authorities. The cultural and linguistic disparities between the Arab world and the West are not taken into account in this scenario. Clarke, Ramanathan and Morgan (2007) reported that concern is regularly expressed in the region for the preservation of regional cultures and identities. Therefore, the UAE government’s language education policies and practices assume a special significance in this highly volatile scenario. Clarke, Ramanathan and Morgan (2007) evaluated the perceptions of Emirati pre-service teachers on how the local and the global are related, as well as the local appropriation of the global. Indeed, the HCT bachelor’s degree in education is enabling young Emirati women to hold important positions in schools as English teachers in a society where men predominate and Arabic is the dominant language. However, the UAE’s ongoing language policy and practice frequently draw criticism from these HCT bachelor’s degree holders for its nostalgia towards Arab-Islamic purity. This new generation of English language teachers in the UAE must therefore be made aware of the socio-political concerns related to the teaching of foreign languages. Their challenge is to ensure that their voices continue to be heard and their concerns are addressed, without becoming essentialised or co-opted by dichotomising agendas.

Similar findings were reported in research by Ibrahim, Al-Kaabi and El-Zaatari (2013). They added that cultural hurdles and a lack of appropriate English competence were the main obstacles to educational reform in the UAE. In their study, the psychological, personal, school-culture-related and organisational factors for teacher resistance to educational change in

government schools in the UAE were examined. In total, 255 teachers who taught at various grade levels in Al-Ain government schools responded to a survey consisting of 39 statements on a Likert scale. The study's conclusions demonstrated that teachers believed that change was necessary and that they could trust principals and changes in policies. However, because they were afraid of the unknowable effects of change, they needed to be psychologically prepared for the change. Further, they were also feeling 'exhausted' by the constant changes that the teachers perceived as being forced. Additionally, they had trouble teaching students who were having trouble with the new curriculum due to the English language barrier. In brief the study concluded that, for successful change to happen among teachers in UAE, well thought out plans, encouraging principals, change-based effective professional development and a reward system are required. Above all, change must be compatible with UAE culture.

The UAE had a countrywide failure rate for the Preliminary English Test (PET) of 47% in 2006. Gobert (2019) emphasised the importance of establishing English as a second language in the UAE. Since then, this situation has largely remained unchanged in government schools due to the political and cultural barriers encountered by UAE students. Despite the fact that English is the primary language of instruction in many private schools, the tuition fee in the private sector is too high (AED 30,000 on average). The authors therefore emphasised the importance of improving English instruction at federal universities and schools. However, the issue with the English language is not a simple concern for UAE authorities, but is an indicator of future problems (Ahmed, 2010). Due to the cultural and language tug-of-war, English has started to represent a cultural turning point as the UAE works to solidify its position on the global stage. The effects of using English as the Medium of Instruction (EMI) in the Arab community must be carefully addressed and further researched (Ahmed, 2011). Students of Emirati origin face

major obstacles due to English being the primary language used to deliver the curriculum, in addition to ideological concerns.

The study by O'Sullivan (2015) draws attention to the need for studies that examine how education reforms in the UAE affected private schools. In the UAE, private schools are where 89% of students receive their education. O'Sullivan inspected the scenario due to the apparent discrepancies between policy and practice in private American curriculum school in Dubai. In recent years, a large amount of research was done on education reform in the UAE, particularly teacher training in public schools. However, there hasn't been much focus on reforming private schools, educating a huge number of Emirati students in addition to those from around the world. Overall, teachers and students are enthusiastic supporters of the UAE education reforms, despite some uncertainty about how to move forward. In order for private schools to keep up with national education reform, a fundamental shift in the quality of education in those institutions must be urgently addressed.

In addition, O'Sullivan (2017) highlighted potential difficulties in the K-12 system in the UAE. Many graduates from high schools who studied English from K-12 are unable to speak or write coherently in English. This inevitably prompts inquiries about the abilities and credentials of teachers. English education reform in the UAE certainly seems to be facing some major challenges. One reason is that little consideration has been given to the actual daily activities that take place in the classroom. In this paper, O'Sullivan brought the focus back to the classroom, and emphasised how effective professional development can alter teachers' classroom behaviours and result in measurable gains in student performance. One of the main points made in the paper is that ongoing professional development programs are generally preferable to one-off seminars and workshops. By giving teachers the chance to put what they

learn into practice over relatively long periods of time and by providing a level of convenience that is absent in conventional professional development, the paper concludes by demonstrating that perhaps a combination of online professional development and face-to-face training will help.

Morgan and Ibrahim (2019) were able to analyse the social construction processes and relationships of the stakeholders, agents and test objects within the global educational infrastructures of the Programme for International Student Assessment (PISA) and The International Math and Science Study in Education (TIMSS) in the UAE. This analysis yielded important insight into the problems facing the UAE education sector. The authors came to the conclusion that in order to trace interactions and consequences in local and global accountability infrastructures, it is crucial to have a deeper understanding of the connections between global tests, users and agents from cross-national viewpoints. As a result, the UAE's attempts to adjust by reconfiguring its pupils, who take part in these assessments, yet end up being low-performing consumers. Therefore, the UAE government should consider its cross-cultural contexts before implementing such global tests on its pupils.

2.13 Danielson's Framework for Professional Development

The current study makes use of the Danielson framework to assess how well teachers performed throughout their field experiences and assist them in furthering their professional growth in real-world situations. The Danielson framework can be utilised as a tool to furnish the unique abilities of the teachers and to improve their professional growth. As it serves as a road map that focuses on the shared knowledge of the teaching methodology, this framework is also utilised as a structure to aid in preparing new teachers and in helping them adapt to their professional

contexts (Danielson, 2013). According to the Danielson framework, even the underperforming teachers are open to discussion if they are given clear directions about how to improve and honest feedback is provided on their performance, based on the evidence. As they deal with classroom management issues, they will be eager to take part in the professional development programme and to boost their confidence. Becker, Waldis and Staub (2019) used the term “emotional support” for this kind of corrective yet sympathetic supervision.

Danielson’s theory comprises four domains (Table 1), which are employed in this study as four variables to determine how they affect the teaching pedagogy of pre-service teachers throughout their fieldwork experience (Danielson, 2015).

Table 1: The four domains of the Danielson framework and the pedagogical perspectives coming under each domain

Domain 1	Domain 2
Show the knowledge of content and pedagogy	Establish the environment of respect and dignity
Have sufficient knowledge of students	Create a culture for learning experiences
Set instructional consequences	Manage classroom processes effectively
Have the knowledge of resources used	Manage student behaviour and attitude
Teacher should design coherent teaching strategy	Organise physical structure
Evaluate students’ performance	
Domain 3	Domain 4

Communicate with students	Reflection on teaching process
Ask questions and discuss methodology	Sustain records accurately
Engage students in learning process	Communicate with the students' families
Use evaluation techniques in learning process	Actively participate in professional community
Show responsiveness and flexible methods	Grow and develop professionally

Domain 1: Planning and preparation

The first domain focuses on how pre-service teachers organise and plan their lessons for use in the classroom.

Domain 2: The classroom environment

The second domain describes whether or not the learning atmosphere in the classroom is conducive.

Domain 3: Instruction

The third domain takes into account how teachers instruct pupils and whether or not they are interested in the material being taught.

Domain 4: Professional responsibilities/feedback by the supervisor and/or colleague teachers

This area takes into account how instructors carry out their responsibilities both within and outside of the classroom.

In 2009, the US Department of Education offered the stimulus to look for various models that help meet the rigorous and fair evaluation system for teachers' performance. Danielson's work (1996) was regarded as the most advanced professional framework to evaluate teachers' efficacy by the US Department of Education. In 2013, Danielson's framework was selected as the common core standard and policy which organises teachers' professional practice into four broad categories as listed in the Table 1 given above.

Danielson's framework can be used in field experience of pre-service teacher education to help pre-service teachers prepare for full-time careers as professional in-service teachers and also to assess their efficacy. The Danielson framework not only serves as a crucial foundation for evaluating effective teaching practices, but it also directs institutions and colleagues regarding the kind of feedback necessary to get them ready for their future prospects, problems and opportunities. In addition, after completing their field experience program and joining the professional platform, teachers receive guidance regarding their evaluation procedure. In a research study, Feiman-Nemser (2001) also underlines the necessity of supervising teachers giving emotional support as well as clear guidelines and supervision to the pre-service teachers regarding how they might handle pressure in the classroom. Such comprehensive planning provides future evaluation criteria and allows pre-services teachers to link their professional job experience with their assessments.

By using the Danielson framework, it should be possible to comprehend the procedure for assessing teacher practices and determining which areas need to be strengthened. Becker et al. (2014) suggested that Danielson's framework must be utilised to influence the pre-service teachers while they are learning to teach and develop their professional skills. Similarly, Field (2013) also highlighted how the Danielson framework's use positively influences student-

teacher interactions and aids the teachers in emphasising their curriculum. Clarke, Triggs and Nielsen (2014) further debates that teacher evaluation can be carried out both internally and outside of the classroom. The Praxis examination is one of the tools used to assess the performance of teachers. The Praxis is an external assessment that includes state-mandated testing which examines the student teacher's understanding of the subject matter, approach to teaching and other fundamental abilities. According to Danielson (2007), portfolio-based performance evaluation such as edTPA, which incorporates video clips of applicants' actual teaching, is sometimes utilised for teacher candidates in addition to the written exam.

Contrarily, as stated by Bullough and Draper (2004), when the internal evaluation procedures are used to measure the internal grades, class assignments and when the exams involve 'true and false' type answers, it may not reveal the true degree of the in-service teacher's understanding of the problems involved. The format of such examinations often omits important areas such as fieldwork and the difficulties and complications that may arise during the teaching process. Thus, Danielson's approach can be employed as a trustworthy evaluation technique to examine the day-to-day activities of pre-service teachers. According to Bacher-Hicks et al. (2015), the framework goes beyond just labelling teachers as present or absent from class because it is viewed as a low-inferenced, antiquated evaluation method. Danielson's framework has the capacity to illustrate the contextual role, which also takes into account the subject area and school culture. Furthermore, Backes and Hansen (2015) rated Danielson's framework as the most successful strategy because it also considers the complexity of the teaching process. It also covers a variety of areas such as planning, preparation, reflecting and coordinating with others. Most importantly, this framework ensures adequate room for professional growth of the teachers. Moulding, Stewart and Dunmeyer (2014) pinpointed that for teacher evaluation, the

domains on planning and display of teaching professionalism play an integral role in improving field experience. Perhaps this may help the pre-service teachers to improve their teaching pedagogy in the classroom, as stated by Aaronson, Barrow and Sander (2007).

The Danielson framework enables teachers to look beyond their immediate work environment and extend their lesson planning efforts to accommodate student behaviour patterns as well. According to Henning et al. (2005), this framework aids pre-service teacher candidates in improving their performance in the complex and challenging setting of classroom teaching practice. Pre-service teachers also receive feedback about their performance from their supervisors, who evaluate their strengths and weaknesses so that the pre-service teachers can fix the errors, strengthen their competencies and fulfil the minimum requirements. This enables them to determine whether they can develop the essential competencies over time.

2.13.1 Major Criticisms against the Danielson framework

In the aforementioned literature analysis, only the positive points of the Danielson framework gained prominence. Despite being praised as the most successful strategy for teacher assessment, Danielson's four-point module has certain drawbacks. For instance, while claiming to be student-centred, it places an excessive amount of focus on the teacher without allowing for a shared responsibility with the student.

According to Bem's hypotheses, a subject's self-perception is influenced by how the community describes and explains their feelings. However, Dewey (1986) has clearly described that a student enters the classroom with some prior knowledge that serves as his framework for evaluating novel encounters. Prejudice is based on this pre-conditioning. The pre-conditions of knowledge that pupils bring to a global classroom (prejudices) present a challenge to a pre-

service teacher in training. This study will further explore a partial answer provided by the study of Becker et al. (2014) in an attempt to provide more clarity on the above scenario. The pre-service teachers need two essential contributions from the school in order to negotiate the problems that arise on a regular basis: emotional support and classroom management support. The current research will include determining if pre-service teachers in the UAE undergoing training receive this support.

2.14 Daryl Bem's Self-perception Theory

This study will employ the self-perception theory of Daryl Bem (1972) to better understand how pre-service teachers develop and express their perceptions and opinions. The foundation of Bem's (1972) self-perception theory is made up of two assertions. First, the theory proposes that people understand their beliefs, attitudes and perceptions by understanding their own behaviour and the circumstances behind it. Second, the theory states that if an individual doesn't have full understanding of his/her behaviour, then they act like an outsider who observes the actions and conducts and tries to make sense out of it to deduce their own inner characteristics. Bem (1970, p. 8) further states that a person's "own behaviour will be used by him as a source of evidence for his beliefs and attitudes." The theory will be thoroughly discussed in the 'materials and methods' section of this thesis.

The main points of Bem's self-perception theory in educational contexts will be the subject of this study. As Mohebi and Bailey (2020) suggested, studying one's own behaviour as well as the circumstances around it can help people to understand their own thoughts, attitudes and viewpoints. Therefore, Bem's theory is essential to understanding how pre-service teachers perceive their own attitudes and abilities. The review of literature on the pre-service teachers'

fieldwork experiences also revealed that an adaptation of Bem's theory can be applied to the classroom environment. Pre-service teachers often have preconceived notions and viewpoints about instruction and their classroom practices (Mohebi & Meda, 2021). Bem's idea is significant because it corroborates Becker's finding that senior teachers' emotional support is the most crucial factor in the professional growth of pre-service teachers. After being confirmed by others, what we already know becomes true. To explain his self-perception theory, Bem used the illustration of a patient who is experiencing discomfort from inside. Until the doctor says so, the patient cannot tell if the pain is coming from an inflamed liver or a ruptured spleen. Similar to this, a child is unaware of hunger signs, unless their mother verifies them. "To the observer, the most important clue of an individual's inner state is found in his behaviour." However, the individual is not an island. Two modules, *intent and meaning*, must be used to interpret the behaviour of an individual. However, the pre-service teacher in the UAE encounters international students whose behaviour is beyond their comprehension. As a result, "precisely because they feel that there is something more interpersonal perception than responding to overt behavior" the mentor must interpret these for the pre-service teachers (Bem, 1972, pp. 4-5).

Additionally, when applying Bem's theory of cognitive dissonance, the pre-service teacher in a global classroom may run into situations where his preconceived notions may not be useful in tackling the problems at hand. For example, if a girl student is hurt after falling, should a male teacher carry that girl student to the nurse? According to Bem, there are times when one's past experiences are inapplicable to the present. Then the question arises: "What must my attitude be?" (Bem, 1972, p.16). Whatever the pre-service teacher does in such a situation may qualify as behaviour dissonance, assuming that he has prior assumptions (prejudices) about how he should behave. In this case, the supervisor's ability to provide emotional support is vital. By

witnessing how his supervising collaborative teacher handles novel and challenging situations, the student teacher may develop some cultural competence.

A study conducted by Mohebi and Bailey (2020) investigated the claims made by pre-service teachers that they are unique and different from other field instructors because they believe that they are better suited to pursue their selected career paths. Throughout the course of their field experience, they have taken part in a number of challenging activities. As a result, they may display a variety of altered behaviours and attitudes. Before pre-service teachers commit to a lifelong career as a teacher, Bem's theory can be used to ascertain whether their mental dispositions have undergone major changes. This study will look at these changes and how they affect how teachers are trained in the UAE.

2.15 Perceptions of Pre-service Teachers

Although teacher education aims to integrate the theoretical and practical aspects of teaching, both aspects of which are important for teachers to carry out their duties, novice teachers many have difficulty applying experiences from their education program to the reality of teaching. According to Holligan (1997), practicalities of teaching are more difficult to deal with than theories of education. This could be the reason why pre-service teachers value field experience and chances for classroom teaching more than the theory, because they can apply the knowledge gained in theory class during their practicum experience. Melnick and Meister (2008) discovered that inexperienced teachers and pre-service teachers both failed to recognise the complexity of problems like time management. They asked inexperienced teachers to choose topics that were much more valuable than course content, and the top four ranking items chosen

were classroom management, strategies for engaging parents, inspiring kids to study and conflict resolution.

Some students are unable to put theoretical ideology into reality, even though they have benefited from it and agreed with it in some cases (Ezer, Gilat & Sagee, 2010). This study also reveals that novice teachers, at least in theory, clearly preferred constructivist teaching methods (in which knowledge is acquired through a process of learning that builds new knowledge into existing knowledge); however, it is unclear whether this preference translates into actual classroom practice. The problem is complicated because, although agreeing with some procedures in theory, students may find it difficult or impossible to put them into practice (Kong, 2022). If there is a “gap” between theory and practice, it is crucial to assess it and determine whether the students’ training has prepared them for their first year of teaching. There is no question that teacher preparation cannot, obviously, adequately prepare teachers for every conceivable circumstance or for their whole career (Northfield & Gunstone, 1997). The majority of the literature on the effectiveness of teacher preparation advocates for the generalisation of teaching preparation, a long process that will result in skill mastery and, more importantly, the capacity to use those abilities in novel and unfamiliar contexts (Kyriakides, Charalambous, & Papadamou, 2023). It is uncommon for new teachers to be wholly ignorant of certain techniques or methods; however, they simply find it difficult to use these techniques in a classroom setting.

As mentioned in the first chapter, developing positive perceptions and attitudes among the teachers is essential for the successful development and administration inclusive education. Previous studies indicates that it is essential to develop these positive attitudes toward inclusive education during the pre-service teacher training stage itself (Swain, Nordness & Leader-Janssen, 2012). A notable study by Hassanein, Alshaboul, & Ibrahim (2021) assessed the extend

of changes in pre-service teachers' attitudes toward inclusive education system in Qatar, following an inclusion promoting crash course. This course was provided in combination with practicum. The pre and post-course surveys indicated that the crash course was able to change the pre-service teachers' attitudes/perception toward inclusive education, in a significant manner. Therefore, combining information-based courses with field experiences programs can be useful in developing efficient pre-service teachers.

Online education and technology integration in classroom became integral part of teaching after the onset of COVID-19 epidemic (DeCoito & Estaiteyeh, 2022). In the light of this changed scenario, Akram et al., (2021) assessed online teaching competencies of teachers using the technological pedagogical content knowledge (TPACK) model. This quantitative study used closed-ended surveys for assessing the content knowledge (CK), and technological knowledge (TK) of 256 teachers belonging to the public universities in Pakistan. Though adequate competency was observed in the content knowledge (CK), the participants' technological knowledge (TK) was poor. This study suggested professional development programs to improve the teachers' capabilities for integrating ICT in the pedagogical practices. These findings are not limited to Pakistan, ICT will probably remain as an important tool in education in the post-pandemic era as well.

Similarly, Qiu et al. (2022) assessed the pre-service teachers' perceptions regarding technological pedagogical content knowledge in China. This study identifies the essentiality of integrating TPACK in Chinese language teaching. This study assessed the Chinese as a second language (TCSL) pre-service teachers' understanding of TPACK in education. Using an exploratory factor analysis method, the perceptions of 286 pre-service TCSL teachers were assessed. Notably, the participants could not differentiate between technological pedagogical

knowledge (TPK) and technological content knowledge (TCK). Though the participants perceived their TPACK capabilities as ‘slightly satisfactory’, they were not satisfied with their technological knowledge (TK). These studies remind educators and policymakers across the globe to revise current teacher training programs, to integrate technology while designing the lessons.

Though COVID-19 has enforced online learning at least for some duration in every country, studies indicate that many factors are involved in the successful implementation of an online education system. For instance, a recent study from Turkey indicated that face-to-face learning has an upper hand over the online teaching, while studying the science subjects. Yılmaz and Malone (2020) studied the effectiveness of blended learning (online and face-to-face) for science education. Participants of this study were early childhood elementary preservice teachers and their students in Turkey. This survey reported that students expressed positive perceptions towards the blended learning system within their science education course. However, the students perceived that, many technical aspects of the science education like an active experimental demonstration in the class, cannot be covered fully in blended learning environment. Therefore, while designing online courses for science subjects, the practical aspects of the course is to be kept in mind, along with the theoretical part.

The lack of preparedness of in-service as well as in-service teachers to teach in online mode was a major challenge while implementing the online medium of instruction in many of the countries. For instance, Embang and Saluta (2022) demonstrated how the pre-service teachers of Philippines suffered due to the sudden change in teaching medium from face-to-face to online during the COVID-19 crisis. Though they have positive attitude towards this medium change, they were not technically prepared for teaching online. Further, the pre-service teachers

knowledge levels, experience, skills, and attitude was found to be determining factors in their readiness to teach online.

A study conducted at the University of Education, Winneba, Ghana, assessed the perceptions of 226 pre-service teachers regarding their teacher training program (Amankwah, Oti-Agyen & Sam, 2017). The major challenges faced by these pre-service teachers, during their training include the lack of teaching aids, inadequate time for preparing notes and lessons, poor planning from supervisors, lack of proper administrative support, and lack of proper feedback and orientation. Indeed, developing nations often suffer from the lack of supply and support, as compared to developed nations (Fomba, Talla & Ningaye, 2022).

The problem with UAE education is “that it has a multi-cultural teaching faculty managing a mono-cultural set of learners and vice-versa,” according to Moore-Jones (2015). Due to the dynamic nature of UAE classrooms, ongoing monitoring and feedback mechanisms are crucial in these situations. Moore-Jones examined how teachers and students in the UAE perceived public tertiary education. Their research questions were based on stakeholders’ perspectives of the advantages and disadvantages of multiculturalism in an academic setting. The UAE is unique in that the majority of the faculty members don’t belong to the local culture in which they reside and conduct business. High degrees of intercultural competency are therefore essential for effective academic and professional practices in the UAE. Although this setup gives faculty and students the chance to interact with people from varied cultural backgrounds and linguistic abilities, one needs to have high levels of intercultural intelligence to succeed in this configuration. Sadly, a lot of newly joined teachers, pre-service teachers and students lack this set of abilities. Therefore, UAE authorities must find ways to improve the intercultural intelligence of the stakeholders in the UAE education system.

The classroom-based instruction at the end of the UAE's pre-service teacher training programme worries them a lot. Rashad et al. (2016) conducted research on pre-service teachers' perceptions of their twelve-week field experience/internship during their last year of study. Notably, participants in this study disclosed both good and bad things that happened during their field experience. Most of the good experiences were linked to the interaction and cooperation between mentors and pre-service instructors. As previously mentioned, many mentors continue to use outdated techniques and avoid communicating with pre-service teachers. The pre-service teachers are left with a "feeling of loneliness" and a "lack of suitable support" as a result of this circumstance. Many pre-service teachers, however, are grateful for the opportunity to practice in a "real world" setting; therefore, they generally perceive the field experience favourably. Additionally, a lot of participants talked about their perceptions regarding teaching loads, English competency and difficulties with educating students from varied cultural and linguistic backgrounds. Therefore, it would be beneficial if the pre-service teachers received proper training before the commencement of their actual teaching career. In light of this research, mentor training for modern teacher education approaches is also required.

In a study published in 2018, O'Sullivan (2018) evaluated teachers' opinions of the UAE's bilingual education reform programme. Recent local, national and global realities have made being highly proficient in two or more languages more important than ever. Because of the need to consider the wider social and cultural repercussions of the widespread use of two languages in society, bilingual education is a complex and contentious field. Abu Dhabi's policymakers have started an ambitious programme of public-school reform that advocates for what is essentially a bilingual education system. This has been imposed in a top-down way, leaving many stakeholders feeling marginalised. This study focuses on teachers' perceptions of the

reform programme and finds that they have a generally negative view of the practicalities of bilingual education in the classroom. Cultural concerns have been raised over the use of English as a medium of instruction in math and science classes as well as the hiring of teachers who are native English speakers to teach English. This study contends that a thorough comprehension of contextualised perspectives is required for the programme to be both successful and sustainable, which would then result in a pragmatic language policy in the Emirates' schools.

Therefore, understanding the difficulties a pre-service teacher is facing is important along with knowledge on what perceptions the pre-service teachers possess. By comparing the aforesaid knowledge with the perceptions from the other stakeholders in pre-service teacher training like the instructor teachers, co-working teachers and students can provide a deeper insight into the areas that require improvement. These steps can greatly improve the efficiency of teacher education and in turn will benefit the education system in the UAE and will also help to achieve its goals.

2.16 The Pre-service Teachers' Perceptions - The UAE context

van der Hoven and Carroll (2017) taught English to aspiring pre-service teachers in the UAE. Their observations of pre-service teachers in the Emirate of Abu Dhabi and their experiences there are similar to those in the US. Whether in the US or Abu Dhabi, a global classroom has similar features. Many Abu Dhabi students began their academic careers in Arabic with English as a second foreign language. They “abruptly transitioned” from Arabic-medium instruction to English-medium instruction as they advanced and were admitted into institutions of higher education (HE). Similar circumstances exist in the US. Bilingual instruction in Spanish and English has been attempted in California and New York.

While instructors accepted the constructionist view that the knowledge that students brought to the classroom was pertinent to their future progress, and even though the accepted view was that Emirati students brought with them a rich socio-cultural context, the students quickly realised the reality that: “graduating from English medium universities (was) linked respectable work outside the home with high paying salaries, not readily offered four decades ago” (van der Hoven & Carroll, 2017, p. 40).

The second reality was that while Arabic was the official language in the UAE, English is the universal language as well as in its non-standard form the *lingua franca* of the UAE. The demographics of Abu Dhabi and the UAE as a whole are unique, and this is reflected in the pre-service teachers’ viewpoints. According to population figures from 2012, there were 253,740 Emirati living in Abu Dhabi, with an extra 1.6 million foreigners. A total of 183 of Abu Dhabi’s 451 schools are privately owned. Despite the fact that there are 30,000 teachers in public schools, just 50 Emiratis work in the 183 private schools. Only 8,000 Emiratis work at the public schools there (van der Hoven & Carroll, 2017, p. 41). Despite being an extreme case of a global melting pot, in Abu Dhabi, the schools represent its infancy. Although Arabic is the native tongue, students regularly use both Arabic and English in their studies and daily practice, inventing their own unique realities by employing their own “English grammar, word borrowings and word blending... in settings where standardised forms of Arabic are not necessary.” Therefore, the pre-service teacher is observing the emergence of a brand-new, self-creating global reality (van der Hoven & Carroll, 2017).

Without any government approval, the languages sort themselves into a hierarchy with some being important and others being marginalised. In a broader societal context, “Our participants, as future teachers, are expected to serve as role models for Emirati children in Abu Dhabi

government schools in a wider social context.” Within this diverse context the teachers will facilitate multi-cultural and multi-lingual communication and multi-national accommodation (van der Hoven & Carroll, 2017, p. 55).

As Freeman (2010) mentioned earlier, it is an experience of cultural change that a pre-service teacher in North Carolina would be able to relate to. In a study, Makrakis (2005) evaluated 478 pre-service Emirati teachers’ perspectives about Europe. This study reflected two issues, modernisation and globalisation. Makrakis justified his research by arguing that globalisation requires some sort of cultural and social adaptation across international boundaries.

The debate concerning the relationships between the Arab world and Europe or the West at large, has drawn the attention of many scholars due to social, cultural, political, and economic factors that unite ethnic or divide these two worlds (pp. 501-502).

After all, the attitudes and opinions of pre-service teachers - who will serve as mentors and influencers for future generations - are a fundamental foundation for healthy ties between the West and the Arab world based on mutual respect, acknowledgment and understanding.

Some people recall Jacques Delors, the longest-serving president of the European Commission (1985 - 1988), for his desire to influence educational reform in the future so that it would serve the interests of the entire European Union. The 1996 report bearing his name, The Delors Report, reflected Delors’ primary concern that education should support lifelong learning habits and, more importantly, the recognition that decisions concerning education should be based on a moral precept of the kind of society one desired to live in. The purpose of the paper was to serve as a springboard for future thinking on the part of educators preparing the next generation for a global society. He specifically outlined seven guiding principles for a global integrated society,

including: (1) resolving the global-local conflict; (2) taking both long-term and short-term factors into account; (3) balancing tradition and modernity; (4) the spiritual and the material; (5) the necessity of competition; (6) the ideal of equal opportunity; and (7) the advancement of knowledge. The attitude of tolerance and forbearance of many conceptions that are dissimilar from our own served as the binding agent between all seven of these pillars of education (Delors, 1996).

Makrakis (2005) extrapolated from the Delors Report, 1996 that: “education must aim at developing an understanding of other people and an appreciation of interdependence in a spirit of respect for the values of pluralism, mutual understanding and peace. The rationale behind (the study) is based on the belief that students arriving in the classroom bring with them certain preconceived or distorted notions relating to other groups.” Therefore, the European Council of Ministers acknowledged that ethnocentric attitudes and stereotyping can harm individuals in Recommendation Number (84,81) and that efforts should be made through education to counteract such influence. As a result, both educators and learners were urged to participate in a process of enlightenment and cultural exchange (Makrakis, 2005, p. 502).

Furthermore, Makrakis (2005) reported that pre-service Emirati teachers’ attitudes toward Europeans were based on the historical construction of the socio-cultural borders between their two continents. The idea of Europe was more of a mental construct than a geographical or social reality, with Christianity serving as the primary determinant of its identity and the population holding similar religious convictions. Christianity (and Europeans) thus faced off against Islam. Additionally, in its interactions with Islam, Christianity was supported by European colonialism. Makrakis (2005) discovered that pre-service instructors had established conventional ideas of Europeans as enemies of Islam and Muslims based on this historical foundation. Prejudices,

which include unfavourable assessments of the “other”, are related to stereotypes. Markakis (2005) contends that the relevance of these results is that children learn preconceptions and prejudices from the world around them, and that the school environment is a crucial aspect of their social and mental development. Delors (1996) wanted to reshape students’ mental views toward an inclusive society through education.

However, Markakis’ findings demonstrated that pre-service Emirati teachers did harbour anti-Western attitudes.

The analysis of the findings reveals a high degree of animosity towards Europeans and Europe. Negative statements as compared to positive and neutral statements heavily load the respondents’ perceptions of Europe and Europeans. More specifically, Emirati pre-service teachers’ negative perceptions of Europe were intertwined and very frequently rate with the mostly cited statements referring to crimes and dirty habits as well as a tendency to control and dominate other countries. To their minds, Europe stands as the imperialist militaristic enemy, which poses a threat to the Arab and Islamic culture and existence. Other assertions were that Europeans had no fidelity to family ties. On the other hand, Emirati pre-service teachers acknowledged the industrial advancement of Europe and its technological superiority. Some acknowledged also that Europe symbolized ideas of freedom of speech, expression, and democracy, punctuality, and efficient management. (Markakis, 2005, p. 506).

2.17 The Importance of Stakeholders in Generating Fruitful Teaching-learning Outcomes

A successful curriculum requires input from a variety of stakeholders, including teachers, school administrators, parents, school boards and policymakers. By keeping track of students’ development and carrying out the curriculum, teachers and school administrators play a crucial

part in constructing and growing the school and its pupils. Similar to aforementioned stakeholders, politicians and psychologists can offer helpful solutions for addressing pupils from other countries or those with disabilities. Since responsible community members and parents frequently serve on school boards, they can also contribute to the proper supply and utilisation of a variety of study resources that are not located on the school premises (Warsi, 2018; Alomes, 2020). According to Epstein et al. (2002), effective stakeholder engagement requires leaders to intentionally interact with, gain knowledge from and communicate with individuals and groups throughout the decision-making process, not just at the end. They outline five requirements for successful stakeholder involvement in education: 1) Improved understanding of the ideas and perceptions of stakeholders; 2) The capacity to make important judgments more swiftly and inexpensively; 3) More support from stakeholders who were more active during the decision-making process; 4) Greater possibility of a favourable result as a result of access to more ideas and greater understanding of the chosen course of action; and 5) Increased confidence among stakeholders in educational leaders (Epstein et al., 2002).

Similar findings were made by Cheung, Keung and Mak (2019) regarding how stakeholder perceptions can influence students' learning processes. The 'New Senior Secondary Curriculum' was implemented in Hong Kong in 2009. With the ultimate goal of preparing secondary school students for meeting the changing needs of the workplace and for lifelong learning, this educational reform encourages a paradigm change in learning and teaching methodologies. This study compared the perceptions of the various stakeholders (school heads, teachers and students) in order to offer empirical findings about the effects of such a paradigm shift in education. After evaluating stakeholder's perceptions, the authors identified that more attention should be given to the relatively weak areas of students' self-regulated and reflective

learning as well as their personal growth through Other Learning Experience (OLE). This investigation also uncovered the divergent perceptions held by various stakeholders, primarily by senior management and the teachers. In order to create a mutually beneficial consensus for reaching curriculum goals, it is important to take into account the stakeholders' perceptions and identify potential solutions that can resolve this issue.

Kwangawad (2017) argues that teacher preparation is extremely important and that well-designed teacher preparation can be used as a powerful vehicle for preparing the next generation of teachers to implement new curriculum and innovative teaching methods. To ascertain their view points, they conducted a quantitative study to explore stakeholders' perceptions of effective English as Foreign Language EFL teachers in the pre-service teacher education program at Mahasarakham University, Thailand. The study involved 576 stakeholders (472 students, 34 EFL pre-service teachers and 70 school administrators). They found that the students believed that EFL teachers' knowledge was the most important for the teachers to possess. The EFL teachers' characteristic the EFL pre-service teachers rated most strongly was EFL teachers' professional attributes. The school administrators also considered EFL teachers' professional attributes as the most important and effective. Three groups of stakeholders (students, EFL pre-service teachers and school administrators) valued attributes of EFL teachers as a strong aspect of EFL teacher effectiveness. Therefore, this information will be useful to revise the EFL pre-service teacher education program.

Juma, Onyango and Herman's (2021) study tried to determine the efficiency of the Performance Management (PM) system in secondary schools in Tanzania's Nyamagana District by evaluating the opinions of stakeholders, including the heads of public secondary schools and teachers. There were 174 teachers, 12 school heads, seven Wards Educational Officers (WEOs),

and one District Educational Officer (DEOP) in the sample of stakeholders. According to the survey, both school administrators and teachers are aware of their responsibility for putting performance management into practise. However, the government and policymakers needed to make more of an effort to give the stakeholders enough resources and support. The authors also suggested conducting seminars and workshops to streamline the procedure so that school administrators and teachers could adopt a practice with ease. Therefore, it is clear that the government and policymakers missed simple yet important points while implementing the program, which made it less effective. By assessing the stakeholders' perceptions, the authors were able to identify vital points which could be used for the successful implementation of the program.

Similarly, a work by Zheng (2020) assessed the perception of stakeholders like teachers, headteachers and administrative staff ($n = 365$) from 10 schools in the Shandong province of China. This study revealed previously unidentified pitfalls in the system. The authors found that the prevailing exam-oriented evaluation system still sets barriers for students' all-round development. Further, educational equity in student performance has not drawn sufficient attention from the inspectorates of Shandong province of China. The authors concluded that school inspection standards need to be improved to better support students' all-round development and equity in educational outcomes within and between schools.

Assessing the stakeholders' perceptions will also provide an insight into the quality of education provided. An assessment by Aydin (2013) regarding the efficacy of the Gülen educational initiative in the schools of Nigeria revealed the educational viability of "Gülen-inspired" schools in Nigeria, which are called as "Nigerian-Turkish International Colleges (NTICs)". The author used a qualitative methodology to assess the perceptions of four types of stakeholders -

administrators, teachers, students, and parents. This study concluded that the Gülen educational initiative is successful and the NTIC schools can promote academic achievement in an environment that also teaches sound values and acceptance of others through curriculum, school organisation and the quality of the people who work in the schools.

Therefore, it is crucial for policymakers, programme designers and programme implementers to comprehend how stakeholders perceive the quality of education (Anderson, 2002). Allowing the stakeholders to provide their suggestions not only enables the policymakers to comprehend their thoughts and feelings on a subject, but it also gives them the chance to participate in the formulation of crucial policy choices that have a direct bearing on their daily lives. Understanding how significant stakeholders view effectiveness is just as crucial as understanding the teaching and learning process itself. As a result, it is important to listen to stakeholders in their own context. Students, future teachers, current teachers and school officials are some examples of the stakeholders in an education system. The knowledge required to fully comprehend the efficacy at the classroom level can be provided, in particular, by pre-service and in-service teachers as well as students (McKnight et al., 2017). Further, stakeholders are useful partners who can improve teacher preparation programmes, including universities, schools and pre-service teachers (ACDE, 2003). Therefore, university and school staff must share learning responsibility and help with ongoing role clarification in order to improve the overall success of teacher preparation programs (Clinard & Ariav, 1998; Broadbent, 2006).

2.18 Summary of the Chapter

The chapter provided a detailed insight into the currently available literature/research studies on pre-service teacher education programs, reforms in education-related policies in the UAE as

well as international practices. Also, recent research studies related to the importance of self-perception of pre-service teachers were reviewed in this chapter. Therefore, this chapter also gave an account of Bem's self-perception theory and Danielson's framework for teacher performance. Further, the importance of the pre-service teacher training program in 'making or breaking' the teachers, with a special emphasis on the field experience was also described. Studies also suggest that there are pitfalls in the implementation of education policies in the UAE due to various reasons including socio-cultural as well as teachers' efficiency and self-perception-related obstacles. From the review of literature it is clear that research works related to the perception of stakeholders like pre-service teachers about their field experience are very rare in the UAE context. Furthermore, most of the studies disregard one of the important stakeholders in the pre-service teacher training program - the instructors/supervising teachers. Many studies suggested that studying the perception of stakeholders is of great importance for the successful implementation of a program. In summary, the review of available literature points towards the need for studying the perceptions of pre-service teachers and instructors in order to improve the pre-service teachers' field experience, which in turn could be beneficial for the education system in the UAE. Therefore, the present research work is aimed at addressing these issues in the UAE context.

Chapter 3 : RESEARCH METHODOLOGY

3.1 Overview of the Chapter

The objective of this chapter is to provide a detailed description of the methods, tools and frameworks which are used for the present research study. At the beginning of the chapter, there is an outline of the interpretive approaches which helped in selecting the methodology for this study. Then, the chapter describes why and how the pilot study is conducted. The theoretical and practical basis for selecting particular tools for the present study is then explained, along with the research design and description of each research method. The context-dependent research questions are also narrated. The approaches used for data collection and statistical analysis methods used are described in detail, and finally, potential ethical and moral considerations that were identified as relevant to the present study are discussed.

3.2 Theoretical Perspective

The structure that can hold or support a research study's theory is known as the theoretical framework. Therefore, the theoretical framework of a research study explains why the research problem under study is valuable and why particular tools or methods were employed for conducting the study (Hiebert et al., 2023). Choosing the correct research method and tools can be puzzling for researchers. It is not easy to determine which methodology or which combination is appropriate for the collection, analysis, and interpretation of the research data. Further, the researcher must be confident about the consistency of selected research methods with the theoretical perspective used for the study. Therefore, it is of great importance to have clarity, precision and consistency between methodology and theory for successful culmination

of the research (Gothberg & Mahon, 2023; Hiebert et al., 2023).. Further, for the successful implementation of a research study, the researchers must first do research on the theoretical background of the work, which helps them to choose apt methodologies and tools (Crotty, 1998). Therefore, this section of the chapter attempts to provide clear background knowledge on the theoretical socio-economic background of the research study, which enables the researcher to set up the rationale and tools for investigating the problems in question.

3.2.1 Interpretive Explanatory Approach

In the previous chapters, various aspects of the education sector including the policies, challenges and overview of the pre-service teacher education system world-wide as well as in the UAE were discussed. These discussions formed a broader theoretical framework for the current study. The main purpose of discussing the background literature and contextual policies was to identify the gap areas in educational research in the UAE. Further, it helped in identifying the shortcomings in implementing the educational policies by the authorities. It was identified that there are several challenges faced by the pre-service teachers - especially that the pre-service teachers' field experience program has failed to achieve its goal and hence this adversely affects the education quality in the UAE. From the review of literature, it was clear that studying the perceptions of stakeholders is of great importance for successful implementation of any type of policy, including those in the education sector (Epstein, et al., 2002; Kwangsawad, 2017; Musmar, 2018; Warner, 2018). However, it was evident that research studies exploring the perceptions of stakeholders, especially pre-service teachers' perceptions about their field experience in the UAE context, are very rare. Thus, the previous chapters resulted in the rationale for conducting this research study: filling the knowledge gap in pre-service teachers' perception-related research literature, with an emphasis on the field experience program.

Therefore, the decision to conduct this study is fortified by the knowledge that evaluating the pre-service teachers' perceptions is rare in the UAE context.

Studying the differences in perception and cognition is important for understanding the behaviour of mixed populations because these two domains shape the individual-specific experience among human beings (Varela, Thompson & Rosch, 1999; Kastanakis & Voyer, 2014; Chin et al., 2022). Therefore, deeper insight and knowledge on the conditioning effect of culture on perception and its influence on cognition can help in understanding the perception-related issues among pre-service teachers in the UAE. According to studies, cultural differences in perception are responsible for the striking differences between how Westerners or Easterners perceive their emotions, environments, and other sensory perceptions in the self-versus-others scenarios (Simonson et al., 2001; Weiner, Healy & Proctor, 2003; Engelmann & Pogosyan, 2013). Therefore, the complex nature of human perceptions and emotions are kept in mind while designing the present study and while considering the aptness of study research questions.

First, the questionnaire used in the present study was designed to understand the reasons for the pre-service teachers' perceptions which are arising during field experience training. Thus, adopting the mixed methods explanatory research approach may be useful for a better understanding of the stakeholders' perceptions in these situations rather than being involved only in an interview process (Schoonenboom & Johnson 2017). Further, to better understand how pre-service teachers, as entities who engage in a complex environment like the UAE classroom, interact and respond to certain situations and events during the process of teaching and learning, it is essential to model an appropriate research methodology that searches for the reasons for pre-service teachers' perceptions. Therefore, a simple study which explored the perceptions alone would not fit well within the complicated paradigm of the UAE classroom.

The present research aimed to address this issue by blending the well-versed Danielson's framework with Bem's self-perception theory (both are discussed in detail in the review of literature section), that can account for this diversification imposed by the complexity of global UAE classrooms through a mixed methods explanatory approach.

3.3 Selection of Research Design

The purpose of this mixed-methods study with a mixed- methods explanatory research design is to examine the perceptions of pre-service teachers and instructors about field experience. As stated previously, the purpose of the research is the determining factor for the research methodology and design. Hence, the mixed- methods approach is selected for the current study because it has been determined as one of the most effective designs for properly addressing research questions (Hedström & Swedberg, 1996; Plano Clark & Ivankova, 2016). According to Morgan (2007), a research approach should include four essential elements: the epistemology that guides the study, the philosophical paradigm (such as post-positivism, constructivism or pragmatism), the methodology, and finally, the tools for gathering and analysing the data. According to Easterby-Smith et al. (2008), "paradigms are a way of framing what we know, what we can know and how we can know it."

There are many important paradigms in social science, each with a unique and important perspective. According to Blackstone (2012), positivism, social constructionism, the critical paradigm, and postmodernism are four of the most prevalent social scientific paradigms that can be applied in research. In this study, the importance of two paradigms - constructivism and positivism - is correlated. These two paradigms are either subjectively constructed by individuals (constructivism) or are objectively measured by the researcher (positivism). Further,

a quantitative research approach is based on the philosophy of post-positivism (Crowther & Lancaster, 2008), which states that if the research study is designed to seek out facts which are dependent on the reality, then the researcher must attempt to recognise differences in human behaviour and try to explain these. Additionally, in line with the quantitative method, the current study assesses a collection of variables that demonstrate statistical outcomes and attempts to establish links and identify the factors that led to changes in the examined social figures (Wrench, 2017). In order to further support the concept of a quantitative approach, the researcher's role is separated from data collection, and methods were developed before data collection and analysis. Because the quantitative research phase (the survey) is based on positivism and the qualitative research phase (the interview) is based on constructivism, these two paradigms lead to the use of a mixed-methods approach (Schoonenboom & Johnson, 2017).

According to the definition by Johnson, Onwuegbuzie and Turner (2007, p. 123):

Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e. g. use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration.

The goal of qualitative research is to build up meaningful results without sacrificing richness and dimensionality through making sense of and identifying patterns among words. Like quantitative research, qualitative research seeks to find answers to the “how, where, when, who and why” questions from the standpoint of developing a theory or contesting an existing theory. The focus of qualitative research is on non-numerical data and its phenomenological interpretation, which is inextricably linked to human senses and subjectivity. However, in

quantitative research, the primary goal is to analyse and interpret numerical data and its statistical interpretations under a reductionist, logical and strictly objective paradigm. In qualitative research, the same elements are regarded as essential and inevitable because they invariably add additional dimensions to the body of findings. In quantitative research, human emotions and perspectives from both subjects and researchers are considered undesirable biases confounding results. However, the problem of subjectivity and contextual implications has prompted debates over the standards of the quality and veracity of qualitative research findings (Dixon-Woods et al., 2004; Leung, 2015).

After considering all the points discussed above, the present study opted for a mixed- model, in which the quantitative and qualitative research methods are mixed as per the guidelines of Creswell (2011) and Plano Clark and Ivankova (2016). The mixed- methods research model included collecting, analysing and integrating both qualitative and quantitative research (Figure 3.1).

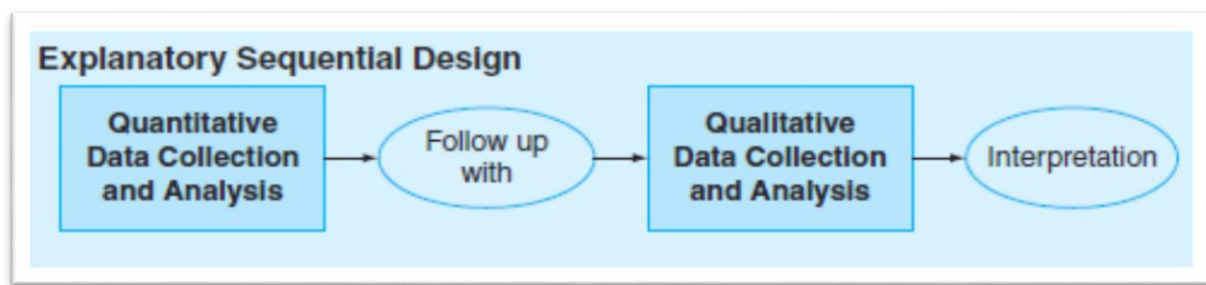


Figure 3. 1: Mixed-methods model: A simple depiction of the quantitative and qualitative mixed-methods model used for the present study (Adapted from Creswell, et al., 2003)

A five-point Likert scale survey that will be created utilising Danielson’s methodology will be used to gather the quantitative data for this study (Table 2). All domains of the Danielson’s

framework, which were chosen as the key themes based on the evaluation of the current study, is represented by a cluster statement in the questionnaires. These Danielson's framework domains demonstrate the domains associated with efficient teaching methods (Danielson, 2013). Each statement will receive a score from 1 (strongly disagree) to 5 (strongly agree) by the study's respondents. The use of a five-point Likert scale is justified since it makes it simple for the researcher to quantify each response obtained from the respondent using a scale from 1 to 5 (Hasan, Hamzah & Awang, 2014). The components that will reflect pre-service teachers' perceptions of field experience will be included in the directions. In the current study, a highly effective teacher is described as the one who makes a positive and influential impact on their students. The researcher will apply statistical analysis to assess the internal consistency, or Cronbach's Alpha, for the five-point Likert scale questionnaire and guarantee the validity of the instruments employed in the questionnaire. Ten specialists in the field will also be given access to it so they can provide feedback and offer guidance. Additionally, the statements will be included in the questionnaire linked to one of the five domains of the Danielson framework in order to determine the validity of the instruments. After this step, the design will be subjected to a pilot study to test its reliability and consistency. Changes will be made if discrepancies are found during the pilot study. If the design is satisfactory, then the survey will be conducted to gather information from pre-service teachers.

As for the instructors, a qualitative approach that utilises a purposely chosen group of respondents will be adopted. The data will be collected using interview questions (Appendix A). The design will be flexible to permit the growing concepts that evolve by means of the process of collection, analysis and interpretation of the interview data. Baškarada and Koronios (2018) claim that the qualitative research method is the most effective tool for uncovering

people's perceptions and thereby allows their experiences to flow freely to the researchers conducting the study.

It is impossible to create a research design that works for all research areas because each research study is unique in its planning, design and strategy. According to Cohen, Manion and Morrison (2007, p.73), "there is no single blueprint for planning research." It is a well-known fact that every research project has its own areas of interests, problems to address, strengths and limitations, all of which together create the justification for choosing one study design over another, giving each project its individuality. Regarding the current study, the formulation of its research methodology was heavily influenced by three fundamental issues. These factors included choosing a workable and accessible location, choosing the sample population and selecting the right data gathering and analysing tools (Figure 3.2). Therefore, the theoretical and practical justifications for choosing a method/tool at each of these crucial stages are also explained.

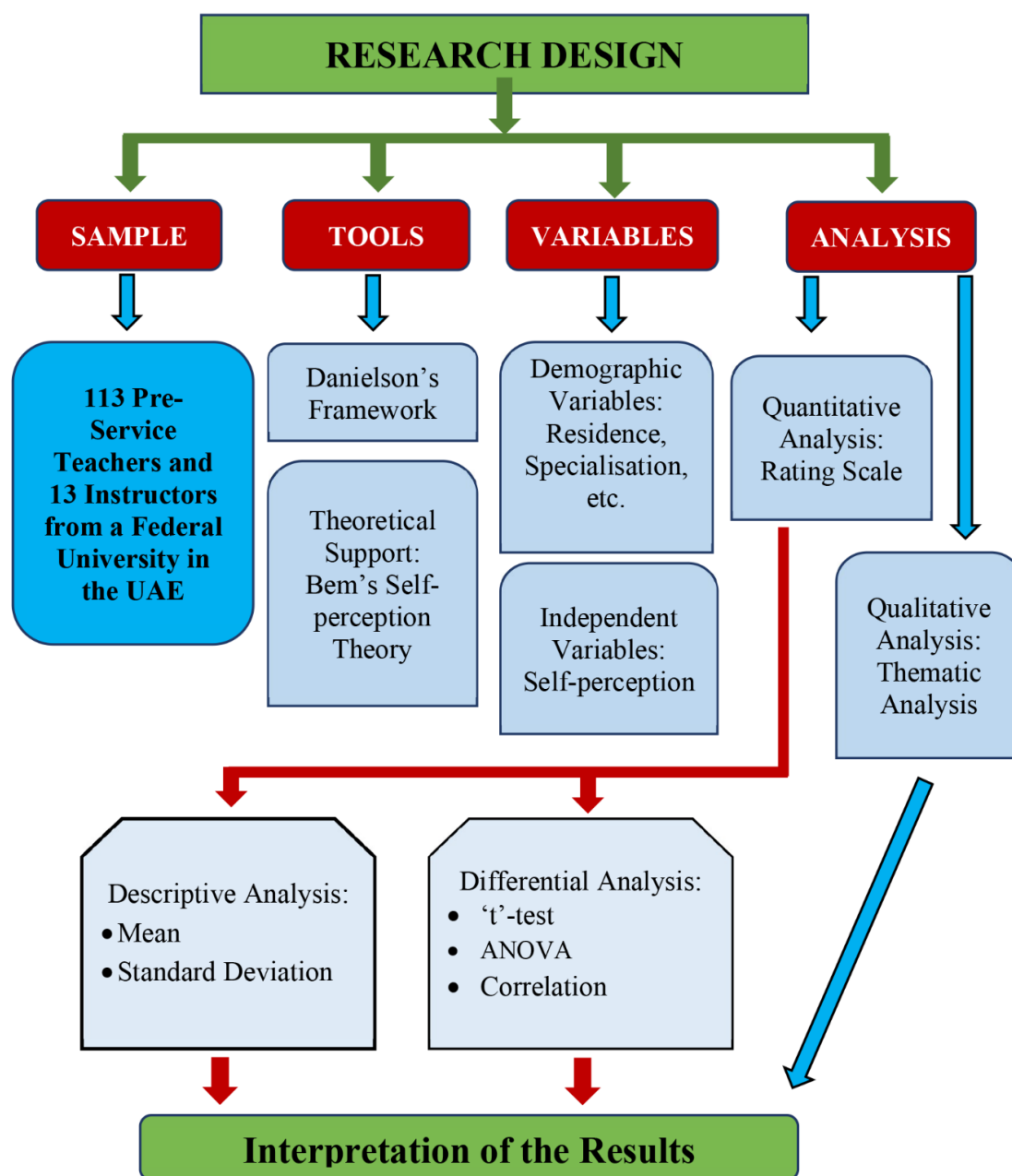


Figure 3. 2: Flow diagram of the research design depicting the flow of research work

Table 2: Scoring procedure using a Likert five-point rating scale

Scoring Procedure for Emotional Intelligence Response	Scoring
Strongly Disagree	1
Disagree	2
Undecided	3
Agree	4
Strongly Agree	5

3.4 Research Methods

As mentioned previously, the present study employs a mixed- methods of explanatory research. In explanatory sequential design, which is a mixed-methods study design, the quantitative phase of data collection and analysis is followed by the qualitative phase of data collection and analysis (Fetters, Curry & Creswell, 2013). Therefore, in an explanatory sequential mixed-methods approach, all the qualitative and quantitative findings are systematically combined during the reporting phase. This “building” approach, among the different integration options at the methods level, entails using the data from one phase to guide the second phase’s data collecting strategy. At the reporting level, data integration involves employing the “merging” approach to create a “joint presentation.” Therefore, integration of the qualitative and quantitative phases is useful in obtaining a deeper understanding of the problem under evaluation (Plano Clark & Ivankova, 2016). Further, the triangulation of the data ensures the results are more accurate

(Fetters, Curry & Creswell, 2013). Therefore, mixed methods model with explanatory sequential design is employed in the present study.

3.4.1 Determining a Feasible and Accessible Site

Selecting an appropriate location for the study is of utmost importance for the successful completion of any research project. Superficially, it may seem that selecting a site from a list of potential sites is very simple. However, selecting an appropriate site poses a lot of issues to the researcher for a variety of reasons. Although most of the pre-service teachers may find the topic interesting, it is difficult to make it feasible and manageable. At this point, the researcher has to ask many questions, such as – ‘Which higher education institution would best suit the research questions formulated?’, ‘Which is the most practical site administratively and which will be available for the present study?’, ‘Does the accessible study site have a sufficient sample population, or will additional sites be necessary for fulfilling the committed sample size?’, ‘What are the syllabus and education policy-wise differences between selected sites?’, ‘Is it preferable to take samples from several colleges and universities, or will one be sufficient?’, and so on (Daniel, 2012; Sheppard, 2020).

In simple words, the solution to all these troubling issues lay in judging two features of the study site - accessibility and capability ((Daniel, 2012; Sheppard, 2020). Since most existing teacher education institutions or universities run different teacher education programmes, there is a fair chance that they will have different syllabi and policies. Hence, the federal university where this study was conducted is well-known for its sample size strength in the country and for the adherence to UAE national education policies for the teacher education programme it runs. Therefore, this single federal university in the UAE with the afore-mentioned characteristics was selected for the present study. This university is known for its cultural and language-wise

diversity among the stakeholders. Further, it represents the UAE education context policy-wise as well as population-wise. This scenario exactly represents the present UAE context. Secondly, the university selected for the present study had participants who were available for a formal or informal conversation and could be reached by phone or by email invitation.

3.4.2 Sample size calculation and recruitment of participants

The choice of the research location was followed by the challenging choice of selecting the students who would make up the study's representative sample. It is obvious that picking one student group over the other required a more focused study goal. Since the subject area of the present study is related to the field experience of the pre-service teachers, only those pre-service teachers who have some sort of field experience training were selected for the study. However, further screening was required at this stage to ensure the pre-service teachers' participation in the present study because of the time constraints and teaching duties imposed on them. The prime participants of the study were pre-service teachers and their instructors. Therefore, the sampling method used for the study was 'convenience-based sampling method' because the convenience/availability of prospective respondents must be prioritised due to their time constraints and COVID-19 based restrictions (Daniels, 2012). The researcher personally estimated the respondent population size of the proposed study site as 2330. The sample size was calculated using the guidelines provided by Saunders, Lewis and Thornwill (2007). As per the guidelines, a total of 100 pre-service teachers and 10 university supervisors were proposed to be included in the study, to limit maximum margin of error under 10%; with a confidence interval (CI) of 95%. Table 3 given below shows the relationship between total population size and sample size needed to be taken for a particular margin of error, at a CI of 95%.

Since the study was conducted during the COVID-19 pandemic, all the respondents were reached out through email for enquiring about their willingness to take part in the current study. The format of the email sent to the instructors (supervising teachers) is given as Appendix C and for the pre-service teachers is provided as Appendix D. The outline of the study, study objectives and confidentiality, etc. were mentioned in the email. In total 200 emails were sent. From this, 121 pre-service teachers, and 13 instructors who conveyed their willingness to participate in the present study were selected (convenience sampling). The participation was entirely voluntary, and no remuneration was given for taking part in the study. All the respondents were asked to sign the consent form (Appendix E) and information regarding the study and participation was provided to the respondents before signing the consent form (Appendix F). Though 100 participants were adequate for the quantitative phase, the present study included 121 cases, by expecting a margin of error of 20% while making their responses. The expected errors include missing multiple responses, marking more than one response to the same question, lack of other vital information, etc.

Population Size	Sample Size per Margin of Error		
	±3%	±5%	±10%
500	345	220	80
1,000	525	285	90
3,000	810	350	100
5,000	910	370	100
10,000	1,000	385	100
100,000+	1,100	400	100

Table 3: Relationship between population, sample size and margin of errors for each sampling (by Saunders, Lewis & Thornwill, 2007)

3.4.3 Selection of Questionnaires Type

In qualitative research designs, interviews are the cornerstone of the primary data collection process. In contrast to quantitative research, the purpose of a qualitative study is to investigate and explain why a specific occurrence is the way it is (Adhabi & Anozie, 2017). Questionnaires are indispensable parts of interviews. There are two types of questionnaires in practice: open-ended and closed-ended. An open-ended inquiry is one in which the respondent cannot choose between a set of predetermined responses. Instead, it is educational in nature and provides the respondent the opportunity to express themselves through freestyle responses, which could take the shape of sentences, facts or anecdotes. Customers are free to provide any comments in their own words while responding to open-ended survey questions. In-depth discussion of subjects, comprehension of processes and the determination of potential reasons of observed associations are all possible with the proper use of open-ended questions, alone or in combination with other interviewing approaches. As a result, in-depth narratives can be obtained using open-ended questionnaires. On the other hand, closed-ended questions are questions that are answered with predefined binary or multiple-choice options, like Yes/No responses or scaled responses. Closed-end questions are easy to interpret and the response rates are much higher than open-ended questions. However, closed-end questionnaires often fail to collect detailed information on the subject (Farrell, 2016; Desai & Reimers, 2019). Although open-ended questions are good at obtaining detailed information, they are often time consuming and the response rate may be low because of the saturation effect of open-ended questionnaires on the respondent (Weller et al., 2018). Therefore, care must be taken while designing open-ended questions to avoid the

afore-mentioned saturation effect and to get maximum response rates. The primary aim of the present research work is to gain a deeper insight into the perceptions of pre-service teachers regarding their field experience training program. Therefore, closed-end questions may not be suitable for gaining a deeper insight into the perceptions of pre-service teachers regarding their field experience. After weighing the pros and cons of open-ended and closed-ended questionnaires and checking their suitability for the present study design, open-ended questionnaires were selected over the closed-ended questionnaires.

3.4.4 Selecting Appropriate Data Collection Tools

The next important stage of research design was to properly select the most suitable and feasible tools of data collection that would ensure sufficient information about the participants' perceptions, which are reflections of the challenges and favourable incidents that they may have encountered during the field experience program. For this purpose, two techniques were chosen that were complementary and integrated in supplying required information for the study. They are one-on-one open-ended interviews and the critical incident method. The rationale that justifies the selection of these tools is given below.

As mentioned previously, the perceptions of a person are influenced by an array of factors. The researcher used the explanatory mixed-methods approach in the current study. In this scenario, it is apparent that one-on-one interviews/ talking to the participants in-person and giving them the chance to freely reflect on and express the various types of perceptions they have is the only way to understand their perceptions about field experience. Therefore, use of these data collection tools was the most suitable research strategy for achieving the objectives outlined in the research questions. The justifications for choosing these tools are given below.

Individual in-depth interviews and the critical incident method, the two research methods that were selected, were based on the previous literature (Cohen, Manion & Morrison, 2007; Kvale, 2007; Gibson & Brown, 2009; Serrat, 2010). Face-to-face interviews with the participants undoubtedly give the researcher the freedom to gain deeper insight into the research questions and ask as many clarifying questions as required to elicit additional information. Additionally, it was necessary to conduct individual interviews in order to triangulate the data and strengthen and deepen the conclusions. “The research interview is an interview where knowledge is constructed in the interaction between two people,” affirms Kvale (2007, p. 13). Therefore, the knowledge acquired is a by-product of the interaction, which yields fresh findings through interacting with various interviewees. Semi-structured interviews give the researcher more freedom to ask questions while still being “sensitive to the developing conversational structure” (Gibson & Brown, 2009, p.87).

The critical incident method is the research strategy chosen, based on Serrat’s (2010) assertion that “critical incidents can be harvested to provide a rich, personal perspective of life that facilitates understanding of the issues and obstacles people face from time to time, and illuminate avenues for improvement (or replication if outcomes are effective).” As per research works similar to the present study, the critical incident method is a good qualitative data collection technique for the goal of the current study. This method is very appropriate for use in the UAE context because it primarily focuses on comprehending a real-world phenomenon that has received little study or knowledge. Critical incidents are defined as “specific events or occurrences that might characterise or starkly illuminate a particular feature of a teacher’s behaviour or teaching style” (Cohen, Manion & Morrison, 2007, p.404).

This approach is crucial because it allows people to pause, reflect on their life experiences and re-evaluate how they responded and reacted to specific circumstances that might have impacted their professional learning. In short, it appeared that the critical incident method worked well with the overall research design of the current study and effectively integrated with the other research methodologies because it supported Serrat's presumption that "At their core, all incidents pertain to matters such as culture, knowledge, competence, relationships, beliefs, emotions, communication or treatment" (Serrat, 2010, p.2).

Therefore, identifying the key issues helped to finalise the primary design of the current research study. Steps were then taken to design and administer the data collection tools, finalise and choose the study's population and the data analysis process to implement this study.

3.4.5 Pilot Study

Pilot studies are scaled-down versions of larger investigations (sometimes known as "feasibility" studies), as well as the pre-testing of a specific research instrument, like a questionnaire or interview schedule. Pilot studies serve a variety of crucial purposes and can help other researchers by revealing critical information. A pilot study might help the researcher decide whether their research plan is feasible before they get started. This is a small-scale, preparatory "rehearsal" where the strategies the researcher wants to apply to their research topic are tested. The outcomes will serve as a guide for the large-scale investigation's methods. Both qualitative and quantitative investigations need to have pilot studies. The significance of the pilot research is based on the fact that it can save time, energy and money. A strong study design must include pilot experiments. Although conducting a pilot study increases the likelihood of

success in the main study, it does not always ensure success (van Teijlingen & Hundley, 2002; Hassan, Schattner & Mazza, 2006; Enago Academy, 2022).

Components of a Pilot Study

In all types of research, whether it is a social science research study or a clinical trial of a medical treatment or just a survey in the form of a questionnaire, the researcher can use a pilot study to enhance the actual study to be informative and add value to the research field (van Teijlingen & Hundley, 2002; Hassan, Schattner & Mazza, 2006; Enago Academy, 2022).

Important points to consider while performing the pilot study are:

- a) **Site selection and sample size:** The research data must accurately reflect the intended study population. In order to determine whether the sample size is feasible, one should use statistical techniques (Table 3).
- b) **Determine the criteria:** Based on the goals of the study, the researcher will decide what constitutes a successful pilot study. In addition, proper planning is done on what the pilot study will take into account for the standards.
- c) **Recruiting subjects or collecting samples:** The researcher makes sure the process is manageable and practical when selecting subjects or gathering samples.
- d) **Test the tools/instrument:** This refers to the questionnaires, frameworks, tools or techniques. The present pilot study enabled the researcher to test whether it was practical and realistic and also helped the researcher decide how the questionnaire could be made better.
- e) **Data entry and analysis:** The researcher runs the trial data through the proposed statistical analysis to see whether the proposed analysis is appropriate for the data set.

Further, the reliability and consistency of the data produced are validated using Cronbach's alpha test.

- f) **Create a flow chart of the process:** Finally, based on the results of the pilot study, the methods and tools are improved and a flow chart of the entire research design and process is prepared (Figure 3.2).

3.4.6 Assessment of Validity and Consistency of the Research Tools

To improve the accuracy of the assessments and evaluations, it is essential to develop trustworthy and valid tests and questionnaires. Two fundamental components in the assessment of a measurement instrument are validity and reliability. Skill or attitude tests, or survey questionnaires or clinical simulations, are all examples of instruments. Concepts, psychomotor skills and affective values can all be measured using various tools. The degree to which an instrument measures what it is meant to measure is what is meant by validity. The consistency of a measurement made by an instrument is what reliability is all about. It should be emphasised that an instrument's validity and reliability are strongly related. Without reliability, an instrument cannot be considered valid. Therefore, evaluating the accuracy and consistency of research tools is termed as validity and reliability respectively. Validity and reliability are of great importance when conducting research studies consisting of questionnaires, because there are no fixed guidelines in framing the questions for a study. As a result, there can be unintended errors in the data collected and the entire study can thus be regarded as 'unreliable'. This fact has been reported in several studies, but their many researchers are either unaware of this or deliberately avoid this part (Cronbach, 1951; Nunnally & Bernstein, 1994; Tavakol, Mohagheghi & Dennick, 2008). Since the importance of validation and consistency checking is

important for questionnaires, the present study measures them according to well-defined methods, as described below.

a) The Validity of the Tools

Validity of a tool can be defined as the degree to which an instrument measures what it is intended to measure and/or functions in the manner intended by its designers. Since 100% validity of an instrument is quite rare and practically not attainable in many cases, validity is typically expressed in grades. In order to evaluate an instrument's accuracy, the validation procedure comprises gathering and interpreting data. The validity of quantitative instruments can be evaluated using a variety of statistical tests and metrics, which typically entail pilot testing. There are two types of validation - external validity and content validity (Creswell, 2005; Bolarinwa, 2015; Biddix, 2018).

The degree to which study findings may be extrapolated from a sample to the entire population is known as external validity. So, sampling leads directly to establishing an instrument's external validity. While the entire population might not be available, proper sampling techniques should accurately represent the population. The degree to which a sample represents the population, or population generalisability, is obtained with the aid of an instrument that is externally valid. In terms of an instrument's content, appropriateness is referred to as content validity. When the measurements (questions, observation logs, etc.) truly reflect what the researcher is trying to learn, then the tool/instrument can be regarded as valid. In order to do this, representative questions from each component of the unit can be evaluated in relation to the expected results (Creswell, 2005; Bolarinwa, 2015; Noble & Smith, 2015; Biddix, 2018). In simply, the validity of a test is defined as the degree to which the test measures what it is proposed to measure.

Therefore, validity means truthfulness of the test. In this test, the investigator has tried to establish the validity of the self-perception assessment scale.

i. Face validity

Face validity means that the given test seems to measure what it is meant to measure. The constructed scale is for finding the self-perceptions of pre-service teachers, with regards to their field experience.

ii. Content validity

Content validity is a type of test validity in which the content of the test is judged to be the representative of a large domain of the content. The content validity can be ensured by the systematic plan and procedures of assessment construction.

b) Reliability

As mentioned previously, the term reliability can be regarded as equivalent to consistency. If the instrument is able to accurately measure the variables it is designed to, then it can be regarded as reliable. That said, it is not possible to accurately quantify the reliability. Hence, there are many statistical and non-statistical methods to predict whether the tool/instrument is reliable or not (Creswell, 2005; Bolarinwa, 2015; Noble & Smith, 2015; Biddix, 2018). They are:

Inter-rater/Observer Reliability: The degree to which different raters/observers give consistent answers or estimates.

Test-retest Reliability: The consistency of a measure evaluated over time.

Parallel-forms Reliability: The consistency of two tests created using the same methodology and subject matter.

Internal Consistency Reliability: The consistency of outcomes across items; frequently assessed using *Cronbach's alpha*.

In the present study, the researcher used the Cronbach's Alpha Reliability Testing as a measure of internal consistency of items in the questionnaire (Table 4). It varies between zero and one. The closer alpha is to one, the greater the internal consistency of the items in the questionnaire.

3.4.6.1 Reliability Testing Using Cronbach's Alpha

Notably, the reliability of an instrument can be measured objectively, and in this study, the researcher defines Cronbach's alpha as the most popular objective reliability metric. When numerous items are used to measure a concept or construct, education research now routinely calculates alpha. Since it calls for only one test administration, it is easy to apply than other estimates (such test-retest reliability estimates). In order to quantify the internal consistency of a test or scale, Lee Cronbach created the alpha statistic in 1951; it is represented as a number between zero and one. Internal consistency refers to how closely all the test items assess the same notion or construct, and is thus related to how closely the test items are related to one another. Before a test is used for research or examination purposes, internal consistency should be assessed to ensure validity. Reliability estimates also display the degree of measurement inaccuracy in a test. The index of measurement error is created by squaring this correlation, deducting from 1.00 and adding back. The percentage of a test score attributable to error will decrease if the reliability estimate is increased. It is important to emphasise that a test's reliability indicates how measurement inaccuracy affects a cohort of participants as a whole rather than a single participant (Cronbach, 1951; Nunnally & Bernstein, 1994; Tavakol, Mohagheghi & Dennick, 2008; Cohen & Swerdlik, 2010).

The value of alpha rises if a test's elements are associated with one another. A high coefficient alpha does not always imply a high level of internal consistency. This is due to the fact that test length also has an impact on alpha. The value of alpha is lowered if the test duration is too brief. Therefore, more items testing the same notion should be added to the test in order to enhance alpha. It is also crucial to remember that alpha is a characteristic of test results from a particular sample of test takers. As a result, researchers should measure alpha each time the test is given rather than relying on published alpha estimates (Nunnally & Bernstein, 1994; Streiner, 2003).

In the present pilot study, the internal consistency coefficient (Cronbach's alpha) was used with 25 participants. The reliability coefficient for the sub-sections was between 0.67 and 0.96, which is considered to be suitable for the study. Regarding categories 6 ($\alpha = 0.681$) and 7 ($\alpha = 0.678$), the internal consistency of the reliability was questionable. However, by combining categories 6 and 7 together, the internal consistency is acceptable. In addition, the total items of the survey are calculated to be ($\alpha = 0.978$), which is considered very highly reliable. Accordingly, the values of categories 6 and 7 are ignored. Table 4 below displays the results obtained. After assuring the reliability of the instrument, the survey was administered to the participants through a survey questionnaire.

Table 4: Validation of the tools using Cronbach's Alpha test

Categories	Cronbach's Alpha	No. of Items	Internal Consistency
1: Applying Knowledge of Content and Pedagogy	0.846	7	Good
2: Knowing and Valuing Students	0.834	3	Good

3: Setting Instructional Outcomes	0.881	6	Good
4: Using Resources Effectively	0.955	5	Excellent
5: Planning Coherent Instruction	0.905	3	Excellent
6: Designing and Analysing Assessments	0.681	2	Questionable
7: Cultivating Respectful and Affirming Environments	0.678	2	Questionable
Merging 6 and 7 together	0.739	4	Acceptable
8: Fostering a Culture for Learning	0.908	6	Excellent
9: Maintaining Purposeful Environments	0.847	3	Good
10: Supporting Positive Student Behaviour	0.901	4	Excellent
11: Organising Spaces for Learning	0.820	2	Good
12: Communicating About Purpose and Content	0.890	6	Good
13: Using Questioning and Discussion Techniques	0.824	4	Good
14: Engaging Students in Learning	0.831	6	Good
15: Using Assessment for Learning	0.894	3	Good
16: Responding Flexibly to Student Needs	0.833	2	Good
17: Engaging in Reflective Practice	0.966	2	Excellent
18: Documenting Student Progress	0.822	2	Good
19: Engaging Families and Communities	0.836	7	Good
20: Contributing to School Community and Culture	0.966	2	Excellent
21: Growing and developing professionally	0.869	4	Good

22: Acting in Service of Students	0.865	2	Good
OVERALL	0.978	83	Excellent

3.4.7 Profile of the Sample Population

There are currently 115 pre-service teachers at the selected federal university. Most of them are UAE nationals with ages ranging from 24 to 28 years and very few are from Emirati mothers. For privacy and confidentiality reasons, the participants, who gave their suggestions on methods to improve field experience, were given pseudonyms which were used in the results/discussion section of the current study. As both the researcher and the students are native Arabic speakers, it was more convenient and feasible to conduct all interviews and write about crucial incidents in that language. Additionally, the primary goal of the current study was to examine pre-service teachers' perceptions of their field experience. Since English language proficiency may have had an impact on expressing their perceptions, the researcher did not intend to use it in the interviews or the pre-service teachers' written communication because doing so could have confused the participants and would distort the results. According to what they said during the interviews, allowing the participants the flexibility to speak in their native tongue was a source of comfort. Therefore, this study allowed the pre-service teachers to reflect on their field experience and allowed them to describe their experience and thoughts without the worry of running out of linguistic options. The researcher then manually transcribed the results from Arabic to English.

3.5 Implementation of the Research Methods

The sequential explanatory design process incorporates quantitative data as a complementing aspect in the interpretation of conclusions from qualitative data (Figure 3.3). Studies that aim to improve generalisation with or without the influence of theoretical viewpoints fall under this type of design (Alavi & Habek, 2016). Creswell (2011) claims that creating instruments is a common practise in this technique, where a survey or test is utilised as a pilot for a small population and crucial qualitative data is collected based on their experiences with the study problem. Later, further adjustments and changes to the instrument result in the gathering of quantitative data that strengthens and completes the findings of the pilot study. As discussed above, the present study conducted a pilot study and decided the validity and reliability of the study tools and methods. Further, the questionnaire was also enhanced. The enhanced system was then used for conducting the interviews, data collection and data analysis.

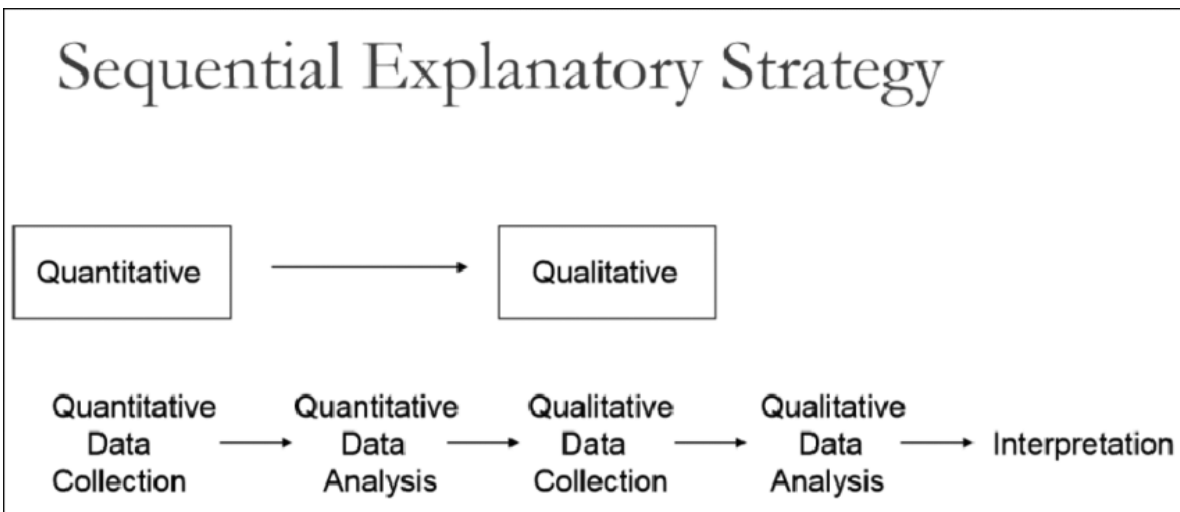


Figure 3. 3: Sequential explanatory mixed-methods strategy: A depiction of the strategy implied in the present study (Adopted from Terrell, 2012).

3.5.1 In-depth Individual Interviews

It was decided that in-depth individual interviews would be the most practical research method to use to further explore the emerging issues and concerns after the pilot study was completed. According to the preliminary data, some areas of concern that were also highlighted in the pre-service teachers' perceptions - including field experience challenges, knowing and valuing the students, their ability to apply knowledge of content and pedagogy, capacity for designing and analysing the assessments and ability to cultivate an affirming environment in the classroom - seemed to be the most important ones to emphasise in the individual interviews. Thus, in general, these themes were the focus of the in-depth one-on-one interviews. Occasionally, most participants also made reference to sub-themes such as: a) Fostering a culture for learning; b) Maintaining purposeful environments; and c) Supporting positive student behaviour, etc.

It is well-known fact that closed-end questionnaires (Yes/No type) may miss the mark while collecting detailed information from the responders (Farrell, 2016; Desai & Reimers, 2019). Therefore, face-to-face interviews were employed for collecting qualitative data from the instructors, wherein the respondents were allowed to speak their perceptions freely, without any intrusion from the interviewer (Kvale, 2007). Further, if a respondent stated that they are more comfortable in speaking in Arabic, then they were allowed to express their perceptions and opinions in Arabic. By doing so, the researcher ensured the respondents' active participation and free-flowing expression of the perceptions and suggestions. Before collecting data, the interview questions were presented before the Research Ethics Committee at the University for obtaining approval. While conducting the interviews, the interviewer(s) were provided with the

interview guide (Appendix G). This was done to ensure the uniformity of the interview procedure (Seidman, 2013; Flick, 2021). All the interviews were electronically recorded after obtaining the interviewee's permission in writing.

Interviews with all the participants took place as per their convenience. The average length of each interview was 40 to 50 minutes. All interviewees were urged to speak openly and honestly about their thoughts and feelings. It was occasionally necessary to ask respondents to explain their responses or to give more information about the examples they used. However, everyone who took part in the field experience was eager to talk and share almost everything they experienced. As mentioned above, the interviews were electronically recorded, transcribed and coded as soon as possible after obtaining the interviewees' consent. In addition, the participants were given time to review their responses and the option to edit or delete any of them (Seidman, 2013; Flick, 2021).

3.5.2 Critical Incident Technique

Finally, the critical incident methodology was used as the technique that made the most sense to support the focus group and in-depth interviews. Adopting Kain's (2004) perspective, it was thought that this qualitative tool suited the explanatory nature of the current study well because "unlike participant observation activities, which require focused, long-term field experiences, the critical incident technique allows researchers to access the perspectives of many research participants through one of the most accessible human discourse avenues, the narrative" (Kain, 2004, p.78).

At this point, pre-service teachers were sent emails asking them to provide their perceptions on the field experience program. The data obtained was in Arabic, which was then translated and

transcribed into English. However, all the translated scripts and the original Arabic data were sent to the supervisor for additional review and correction of any potentially misunderstood terminology for verification purposes.

3.6 Data Analysis

Both data collection and analysis were done at the same time, as per the recommendations of Merriam (2009). The main activity occurring at each stage of analysis was reflection. All pre-service teachers provided valuable information, which was noted in a notebook for further analysis and correlation with the data gathered. As mentioned earlier in this chapter, all web-based and one-on-one interviews were promptly transcribed into English before were analysed them. To make proper use of the vast amount of information collected, the data was carefully reviewed. According to Hatch (2002), thoroughly reading the complete dataset and the notes makes the data seem more thorough and connected.

Throughout the transcription process, the different sorts of perceptions that participants had mentioned were carefully transcribed into English without losing the essence. To ensure the effectiveness of transcription from Arabic to English, a small number of participants (n=15) were provided with transcripts of their responses in Arabic and were asked to check the accuracy of Arabic to English translation. During this process, only those participants who are good at English as well as in Arabic were selected, because candidates with inadequate knowledge in one of these languages cannot assess the process. Since none of the participants pointed out an issue in transcription, the process is regarded as reliable and effective. Furthermore, random translations were provided to professional English to Arabic translators to check whether there

are any issues. Extracts of translation from Arabic to English are provided as Appendix H (pre-service teachers' suggestions) and Appendix I (instructors responses and suggestions).

Then the pre-service teachers' responses were coded for analysis of the data using the mentioned codes, which was a laborious process. In certain circumstances, neither all nor most of the participants shared a common background. According to Creswell (2007), continual data comparison aids in the development and saturation of emergent categories, for example, a circumstance involving classroom management, valuing the students, applying pedagogical skills, etc. The participants' practicum experiences, difficulties and coping mechanisms were then represented by categories created from those scenarios. The different perception types were then divided into positive and negative perceptions within each category.

For analysing the data collected using interviews, thematic analysis was used. Each answer was categorised in the emergent themes (Saunders et al., 2007). Themes included the statements and description of what is going on. The data analysis process of the interview transcript included the patterns to be recognised. The researcher sought out the prime factors that are repeated in the interview such as the challenges faced by the pre-service teachers in their field experience and then the key elements were highlighted. Once the integrated themes are identified, the findings offer answers to each question asked in the interview (Hasan et al., 2014). This also illustrates the meaning of the collected response and gives a voice to the interviewed teachers at the time of describing the data. To ascertain the validity of the interview instruments, each interviewer was provided with the transcript to read and check their responses. If none of the participant raised any issue, it ensured that the quality of the transcription was reliable and valid. The interviews were recorded with the interviewees' permission and transcribed using

Creswell's (2011) guidelines, which states that data analysis of text involves dividing it into groups of sentences, called text segments. The data is then interpreted by reflecting on it.

3.6.1. Statistical analysis of the data

The quantitative data was analysed using the statistical software IBM Statistical Package for the Social Science (SPSS Statistics) version 24. Different types of analysis were conducted: descriptive, correlation and composite score. Since the study was explanatory and the need to get a broader perspective of the results is essential, descriptive statistics analysis was adopted. This type of analysis provides the average and standard deviation for each variable or item; thus, a very general overview can be established. On the other hand, correlation analysis was used in two ways: first, through correlation between variables to identify the strength and direction of the relationship between them and second, correlation between composite scores was applied to understand the strength of the relationship between combined variables.

3.7. Ensuring the Credibility of the Data

It is crucial that the researcher ensures the credibility and the internal validity of the study, which entails making sure that the findings are consistent with reality (Merriam, 2009). Given that qualitative research works with numerous realities, cognisant efforts from the researcher's side drawn from reality is required to confirm the authenticity of the results. "Triangulation" is a technique that aids researchers in evaluating their findings. Merriam (2009) proposes four types of data triangulation - multiple methods, multiple theories, multiple sources of data and multiple investigators. Therefore, the following methods were adopted for ensuring the authenticity of collected data:

1) *Data cross-checking and comparison*: The researcher repeatedly compared the outcomes from various sources and cross-checked with own data. Individual interview scripts were all thoroughly reviewed, re-read, double-checked and compared with the source documents. The same participants' viewpoints were also cross-checked and compared across the major data sources (i.e. individual interview and the critical incident reflection).

2) *Random sampling*: The method of random sampling was used to ensure that there was no sampling bias. All the pre-service teachers in the study site were informed that participation was entirely up to them. There was no bias between male and female respondents, who were picked at random and were provided with equal chances of participation after getting their consent. All the pre-service teachers gave their written approval to participate via email.

3) *Respondent check*: In order to ensure that the data was correctly interpreted, the pre-service teachers were given access to their own written responses for validation purposes. According to Maxwell (2005, p.111), "member check is the single most important way of ruling out the possibility of misinterpreting the meaning of what participants say and do and the perspective they have on what is going on, as well as being an important way of identifying your own biases and misunderstanding of what you observed." Therefore, each and every pre-service teacher was given the chance to review their answers and make any changes, additions or deletions when they felt it was necessary. This step ensured that the data collected was a real representation of the pre-service teachers' perceptions of their field experience. According to Troudi and Jendli (2011), the aforementioned validation procedure offers "as accurately as possible, a real representation of the students' opinions."

4) *Peer review*: All the data collected was subjected to a blinded peer review process to ascertain the quality and error-free nature of the data. Further, supervisors' comments regarding the

method of data collection and transcription of notes were positive - which again validated the correctness and reliability of data collected for the study.

5) *Self-reflection*: All the prejudicated attitudes were curbed while analysing and interpreting the data, because the researcher is a teacher with prior field experience. Being a teacher, it was important for the researcher to self-reflect and be clear about a teacher's role and interactions with the students. This clarification enabled the unbiased analysis and explanation of the findings.

3.8. Transferability

According to Lincoln and Guba (1985), the term “transferability” should be used in qualitative research instead of the quantitative research phrase “generalisability.” Transferability can be defined as the virtue by which results from one context can be used in similar contexts (Major & Savin-Baden, 2010). The present research work is a ‘sequential explanatory mixed- methods’ type of work. Hence, the results of the present work will be of great use for researchers and policymakers while working with similar contexts. The information collected and analysed in this study is less explored in the UAE context. Hence, it will motivate researchers and policymakers to further explore this area. This study also identifies areas that require additional research and investigation.

3.9 Ethical Consideration

According to Wilson (2010), the ethical considerations are important when conducting primary as well as secondary research, which considers confidentiality and privacy of the participant/respondent. It becomes important to ensure that accurate and transparent information

is included in all parts of the research. The protection of human rights becomes extremely important along with supervising them throughout the process of data collection. Therefore, the importance of ethical consideration was kept in mind while preparing the final research. The identity and information of the respondents were kept confidential. The participants were informed about the reason for conducting the research. Written informed consent from the participants was taken before asking them to be part of the research. The respondents were treated with respect. Apart from this, all the secondary sources were taken from the university library and other reliable sources. Therefore, all the secondary data was properly cited using the APA 7th edition referencing guide of the university to give proper credit to the authors.

3.10 A Special Consideration Made While designing the Study

The present study avoided analysing the gender-wise or sex-wise differences in perception among pre-service teachers. The modern world prefers gender neutrality over gender equality. Gender neutrality, commonly referred to as gender-neutralism or the gender neutrality movement, is the viewpoint that laws, terminology and other social institutions ought to refrain from classifying people into different social groups based on their sex or gender. Gender equality on the other hand advocates that all people should have equal access to resources and opportunities, including economic involvement and decision-making, regardless of gender. Further, regardless of gender, all people should be valued for their unique behaviours, goals and needs (LeMoyne, 2011; Sendén, Bäck & Lindqvist, 2015; Meriküll & Mõtsmees, 2017; Saguy & Williams, 2019). However, in the modern era gender neutrality is preferable over gender equality because the former term is more practical and applicable in work spaces. Although gender information may be important for health research due to physiological differences

between males and females, gender information should be neglected in education research areas (Clayton & Tannenbaum, 2016; Lindqvist, Sendén & Renström, 2021). In addition, there are two issues with the binary gender paradigm. First, if gender is treated as a categorical variable without being operationalised, measurement errors may result (Frohard-Dourlent et al., 2017). For instance, binary response options do not capture the range of gender identities, therefore standard measures do not recognise findings linked to identities other than the traditional genders of woman and man. The worst result of this is erroneous or at least distorted research findings. Second, having gender as a variable with only two possible answers is an unethical practise that makes people who do not identify with either of those possibilities suffer (Nowakowski, Sumerau & Mathers, 2016). Therefore, without facing prejudice in research, a person should be able to determine their gender identity for themselves. Because of this, using a binary gender categorisation creates moral dilemmas for the researcher (Frohard-Dourlent et al., 2017). Furthermore, the participants in the present study are pre-service teachers, a highly educated group of people who are being trained and the researcher should be gathering information from them and analysing this without bias. Hence, it is illogical to consider them to have a gender-based bias on opinion regarding their field experience program. Even if some gender-based differences are found during the analysis, it would be practically impossible to suggest and execute gender-based teacher education policies because the result would be rather disastrous and unacceptable for countries like the UAE. Hence, in the view of gender neutrality and practicality, the present study decided to omit the gender/sex information from the data collection and analysis.

3.11 Summary of the Chapter

This chapter has provided a clear discussion of the methods and tools used for the present research work. The questions regarding the study design - ‘why, how and when’ - are clearly answered. Further, the theoretical and practical justifications for selecting particular tools and methods over the others are provided. Tools and methods for data analysis as well as measures taken to ensure the credibility of data are also described in detail. Lastly, ethical and moral considerations for conducting the present study are also presented. To summarise, this chapter forms the theoretical basis for evaluating the following chapters - Results and Conclusion.

Chapter 4 : RESULTS

4.1 Overview of the Chapter

This chapter is dedicated to describing and discussing the results of both quantitative and qualitative data analyses. In the first section, the results of the quantitative data are presented - which represents the pre-service teachers' perceptions on the Likert scale. The questions in the quantitative survey are designed to assess the perceptions of the pre-service teachers' perception regarding quality parameters of pedagogy, as per the Danielson framework. Initially, the demographic details of the study population are provided. Then, the normality of the data was assessed using tests like Shapiro-Wilk test and Kolmogorov-Smirnov test. The reliability and validity assessment of the tests are also presented, followed by correlational analyses and descriptive statistics. For this purpose, Pearson product-moment correlation analysis, t-tests and one-way ANOVA are used. The results of the quantitative data are then compared and discussed using existing literature. In the second part, the results of the quantitative research questions are used as a mean to analyse and interpret the qualitative research - which includes interviews with the university instructors as well as suggestions from the pre-service teachers regarding the areas of field experience which need to be improved. For analysing the qualitative data, the thematic analysis method was employed. Finally, the association between the perceptions of the pre-service teachers and the instructors are analysed, which provide information regarding the common areas of concern.

4.2 Results of the Quantitative Phase of this Study

The primary goal of the current study was to examine the perceptions of the pre-service teachers in a federal university in the UAE regarding their field experience training. This chapter attempts to link the data collected to the research questions mentioned in chapter one by offering a synthesis of the findings. The findings include a description of how the pre-service teachers felt about their training during their field experience. The conclusions were derived from an in-depth review reflecting on focus groups and individual in-depth interviews.

Three sections make up the chapter. The perceptions of pre-service teachers about their field experience are described in the first section of this chapter. Since the survey data is presented on a Likert scale, this section follows a quantitative analysis method. Correlation between the different Danielson's groups was also given. The results of this section were then used as a mean for interpreting and discussing the results of the next two sections - assessment of qualitative data from the personal interviews with the pre-service teachers and the university instructors.

4.2.1. Data Screening

The selected federal university in the UAE was chosen for the study after it responded to a request via email. The primary data collection began in September 2020. Since the online medium was found to be convenient due to COVID-19 restrictions, 200 surveys containing the questions designed according to the Danielson framework were sent out via email. In total, 121 pre-service teachers responded to the survey, translating to a response rate of 60.5%. Prior to conducting the statistical analysis, the information gathered for the primary study was assessed. Data input accuracy was checked, missing values were identified, normality was evaluated and outliers were identified as per Tabachnik and Fidell (2007).

Assessment of data entry accuracy

First, the researcher verified that each item had been entered accurately and labelled. The Likert scale items had been flipped to make it easier to evaluate the results. In both cases, a lower score on an item reflected a lower evaluation of talents. A research assistant then double-checked all data entries to ensure accuracy. It was confirmed that all items with a five-point Likert scale were within range. In addition, it was checked whether there were any discrepancies in the means and standard deviations of the results.

Correcting the missing values

When dealing with missing data, identifying whether missing data occurs systematically or sporadically is crucial. Indeed, during large-scale surveys there is a trend in the missing data points (Tabachnick & Fidell 2007). Further, there are 83 questions to answer per survey. Therefore, chances of missing a value or two per survey are there. When minor elements like Likert scales, institute, Emirate in which the field experience was conducted, speciality, etc. were absent, then the respondent was contacted via email and the values were identified. If some necessary identifiers were missing or the respondent was not willing to respond or fill the required information, then that respondent was excluded from the analysis. There were only random missing data points in some of the surveys, which were corrected. Out of the initial 121 survey respondents, eight participants were avoided due to missing data points and/or they were not ready to provide the missing data. As a result, the final number of participating pre-service teachers in the analysis was 113.

4.2.2 Demographic Details of the Study Population

As mentioned above, a total of 113 pre-service teachers undergoing the field experience training program from a federal university in the UAE were recruited for the present study. The participants belonged to different Emirates of the UAE (Figure 4.1); pre-service teachers native to Abu Dhabi represented the largest fraction of the study population (51.3%), followed by Dubai (37.2%). Other contributing Emirates included Ajman (6.2%), Sharjah (4.4%) and Al Ain (0.9%). Similar data was presented with regards to the field experience of the pre-service teachers (Figure 4.2). More than half of the participants had their field experience at Abu Dhabi (50.5%), followed by Dubai (38.9%), Sharjah (5.3%), Ajman 4.4% and Ras Al Khaimah (0.9%).

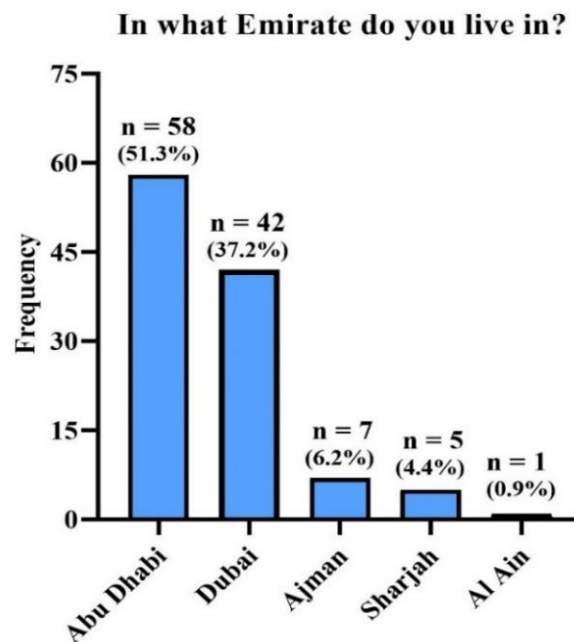


Figure 4. 1: The nativity of the participants of the present study

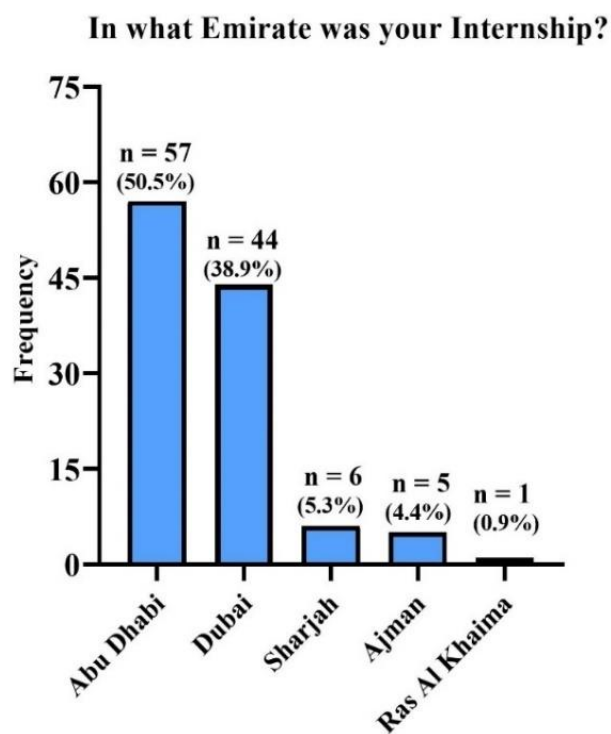


Figure 4. 2: Emirate-wise distribution of internship - Region of the UAE in which the participants performed their internship

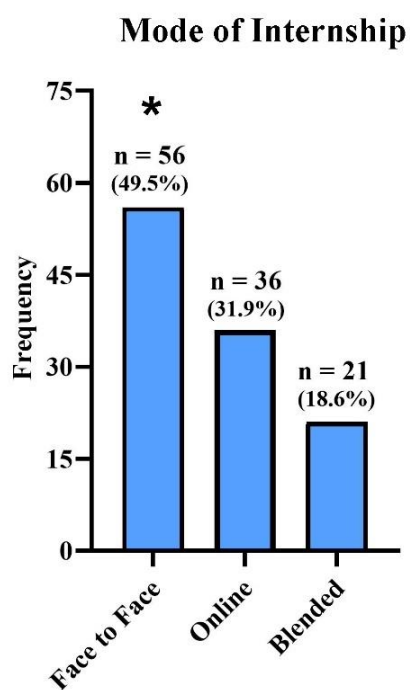


Figure 4. 3: Mode of Field Experience - Through which medium the pre-service teachers performed the act of teaching. * Denotes statistical significance ($p = 0.023$).

Regarding the mode of internship, 49.5% of the participants were familiar with the face-to-face method of teaching, which is the classic method of the teaching-learning process. The percentage of participants undergoing face to face mode of internship was significantly higher than online and blended modes of internship ($p = 0.023$). In the COVID-19 era, many of the schools used the online medium of teaching. A considerable number of the pre-service teachers recruited in the present study (31.9%), were found to be using ‘online mode’ for their internship. Furthermore, 18.6% of the pre-service teachers involved in the present study reported that they were using a blended mode (face-to-face and online) for their internship (Figure 4.3).

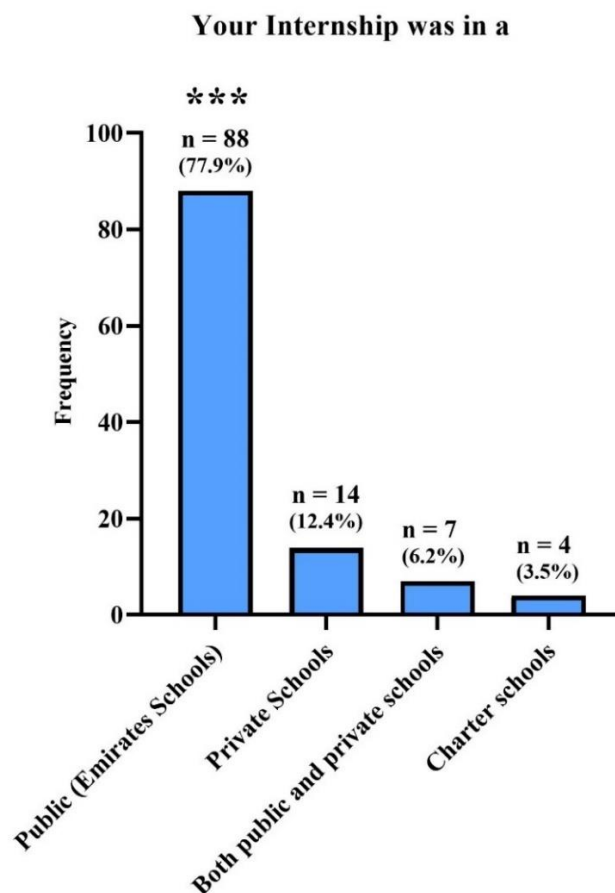


Figure 4. 4: Type of school at which the pre-service teachers received their internship. ***

Denotes statistical significance ($p < 0.001$).

Notably, One-way ANOVA analysis showed that the percentage of pre-service teachers (77.9%) undergoing their internship entirely in public schools (Emirates schools) was found to be significantly higher than ($p < 0.001$) other types of schools or in mixed types (public schools and private schools). Only 12.4% of the pre-service teachers practiced in private schools for their internship whereas 6.2% of the pre-service teachers had undergone internship in both public and private schools (Figure 4.4). Further, 3.5% of the pre-service teachers reported that they were undergoing their internship in ‘charter schools’.

It was found that 80.5% of the participating pre-service teachers had specialised in ‘early childhood education’ (Figure 4.5). Specialisation in ‘education’ was opted by 9.7% of the participants, whereas other participants stated that they had specialisation in ‘teacher’ (1.8%), ‘Kindergarten teacher’ (0.9%), ‘chemical engineering’ (0.9%), ‘chemistry’ (0.9%) and ‘business’ (0.9%). Five pre-service teachers (4.4%) did not specify their specialisation. Though the researcher has not made any intentional selection bias, pre-service teachers from the specialisation namely ‘Early childhood education’ outnumbered the pre-service teachers from all other specialisations. One-way ANOVA showed that their numbers are significantly higher than participants from other specialisations ($p < 0.01$) in the present study. One major reason for this was that the specialisation ‘Early childhood education’ is the most widely preferred specialisation and hence, more than 80% of the pre-service teachers at the study site belongs to this site. Consequently, participants from this specialisation represented a major portion of sample used for the present study

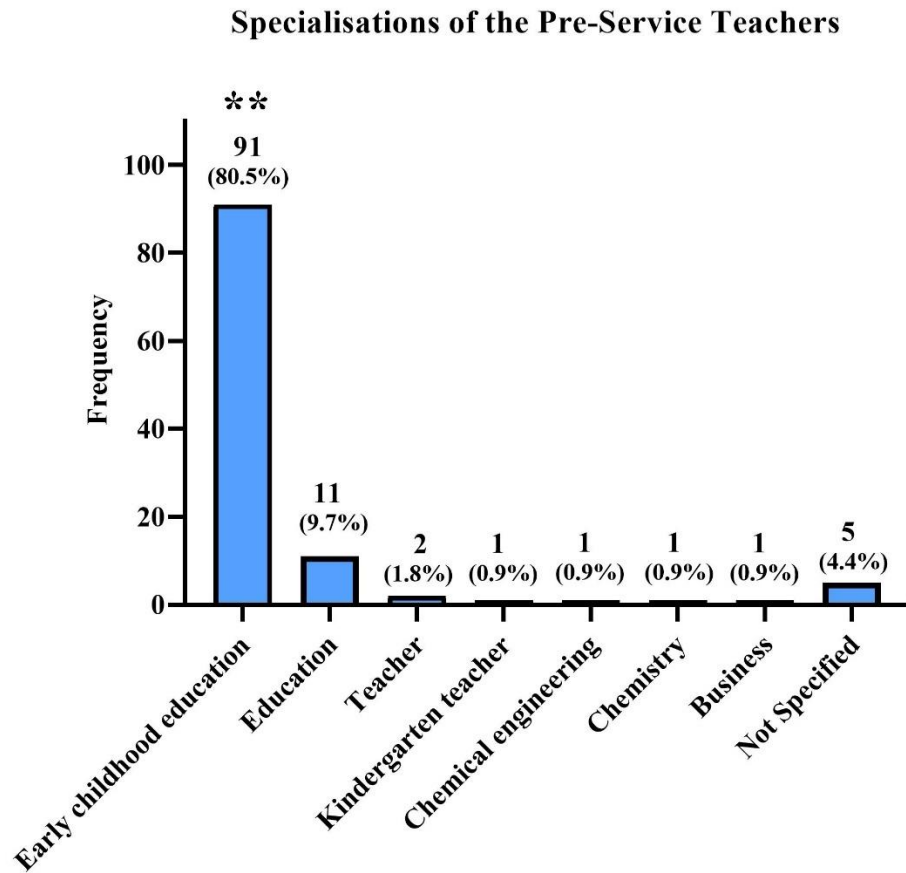


Figure 4. 5: Specialisation-wise distribution of the pre-service teachers participating in the present study. ** Denotes statistical significance ($p < 0.01$).

4.2.3. Results of Quantitative Analysis on the Pre-service Teacher's Perceptions

The quantitative analysis of the pre-service teachers' perceptions was collected using questionnaires designed as per the Danielson Framework. As mentioned previously, there are 22 standards coming under the four domains of the Danielson framework which can be used for evaluating the effectiveness of teachers' pedagogic skills and the quality of education. Therefore, a total of 83 questions were designed according to the 22 standards of Danielson's

framework. The participating pre-service teachers provided their answers without fail, without any external influence, at their free-will. As mentioned previously, they were provided adequate time to think and were allowed to change their answers when they felt it was necessary. In this fashion, all the 113 pre-service teachers marked their answers to all 83 questions using the Likert scale (1 = Totally Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; and 5 = Totally Agree). The reaction '5' is regarded as highly positive and '1' as highly negative.

Altogether, 9379 Likert scale reactions were collected from the pre-service teachers during the quantitative data collection step, through online surveys (Figure 4.6). The choice of an online survey over face-to-face surveys was made since many pre-service teachers were busy with their tight schedules and many of them travelled considerable distances from their living place to the school in which their internship was in progress. Therefore, their convenience was considered as the first priority. Since online surveys can be completed at any convenient time without the need for physical face-to-face presence, the present study opted for it. Notably, 93.3% of these reactions were positive: they were either 'Totally Agree' (58.4%) or 'Agree' (34.9%). Only around 1% of the reactions belong to the 'Negative' category (Disagree and Totally Disagree). The remaining 5.7% reactions were counted as 'Neutral'. Therefore, it is clear that the pre-service teachers in the federal university in the UAE under study have an overall positive perception with regards to the pedagogical standards assessed in the present study, using the Danielson framework.

An Overview of Reactions from the Pre-Service Teachers

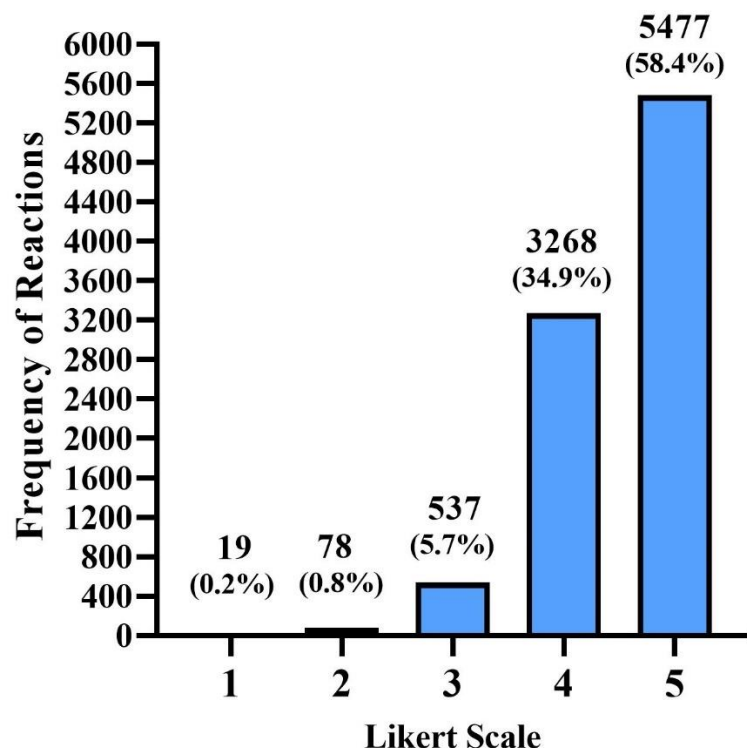


Figure 4. 6: The combined frequency of Likert scale reactions.

Figure 4.6 showed combined frequency of Likert scale reactions collected from the participating pre-service teachers undergoing the field experience. These values were the combined frequencies, calculated from reactions provided for 83 questions.

From the afore-mentioned studies it is clear that the curriculum, institutional settings and atmosphere used for conducting the field experience training have a great influence on the pre-service teachers' training outcomes and thereby on their perceptions. In the present study, the overall perceptions of the pre-service teachers are positive. However, the pre-service teachers have undergone training in different schools, under different supervisors. It is possible that they

had different levels of teaching opportunities and may have different experiences about the field experience. Therefore, the researcher chose to evaluate the sub-category-wise perceptions of the pre-service teachers, based on the Danielson framework to identify the potential aspects/modules of the training program which requires improvement.

As mentioned previously, the present survey had 83 questions, which were sub-categorised into 22 standards of pedagogy as per the Danielson framework (depicted as DF1 to DF22). Since there were 83 questions, it could create a state of saturation among the participating pre-service teachers. This scenario in turn could affect their active participation. To check any such bias in the collected data and to confirm the mindful participation of the pre-service teachers in the survey, the researcher assessed whether the collected data was normally distributed. The normality of the data was assessed using tests like the Shapiro-Wilk test and Kolmogorov-Smirnov test, and plotted using a 'QQ plot'.

A QQ plot (quantile-quantile plot) is a graphical tool that can be used to determine if a collection of data is likely to have originated from a theoretical distribution like the normal distribution or exponential distribution. A normal QQ plot can be used, for instance, to verify an assumption made during a statistical analysis that the dependent variable is normally distributed. When two sets of quantiles are plotted against one another, the result is a scatterplot known as a QQ plot. The points should form a relatively straight line if both sets of quantiles were drawn from the same distribution. In other words, if the data is normally distributed, then the points in QQ plot will lie on a relatively straight diagonal line (Zach, 2021; Ford, 2022). After testing the normality of data using the Shapiro-Wilk test and Kolmogorov-Smirnov test, it was found that the 'Actual' and 'Predicted' distributions were not significantly different from each other ($P > 0.05$). This suggested that the data was normally distributed. Further, the data points in the QQ plot lie

almost in a straight line, thereby confirming that the collected data was normally distributed. The normal QQ plot depicting the distribution of Likert scale values in the present study is given in Figure 4.7. After confirming the normality of the collected data, the researcher proceeded to the quantitative analysis of the data.

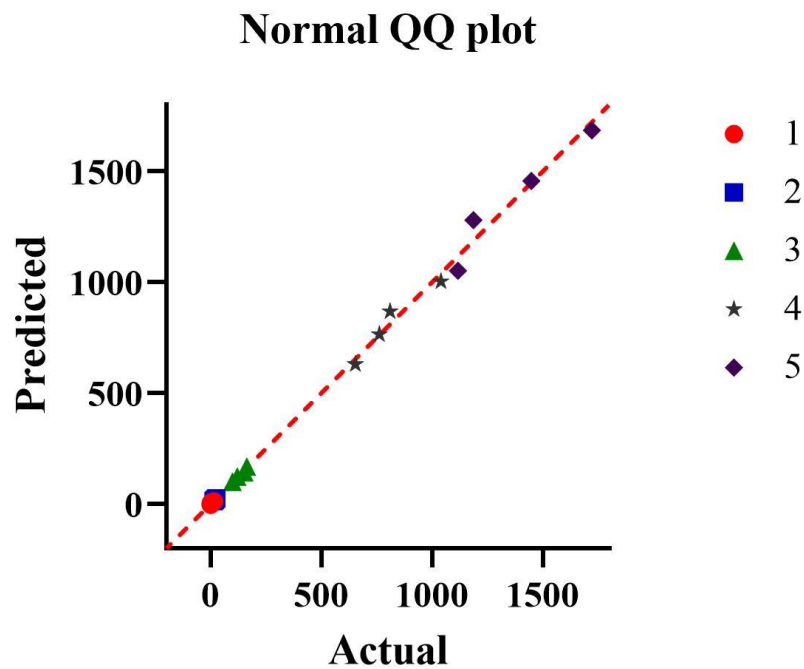


Figure 4. 7: QQ plot depicting the distribution of actual and predicted data values in the present study

In Figure 4.7, it was observed that the actual values do not significantly vary from the predicted value ($P > 0.05$), thereby validating that the study population of the present study is normally distributed.

To evaluate how the pre-service teachers' perceptions regarding the four domains of the Danielson framework are correlated, the present study employed the Pearson correlation analysis (Figure 4.8). It was found that there is a strong correlation between the pre-service

teachers' perceptions between the four domains of the Danielson framework. This result is in agreement with the normality tests because if the collected data was biased, then there is a fair possibility for lack of correlation during the domain-wise comparison.

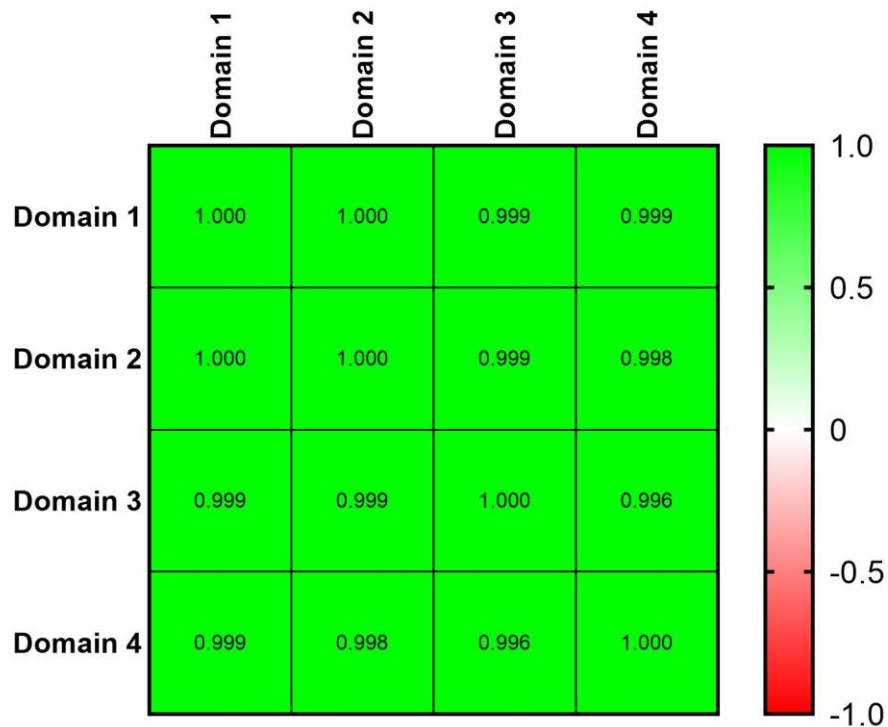


Figure 4. 8: Correlation analysis

Figure 4.8 shows the correlation analysis of the data collected (Pearson correlation coefficient), subdivided into the four domains of Danielson's framework. The heatmap denotes extent of correlation: -1.0 being strong negative correlation (dark red colour), whereas +1.0 denotes strong positive correlation (dark blue colour). None of the groups showed a negative correlation.

Furthermore, to assess the strength of the sub-categorisation, the present study assessed how the Danielson Framework groups are correlated to one another, using the Pearson correlation analysis (Figure 4.9). The individual Pearson correlation coefficient values are presented in Appendix B. It was observed that all Danielson framework groups are positively associated with

one another. None of the groups showed a negative correlation. Most of the groups showed strong linear relationship with one another (Pearson correlation coefficient > 0.5). There was a strong correlation between DF21 and DF22 (Pearson correlation coefficient = 0.796).

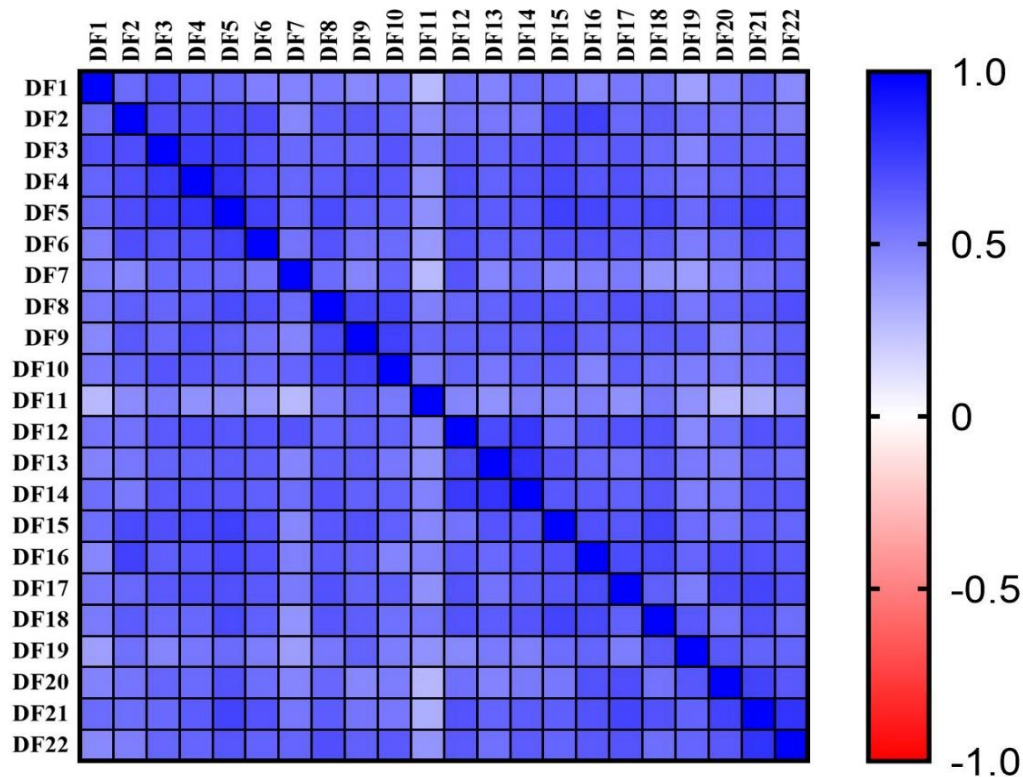


Figure 4. 9: Pearson correlation analysis

Figure 4.9 presents the Pearson correlation analysis matrix, showing the correlation between different perspectives belonging to the four domains of the Danielson framework. Altogether, there are 22 perspectives of pedagogy under analysis (depicted as DF1 to DF22). The heatmap denotes extent of correlation: -1.0 being strong negative correlation (dark red colour), whereas +1.0 denotes strong positive correlation (dark blue colour). None of the groups showed a negative correlation.

The Danielson Framework is well-known for assessing the efficacy of different professional practices coming under pedagogy. Therefore, this result is reasonable because this framework can arrange the positive and negative patterns in teaching practice in a systematic way (Alvarez & Anderson-Ketchmark, 2011; Morris-Mathews et al., 2021). Although most of the associations were positive, Danielson framework group 11 (DF11) showed comparatively weaker association with other groups (Pearson correlation coefficient <0.5). The contrast was marked between groups DF7 and DF11, the Pearson coefficient being 0.272. The group DF7 denotes ‘Cultivating Respectful and Affirming Environments’; the questions associated with this group are: “My interactions with my students show mutual respect and care” and “I expect my students to be polite, caring and respectful to each other.” The group DF11 corresponds to ‘Organising Spaces for Learning’; the perceptions associated with this group being “The classroom is a safe place” and “The classroom’s furniture arrangement is designed for maximum accessibility.”

The Pearson correlation coefficient measures a linear relation and can be highly sensitive to outliers (Schober, Boer & Schwarte, 2018; Saccenti, Hendriks & Smilde, 2020). Therefore, the researcher manually checked the perceptions of the pre-service teachers regarding these two sub-groups. Although most of the pre-service teachers perceived these pedagogical standards in a positive way, some of them showed negative perceptions about these requirements. Notably, some pre-service teachers provided negative feedback to the Danielson framework group 11 (DF11), whereas no one had a negative perception about the Danielson framework group 7 (DF7). This could be the reason why there is less linear relationship between these two groups. It was noted that few of the pre-service teachers perceived that the classroom was not a safe place or the classroom infrastructure was not up to the mark. Although quantitative analysis cannot explain why they felt this way it is possible that the pre-service teachers’ need

for emotional and supervision support is not met with in some schools/classes. Further, it is possible that some pre-service teachers have perceived the students' classroom behaviour and cultural differences in a negative way. To understand the reasons behind these negative perceptions, the present study assessed their requirements through personal interviews as well. These results are provided in the qualitative analysis section of this chapter and further suggestions for improvements are provided in Chapter 5 - Conclusions.

4.2.4. Results of Category-wise Analysis - the Danielson Framework Domains

After obtaining the overview of the pre-service teachers' perceptions about the standards of pedagogical practice, the present work analysed the pre-service teachers' perceptions of all 22 Danielson framework groups, which consists of 83 questions. It was noted that more than 90% of the pre-service teachers believed that the Danielson framework 1 - Applying knowledge of content and pedagogy - was highly important (Figure 4.10). This part consisted of seven questions, as shown in Appendix A. Most of the pre-service teachers believed that the content they teach is relevant to the students' needs and they can teach in such a way that draws on the previous experiences and knowledge of the students. Further, they believed that they have ample knowledge regarding the links between the topics they teach, and know the concepts well enough to ensure a proper teaching-learning process. It must be noted here that 94.7% of the pre-service teachers stated that they use multiple teaching methods and teaching aids to enhance the understanding of the students. None of the 113 pre-service teachers participated in the present study have a negative perception regarding the usage of different teaching methods and teaching aids in ensuring the effective transfer of knowledge to the learners.

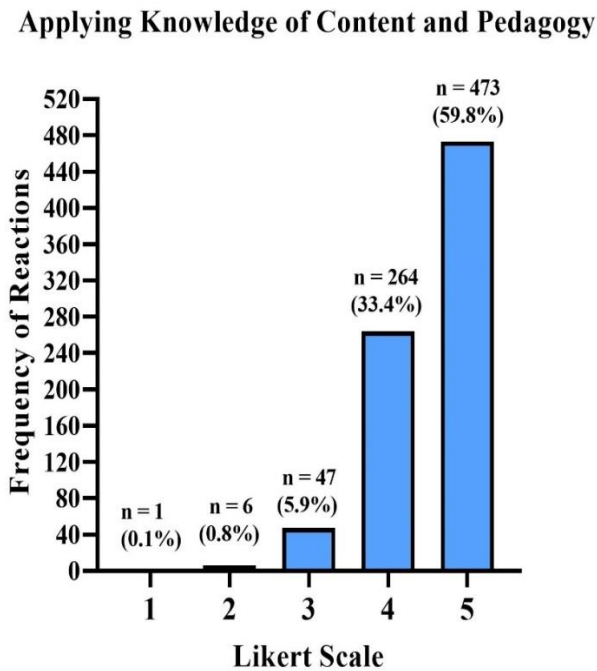


Figure 4. 10: Pre-service teachers’ responses to DF1

Figure 4.10 shows pre-service teachers’ responses to DF1, Danielson’s framework Domain 1, Perspective 1, ‘Applying Knowledge of Content and Pedagogy’.

Previous studies have reported that both in-service teachers and pre-service teachers have a highly positive perception about their pedagogical skills and their preparedness for managing the classroom. These perceptions may be different from the reality in many cases. For instance, Khaled, Dukmak and Ishtaiwa-Dweikat (2016) reported that pre-service teachers in the UAE have positive views regarding their own pedagogical preparation. The majority of the pre-service teachers participating in the study held the belief that they are “highly prepared” or “well prepared” for teaching in real classrooms. Similarly, various studies have shown that pre-service teachers have positive perceptions of the adequacy of their preparation to teach mathematics (Rosas & West, 2011; Sears, Mueller-Hill & Karadeniz, 2013), science (Tairab, 2008; Firat,

2020), and in some cases the pre-service perceived that they are highly prepared in most of the skills offered to them (Hassan, Khaled & Al-Kaabi, 2010; Siew, Amir & Chong, 2015).

The second panel of questions consisted of three questions which were designed according to the Danielson framework 2 – ‘Knowing and Valuing the Students’. Most of the pre-service teachers had a strong belief that they possess a clear understanding about the skillsets of their students and the pre-service teachers perceived that this knowledge can be used for enhancing the learning experience (Figure 4.11). In addition, the pre-service teachers stated that they knew the patterns of learning behaviour during childhood development, which they used for improving an individual-specific learning experience. However, around 7.7% (n = 26) of the pre-service teachers either provided a ‘Neutral’ or ‘Disagree’ response to this criterion.

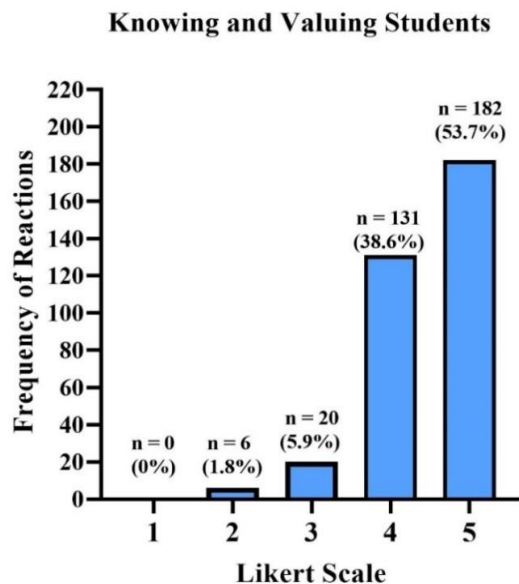


Figure 4. 11: Pre-service teachers’ perceptions regarding DF2

Figure 4.11 shows how pre-service teachers perceived DF2, Danielson’s framework Domain 1, Perspective 2, ‘Knowing and Valuing the Students’.

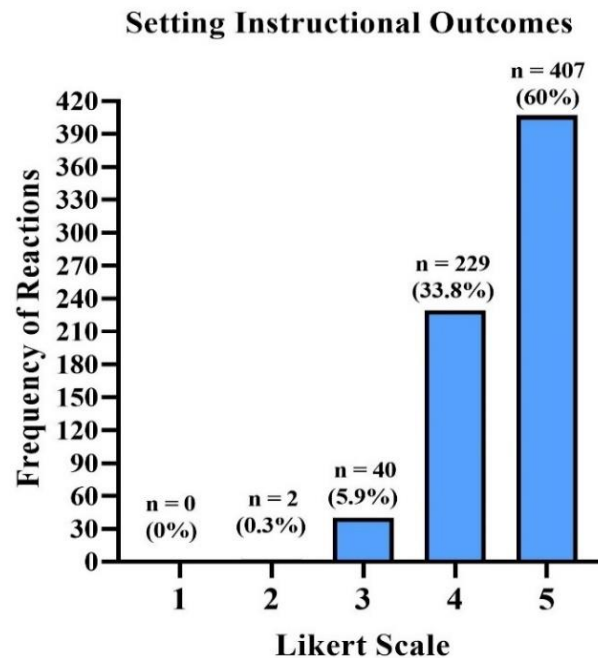


Figure 4. 12: How the Pre-service teachers perceive DF3

Figure 4.12 shows how pre-service teachers perceived DF3, Danielson’s framework Domain 1, Perspective 3, ‘Setting Instructional Outcomes’.

The next three standards in Danielson’s framework of pedagogy were related to setting teaching goals, effective usage of resources and planning of coherent teaching (DF3 to DF5). There were 14 questions from these three sections. More than 93% of the pre-service teachers involved in the present study believed that their classes cover important knowledge areas, concepts and essential skill sets that the students are supposed to learn (Figure 4.12). They also believed that they are able to understand and use classroom resources properly (Figure 4.13). More than 95% of the respondents stated that they are fully aware of all the available resources and which resource was appropriate for a particular type of learners. The pre-service teachers perceived that the materials and resources that they use during the teaching-learning process are adequate

for yielding optimal instructional outcomes, which enhances the learning process and enables the students to understand the relevant lessons.

Furthermore, the pre-service teachers believed that their mode of teaching and lessons are well-balanced and clear for the diverse learners in the classroom (Figure 4.14). They perceived that the structure of the lessons and learning activities are properly planned for the diverse group of learners and can engage all students at the same time in the learning process. This perception is of great importance to the ‘global classrooms’ in the UAE. Therefore, the reality of these perceptions of the pre-service teachers has to be verified by the instructors and teachers. Around 95.6% of the pre-service teachers believed that their approach towards planning of assignments for the learners fits exactly to the desired learning outcomes. Only 4% of the correspondents stated a ‘Neutral’ reaction. Further, merely 0.4% of the pre-service teachers felt the assignments planned by them are not good enough to realise the desired learning outcomes. Furthermore, most of them believed that the assignments planned by them are good enough for planning instructions in future as well (Figure 4.15).

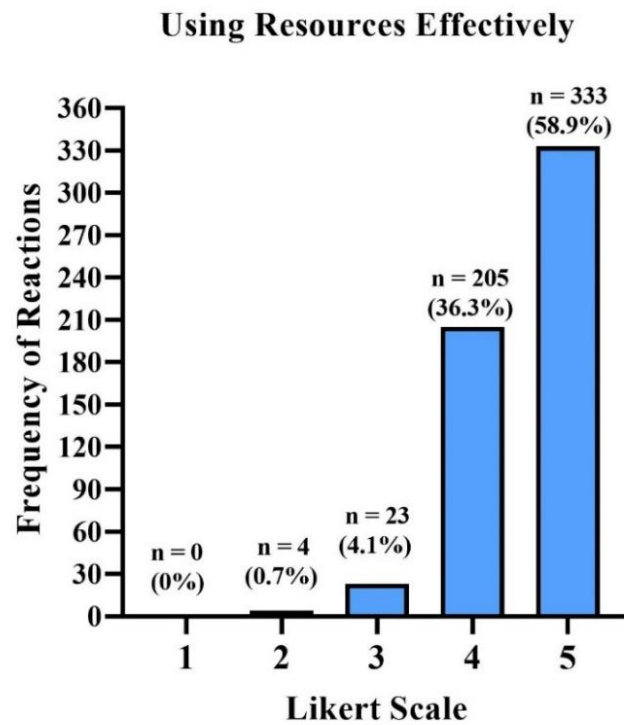


Figure 4. 13: Perceptions of the Pre-service teachers regarding DF4

Figure 4.13 shows the pre-service teachers' perceptions of DF4, Danielson's framework Domain 1, Perspective 4, 'Using Resources Effectively'.

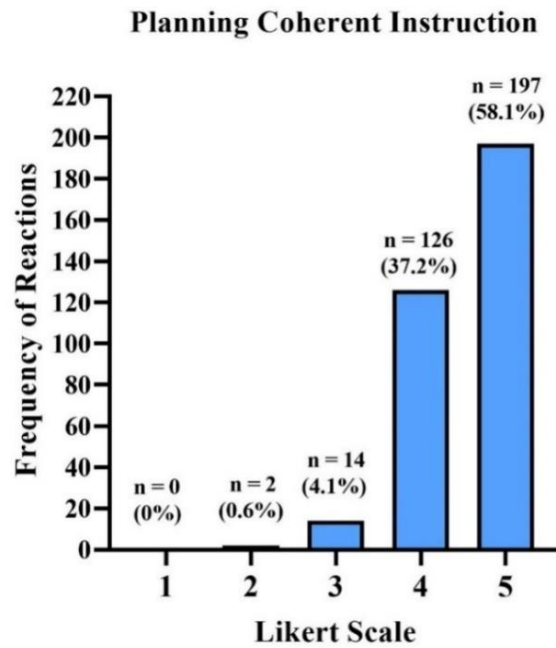


Figure 4. 14: The pre-service teachers' beliefs about DF5

Figure 4.14 shows perceptions of pre-service teachers about DF5, Danielson's framework Domain 1, Perspective 5, 'Planning of Coherent Instruction'.

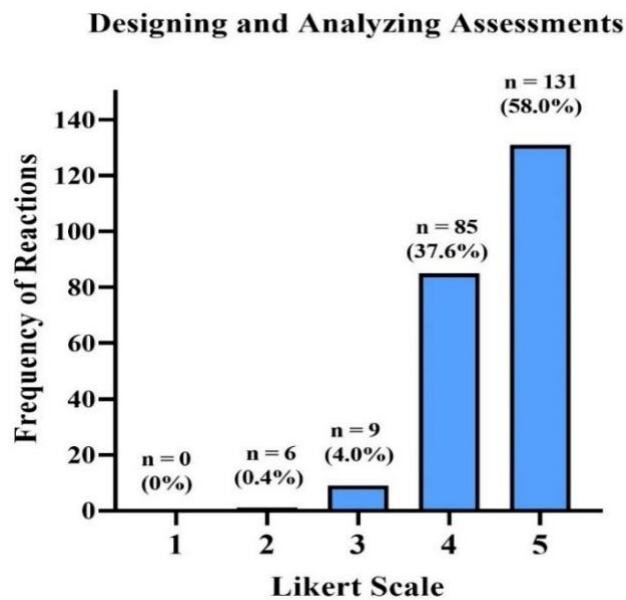


Figure 4. 15: The pre-service teachers' perceptions regarding DF6

Figure 4.15 shows perceptions by pre-service teachers about DF6, Danielson's framework Domain 1, Perspective 6, 'Designing and Analysing Assignments'.

Most importantly, none of the pre-service teachers believed that their interaction with their students lacked mutual respect (Figure 4.16). It is notable that the pre-service teachers believed in mutual respect between the learners and the instructors. Further, they believed that the students must possess a polite nature, being caring and respectful to one another. Although this perception is an ideal one in the teaching-learning system, the reality can be far from this in mixed culture classrooms like in the UAE.

The 8th perspective of the present survey is about 'Fostering a culture for learning'. This section also received around 90% positive reactions from the pre-service teachers (Figure 4.17). However, this section has received the highest number of 'Disagree' responses (negative perception, n = 13) along with a considerable number of 'Neutral' responses (n = 46). The questions under this Danielson perspective were designed to assess the pre-service teachers' perceptions regarding the active participation of the students in the learning process, focusing on details of the lessons and whether the pre-service teachers expect the students to be proud of the students' work and skills. It is clear that few of the pre-service teachers participating in the current study have a negative perception about the students' active role in the learning process or they are not clear about this concept, therefore making a neutral response to the concept.

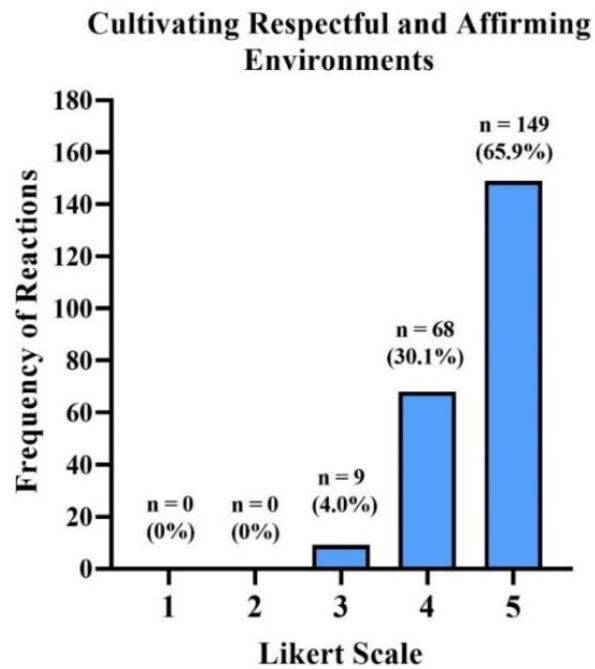


Figure 4. 16: How the Pre-service teachers perceive DF7

Figure 4.16 shows pre-service teachers' perceptions regarding the requirement for 'Cultivating Respectful and Affirming Environments' in the classroom (Danielson's framework Domain 2, Perspective 7).

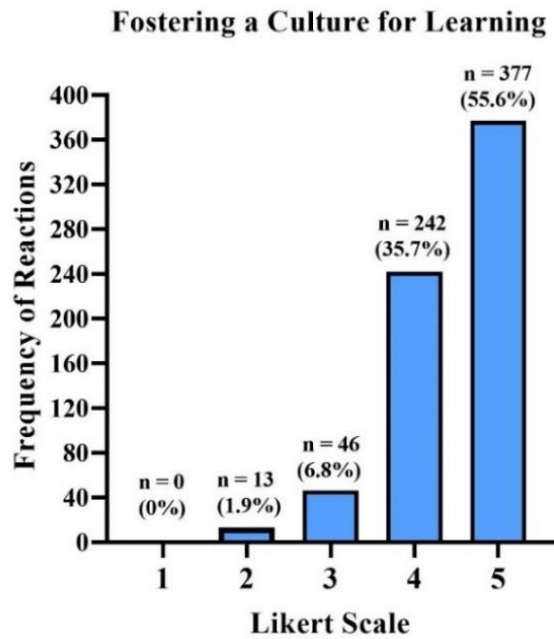


Figure 4. 17: The pre-service teachers’ perceptions about DF8

Figure 4.17 represents pre-service teachers’ perceptions about ‘Fostering a Culture for Learning’ in the classroom, DF8 (Danielson’s framework Domain 2, Perspective 8), depicted on a Likert scale.

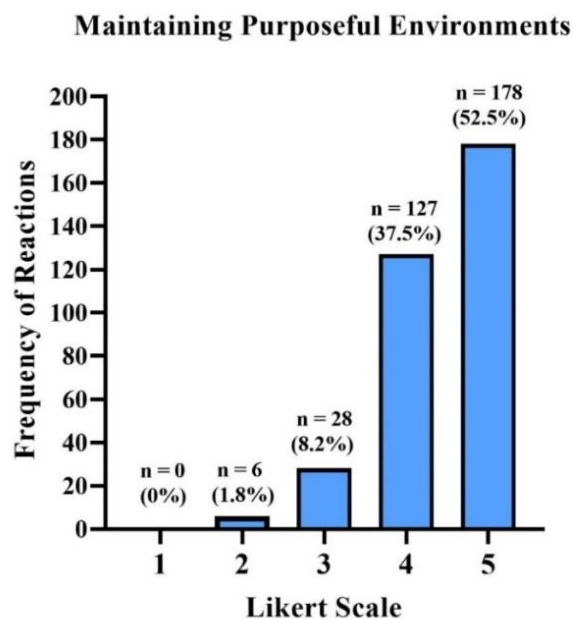


Figure 4. 18: Bar diagram depicting the pre-service teachers’ perceptions about DF9

Figure 4.18 shows pre-service teachers’ perspective of DF9, Danielson’s framework Domain 2, Perspective 9, ‘Maintaining Purposeful Environments’ in the classroom.

The last two perspectives of Danielson’s Domain 2 for education are ‘Maintaining Purposeful Environments’ in the classroom and ‘Supporting Positive Student Behaviour’. The percentage of pre-service teachers who perceived these two parameters as very important (reacting as ‘Totally Agree’) was 52.5% and 59.5% respectively (Figure 4.18 and Figure 4.19). Furthermore, 37.5% and 34.7% of the responses were ‘Agree’, making the total percentage of positive perceptions received for these two categories more than 90%.

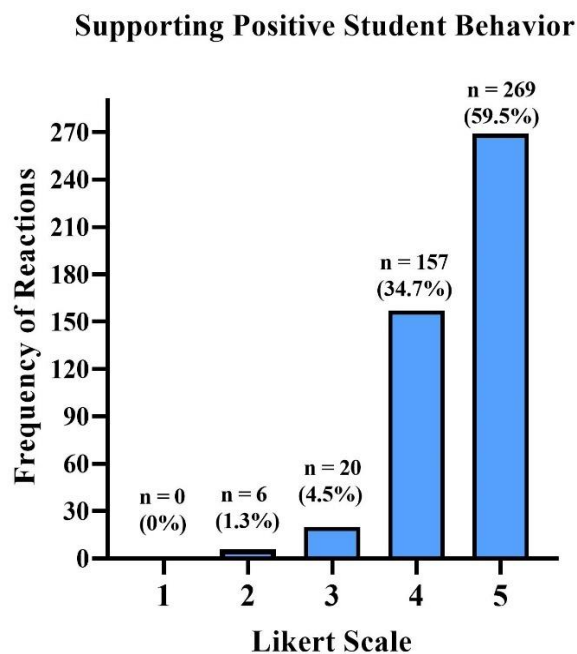


Figure 4. 19: The pre-service teachers' perceptions about DF10

Figure 4.19 shows perceptions of pre-service teachers regarding DF10, the Danielson's Framework Domain 2, Perspective 10, 'Supporting Positive Student Behaviour' in the classroom.

It was noted that around 8.2% of the pre-service teachers provided their reaction as neutral, whereas 1.8% perceived it as negative (disagreed with the statement). Therefore, 10% of the participants in the current survey did not have a clear vision regarding the need for focused learning environments in the classroom, for affirming the teaching-learning process. The statements associated with this perspective were related to the level of organisation and students' participation in small group work. Managing students' group work and ensuring proper handling of resources by students require a skilled instructor. Therefore, it is reasonable that some of the inexperienced pre-service teachers found the situation difficult to handle. It was noticeable that the majority (94.2%) of the pre-service teachers had the belief that affirming positive behaviour among students is of great importance. They stated that they were aware about the proper methods to correct the students' misbehaviour. Furthermore, most of them perceived that using indirect methods to monitor the students' behaviour and taking preventive measures to avoid misbehaviour is very important. Only 1.6% of the pre-service teachers did not follow these guidelines - a great sign of proper pedagogical practice in UAE classrooms, at least with regards to shaping the students' behaviour.

Around 90.3% of the pre-service teachers had the perception that the learning spaces are properly organised (Figure 4.20). They agreed with the statements 'The classroom is a safe place' and 'The classroom's furniture arrangement is designed for maximum accessibility'. However, the remaining participants (around 10%) provided either neutral or negative

perceptions for these statements. As discussed earlier, lack of emotional support and school authorities' administrative support may be the reason why some of the pre-service teachers perceived the situation in a negative way.

Most importantly, none of the pre-service teachers had negative perceptions regarding communicating the purpose and direction of the lesson with the learners (Figure 4.21). As much as 97.7% of the pre-service teachers provided that they make the learning objectives, expectations and directions for learning clear to their students. Further, the pre-service teachers explained the topic procedures and also made attempts to link the present lesson with the past experience and knowledge of the students. Moreover, almost all participants in the current study believed that their written and spoken language is good enough to meet the pedagogic standards. Around 2.3% of the participants provided 'Neutral' response to the questions, but none of them provided a negative statement.

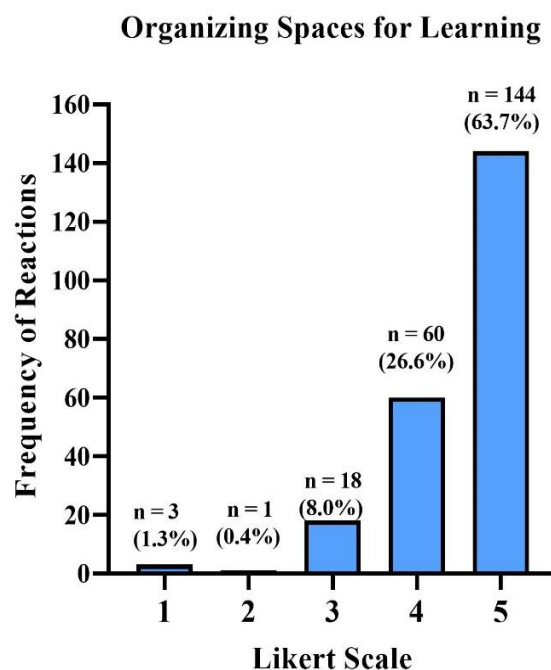


Figure 4. 20: How pre-service teachers perceive ‘Organising Spaces for Learning’(perspective 11 of the Danielson framework Domain 2).

Most of the participants believed that they regularly deliver high quality questions to students and do provide adequate time for their students to respond to these questions (Figure 4.22). Although the pre-service teachers asked questions, some of them were found to have negative perceptions regarding important areas of learning like ‘allowing the student to suggest the discussion topic’ and permitting the students to make voluntary contributions to the learning process. Allowing the students to be active participants in the discussion process improves the students’ abilities to think out of the box and therefore enhances the learning process. However, the instructor must possess ample knowledge about the topics that they are handling, because there is a fair chance some students will ask for and suggest topics outside the syllabus. If the instructor doesn’t have a clear knowledge of the topic suggested by the student, then it may become a matter of embarrassment to the instructor. This is one reason why many instructors do not allow the students to take part in free-flowing discussions of the topic (Pratton & Hales, 1986; Saunders & Wong, 2020). If the pre-service teachers are naive and possess less experience, they may prefer to avoid such an embarrassing situation. This could be one reason why some of the pre-service teachers have a negative perception regarding the students’ active participation and contributions in discussions.

Communicating About Purpose and Content

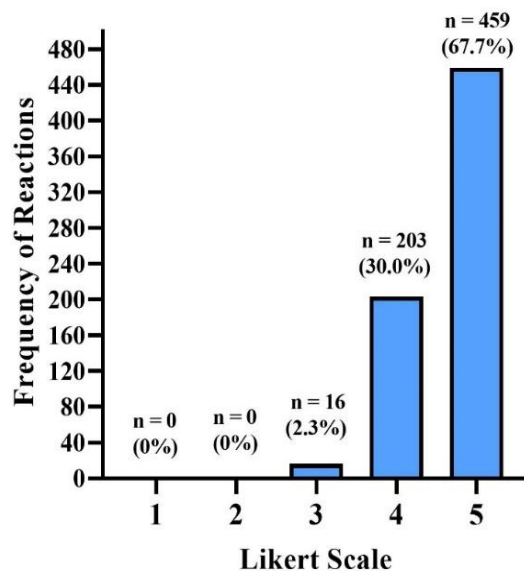


Figure 4. 21: DF12 - How the Pre-service teachers perceived 'Communicating About Purpose and Content' (12th module of the Danielson framework, coming under Domain 3)

Using Questioning and Discussion Techniques

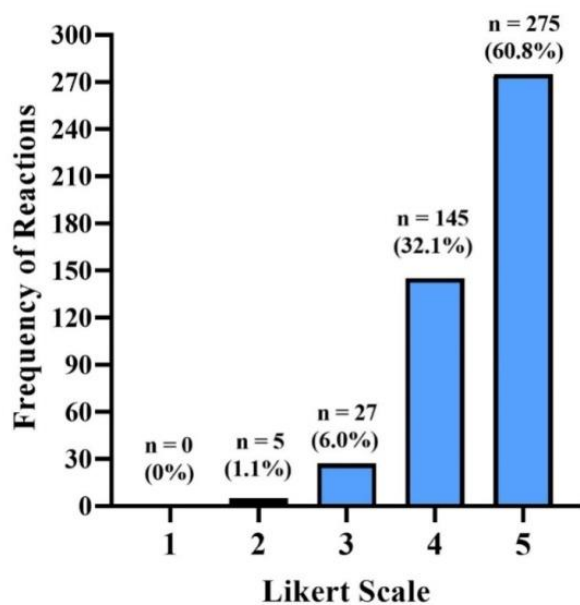


Figure 4. 22: The pre-service teachers' perceptions regarding DF13

Figure 4.22 shows perceptions of pre-service teachers regarding DF13, Danielson's framework Domain 3, Perspective 13, 'Using Questioning and Discussion Techniques' in the classroom, depicted on a Likert scale.

The next two standards of the Danielson framework Domain 3 are regarding the skills of the instructor to engage the learners and to assess the progress of the learners through various measures. It was found that most of the pre-service teachers believed that they are able to cognitively engage the students through realms like learning activities, various assignments and through proper exploration of the lessons (Figure 4.23). Around 59% of the pre-service teachers had highly positive perceptions (reacted as 'Highly Agree') about their ability to engage the students in learning activities whereas 36.7% of the pre-service teachers were positive ('Agreed' with the statement) about the realm. Only 0.6% possessed negative perception about this requirement. Twenty-four reactions (3.5%) were recorded as 'Neutral'. Further, 92.6% of the pre-service teachers believed that providing quality feedback and positive/constructive criticism is of great importance in assessing learning outcomes (Figure 4.24). They believed that the students can use this feedback for understanding the process and thereby improving their performance in the classroom. Only less than 1% of the pre-service teachers possessed a negative perception about this standard of the Danielson framework. Further, 6.5% recorded their reaction to this statement as 'Neutral'.

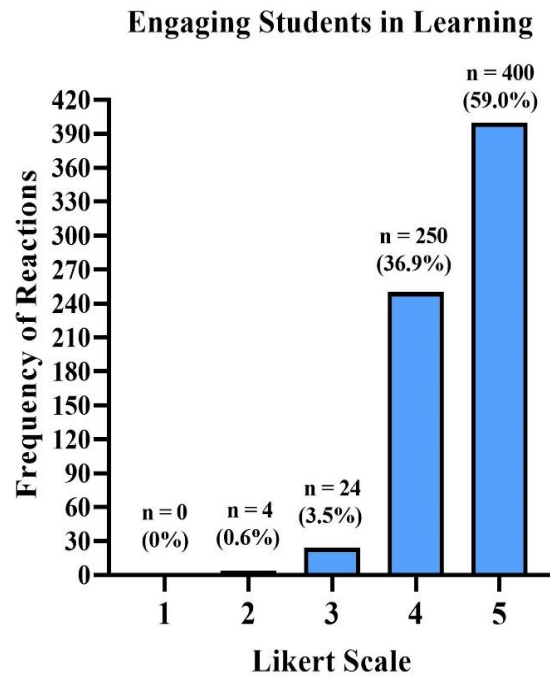


Figure 4. 23: How the pre-service teachers perceive ‘Engaging Students in Learning’

Figure 4.23 shows how pre-service teachers perceive Danielson’s framework Domain 3, Perspective 14, ‘Engaging Students in Learning’, depicted on a Likert scale.

The last standard of the Danielson framework domain 3 is ‘Responding Flexibly to Student Needs’. It was noted that approximately 95% of the participating pre-service teachers believed that they are successful in adjusting their teaching content in accordance with the requirement of the learners (Figure 4.25). Most of them believed that they can spontaneously adjust the way of teaching and content of the lesson according to the interests of the classroom. Adaptability and flexibility are the two important characteristics of good teachers. Therefore, these perceptions of the pre-service teachers are a good sign for the UAE classrooms because teaching the skill sets of critical thinking and problem solving, collaboration and effective

communication will make the learners well-equipped with the capacity to think outside the box and will impart innovation skills to them (Kivunja, 2015; Kynga, 2020).

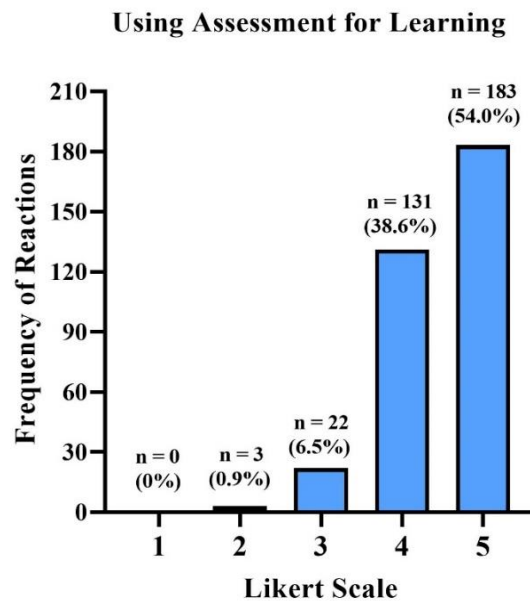


Figure 4. 24: The Pre-service teachers’ perceptions about DF15

Figure 4.24 shows pre-service teachers’ perceptions about DF15, Danielson’s framework Domain 3, Perspective 15, ‘Using Assessment for Learning’ in the classroom.

The last domain of the Danielson framework for education consists of six standards/criteria. These standards include: engaging in reflective practice, documenting student progress, engaging families and communities in the teaching-learning process, contributing to school, community and culture, growing and developing professionally and acting in service of the students. Importantly, the lion’s share of the participating pre-service teachers believed that they are very accurate and careful in assessing the lessons that they teach as well as in using their knowledge for improving their teaching skills. As much as 96.5% of the pre-service teachers

perceived their effectiveness in engaging reflective practice in the afore-mentioned fashion (Figure 4.26).

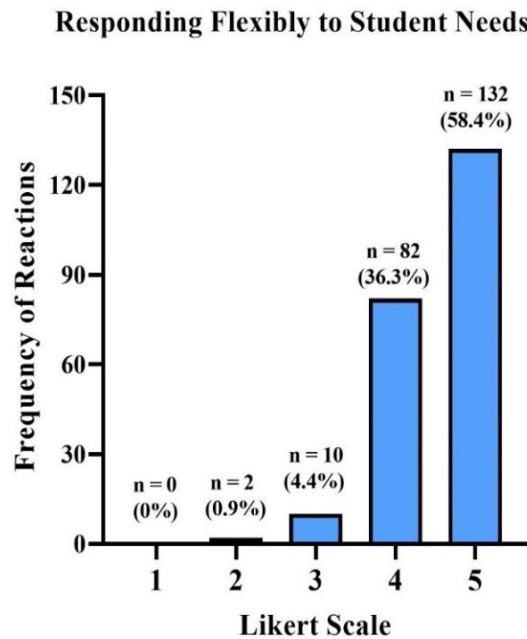


Figure 4. 25: Depiction of pre-service teachers’ perceptions in Likert scale

Figure 4.25 shows pre-service teachers’ perceptions about ‘Responding Flexibly to Student Needs’ in the classroom (Danielson’s framework Domain 3, Perspective 16) on a Likert scale.

None of the teachers had a negative perception about their efficacy in reflective practice. However, a minor fraction (3.5%) of the participating pre-service teachers responded ‘Neutral’ to the question. The next part assessed the participants’ perceptions regarding the documentation of the students’ progress. More than 90% of the pre-service teachers believed that they have an effective documenting system for maintaining the records of the completion of assignments by their students and for monitoring the students’ progress (Figure 4.27). Around 53.5% of the pre-service teachers stated that they ‘Strongly Agree’ with this requirement and 39.8% provided that

they ‘Agree’ with the requirement. Only 1.8% of the pre-service teachers possessed negative perceptions about documenting the students’ progress. Moreover, 4.9% provided their reaction to this pre-requisite as ‘Neutral’. Since 93.3% of the participants had a positive outlook regarding documenting and monitoring the students’ progress, it can be said that the future of the UAE education system is on the right track.

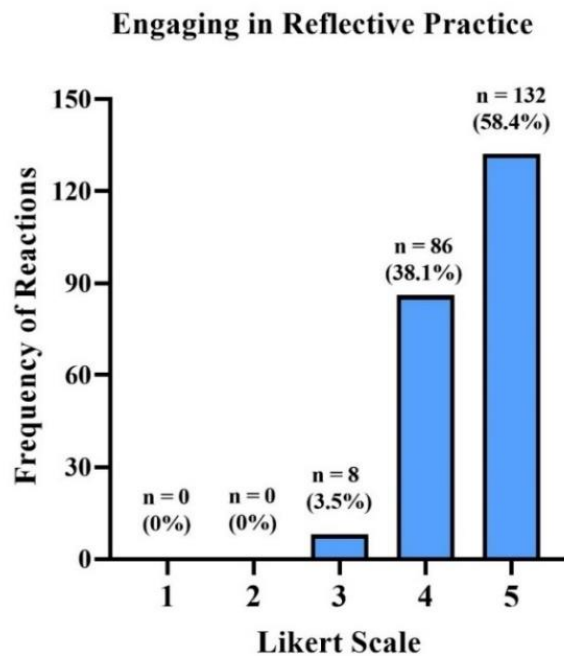


Figure 4. 26: Pre-service teachers’ beliefs about ‘Engaging in Reflective Practice’

Figure 4.26 shows pre-service teachers’ perceptions about Danielson’s framework Domain 4, Perspective 17, ‘Engaging in Reflective Practice’ in the classroom, depicted on a Likert scale.

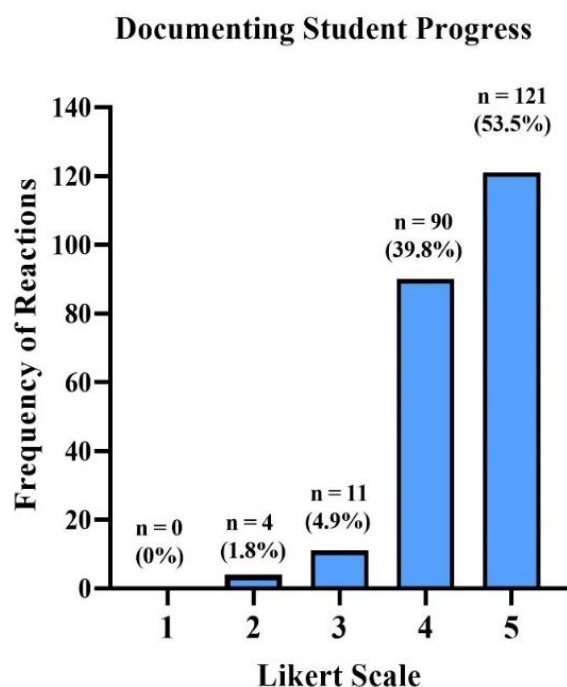


Figure 4. 27: Depiction of Pre-service teachers’ beliefs about DF18

Figure 4.27 shows pre-service teachers’ perceptions about Danielson’s framework Domain 4, Perspective 18, ‘Documenting Student Progress’ in the classroom, depicted on a Likert scale.

The next standard, ‘engaging the families and communities in the learning process’ received the highest number of negative reactions amongst all the 22 standards of Danielson’s framework from the pre-service teachers (Figure 4.28). Twenty-eight responses to this standard were negative (3.5%). The statements that received negative responses from the pre-service teachers include: ‘I usually volunteer in school events and district projects’, ‘I provide information to parents about the instruction program’, ‘I provide information to parents about the students’ progress’ and ‘I successfully engage with parents in helping my students to undertake projects’. Furthermore, 16.4% of the responses to these four parameters were ‘Neutral’ making the total percentage of ‘non-positive perceptions’ approximately 20%. Other statements in this section

were aimed at assessing the pre-service teachers' perceptions about their professional relationship with colleagues. Notably, none of them had a negative perception regarding their colleagues. Around 92% of the pre-service teachers reported that they have a good relationship with their colleagues, which is based on mutual support, respect and cooperation. The remaining 8% responded as 'Neutral'. Therefore, a considerable portion of the pre-service teachers have issues in communicating the students' education program and progress with their parents. Further, many of them are not interested in volunteering in community-based school events. This implies that, around 20% of the pre-service teachers provided non-positive perceptions to the requirement of communicating with the family members of the students.

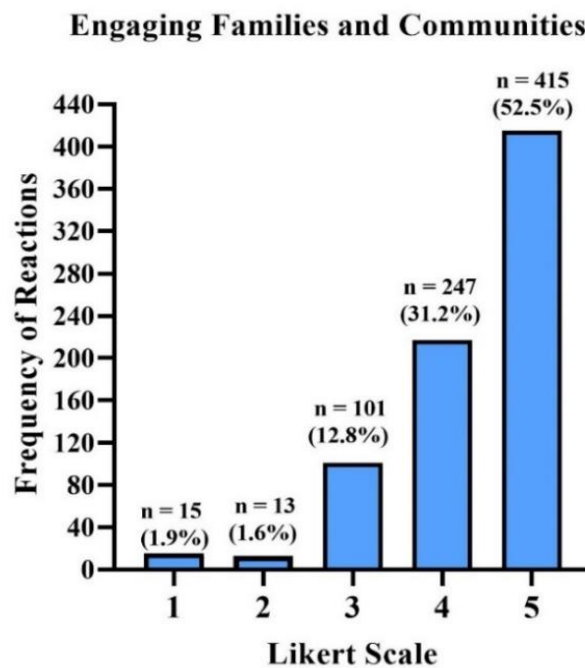


Figure 4. 28: Likert scale depiction of DF19

Figure 4.28 shows pre-service teachers' perceptions about 'Engaging Families and Communities' in the learning process (Danielson's framework Domain 4, Perspective 19).

In contrast to the previous standard, none of the pre-service teachers had an issue with contributing to the school community. The Danielson framework criteria ‘Contributing to School Community and Culture’ received a high percentage (92.4%) of positive reactions from the pre-service teachers (Figure 4.29). They reported to contribute towards the culture of the school by getting involved in the identification of underlying problems and taking positive action to correct it.

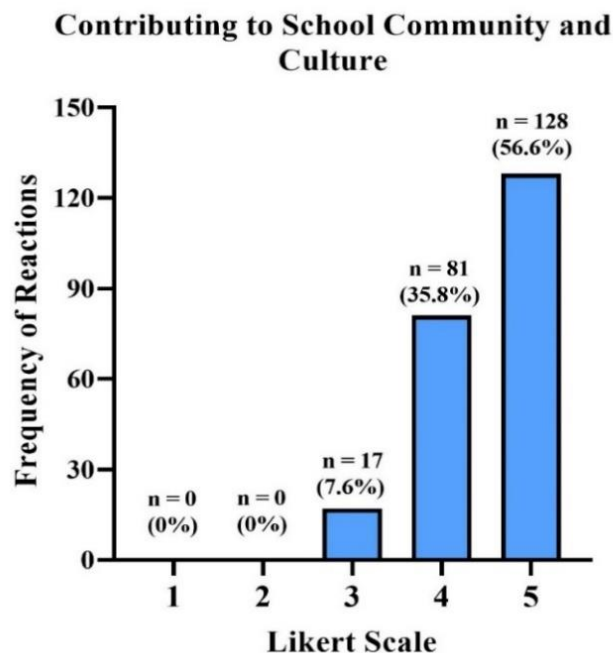


Figure 4. 29: Willingness in ‘Contributing to School Community and Culture’

Figure 4.29 shows pre-service teachers’ perceptions about DF20, Danielson’s Framework Domain 4, Perspective 20, ‘Contributing to School Community and Culture’.

The last two standards of the Danielson framework for education include ‘Growing and Developing Professionally’ and ‘Acting in Service of Students’. The pre-service teachers in the present study had highly positive perceptions regarding these two parameters. None of them

provided a negative reaction to these two standards (Figure 4.30 and Figure 4.31). Most of the participants believed that it is very important to seize all available opportunities for professional development, to accept constructive criticism and feedback from colleagues and supervisors in order to develop teaching skills. Around 96% of the pre-service teachers perceived that growing professionally and developing teaching skills are important for their career. Around 4% provided their reaction as ‘Neutral’, while none (0%) of them showed negative perceptions.

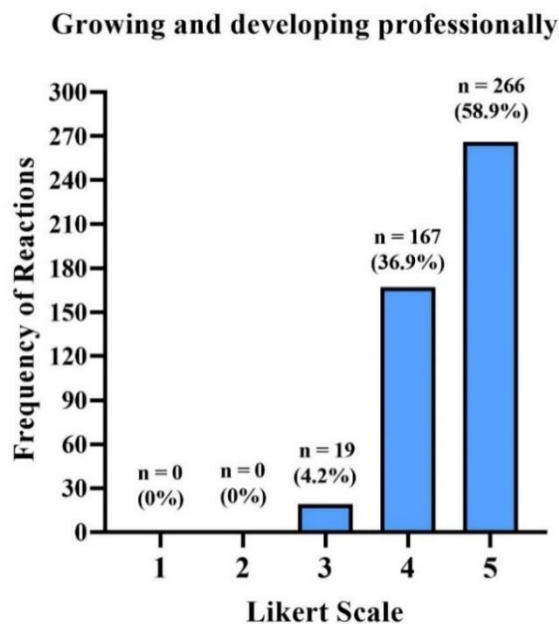


Figure 4. 30: A graphic representation in Likert scale

Figure 4.30 shows a representation of pre-service teachers’ perceptions on ‘Growing and developing professionally’ (Danielson’s Framework Domain 4, Perspective 21).

Similarly, 96.5% of the pre-service teachers possessed positive perceptions regarding their duty/commitment to work for the well-being of the students (Figure 4.31). They believed that it was their duty to work for the success of students by acting ethically and making wise decisions,

and taking thoughtful actions, especially under challenging circumstances. Therefore, it is clear that the pre-service teachers at the federal university in the UAE who participated in this study are highly committed towards their profession. Although some areas need attention, their perceptions and attitudes toward their profession are admirable.

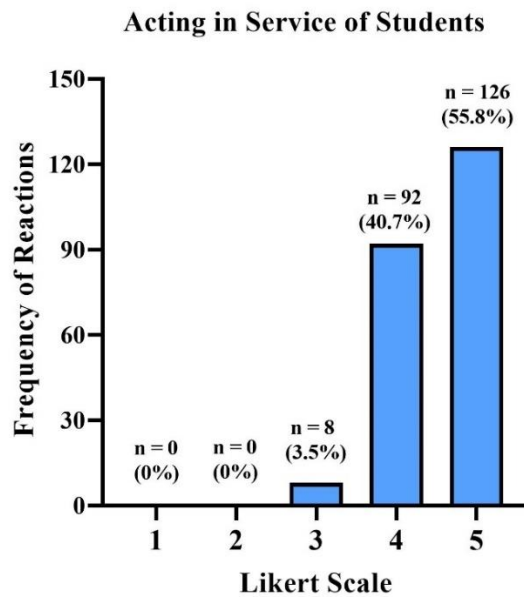


Figure 4. 31: How pre-service teachers perceive ‘Acting in Service of Students’ (Danielson’s Framework Domain 4, Perspective 22, depicted on Likert scale)

After testing with the 22 standards of the Danielson framework for education, more than 70% of the pre-service teachers had positive perceptions (Figure 4.32). Areas where some pre-service teachers showed negative perception include: ‘Planning Coherent Instruction’, ‘Fostering a Culture for Learning’, ‘Organising Spaces for Learning’, ‘Documenting Student Progress’ and ‘Engaging Families and Communities’. Only through a personal interview can the researcher understand the exact reasons for these pre-service teachers’ negative perceptions about these

areas of education. The authorities may take necessary actions to provide professional training to the pre-service teachers to improve their performance in these areas.

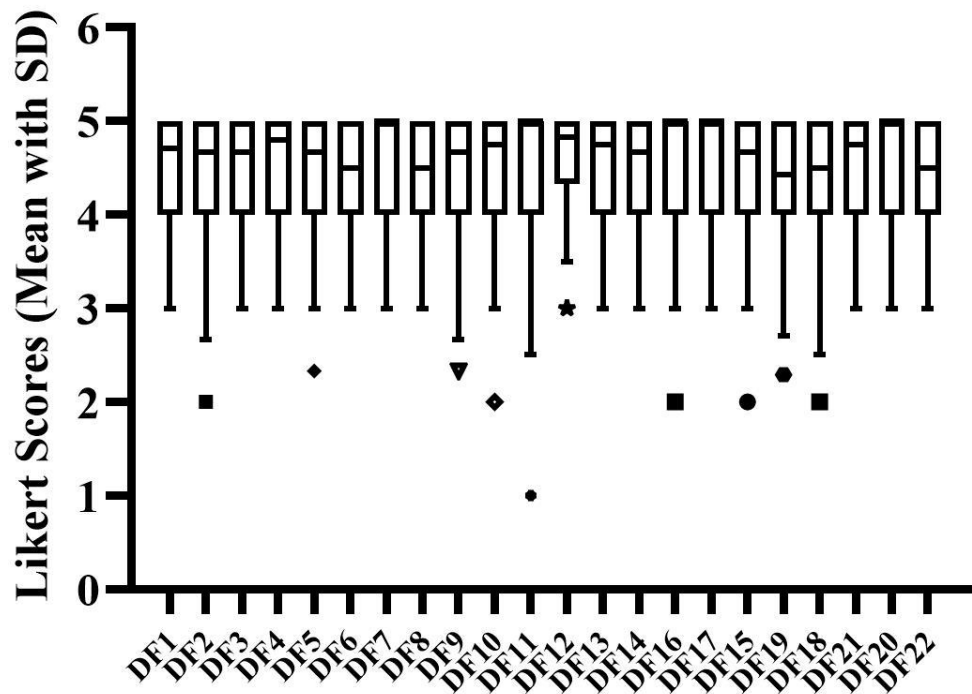


Figure 4. 32: Bar diagram showing mean Likert scale scores, regarding the perceptions of pre-service teachers

The figure 4.32 shows perceptions of pre-service teachers in a scatter plot diagram (mean values with standard deviations (SD) are provided) for each perspective of the Danielson Framework (DF = Danielson's Framework Perspective). After statistical correction using Tukey's formula, only 10 out of 9379 Likert scale reactions (0.11%) were found as outliers. This shows that the data collected is normally distributed and validated the results of the QQ plot. Majority of the pre-service teachers' perceptions, when taken in average, were positive and have scores more

than 3.5 out of 5. Only less than 7% of the pre-service teachers showed average scores below 3 (out of 5).

4.3 Results of the Qualitative Phase of this Study

4.3.1 Perceptions of the Pre-service Teachers

Among the pre-service teachers, 65 out of 113 participants provided their perceptions and suggestions to improve the field experience program. Forty participants opted not to provide their perception and/or suggestions. The decision to provide a suggestion or not to give any suggestions was purely the participants' choice. Eight participants commented that the field experience was perfect and there was no need to improve any aspect of the field experience program (candidates reacted as "Good experience", "Excellent experience", "No need to improve"). The perceptions of the 65 pre-service teachers regarding the areas of the field experience training which need to be improved were evaluated using a thematic analysis method. The pre-service teachers' perceptions were analysed without any prejudice, thereby allowing the formation of different themes in the researcher's mind, without any bias. The pre-service teachers' comments reflected their perceptions, which in turn are the reflection of their experience regarding the field experience training. Further, with the researcher being a teacher by profession, the assessment was easier because the researcher had basic knowledge about pedagogical standards and teaching ethics. During the personal interviews, the pre-service teachers and university instructors participating in the present study had a variety of perceptions about their field experience training. Their statements included both negative and positive perceptions. The abbreviations to anonymized their actual names will be used when discussing participants' comments/perceptions.

The pre-service teachers who had highly positive perceptions about the field experience training did not explain much about their positive perceptions of the field experience program. They merely stated their perceptions in simple terms, making it impossible for a detailed analysis of positive perceptions to be undertaken. For instance, R said that “Every aspect regarding the field experience training was good.” Similarly, Sh said: “I really enjoyed the field experience training.” When their suggestions about improving the field experience program were provided, some of them simply stated “No need to improve”, or “The experience was good”. However, those pre-service teachers who had negative perceptions about their field experience training described the areas of concern in their replies. Further, they attempted to provide some solution to the issue. Therefore, the assessment of the pre-service teachers’ perceptions mainly had negative perceptions or they showed the pitfalls in the program. Whatsoever, assessing the negative perceptions was more important than the positive perceptions because such assessments allow the researcher to identify the pitfalls or potential areas that require improvements. During the thematic analysis, these perceptions were categorised into different pedagogical standards, coming under the different domains of the Danielson framework. The names of the pre-service teachers as well as the instructors were replaced with abbreviations to anonymized names to mask their identity, which is done to avoid any possible personal or professional conflicts that can occur to the participants in future due to their negative comments regarding the field experience program. The themes consequently formed through the analysis are discussed below.

1) Challenges in technology integration and classroom management during online teaching

One of the themes that evolved during the analysis of pre-service teachers’ perceptions includes the issues/challenges they faced during the online teaching practice due to COVID-19

restrictions. Many pre-service teachers were compelled to use the online mode or the blended mode (online and face-to-face), for which they were not fully prepared, mentally, and technically (Masoud & Bohra, 2020; Erfurth & Ridge, 2020; Alshaikh et al., 2021). Many of the pre-service teachers who taught online stated that they were not fully happy with the field experience training obtained through the online mode. It is a fact that the pre-service teachers would have to teach face-to-face mode in future, which is the real-life classroom teaching practice. Therefore, it is reasonable that the pre-service teachers wanted to get at least some real classroom experience, which would benefit them in their future teaching career. Some of the pre-service teachers struggled to cope with the online teaching practice. Some of them battled to deliver effective instruction to the children. For instance, S expressed her concern regarding the online field experience as: “My experience was online, so it was a bit hard to give any suggestions to the students.”

The perception of Shi regarding the online teaching mode was notable because Shi had performed both online and face-to-face teaching during field experience training. Shi’s statement can be summarised as: “As an online trainer I would love them to focus on face-to-face training method. I have tried both face-to-face and online training, both was good experience. However, I learned more during face-to-face teaching.”

H was concerned about the lack of opportunity for face-to-face teaching and inadequate chances for discussions with the university supervisors. H said:

It was online because of Covid-19, I think if it was face to face, it will be better. I think it will be better if every week we have a meeting with all the students in the internship and with the mentor teachers to talk about the students’ progress and the way of teaching. For sure, every

mentor teacher should meet with the pre-service teachers in internship especially after teaching the lesson and provide their feedback.

Similar perceptions were expressed by Ruk and Su who perceived that the online mode of field experience provides them with fewer chances for interacting with the student community. Furthermore, in the online mode, there is less interaction with the students and fewer opportunities to be involved in students' extra-curricular activities and therefore to build a good relationship with them. Ruk said: "Due to blended method and the pandemic, we had less time to interact with the school community and to build relationship with student" and the words of Su can be summarised as: "Due to some online visits that we had, we have limited time to engage with school community and students' extracurricular activities."

Many other pre-service teachers were concerned about the difficulties in online teaching practice. For instance, Ab, who received online field experience training, stated that: "I wish that the authorities try both face-to-face and online modes." Similarly, Ahmed stated that: "I want to try teaching both face-to-face and online."

After analysing the perceptions of the pre-service teachers regarding their field experience, it is clear that many of them have realised the importance of face-to-face instruction in the personal and professional development of a teacher. Although the online mode of teaching is evolving as an important way of teaching after the emergence of COVID-19, face-to-face instruction still has its own edge over the online mode such as through better classroom management, teachers having better chances of expressing themselves, understanding the emotional requirements of the learners and better chances of teacher-student interaction and bonding. The issues associated with the online mode of teaching can be linked with the Danielson framework standards termed 'Using Resources Effectively' and 'Planning Coherent Instruction'. During the online mode of

instruction, the teachers need to be well aware of how to use ICT tools to express themselves, plan the lessons and manage learning activities. Further, they should apply their experience at the fullest to control problematic students in order to manage the classroom. The pre-service teachers with very little experience may suffer in classroom management and in providing their suggestions and delivering lessons effectively.

2) *Lack of adequate teaching opportunities*

Another negative aspect of the field experience program that the pre-service teachers identified is its short duration. Many of them believed that the duration of the field experience program is inadequate to provide proper classroom experience to the pre-service teachers. One of the most common themes of the pre-service teachers' perceptions regarding field experience was "Give us more lessons to teach". Indeed, longer real-classroom training can make better teachers. For instance, R wanted the university authorities to provide more opportunities for teaching in real classrooms. She said: "Please give mentees more opportunity to show their skills in the classrooms."

Similar perceptions about field experience were given during the personal interviews, where SA said: "More training in schools will be great for the pre-service teachers"; WHA stated: "I want to teach more"; Sha urged: "Provide more experience to help student teachers."

The abovementioned appeal to extend the field experience training program indicates that the present curriculum fails to provide pre-service teachers with enough classroom teaching experience. These pre-service teachers believed that an extended field experience would impart them with the professional skills required to thrive during their future teaching career and would also build confidence in them to face difficult circumstances. For instance, LA's perception

about field experience provides a clear overview of the scenario. She detailed her perceptions regarding field experience as:

Longer field experience program will make the pre-service teachers more experienced, by teaching students in every term, because by practicing more, it will help students know the reality of teaching and face the obstacles of handling a whole classroom. The current curriculum has shorter field experience training, which is inadequate to provide the pre-service teachers the required classroom exposure.

Other perceptions about the field experiences include the one from HA: “I want more hands-on activities. I would like to recommend that the frequency of practicum takes more than once on the week and duration is a bit longer so it will help us as future teachers.” Similarly, AY said: “Give me more teaching opportunities (especially)”; Jun added: “I would love to get more time in the field experience.”

H believed that the allotted time for field experience is inadequate for successful transformation of pre-service teachers to efficient in-service teachers in the future. H explained his perception on field experience as:

To enhance the experiences, I think two month is not enough for the students to identifying the schools even the students so I recommend the college to extend the time of this experience because it as an important experience that I got.

HR also provided similar view points. HR held the belief that practicum 2 and 3 are short and the teacher candidate did not get adequate days of teaching experience. He believed that the pre-service teachers should be allowed to experience random schedules rather than a fixed one. HR’s perceptions can be summarised as:

I would like to request the authorities to implement a longer period of time for practicum 2 and 3. Where teacher candidates can go and teach for days in a row so they can make the most of their experience in the school. In this way they will be able to build a better relationship with the students and therefore create a better lesson for them. They will also be able to experience the schedules of different days and get to be familiar with the routines that are put in place.

In support of the HR's comments, KH stated that the pre-service teachers are provided with less chance for teaching. Some schools schedule the pre-service teachers to teach on a Fridays, which has a half-day working pattern in Arab countries. Further, the number of students in the classroom can be less on Fridays. This scenario limits the pre-service teachers' interactions with the learners and prevents them from expressing their full potential.

KH said:

The field experience program should allow the teacher candidates to participate in days in which there would be full day learning instead of Fridays as it is a half day and did not allow us to provide all of our potential. I would also prefer for the teacher candidate to know which school, grade, and subject she would be placed in and subject to teach prior to starting her practicum or internship course as that would allow the teacher candidate to prepare more effectively and if possible, she should be given the lesson outcomes that are expected from the school for the specific subject/grade so that she would be able to create effective and creative lesson plans.

LU was really upset about the entire course and expressed dissatisfaction regarding her field experience. LU believed that the hands-on training received during field experience training is

negligible and she expressed her concern that the curriculum consists of a lot of theory and a minimum amount of practical training. LU said that:

I am really sad for choosing this major, now 4years without work. I would like to have more training for the pre-service teachers and all pre-service teachers should be allowed to teach subjects both in Arabic and English, which is important for mixed culture classrooms like in the UAE. I would suggest the authorities to provide us longer periods to spend in schools.

RA believed that the structure of the field experience program is good enough to impart knowledge to the pre-service teachers and that it can improve the professional skills of pre-service teachers. In that regard she was happy about the field experience program. However, RA was concerned about the short duration of the field experience training. She said:

I think the program already is enhancing the experiences of the students by preparing them to be in a classroom, just allow them to teach as much as possible during the internship. Try to get the most in the internship. I suggest the authorities to add extra practical lessons. This can make the pre-service teachers better at their job.

NAD believed that the inappropriate timing of the field experience training makes it less effective than it is meant to be. In addition, NAD perceived that there should be more opportunities for pre-service teachers to engage themselves in school activities. NAD commented:

The authorities have to provide the mentees more opportunities to engage in school activities. Start from term 1 and do not wait to the end to start the field experience/teaching experience program. The pre-service

teachers should take all the opportunities to experience many things in teaching. They must always challenge themselves.

NAD's perceptions about planning early field experience are valid because early field experiences before student teaching practicums can be advantageous for pre-service teachers and can help them to define their teaching philosophies. Early field experiences involve observing, assisting, or directly engaging in a variety of formal and informal educational settings. As pre-service student teachers enter the classroom at the start of their teacher education programme, they have little or no theoretical knowledge in pedagogy, which makes early field experiences different from the student teaching practicum. The pre-service teachers taking part in early field experiences are not supposed to take on teaching duties, but they can observe, help the in-service teachers and take part in as many classroom activities as they can. These activities include preparation of instructional materials, brief classroom presentations, helping the in-service teachers during laboratory demonstrations and grading of student work. This can be accomplished by rearranging the curriculum of teacher education programs (Arnett & Freeburg, 2008; Freeman, 2010). Therefore, one must admire NADs suggestion to hold an early field experience to prepare the pre-service teachers for their student teaching practicum.

Interestingly, AB, one of the participating pre-service teachers, perceived that the duration of the current internship period is long and should be cut short. Further, AB wanted to reduce the number of assignments because he believed that it was a waste of time since the assignments and lesson plans had a lot of unnecessary content. AB said: "It will be nice if the authorities can shorten the internship period and provide fewer assignments."

It is not clear what made AV perceive that the current internship is lengthier and assignments have unnecessary detail. Field experience programs are generally designed to give the pre-

service teachers an opportunity to interact with the students, principals, cooperating teachers and other support staff. Through planned field experience observations, the pre-service teachers gain comprehensive pedagogical knowledge and experience. These observations and encounters assist a pre-service teacher to make an intentional and substantial transition from studying educational theory to putting it into practise in the classroom. Hence, reducing the duration of the internship may not be a good idea.

3) *Lack of quality of internship providers*

In the present study, most of the participants have undergone their field experience training in public schools (Figure 4.4). Interestingly, some of the pre-service teachers were not happy with the field experience training provided by their schools. Many of them perceived that choosing the right school is important for the getting proper field experience training. Their concerns were related to the Danielson framework “Organising Spaces for Learning”. For instance, HA said:

Going to private schools would be a better experience as they have more resources and are capable of involving a teacher candidate. Let the pre-service teachers choose the place where they want to undergo their field experience training.

Similarly, AB said: “Let the student teachers choose which grade they want. I want the college to be more in depth with their studies.”

Whereas FO stated:

Allow pre-service teachers to choose what school they want to do their experience in teaching. I want to look up for high standard kindergartens and schools where teacher candidates would gain a competent amount of knowledge and skills from their experience with them.

SAN also has similar perceptions. She stated she would prefer to teach higher grade students. She said: “I would love to teach higher grades in primary level and want include private schools in the internship as well.”

However, the pre-service teachers cannot choose the school in which they want to undergo their field experience training. On evaluating their placements, it was noted that the above-described persons had undergone their field experience in public schools. It is not clear what made them perceive their field experience in public schools in a negative way. It is possible that Abu Dhabi’s private schools differ significantly from their government-run counterparts in different ways. Private institutions frequently have smaller class numbers and provide face-to-face teaching services, allowing students to advance at their own rate. Comparatively, public schools often offer bigger classes and less individualised instruction from teachers. From the perceptions of the pre-service teachers regarding their preference for face-to-face teaching over the online mode, it is possible that they cherished the chances for more individualised experiences in private schools.

Moreover, the private schools in Abu Dhabi have higher success rates than the public schools which also could have influenced the pre-service teachers’ perceptions. However, a public school must have an open enrolment policy since taxpayers pay for it, whereas private schools can choose better students and can prevent less efficient students from getting admission. Consequently, they have higher success rates.

Interestingly, HAD, a pre-service teacher who had undergone most of his training in a private school, stated his perception as: “Increase the number of visits to the public schools rather than the private schools. I am not happy with the training that I received in private schools.”

So, it is clear that opting for private schools may not necessarily provide the desired results. Success of field experience is dependent on a variety of factors, including the mentors, cooperating teachers, the pre-service teachers' motivation, design of curriculum, student population, etc. The state of the facilities at the school is only one of the several factors which decide the success of the field experience program.

4) Lack of involvement of stakeholder in decision-making

Input from stakeholders, such as in-service teachers, pre-service teachers, school administrators, parents and policymakers, is necessary for the successful implementation of curriculum plans. Teachers and school administrators play a significant role in building and developing the school and its students by monitoring students' growth and carrying out the curriculum. Therefore, if school administrators or educational authorities are not ready to listen to the pre-service teachers or if they think that the pre-service teachers are not important, then the system is going to fail because these pre-service teachers are one of the stakeholders and will become in-service teachers in the near-future. The qualitative analysis of the pre-service teachers' perceptions identified the crucial pitfall in field experience training in the UAE education system. Some of the pre-service teachers complained about the lack of their involvement during lesson planning.

For instance, JAM believed that it is not good if the school authorities are not considering the pre-service teachers during important meetings and developing the lesson plans. The pre-service teachers should get an understanding of how to do lesson planning because they will become in-service teachers after their graduation. JAM's concern can be summarised as:

Let the internship students to do lesson plan, encourage the internship students to attend all meetings because we, the pre-service teachers, will

be the in-service teachers in future. What if we don't have an idea of these important aspects at that time?

AB also wanted to get involved in the lesson planning. AB stated that: "Let us do the lesson plans with less unnecessary details because it takes a very long time to write it."

GAM also exhibited similar perceptions about her field experiences. GAM was worried about the lack of freedom in using her own materials in the classroom during teaching, which she believes will aid her to develop her own style/identity in teaching. GAM said:

Do not strict much with the lesson plans. Let the student take their time and allow them to use their own material in classroom. By preventing me from using education aids/materials designed me, the school authorities hindered my professional growth and style of teaching.

Indeed, allowing the pre-service teachers to do the lesson plans would be a good idea, provided that the university supervisor monitors it. Otherwise, the students may suffer from faulty plans because the pre-service teachers are yet to evolve into good teachers. Studies have demonstrated that it is a challenging task to put policies into practice in a way that promotes the objectives stated in institutional documents. Any educational institution's inability to connect desired outcomes with policies - a gap that has been recognised - is one of the major barriers to attaining its goals. For instance, the UAE's plan to implement bilingual education is hindered by the lack of involvement of many stakeholders, most notably teachers, who were not considered while designing the policy's alignment with its execution (Musmar, 2018). Effective education cannot be realised if authorities are not ready to listen to the teachers' viewpoints.

Similarly, Moore-Jones looked at how tertiary public education was perceived by UAE teachers and students. Her research questions were based on stakeholders' perceptions of

multiculturalism's benefits and drawbacks in a university setting. The bulk of the faculty members in the UAE are distinctive in that they don't belong to the community in which they live and teach. Therefore, in order to conduct efficient academic and professional practises in the UAE, high levels of intercultural proficiency are required. Although this arrangement allows instructors and students to communicate with people of various linguistic and cultural backgrounds, it also requires a high level of intercultural intelligence to be successful. This collection of skills is regrettably lacking in many newly hired teachers, pre-service teachers and students. As a result, UAE authorities must devise strategies to listen to stakeholders and raise the intercultural acuity of participants in the UAE educational system.

The above-mentioned perceptions justified the aims and objectives of the present study. This study intended to uncover stakeholders' perceptions regarding field experience as the researcher realised the importance of hearing the stakeholders' voice for the successful culmination of programs.

5) Need for proper feedback

According to Darling-Hammond and Snyder's (2000) research study, field experience is expected to prepare pre-service teachers for work-based experiences that are full of opportunities, through offering high-quality feedback and by giving pre-service teachers enough time to develop and demonstrate their pedagogical skills. However, the assessment of the participants' perceptions revealed that this is not always the case. Many supervisors, cooperating teachers and school authorities fail to provide proper feedback and time for the pre-service teachers to assess themselves/their own progress.

For example, JUN described his experience as:

Placing inappropriate timings and tight deadlines for the assignments is one of the issues that I have faced during my field experience. In order to improve the students' internship experience, I would suggest changing the assignment deadline. For example, I submitted everything at the end, instead let it be weekly assignments. I would also recommend a non-prepared visit from the professor to see the students' and the mentors' real potential.

ZAH provided perceptions similar to the above comment, stating: "Provide the pre-service teachers a preview to the classes they will be teaching and we need proper feedbacks to improve our style of teaching – both of these requirements were not met with by the supervisors and colleagues"

These perceptions are in line with the study of Newton et al. (2010). Their study reported that supervisors don't frequently visit pre-service teachers to provide guidance on their pedagogical practises. As a result, pre-service teachers who are not under the close supervision of the supervisors may suffer due to missing important assignments and valuable feedback from the supervisors. This "lack of close supervision" was prevalent in educational institutions that upheld conventional teaching practises. Therefore, it is possible that at least some of the institutions in the UAE are not good enough in providing proper guidance to pre-service teachers during field experience.

6) *Insufficient mentoring and battle to adjust with the mentors*

The most important theme that evolved during the thematic analysis was the pre-service teachers' battle to adjust to their supervisors. A considerable number of pre-service teachers had negative perceptions regarding their mentors and the manner in which mentors treated them

during field experience. After assessing the pre-service teachers' perceptions, it became apparent that there are considerable issues in mentoring which need to be addressed. One of the most frequent pieces of advice from pre-service teachers for improving field experience was "Choose perfect mentors" or "Choose a good mentor teacher".

For example, SH stated: "Choose the mentors carefully, because the mentor plays a big role in the field experience program and in our professional development."

In the present study, one of the pre-service teachers provided concerns related to the findings of Boyd et al. (2009). HA believed that his interactions with his mentor were inadequate to fulfil his course requirements. He said:

Meetings were done with the college and school mentors in the beginning of the program to clear out the requirements, however because of the online sessions the communication wasn't clear. I was in desperate need for more clarification from the mentors on while sharing the field requirements and assessments with the mentors. To create authentic teaching opportunities, we needed more Pedagogy courses and ICT training especially due to the lack observation classroom time spent in the pandemic era.

Another noteworthy point regarding the field experience program was one that evolved after assessing LU's perceptions. Lulu had conflict with her supervisor, which badly affected her field experience. She said:

If there was a conflict between teacher candidate and mentor, the university should intervene instead of telling the candidate to adjust with it. There should a system to resolve such issues rather than making the

pre-service teacher to suffer from it. Only the pre-service teacher suffers from such conflicts, because the supervisors are the authorities.

SUM's narration regarding the issues of improper supervising was even more elaborate. She provided her perceptions and suggestions as:

The mentor teachers should also be informed beforehand that they would be having teacher candidates coming in so that they could be well prepared in offering the correct support and feedback needed. Not only that, but they should also be informed on how to use the COE platform so that the teacher candidates would not lose time in showing them how to use it. Mentor teachers should also allow more flexibility to the teacher candidates and allow them to take in more roles such as helping parents with their children at the end of the day when they are getting picked up, choosing three students and asking the teacher candidate to teach them in small groups, allowing the teacher candidate to organize the students in a line and take them to the playground independently. When teacher candidates are given trust to handle the students alone, they would be more responsible and would feel that the role of being a teacher is handled to them so that they could properly train to be teachers in the work place.

From the afore-mentioned perceptions it is clear that conflicts can arise between the pre-service teachers and the mentors wherein the pre-service teachers suffer the most. University/institutions in the UAE education system don't have any procedures/systems to resolve such issues. Lack of quality of some of the mentors was evident from the comments of one of the pre-service teachers. Some of the supervisors lacked the skills to describe the research methods to the mentees. For example, UH said: "The pre-service teachers need a mentor who

can explain the research very well. I was blinded by my mentors' lack of knowledge on the subject.”

The lack of support from the supervisor/mentor is a deviation from the Danielson framework domain 4. This pedagogical standard requires feedback from the supervisor and/or colleague teachers, which also considers how instructors carry out their responsibilities both within and outside of the classroom. Therefore, the UAE education system has deviations from the basic requirements put forward by the Danielson framework which may be affecting its efficacy in a negative way.

SAB provided a good suggestion to overcome the afore-discussed issue of “lack of feedback from the supervisors and cooperating teachers.” SAB stated: “I would suggest to provide the teacher candidates an opportunity to provide feedback upon each other’s lessons.” Although this may seem a good suggestion, the pre-service teachers may not be able to provide valuable feedback regarding the classroom management or style of teaching because they also lack the experience in teaching to assess others’ progress. Therefore, it is the authorities’ job to make sure that the supervising teachers interact with and provide valuable feedback to the pre-service teachers regarding their pedagogy.

7) Lack of opportunities to interact with parents and the community

Another deviation from the Danielson framework observed in the present analysis was the lack of opportunities for pre-service teachers to interact with parents and the community. This scenario overrides the basic pedagogical standards of the Danielson framework like ‘Engaging Families and Communities’ and ‘Contributing to School Community and Culture’. Many pre-service teachers had the perception that they did not have adequate chances to interact with the

parents of the students, which hinders their personal and professional growth and prevents them from rising to their full potential. The ways through which the involvement of the families and community in education benefits the students and the pre-service teachers were discussed extensively at the beginning of this chapter during the quantitative analysis of the pre-service teachers' perceptions. Therefore, a repetition is avoided here.

Although MH was happy with how the field experience training helped him to improve his pedagogical skills, he was concerned about the lack of chances to interact with the parents of his students. MH's perceptions about field experience can be detailed as:

Everything was perfect for me; However, I would love to connect more with the parents. There is little or no chance for the pre-service teachers to interact with the parents. The policy makers should make amendments to realise the pre-service teachers' interaction with the parents and the community, which is essential for us to develop professionally and to deliver effective lectures.

Similarly, SUM wanted the schools/authorities to arrange for "meeting with parents to develop the pre-service teachers' skills."

ANW also perceived that contacting the parents and community was important. ANW suggested a means to achieve this, namely engaging the internship pre-service teachers in assessing children and contacting parents for communicating the assessment reports to them. She also suggested: "Teach teacher candidates how to engage parents in learning and how to communicate with them."

Therefore, it is clear that the pre-service teachers are well-aware of the importance of parents in culminating effective teaching and in improving the students' performance. However, the

education system in the UAE does not have a well-structured system to realise the interaction between the pre-service teachers and the parents as well as with the community.

8) *Requirements for emotional support – make the classroom a safer place*

It is a fact that the pre-service teachers need emotional support from supervisors and cooperating in-service teachers to survive the classroom pressure. The pre-service teachers' stress can be from students' bad behaviour, issues in the classroom, language barriers, etc. Feiman-Nemser (2001) emphasises the importance of supervising instructors in order to provide pre-service teachers with clear guidelines and supervision on how to handle pressure in the classroom as well as on emotional support. In the absence of the afore-mentioned support, the pre-service teacher may perceive the classroom as a hostile place. Further, the teacher's as well as the students' emotions can reciprocate and may affect the teaching process negatively. It was noticed that at least two pre-service teachers had negative perceptions pertaining to this subject. For instance, BUSH said: "Let the students feel safe and enjoying the lesson. Why we should make them frightened and uncomfortable?"

The source of BUSH's negative perception about the classroom may be her supervisor's or cooperating in-service teacher's bad behaviour towards the students. During the quantitative analysis itself, it was noted that some of the pre-service teachers have negative perceptions about the statement "classroom is a safe place". Indeed, for an effective teaching process to ensue, it is necessary to make the students feel that the "classroom is a safe place". This pre-requisite comes under Danielson's pedagogical standard, namely "Organising Spaces for Learning".

Furthermore, the teacher must also feel comfortable. JA's perceptions about field experience shows that the pre-service teachers can also be feel 'embarrassed' due to the bad criticism and harsh comments from cooperating teachers as well as the supervisor. She said:

I hope that the authorities will provide a day for the pre-service teacher with the students alone, without the presence of any other in-service teacher with them, so that he/ she could rely on themselves better and gain self-confidence. Further, the humiliation due to bad criticism can be avoided.

4.3.2 Perceptions of the University Instructors - Regarding the Field Experience Program

4.3.2.1 Positive Perceptions of the University Instructors

Unlike the pre-service teachers, the university instructors showed a lot of positive perceptions about the field experience program. The themes developed included 'chances for collaboration and personal development'. The positive perceptions of the instructors are analysed, classified and discussed below.

1) Chances for collaboration and professional development

Some of the university instructors perceived field experience positively as a means of collaboration and professional development. For example, Dr. AA stated that: "It was great experience and the team was very professional. Assignments of students in their schools went very smoothly. Very supportive when having any request."

Similarly, Dr. FB also considered the field experience training as a tool for professional development and collaboration. Dr. FB enjoyed their contributions toward the professional

development of pre-service teachers to in-service teachers under their supervision. According to Dr. FB:

Prior to joining ZU, I completed field experience as it was required for me to teach and be a school leader in California schools. It was also useful for me once I entered into UAE schools as a school leader. Upon joining ZU, I observed, collaborated with, supported, engaged and provided feedback for the College of Education's field experience program at ZU. Seeing the pre-service teachers' progress and growth over the years makes me happy.

Similarly, Dr. MLM perceived the field experience as a means of personal and professional development because Dr. MLM believed that it is an opportunity for collaboration and transferral of knowledge to the learners. Dr. MLM said:

Our placement program compared with the other programs that I am aware of is long and intensive. I like the TCSIL assignment that they do at the end of their internship. On the personal level, I like to go to schools and meet schools' personnel like teachers and administration as I am very social person. Further, the opportunity I get to transform some of my knowledge experience to the students. I like the progression of the program, from classroom observation, then moving to teach small groups until they reach to teach whole classrooms.

Dr. ZH believed that field experience is a way for self-learning by observing the pre-service teachers' activities in the classroom:

Field experience is of great value to the student teacher as well as the faculty member. I always enjoyed watching my students apply what I was teaching them in class. I think there is no better way to learn than to do it yourself.

According to Dr. AL, field experience programs serve as a means for meeting alumni, getting updated about the recent developments in the education sector and a way for mentors to expand their social circle - which is an important aspect of professional development.

I am happy with current field experience system. I like the challenges and changes that is going on in this field. Like merging systems in the UAE and finding schools placements for our students. I feel I am updated about our education system, and loved my social part by expanding my network and meeting new education atop stakeholders. I like going in schools and see the reality and classrooms strategies that gives me updates about the new curriculums and researches that is going on which I reflect what I observe with my students and use real- classroom cases and scenarios with my students as part of our course's discussion and assessment. Meets our alumni and connect with them, which gives a real motivation for our current pre-service teachers.

Dr. KA expressed his highly positive perception about field experience. She considered the field experience as:

The most beautiful classes that I ever had. I extremely enjoyed teaching all the field experiences courses from practicum 1 till internship courses. I saw how the students applied all what they have learned in real classroom contexts especially in the internship which was the last station for them. I saw all what we have discussed in our classes accomplished in their field experience.

Dr. KA continued to explain her beliefs regarding the benefits of collaboration which evolved during the field experience visits:

Further, lots of collaboration research publications and topics came up from my school visits. Last year I had three published educational

researches collaborated with school mentors that I have known from my visits while observing my students. Also, I like the pre-teachers' enthusiasm before their going to schools. I noticed also the sound learner students get benefit from our students (pre-teachers) as they can interact with fresh and enthusiastic teachers. As you can noticed the positive influenced that they got.

According to research, learning is deeper and more meaningful when it occurs through active participation, through social and contextual encounters, through engaging and through student-owned educational situations. The development of oral communication, self-management and leadership abilities are among the advantages of collaborative learning. Therefore, when university supervisors perceive field experience as a tool for developing collaborations within and outside the institution, it is a positive sign for the UAE education sector.

2) The mentors' willingness to provide emotional and educational support to the pre-service teachers

Some of the university supervisors have highly positive perceptions regarding the support given by the mentors to the pre-service teachers during field experience. According to studies, many pre-service teachers believe that mentors' emotional support is the most important characteristic of the pre-service teacher-mentor relationship. Many mentors also perceive providing support to their student as their duty. For example, Dr. EW had the perception that:

My positive perception regarding the field experience program includes some excellent mentors. When pre-service teachers struggle in class to manage the lessons and with motivation really find their mentors' calling during practicum placements. Some pre-service teachers find

excellent mentors who teach them so much during the semester - more than could ever be gained in the university classroom.

Similarly, Prof. NH described his willingness for supporting pre-service teachers emotionally and technically. Prof. NH said:

I have a rich experience with this program. Working with future teachers and supporting them by supporting them emotionally and professionally is a pleasure to me. I also like the networking that I had with the schools, which always great research topics come up from the real situations. Assessments in practicums and Internship are related to the course's objectives and prepare them to be future teachers.

Dr. KA also believed that it is highly important to help pre-service teachers when needed. She perceived her connection with pre-service teachers as highly pleasurable, which is highly satisfying. Dr. KA never had an inhibition in providing advice to the pre-service teachers and she prepared the discussions and advice for pre-service teachers using her real-life scenarios.

Dr. KA's perceptions about field experience can be summarised as:

I felt really connected and enjoyed every moment spent with my students, I felt worth giving them the advice while they are in their field. As university faculty, when we go to the schools and the educational settings and the young learners' environments added more value to me in personal as well. As, I could relate to all the experiences that I observed and use them as real case scenarios to my other students and use them in my classroom materials preparations. Also, I was using these scenarios as discussion topics and preparation materials for the student teachers who are going to enter the field. It was one of the most interesting, valuable and useful courses I had for me and my student teachers.

The above-discussed scenario may seem contradictory to the one discussed while analysing pre-service teachers' perceptions. However, it is reasonable that some of the university supervisors/mentors are great at their job, where some others are not. Those pre-service teachers who had good mentors enjoyed the support from their mentors while others suffered. Further, each pre-service teacher and university supervisor is a unique individual with different viewpoints. To create specialised teaching strategies and content, pre-service teachers need more than just emotional support. Under such circumstances, the evaluation of pre-service teachers' training according to the program's expectations presents difficulties for mentors. Therefore, different people possessing contradicting perceptions are fairly common. It is also possible that the mentor and the pre-service teacher perceived the same incident in different ways. However, some of the mentors have the perception that mentors do provide emotional and educational support to pre-service teachers during field experience training.

3) Perceptions related to general happiness

Dr. JJ has 20 years of experience in dealing with pre-service teachers during field experience. This included at undergraduate, master's, and doctorate levels. Dr. JJ expressed an overall positive and happy perception about field experience training. According to Dr. JJ:

I have had mostly positive experiences with field experience. Students understanding what the requirements are and completing them. I will talk about two positive experiences. The first one happened in the United States. This pre-service teacher was teaching in middle school and the lesson plans she created were dynamic. She was able to connect mathematics to her students' culture. Awesome lesson plans! The second positive experience took place in the UAE. This pre-service teacher was teaching in grade 1 and used the playground as her

classroom. She took her students outside to allow the children to play and explore mathematics.

Similarly, Dr. RT stated he had a pleasant experience where his students were warmly welcomed by the host institutions. Dr. JJ said:

With practicum - I, I found that the general environment of the school and how the school administration manages and coordinates the visits were very important. All the schools we visited welcomed our students and gave them good overview about the school and its curriculum. The teachers in the classroom also were ready to receive our students in their classes and seemed to be well informed about the field experience program.

Dr. KG has vast experience in female education. She perceived pre-service teachers as the beacon holders of education, who pass the torch of teaching on to the next generation. Dr. KJ shared her perceptions as:

Through my involvement in Female education, I am honored to share my knowledge and experience with novice pre-service teachers. I enjoy observing in school classrooms. I like observing new teaching techniques and seeing new technological advances in action. I like seeing new resources for teaching and learning. I love seeing children learn.

The perceptions and overview of Prof. FA regarding field experience is notable. Prof FA believes that the very best way to learn to be an effective teacher of children is by spending significant time in real-classroom contexts. Since these field experience courses are a key part of pre-service teacher development at all levels, it allows the pre-service teachers to feel, see, hear and even smell what real classrooms are like.

Prof FA said:

I personally enjoyed teaching, mentoring and guiding my students by practice and while they are teaching real children more than watching videos and discussing cases. The grading systems ensures that the pre-services teachers to commit professionally and take it more seriously, as the college noticed that the recent students are entering the profession without commitment nor passion, which affected the teacher quality in the country. Overall, my personal experience it positive and productive and I see it as an important part of any teacher preparation.

4.3.2.2 Negative Perceptions of the University Instructors

Like the pre-service teachers, the university supervisors also had a number of negative perceptions about the field experience program. These included: 1) Lack of motivation among the pre-service teachers, 2) Issues with mentoring, 3) Lack of skills for integrating ICT in online classrooms, 4) Lack of involvement of stakeholders in decision-making, and 5) Other generally negative perceptions. These themes are detailed below.

1) Lack of motivation among the pre-service teachers

Lack of motivation among the pre-service teachers for utilising the field experience to its fullest is the most frequently identified theme among university supervisors' negative perceptions. The lack of motivation among the pre-service teachers in turn can affect the readiness of university supervisors to cooperate with them. The negative perceptions included “no punctuality in the classroom”, “the assignment deadlines are not met”, “lack of motivation to learn pedagogical standards and methods of teaching”, etc. For example, Dr. AA said: “Unmotivated students sometimes set us a challenge especially when the schools decided to make some of the sessions

online.” Similarly, Dr. FB provided her negative perception as: “Seeing teacher candidates complete field experiences when their heart and mind was NOT into becoming a teacher.”

Other complaints from the supervisors about the pre-service teachers’ lack of motivation included poor lesson preparation by teacher candidates, limited or no dialogic teaching by teacher candidates, limited or no resources developed by teacher candidates, lack of creativity by teacher candidates and overly-long and repetitive observation forms to complete as a faculty supervisor. Also, being a faculty supervisor is time-consuming if one is thorough in feeding back on more than one draft of the lesson plan beforehand and giving both oral and written feedback after the lesson observation.

Dr. EW was concerned about the work ethics of the pre-service teachers. He believed that the lack of motivation is the basic reason behind the pre-service teachers not performing in accordance with the ethical and moral values of pedagogy. The students are the ones who suffer ultimately due to the lack of motivation of pre-service teachers to carry out their duties. Dr. EW said:

Teacher candidates sometimes struggle to put in the work ethic needed, they try to negotiate to be with students less, they barely participate at the schools and they don’t gain very much. Sometimes they think about it only for the grade and don’t learn much about teaching or the children.

Similar to the above comments, Prof. VE disclosed his perceptions as: “Pre services (students) sections, some of them are not taking the program seriously which affect the others’ reputations and causing problems with our school partners.”

The comments by Dr. JJ about his negative perceptions regarding the field experience program were notable. He said:

The negative experience took place in the UAE. This student teacher would come to her placement school extremely tired. Her mentor teacher informed me that my pre-service teacher sleeps in the back of the classroom. Sometimes she snores.

Although Dr. JJ has negative perceptions about that particular pre-service teacher, the comments from Dr. ZH provided the possible reason for the pre-service teacher's sleepiness. Dr. ZH stated:

Sometimes I had multiple candidates who were placed in several schools far in distance from each other. I think also sometimes, these scenarios make the teacher candidates who are not interested in becoming teachers to take field experience less seriously.

So, it is possible that the pre-service teachers were physically and mentally exhausted due to the continuous travels and because of the thought they are becoming something that they don't want to become. There are several reasons for this lack of interest in teaching. In UAE, most of the pre-service teachers are female and most of them have traditionally been dictated by religious and cultural norms including a national female dress code. Going into the history of the Emirati females it is evident that those female's choices were restrictive roles of wife and mother at a relatively young age. If a woman wants to work, there are limited choices and one has to be teaching in places close to home like schools where there are no men. However, the UAE's advancements have impacted the Emirati females' educational and professional choices as Emirati Women Reports indicate that the Emirati female labour force exceeded 40% of the total Emirati female population (Buttorff, Welborne & Al-Lawati, 2018). Due to the advances in the UAE, the young Emirati females are free to choose careers other than teaching. Therefore, the

Emirati people prefer careers other than teaching due to the requirement of less qualifications and more attractive salary packages. Although the new generation of Emirati females prefers careers other than teaching, some females are still forced to enter this field as they have no option. As a result, these people don't have any commitment towards the profession; that is why some of the pre-service teachers don't take the field experience training seriously.

2) Issues with mentoring

It was noteworthy that the university supervisors also possessed negative perceptions about the mentors, which is similar to the perceptions of the pre-service teachers.

For instance, Dr. MLM believed that some mentors think that the pre-service teachers can be used as substitute teachers. She identified some mentors as 'inappropriate' for mentoring because these mentors are not supportive of the pre-service teachers. Further, these mentors were not qualified adequately for mentorship. She expressed her perception regarding the field trial as:

We are not selective with our mentors because the university doesn't have the authority to select the mentors who are working with our students. Some of the mentors are not qualified teachers. What I mean by the term qualified - they are not up-to-date, their teaching strategies are weak.

Prof. NHL has identified a potential area of conflict, which he stated as: "Mentor teachers are receiving compensation before completing tasks. Students and supervisors are running after a fee of them! It's a conflict for supervisors to discuss payments."

He continued to narrate his perceptions regarding the mentor's role during the field experience program:

Some of the mentors did not attend the meeting I had with their colleagues and the lead/head admin. Some did not read emails nor have an idea about the deadlines, requirements, procedures etc. I think it is important that mentor teachers have more than 3 years of experience in UAE Schools and only those who wish to be a mentor. Lastly, I think it is important to ask mentor teachers to provide an e-signature that they have READ the practicum handbook and understand the requirements, roles etc. I suggest to involve the mentors in some kind of a training before the start of internship. Access to schools' curriculum documents and resources prior to placement in order to 'hit the ground running.

It is so critical and important that the mentor teachers attend the orientation with the faculty supervisor to make sure they are 100% clear about the requirements, handbooks, policies and procedures. After analysing the perceptions of the pre-service teachers and the university supervisors, it is clear that many of the mentor teachers violate these basic requirements regularly. This has resulted in the generation of a common negative perception in the minds of the pre-service teachers and the university teachers about mentors.

3) Lack of skills for integrating ICT into online classrooms

The field experience is the final stage of the students' studies where they have to apply what they have learned theoretically in their four years to their classroom performance. It is not an easy task when it comes to transforming theory into practice. So, it is understandable that pre-service teachers faulted in their practical tests. However, field experience training can indicate how much the candidate is prepared for performing real-classroom teaching. Many of the

university supervisors showed their concern regarding the pre-service teachers' preparedness for real-life teaching, especially in using ICT during online classes. ICT is an integral part of teaching since the onset of COVID-19.

For example, after monitoring the field experience of many pre-service teachers, Dr. MLM provided her perceptions regarding the preparedness of the pre-service teachers to teach as:

I truly love the field experience coaching in comparison to the other education courses. It gives me an indication of our students' preparedness of teaching after their graduation. During these courses, I realized that we need to update our materials, our courses, our content of the education program of the university. I feel we are not preparing them properly. The teaching I see in the classrooms is not quality teaching.

Dr. MLM further explained her viewpoints as:

I feel like we teach them more theories than real-life teaching. For example, I feel our students lack proper understanding and knowledge of integrate technology in their lessons. even the they had a course called education technology. Another example is whenever I see our student teachers teaching story lessons, they don't follow an educationally sound practices, process, procedures and structures.

4) Lack of involvement of stakeholders in decision-making

In relation to lack of involvement of stakeholders in decision-making, Dr. KA stated:

These courses were not graded, however, in the last three semester a different rule has applied where the college administration decided to make these courses graded rather than pass/fail mode. I was against this application, which I found it has affected the

students' creativity and performance. They were focusing on the grading and paper work more than the classroom performance.

Prof. MA said: "There were a lot of changes during 2017 academic year due to the transition of the operator back then from ADEK to MOE," and Dr. FB commented:

I didn't always agree with decisions that were made (from the COE admin.) regarding field experience. Sometimes I voiced my concerns. It's because of my experience here in UAE schools that I felt some things should have been done differently. Ultimately, for the sake of collegiality and to support the college I obliged and carried out expectations.

Dr. AL stated :

There is no system that obligates the private sectors and the international school to place our pre services teachers in their schools which affect our students' placements. As the government school take is easily with our agreement. We are trying to have more MoU signed between the two sectors, however, the protocols and the process is time consuming and with the lack of the people in the field it will affect the students placement. Although we have a rule and the college notify the schools for not using our student (Pre-Service teachers) as substitute teachers and they have to shadow the mentors. But unfortunately, some schools don't follow and use our students as substitutes, which affected their experience and caused lots of pressure.

In response, Dr. FB said: "Some of our partnership schools allocated/assigned Mentor Teachers that did NOT want to mentor. It came across in their demeanor, disposition and dialogues."

Prof. SA commented:

I remember in one of practicum 2 students that were placed in one of the international schools in silicon oasis where they following British curriculum and all their stuff were British or European and they have big group of diverse students with 300 nationalities. I remember that our students' reactions to that (pre-services teacher) very well that they

are in fear and have mixed feelings and easy to identify from the school students where they perceived them as someone not from the teaching staff that are Emirate which the students' felt as strangers. I had to give some mentor support to ease it for everybody. We had some pre-service teachers who are disheartened and others are really excited to learn from the teaching staff and school mentors. Being culturally responsive and being open with other nationalities and regions in contrary they felt more comfortable in the government schools. I remember, it was a Kinder Garten in Al Warqaa.

5) Other generally negative perceptions

Dr. JJ related his negative experience during field experience:

I will talk about two negative experiences. The first one happed in the United States. A male mathematics pre-service teacher and I met at the internship teacher (female teacher) classroom. The three of us were sitting around a circle table. I introduce myself and my pre-service teacher, and he says 'females should not teach mathematics. We were both asked to leave her room.

The above-mentioned incident can be regarded as a random occurrence and is associated with the beliefs of the person who made the wrong statement. The education system does not need any corrections in such cases.

Similarly, Dr. KG expressed his concern as:

Another negative aspect is the lack of rigor and lack of consistency amongst faculty supervisors in terms of their expectations of teacher candidates. There is also a lack of opportunity as a visiting faculty supervisor to meet with school-based mentor teachers. Finally, I find it impossible to conduct school-based FE research while at the same time being a faculty supervisor in schools. The two roles are not compatible during the same time period.

Dr. RT had negative perceptions regarding online field experience because he believed that the face-to-face mode of teaching (which he mentioned as physical visits to the schools) is superior to the online mode of teaching. Furthermore, as discussed previously, many of the pre-service teachers were not adequately prepared for teaching online due to their lack of knowledge in technology integration. Dr. RT said:

This is my second semester being assigned a practicum course. The first course I facilitated was practicum I. One problem we faced in the last few semesters is the lack of physical school visits because of the covid situation. Instead of visits, students had to watch videos of early childhood classes to base their observations on. It was clear that actual visits were much more effective in giving them an idea of what happens in the classroom. Practicum III students seem more confident with school visits and observations, but are nervous about teaching mini or full lesson as this will be their first time doing so. In my view, this is normal given the situation.

4.4. Data Integration part: How the Perceptions of Pre-service teachers and University Instructors are related?

After the integration of quantitative results and qualitative analysis of the perceptions of the pre-service teachers and the university supervisors, three themes were found to be common between them. These areas include: 1) Issues in online education, 2) Issues with mentoring, and 3) Lack of involvement of stakeholders.

1) Issues in online education

Many of the pre-service teachers showed negative perceptions regarding the ‘compulsory chance to teach in online mode’. These pre-service teachers were worried about their incapability to provide proper suggestions to students online. Further, they battled to manage the classroom online as compared to face-to-face mode. Those pre-service teachers who have undergone training in ‘blended mode’, which consists of both online and face-to-face teaching opportunities, also stated that face-to-face mode of teaching was the best method of classroom practice to improve the pre-service teachers’ inter-personal skills and pedagogical skills. Further, many of the pre-service teachers had the perception that “there is no means for the pre-service teachers to interact with the parents and with the community” during the online mode of teaching. Although the incapability of pre-service teachers to manage classrooms online may be attributed to their inexperience, the university supervisors had different perceptions regarding this scenario. According to the supervisors’ belief, lack of knowledge in technology integration (ICT) is the reason why pre-service teachers failed to manage the classroom online. Further, the university supervisors believed that some of the pre-service teachers lack the ‘motivation’ to learn pedagogical skills, which in turn resulted in their failure. Even if it is agreed that both these points are true, the pre-service teachers’ perceptions regarding the superior nature of face-to-face teaching over the online mode and the pre-service teachers’ complaints regarding the ‘lack of opportunities to discuss the students’ progress with their parents’ needs to be addressed.

2) Issues with mentoring

Another common theme evolved from the qualitative analysis was the issue of mentoring. Most of the pre-service teachers who had provided their perception stated that they want the freedom to select their mentor. The identified negative perceptions of the pre-service teachers include lack of emotional support or technical support from mentors. Further, one of the pre-service

teachers complained that she had conflict with her mentor and the university authorities asked her to ‘adjust’ with it, instead of finding a way to solve the issue. Notably, one of the supervisors complained that the government gives money to the mentors even before the mentor completes his task whereas the supervisors need to make requests for the compensation, which serves as a source of conflict on some occasions. Most importantly, both the pre-service teachers as well as the university supervisors perceived that it is necessary to provide some prior training to the mentors to make them prepared enough for mentoring pre-service teachers. Some of them suggested preparing a list of willing mentors prior to going for pre-service teacher allocation. It is believed that another source of conflict is allocating the pre-service teachers to schools without informing the mentors. Therefore, the policymakers of UAE education should find ways to solve these issues.

3) Lack of involvement of stakeholders in decision-making

Involving the stakeholders and hearing their voice while designing and implementing a new program is essential for successful execution of the program. However, both the pre-service teachers and the university supervisors have negative perceptions regarding their involvement in the education system. For instance, the pre-service teachers complained that they are not allowed to perform lesson planning or are not even involved partly during the lesson planning. Further, no preview of the classes and topics were given to them prior to the instruction, which made the pre-service teachers perform below their actual potential. Similarly, the mentors were not given any prior intimation regarding the allocation of pre-service teachers under their mentorship. Further, the authorities allocated pre-service teachers to mentors who stated that they are not ready for mentoring. This scenario created unnecessary stress and conflict between

the pre-service teachers and mentors. Therefore, the authorities should seriously re-think their style and should make sure that the stakeholders are involved in making important decision.

4.5. Suggestions From the University Instructors

This section does not pertain to the qualitative analysis section. During the personal interviews with the university mentors, the researcher collected valuable suggestions for improving the field experience program in the UAE. Their comments are given below (without any editing or adding researcher's interpretations), with an expectation that these suggestions will reach the policymakers of the UAE education sector. The names of the university supervisors are masked as per the ethical principles of the study.

Dr. AA:

I don't have many suggestions for improvement on the curriculum. However, try to make each section in one school. This will help to avoid the pre-service teachers making long travels during their field experiences and will keep them fresh and motivated during the classroom activities. Further, set a session for all students about the importance of the practicum courses at the beginning, so they will be more motivated.

Dr. FB:

1. Most teacher candidates felt shy to teach subjects in Arabic. They need courses that prepare them to teach content using Arabic as well.
2. Rigorous screening and screening of prospective mentor teachers should happen with faculty and teacher candidate inputs.
3. The duration of field experience for internship should be a full year because this is the basis for teacher candidates to truly become class-room ready teachers with the

necessary skills, pedagogical methods, competencies and confidence to deliver high-quality education to students.

I have tremendous respect for the hard work and diligence of the field experience team. In my opinion field experience is an opportunity for teacher candidates to link theory to practice.

a) to increase manpower, and only allocate faculty to supervise with actual K-12 teaching/leadership experience in the UAE and abroad otherwise they do a disservice to teacher candidates and hinder the development of classroom-ready teachers.

b) field experience should be an office with several elements that drive practicals in ways which are unique to the context of schools here the UAE.

c) provide more resources and time for the field experience office to really develop and implement the field experience program.

Dr. LM:

I would suggest to make innovation in the selection of mentors. We should create mentors' database and hear the faculty feedback and try to recommend the others. Also, give less paper work and assignments to students to do. I believe field experience should be in different educational entities such as ministry of education and not only in schools. I would suggest also exposing our students to educational experiences in NGOs and charity work around the world.

Dr. ZH:

I think teacher candidate placement needs to be mindful of the faculty member location as well as the teacher. The more they are in schools, the better they will be as teachers. They can always have more observation hours and more teaching hours before they reach internship.

Dr. EW:

I wish we could all be in lab schools - I wish I could talk about teaching and then demonstrate it with the teacher candidates. I wish there were a way for faculty supervisors to be embedded in the school so that we know the staff and can meet with the students and their mentors often and to improve practice. Longer days but with breaks with the supervisor during the day. Like - several hours in with students and an hour in class with the supervisor talking and planning.

Prof. NH:

My suggestions for improvement include:

1. Have one mandatory orientation for Mentor Teachers so that we can discuss requirements, expectations and details. Teachers must attend such meetings if they wish to mentor.
2. Improve some aspects of the handbook and require Mentor Teachers sign off that they've received and read it.
3. The attendance was not handled as well as it could have been. The Lead Teacher/Head etc. should cooperate and collaborate with OFE on daily attendance.

4. Induction should be held with OFE, Faculty Supervisor and Teacher Candidates before practicum/internship

5. Mentor Teachers that haven't been with their partnership school (UAE context) at least 3 years may not fully grasp the concept of supporting ESL Emirati teacher candidates. They may have unfair expectations and little understanding of cultural context.

6. Mentor Teachers need to also not apply their country's standards when assessing our teacher candidates rather In TASC standards. I found that some had no idea and did not review our handbook. One mentor told me that a teacher candidate can NOT earn exemplary in practicum III no matter how hard she tried or how excellent she was.

7. Perhaps we can also revise the requirements for faculty supervisors to observe informal and formal lessons in two weeks-time. I had 22 teacher candidates at three different schools.

Dr. KA:

Practicum -I should be graded only. Practicum 2+3 + internship should have pass/fail mode as they are the stages where the teaching is required. Increase the internship periods as rather than 10 weeks we make for two semesters, it can be three days in schools, 2 days debriefing their visits in the university or practicum 1+2 can be combined by adding more everyday visits rather than weekly visits to give it more consistent experience.

Dr. JJ:

I think pre-service teachers need more experience with connecting theory and practice. Most pre-service teachers do not connect or make sense of theory; and how the theory connects to student learning. I think the internship/student teaching should be one complete academic year. The pre-service teacher should be paid (as a year 1 teacher). Attending weekly workshops/professional development should be required. This is similar to a medical students' residency.

Prof. MA:

I really like the current model. I believe that it's very successful. If we have a way to place our teacher candidates with the best teachers in the country that would be great. I'd also love for our students to have an international teaching experience at schools of high quality. The support system needs to be there, inspiration, motivation, and ongoing communication are key for an effective program.

Dr. RT:

Equal distribution between government and private schools. Structure the program in a way where students are given the opportunity to teach starting from their first year in the ECE program. This will give the students ample time to master the art and science of teaching. It will also help them overcome the anxiety and fear of teaching and being observed by mentor teachers and faculty supervisors, which will make them more comfortable and ready for teaching by the time they graduate. Also, facilitate visits from school teachers to the university to meet students and give them workshops or guest lectures (as part of EDC courses lesson plans). This will ensure each student gets more

opportunities to interact with teacher from the field and learn from their various experiences.

Prof. FA:

1. Internship should be only in Outstanding and very good private schools as their last placement. 2. Practicum 1 should be in the students first year 3. Exchange practicum - 1 assessment and make it longer days where they have to live a whole day of a teacher. Structure the program in a way where students are given the opportunity to have longer days to teach starting from their first year in the ECE program. The internship should be more than 10 weeks one full academic year will be more beneficial.

Prof. VE:

Provide the pre-service teachers more time in schools, like full week consecutive days rather than once a week. Going through the students' sections before they enter the major, and having a proper MoU with the schools to accommodate these students to prepare them for the future career.

Dr. AL:

To have a connected platform with the ministry of education that includes the students list like CVS and the security clearance to ease the process and grantee their future jobs. We have the platform and it can be used for this type of connection. More cooperation with the Northern Emirates schools and we as big number of students from these sites. To have more early childhood centers and Nurseries to place the students in. As most of our placements are in KGs and primary schools.

4.6. Summary of the Results

This chapter assessed the perceptions of the pre-service teachers and their university supervisors quantitatively and qualitatively. The pre-service teachers' perceptions regarding their pedagogical skills were assessed using the quantitative survey questionnaire based on a Likert scale. The survey consisted on 83 questions based on the 22 pedagogical standards of the Danielson framework. The quantitative analysis was followed by the qualitative analysis in which the pre-service teachers and the university supervisors provided their perceptions about the field experience program and suggestions for improving it. The qualitative thematic analysis was able to identify several themes and pitfalls in the field experience program.

4.6.1. Pre-service Teachers

In the quantitative analysis, it was revealed that the pre-service teachers have a highly positive perception towards their preparedness for teaching. The pre-service teachers have an overall positive perception regarding their teaching skills and they have a highly positive attitude towards fulfilling the basic requirements of being a good teacher and serving the students and the community. Most of the pre-service teachers perceived the field experience as an opportunity for professional development. They were highly confident about their pedagogical knowledge and they were positive about their skill sets, capacity to serve the students and their own learning processes. However, a small fraction of the participants had either neutral or negative beliefs regarding the field experience and they did not have a clear vision about the pedagogical standards.

The quantitative assessment suggested that there are pitfalls in the UAE pre-service teacher education program because a considerable portion of the pre-service teachers has negative

perceptions regarding the teaching standards like ‘involving the parents and community in the learning process’. Furthermore, some of them had negative perceptions regarding the safety of classrooms and adequacy of classroom settings.

During the qualitative analysis using the data gathered through personal interviews, the researcher looked for reasons for the above-mentioned negative perceptions. Three main reasons were identified for the pre-service teachers’ negative perceptions regarding their field experience. These were: 1) Issues in the online teaching practice: Many of the pre-service teachers were not satisfied with the training and exposure that they get during online teaching. They believed that face-to-face teaching is more important than the online mode of teaching in moulding their pedagogical skills which will help them in the future. Unfortunately, many of them were compelled to teach exclusively in online mode due to COVID-19 restrictions. Further, many of them were not technically prepared for teaching exclusively online; 2) Issues with the university supervisors and school authorities: Many of the pre-service teachers wished that it would be great if they could choose their mentors as well as the school in which they undergo their field experience training. Some of them suggested that if there was a system in university to solve the issues between the pre-service teacher and their mentors, then the unnecessary stress could be avoided. Among the participating pre-service teachers, around 78% had undergone their field experience training in public schools. Notably, many of them were not happy with the teaching atmosphere and facilities provided to them as well as the attitudes of the public-school authorities; 3) Lack of opportunities to interact with the parents and the community: A considerable number of the pre-service teachers felt that there is very less opportunity for them to interact with parents and the community.

4.6.2 University Supervisors

The university supervisors also had an overall positive perception regarding the field experience. The instructors believed that they are efficient in guiding the pre-service teachers in the use of technology in their classrooms, facilitated the communication with students and supported the pre-service teachers emotionally. They believed that many of the pre-service teachers lack the motivation for learning, which is an integral part of being an efficient teacher. Further, the university instructors believed that pre-service teachers are not good at using/integrating technology during teaching. Some of them also identified the source of conflict between the pre-service teachers and their mentors. There is, however, a difference between the ability to use technology and the actual knowledge of technology. Some of the university supervisors believed that pre-service teachers' style of teaching is poor in many cases and they have poor pedagogical knowledge, which can be improved with practical experience.

The common themes between the perceptions of the pre-service teachers and the university instructors include: 1) Issues in online education, 2) Issues with mentoring, and 3) Lack of involvement of stakeholders. To summarise the chapter, evaluating the perceptions of the stakeholders can provide a deeper understanding about the underlying issues. Therefore, the above summarised results are used for drawing the conclusions and thereafter making the suggestions for improvement of the field experience training of pre-service teachers' education programs in the UAE.

Chapter 5 : DISCUSSION AND CONCLUSION

5.1 Overview of the Chapter

The final chapter of this thesis, the conclusion, summarises the key findings of this study and provides suggestions for improvement of the field experience program in the UAE. These suggestions are drawn from analysing the key findings of the study. To start with, a summary of the study is provided, which is followed by a brief description on the key findings of the study. The implications of the current research and recommendations drawn from analysing the results are then discussed. In this section, the key findings of the study are used to back the suggestions made. Thereafter, the strengths and the limitations of the present study are described in detail and this is followed by suggestions for future research in this arena. A concise concluding note is provided in the final section of this chapter, in which the researcher briefly goes through the entire research process and narrates the most important findings of the study. The concluding note denotes the end of the core theoretical and practical parts of the thesis work.

5.2 Summary of the Study

Quality of the field experience is one of the decisive factors in the making of skilled teachers. Understanding the stakeholders' perceptions is an essential step for the successful implementation of any program. Studies about the perceptions of pre-service teachers and instructors, who are the most important stakeholders of the field experience program, are scarce in the UAE education context. Therefore, the aim of the current study was to understand the perceptions of pre-service teachers and instructors about field experience in the UAE

educational system context. The following objectives were framed to guide the researcher in achieving this aim:

1. *To understand the strategies used for field experience in the selected federal university.*
2. *To determine pre-service teachers' perceptions about their field experience.*
3. *To determine instructors' perceptions about field experience.*
4. *To recommend appropriate strategies for implementing field experience effectively.*

The present research work employed Bem's self-perception theory (Bem, 1972) and the Danielson framework for assessing the efficacy of the pre-service teachers' teaching quality (Danielson, 2013). Using these theoretical backgrounds, this research work attempted to collect the perceptions of the pre-service teachers and instructors at a federal university in the UAE. Then, specific research questions were formulated and addressed. The specific research questions addressed in the present research work are given below.

1. *What are pre-service teachers' perceptions about field experience in their college?*
2. *What are instructors' perceptions about field experience in their college?*
3. *How can the experience be enhanced?*
4. *What are the suggestions from the pre-service teachers and instructors on enhance the efficiency of field experience?*

Thereafter, to assess the research questions, a mixed-methods methodology was employed, which consisted of quantitative surveys, followed by qualitative open-ended unstructured interviews. It was planned to address the first research question using quantitative methods, using surveys expressed on a Likert scale. The second, third and fourth questions were explored using a qualitative analysis method, using personal interviews with open-ended questions.

Thereafter, federal universities in the UAE were evaluated for their potential to be served as a study site for the current study. The criteria used for assessment were capacity to serve an adequate sample size and the university authority's and participants' willingness to give permission. After methodical selection and sorting as per standard research guidelines, the sample size of the present research work consisted of 113 pre-service teachers and 15 instructors, whom provided their perceptions about field experience. Further, their suggestions for improving the program were also collected. The surveys and interviews were conducted as per the international ethical guidelines.

After analysing the data, it was realised that most of the participating pre-service teachers and instructors possessed positive perceptions about the field experience program. However, some key areas were identified and marked as 'to be improved' because a significant fraction of the pre-service teachers and instructors showed negative perceptions about these areas. The crucial drawbacks identified were discussed and suggestions for rectification were provided in the present study. Based on the results, the present study made proposals for improving field experience programs in UAE, which can be optimised further to provide world-class training to pre-service teachers in the UAE before they graduate as certified teachers.

5.3 Key Findings

This chapter of the thesis offers practical solutions towards successfully implementing the research findings and conclusions. Therefore, the current section aims to discuss the implications of the research work so as to address and solve the research questions scientifically. A large amount of data and findings evolved through this research and hence they are categorised as key issues and less common issues. The key findings pertaining to the research

questions of the present study are given below, and represent the recurring beliefs, themes and suggestions from the data.

5.3.1 What are the pre-service teachers' overall perceptions regarding their pedagogy?

From the results of the study, it is clear that the pre-service teachers at the federal university in the UAE have an overall positive perception regarding the pedagogical standards assessed in the present study using the Danielson framework. Only 1% of the Likert scale reactions evolved as negative perceptions, whereas 93.3% of these reactions were positive. This indicates that those who chose to become teachers did it voluntarily, not due to external pressure. Society views teaching as a noble profession and the teachers receive a lot of respect in society. They can inspire, influence, and shape the future generations. Teaching and learning go hand in hand and not only the students' but also the teachers' knowledge and personality are also improved through teaching. These factors influence the person's choice when selecting a career in teaching.

Though the present study was conducted during the stressful environment of COVID-19, the pre-service teachers perceptions remained mostly positive. The results of our study are in agreement with recent studies that assessed perceptions of the pre-service teachers in UAE and other parts of the world. For instance, the study of Anderson, England, and Barber (2022) conducted in COVID-19 background in the UAE context, showed mostly positive perceptions from the pre-service teachers. The participants had highly positive perceptions regarding teaching and learning, and despite the COVID-19 restrictions, the participants preferred face-to-face classes over online teaching. The authors suggests that this is due to the participants considered face-to-face classes more effective and because of the strong feeling of

belongingness and connectedness to the physical campus. However, the study of Mohebi and Meda (2021) narrates slightly different results. The perceptions of pre-service teachers belonging to a federal university in the UAE was assessed in this study. Highly positive perceptions towards online teaching medium were reported by the researchers and notably, the pre-service teachers considered online field experience as a milestone of achievement for them. Like our study, the pre-service teachers in this study exhibited positive perceptions towards their pedagogy.

A study Filiz and Durnali (2019) reported slightly different results, wherein the perceptions and experiences of the pre-service teachers regarding the pedagogical formation training were assessed qualitatively. The authors also assessed the strengths and weaknesses of the training program and evaluated whether these experiences helped the pre-service teachers to improve their personal and professional skills. Most of the pre-service teachers believed that the internship training would be useful for their teaching career in the future. However, the pre-service teachers were not happy with regards to the length of the program - many of them suggested that more lengthy internship training would be more useful. Furthermore, many of the pre-service teachers complained about the timing of the lessons, which were scheduled late in the evening. After the tiring day-time work, pre-service teachers stated they were not able to give adequate attentiveness during these classes. Some of the pre-service teachers complained about the crowdedness of the classes whereas complaints about the attitudes of the supervisors and their indifferent behaviour towards the pre-service teachers were also reported. Lastly, the pre-service teachers did not find theoretical training given in the classes as useful because the lessons delivered were almost repeating/similar topics. Therefore, the authors concluded that

the pre-service teachers were not satisfied with the overall quality of the training; however, they believed that the operability was adequate.

The results of the present study are in line with the studies of Khoshnevisan and Rashtchi (2021), in which the pre-service teachers perceived the field experience training as a crucial step for enhancing their teaching practices. The participants of this study were ‘English for Speakers of Other Languages (ESOL)’ pre-service teachers. The pre-service teachers perceived the field experience as a catalyst, which enabled the professional growth and learning process. Although some of the ESOL pre-service teachers had pre-conceived beliefs/some prejudice about the field experience training at the beginning of the program, their perceptions about the field experience became positive once they completed the training. Many of them viewed the field experience as a means to learn new professional skills and culturally sensitive strategies which are essential for their future teaching career. The authors concluded that although the ESOL pre-service teachers were challenged during the initial phases of the training due to the requirements for bilingualism, they were able to adapt to the requirements of the program very fast. The background of this study is like the present study because the pre-service teachers participated in the present study were facing similar challenges due to the cultural diversity of the global classrooms in the UAE. Further, the requirement to teach in English was also a challenge for many of them because their mother tongue is Arabic. Even after facing many such challenges, most of the pre-service teacher participants in the present study had a positive perception about their field experience. Only a few of them were disheartened by the afore-mentioned challenges.

Similarly, the research work by Hamilton and Margot (2019) reported that pre-service teachers involved in community-based field experiences with sixth-grade students perceived the chance to teach in a ‘unique setting’ as a valuable opportunity. The community-based setting was

unique in such a way that the school in which the pre-service teachers taught was located within a public museum. This setting enabled the pre-service teachers to get different perspectives and provided them with regular opportunities to learn how to use learning and teaching by exploring and examining the museum's exhibits, something not available in traditional school settings. The pre-service teachers perceived this unique opportunity as a tool to expand their understanding of pedagogical approaches. They provided highly positive feedback about the program, with one of the participants stating:

I really like that I get to work with a small group of students. It's a fresh experience on teaching that I don't get in my [pre-student teaching] placement. It allows me to get to know the students better because I have more time with each individual student. I also appreciate that we are able to use the [museum] exhibits to enrich their experiences" (Hamilton & Margot, 2019).

Therefore, community-based field experiences, where available, should be implemented because these can serve as an important module for improving the pre-service teachers' professional skills, cultural understanding and learning.

5.3.2 The pre-service teachers' perceptions about 'Applying Knowledge of Content and Pedagogy'

The frame of information and skill sets that are pertinent to a given subject are referred to as content knowledge, whereas pedagogy includes particular instructional methods and tactics that are used to transfer the teachers' knowledge to the students while learning. The participating pre-service teachers had highly positive perceptions about the Danielson Framework domain 1 – 'Applying knowledge of content and pedagogy'. Notably, the pre-service teachers believed that they have sufficient knowledge regarding the links between the topics they teach and know

the concepts deeply enough to ensure a proper teaching-learning process. None of the pre-service teachers have a negative perception about the usage of different teaching methods and teaching aids in ensuring the effective transfer of knowledge to the learners. This scenario is good for any education system because the pre-service teachers are the future beacon holders of education.

A recent study by Qiu et al., (2022) assessed the perceptions of qualified Chinese language teachers regarding the integration of ‘technological pedagogical content knowledge (TPACK)’ during the Chinese language teaching. This exploratory study assessed included 286 pre-service ‘teaching Chinese as a second language (TCSL)’ teachers. Notably, this study states that the participants were unable to distinguish between technological pedagogical knowledge (TPK) and technological content knowledge (TCK). Further, they were least confident on applying their technological knowledge in the classrooms. Though the perceptions of pre-service teachers in the current study regarding ‘Applying knowledge of content and pedagogy’ is found to be positive, we have not evaluated the reality of their claims through a detailed assessment. Further, many of the respondents reported issues related to the integration of ICT during online classes. This indicates that the real picture may not be same as the perceptions of the pre-service teachers participated in this study. A study by Mohebi and Helder (2019) in the UAE context suggests that the skills of pre-service teachers in the UAE in applying TPACK models in the classroom are dependent on the specialisation. The pre-service teachers from the ‘science’ background were more knowledgeable in technology integration, whereas pre-service teachers from a non-science background were not adequately equipped for ICT and TPACK integration in classrooms. Most of the pre-service teachers participated in the current study are from the

specialisation ‘Early childhood education’. Therefore, a detailed assessment could be useful in this regard.

5.3.3 Pre-service teachers’ beliefs regarding ‘Affirmation of Positive Student Behaviour’

In the mixed-culture classrooms of the UAE, the instructors need to focus on affirming positive student behaviour. The majority of the pre-service teachers stated that they are cognisant of the appropriate methods to correct the students’ misbehaviour. Furthermore, most of them perceived that using indirect methods to monitor the students’ behaviour and taking preventive measures can help to prevent misbehaviour. Only 1.6% of the pre-service teachers did not follow these guidelines - a great sign of proper pedagogical practice in UAE classrooms with regards to shaping the students’ behaviour.

Students’ bad behaviour was considered as a source of stress for the teachers by many researchers. For instance, Mapfumo et al. (2012) reported that pre-service teachers perceived dealing with difficult students as the most overwhelming source of stress during their teaching practice. Female pre-service teachers were the most ill-affected; where the majority of female pre-service teachers perceived that they had trouble controlling their classrooms because of students’ misbehaviour. Male learners tended to disrespect female pre-service teachers more frequently than they did male pre-service teachers. One of the participants in this study commented that: “The boys seem to bother us with their behaviour much more than they trouble male teachers. They have no respect for us.”

This scenario was primarily because the headmasters of the host institutes introduced the female pre-service teachers as ‘student teachers’ to the students when they met the learners for the first time. This demoralising introduction by the headmasters led the students to think that the pre-

service teachers did not have any authority, which gave them the courage to disrespect the pre-service teachers in and outside the classroom. Furthermore, some pre-service teachers believed that their mentors and other school administrators were more focused on meeting deadlines and completing tasks than on assisting the pre-service teachers in developing their professional skills. One of the participants of the study stated that:

You get the impression that other teachers including the senior teachers also have to bear the problem of misbehaviour by the boys in the various schools. It is like it's nothing strange to have these boys misbehaving.

The above-mentioned scenario explains how disheartening the students' misbehaviour can be for the pre-service teachers. Several studies have reported that culturally and ethically conflicting behaviour between the students and the teachers is common in the mixed culture and mixed language classrooms of the UAE. The common issues reported in the UAE classrooms include: students entering and leaving the classroom without the teacher's permission, being late for or absent from class, disrespecting teachers and coming to class without the right materials; students' addiction to social networks sites (which they used for both educational and non-educational aspects); verbal abuse by the teachers and some teachers were reported to harass the students physically and mentally (Nazzal, 2015; Ahmed, 2016; Al Ramahi, 2018; Alkaabi, Albion & Redmond, 2017; Zhu et al., 2022). In such cases, the pre-service teachers may find it difficult to handle the scenario. Therefore, these scenarios may be the reason behind those pre-service teachers' perceptions. Only through further real classroom experiences can the pre-service teachers become skilled enough to adapt to the tricky classroom situations and manage such scenarios.

5.3.4 Need for pre-service teachers' training programs in 'Maintaining Purposeful Environments in the Classroom'

The quantitative analysis of the pre-service teachers' perceptions revealed that 10% of the pre-service teachers participating in the present study did not have a clear vision regarding the need for maintaining focused learning environments in the classroom. In the quantitative study, some pre-service teachers exhibited the perception that 'classroom is not a safe place'. Further, they have negative perceptions regarding students' participation in small group work. Managing students' group work and proper usage of resources requires a skilled instructor. Therefore, the authorities should consider providing proper training to the pre-service teachers with negative perceptions to improve their skills for managing students' group activities-based learning.

Although the afore-mentioned assumptions cannot be confirmed without a proper in-person interview/enquiry with the concerned pre-service teachers about the reason for their negative response, there are previous studies in support with the researcher's assumption. Research by Ibrahim, Al-Kaabi and El-Zaatari (2013) showed that the main barriers to educational reform in the UAE are cultural barriers and a lack of appropriate English proficiency. Their study looked at the organisational, psychological, personal, school-culture-related and teacher resistance to educational change in government schools in the UAE. The teachers perceived the requirements for constant changes as being forced, which made them feel 'exhausted'. Although the teachers accepted the fact that change was a must, they stated that the changes should be acceptable to the UAE culture.

For example, many pre-service teachers may find it difficult to adjust to cultural differences in students' behaviour. Although it may sound simple to adjust to different cultures, the behavioral differences can induce misunderstandings and can result in negative perceptions. According to

Bezzina (2006), maintaining classroom discipline is the most difficult aspect of teaching. The classroom, behaviour, responsibilities of student teachers and the school environment, according to Koretz (2008), all have a significant impact on the effectiveness of student teaching. Hill, Kapitula and Umland (2011) supported the afore-mentioned idea by emphasising the discourse surrounding student behaviour, teaching opportunities and the realities of school environments because these factors have a significant impact on the effectiveness of instruction.

Another important factor to consider under these stressful scenarios is the pre-service teachers' desire for support from co-working teachers and authorities during their field experience training, which makes them feel that the classroom is a safe place. The pre-service teachers need two essential contributions from the school in order to negotiate the problems that arise on a regular basis: emotional support and classroom management support. The senior teachers' emotional support is the most crucial factor in the professional growth of pre-service teachers (Becker et al., 2014; Becker, Waldis & Staub, 2019). Becker et al. (2014) evaluated the relationship between the teachers' emotions in the class, their teaching style and the students' emotions in the class. It was found that for effective teaching, the teachers' emotions have similar importance as compared to the students' emotions. The authors suggested that the teachers' emotions can be used as a predicting factor for the students' emotions in the classroom. The mechanism of the aforesaid emotional crossover between the teacher and the student can be verbal or non-verbal. For instance, if the teacher is angry or frustrated, their mood swings are reflected in their instruction style, which in turn fills the students' minds with fear of indifferent behaviour from the teacher. Consequently, the students refrained from asking the teacher questions regarding the lesson and poor teaching-learning process ensued. In the same fashion, the students' bad behaviour in the classroom or lack of motivation to learn can also negatively

influence the teacher's mood. Similarly, lack of support from the cooperating teachers (CTs) can also affect the pre-service teachers negatively. The pre-service teachers often expect the experienced cooperating classroom teachers to act as 'observers' who can provide valuable feedback to pre-service teachers regarding their classroom management and instruction during the field experience program. This feedback and advice from the cooperating teachers is crucial for the professional development of the pre-service teachers (Becker, Waldis & Staub, 2019). When such support is not realised, the pre-service teachers may perceive the teaching atmosphere in those schools as 'unreceptive'.

According to Feiman-Nemser (2001), the pre-service teachers expect support from their mentors and cooperating teachers in the form of advice, materials that aid teaching and emotional support. Further, just providing moral support is not enough for transforming the pre-service teachers into efficient in-service teachers. The mentors/supervisors should understand that the pre-service teachers are active learners as well. Therefore, implementing induction programs that require high standards, without addressing the immediate issues and need for teachers' professional development will only help to increase the pre-service teachers' stress. In such scenarios, the pre-service teachers may also require emotional support from their supervisors and cooperating teachers. However, not all supervisors are good at providing the emotional support to pre-service teachers and in enabling their professional development. Therefore, in the present study it is important to assess what made some of the pre-service teachers perceive students' classroom behaviour and/or classroom management in a negative way.

5.3.5 Pre-service teachers' perceptions about 'Engaging Families and Communities'

Notably, the Danielson framework standard entitled 'engaging the families and communities in the learning process' received the highest number of negative reactions from the pre-service teachers. It was noted that the pre-service teachers have negative perceptions about "volunteering in school events and projects", "providing information to parents about the instruction program and the students' progress" and "engaging parents in helping the students to undertake projects". Involving the parents, families and community in the learning process is regarded as an essential measure in improving the quality and efficacy of education.

Indeed, involving the community and families in the learning process can improve the quality of education. Once the families are involved in the education process, they take the initiative to actively support their children's growth and learning through family-school-community partnership, which is a shared responsibility and reciprocal process between schools, community-based organisations and families. Furthermore, the parents are listened to and are provided with the resources they need to actively participate in their children's education (Rodríguez & Villarreal, 2002; Ahmad, 2013). Furthermore, for improving the students' learning their parents' voices need to be heard and the parents should be provided with the resources they need to actively participate in their children's education (Rodríguez & Villarreal, 2002; Ahmad, 2013).

Unfortunately, around 20% of the pre-service teachers participated in the present study had non-positive perceptions to the above-mentioned requirements. The qualitative analysis of the results revealed that it is not just the pre-service teachers' fault, but factors like the online teaching style (due to COVID-19), lack of support from the school authorities/mentors and lack of curriculum

modules to ensure parent-teacher interactions prevented these pre-service teachers from doing so. During the face-to-face interviews, many of the pre-service teachers revealed their concerns regarding ‘lack of opportunities to interact with the parents/community’.

Interestingly, most of the pre-service teachers reported to contribute towards the culture of the school by getting involved in the identification of underlying problems and taking positive action to correct it. So, it is unclear what prevents the pre-service teachers from interacting with the students’ parents and community, yet they were performing well inside the school community. One possible reason for this may be due to the cultural style of the Arab world, where females generally avoid interaction with outsiders (Khan, 2013). A study by Moosa, Karabenick and Adams (2001) revealed that Arab parents view education of their children as very important, and are willing to help them while learning if adequate guidance is provided by the school authorities. However, the interactions between the parent and the school authorities were very low in number. This scenario was due to the reason that most of the parents viewed the school as the final authority and therefore the parents were reluctant to ask questions regarding their children’s education. Therefore, it is possible that at least some of the pre-service teachers may consider the school community as family whereas they have difficulty in interacting with parents/general community because they perceive them as outsiders. Furthermore, the pre-service teachers have the perception that their pedagogical skills are perfect and therefore they do not need the help of others for effective teaching. This scenario can also contribute to the lack of willingness to interact with the students’ parents.

Since these pre-service teachers are supposed to become in-service teachers in the near future, the authorities in the UAE education sector should take necessary measures to ensure the pre-

service teachers' interactions with parents/community. Otherwise, attaining the desired results may become a difficult task in UAE education.

5.3.6 Pre-service teachers' perceptions about 'Growing and Developing Professionally'

Since the pursuit of one inspires the other, personal and professional progress are closely related. Professional development focuses on acquiring new knowledge and abilities to improve both one's present job, and also enhances getting better opportunities in the future. The pre-service teachers in the present study had highly positive perceptions regarding personal and professional growth - a pre-requisite for transforming from the novice pre-service teacher to efficient in-service teachers. None of them possessed a negative perception about these two pre-requisites. Most of the participants believed that it is very important to seize all available opportunities for professional development and to accept good criticism and feedback from cooperating teachers and supervisors to improve their teaching skills.

A comparative study conducted by Shaukat, Vishnumolakala and Alghamdi (2020) on science teachers' perceptions of personal science teaching efficacy beliefs revealed that teachers from the UAE have the lowest scores with regards to their science teaching efficiency. This study included in-service teachers from three Islamic countries – Kingdom of Saudi Arabia, Pakistan and the UAE. Furthermore, there is a gender-wise difference as well in teachers' self-belief. In-service teachers in the UAE have the lowest scores on beliefs about their own ability to be an effective science teacher. The teachers from Saudi Arabia have the highest scores followed by teachers from Pakistan. However, the authors did not account for the fact that the UAE classrooms are culturally much more diverse as compared to other two Islamic nations. This means that in UAE classrooms, both the teachers and learners have different nationalities, with

different cultures and language styles, which make the teaching-learning process and classroom environments in the UAE much more complicated and challenging for teachers.

Moore-Jones (2014), who has taught in culturally different countries like Taiwan, Thailand, Japan, Czech Republic, Spain, France, Swaziland, Zimbabwe, Turkey, Poland and the UAE, stated that the cultural diversity and associated challenge for adjusting the teaching methods is the highest in UAE classrooms. This scenario might have negatively influenced the confidence of the UAE science teachers to teach curriculum content. The study of Shaukat, Vishnumolakala and Alghamdi (2020) is in accordance with the study by McKinnon, Moussa-Inaty and Barza (2014), which reported a much lower sense of self-perceived science teaching efficacy among the culturally foreign teachers in the UAE, as compared to other studies using the same tool - Science Teaching Efficacy Belief Instrument (STEBI). Therefore, the authorities of UAE may consider assessing and making necessary amendments to improve the efficacy of the in-service science teachers in the UAE. However, the present study shows results similar to the studies stating that pre-service teachers have a highly positive perception about their pedagogical skills and their preparedness for teaching in real life.

Language can be one major barrier in the pre-service teachers' professional development in the UAE. Many education reforms in the Arab world have preferred English as an important medium of education in addition to the native Arabic language. Similarly, English is an important medium for teaching in UAE classrooms as well because only a global language like English can realise the language requirements of the UAE classrooms, which have multi-cultural and multi-linguistic teachers and learners (UNDP & Al-Maktoum, 2012). As a result, the teachers in the UAE classrooms are often required to deliver their lectures in English. Interestingly, the native Arab pre-service teachers' claims regarding 'possessing adequate skills

in written and spoken English’ may not necessarily be ‘real’ in many cases. For instance, Tibi et al. (2016) reported that the native Emirati pre-service teachers’ claims about their competency in English were not ‘real’ when their practical application skills of English language were tested. Although the pre-service teachers conducted English classes in their elementary school years, their Arabic and English learning was based on skills-based language teaching, which included little or no practical and focused applications. Furthermore, the pre-service teachers did not have a clear vision regarding why improving their proficiency in English is important. As a result, they did not perform English reading and writing practice outside of the classroom, leading to inadequate teaching capabilities.

The results of the research work by Litzenberg (2013) supports the afore-mentioned study. Since English has become the default language of global communication, the pre-service teachers need to address the requirements of fluently speaking and error-free writing in English, at least before their classroom teaching during their field experience. This requirement poses a big challenge for the non-native English-speaking pre-service teachers. Therefore, teacher training programs need to prepare pre-service teachers to deal with the challenge of addressing the changing global linguistic landscape and to help them develop professionally.

5.3.7 The pre-service teachers’ efficacy in technology integration and classroom management during online teaching

One of the themes that evolved during the qualitative analysis of pre-service teachers’ perceptions includes the challenges faced by them during teaching ‘online’. Many of the pre-service teachers who taught online stated that they were not fully happy with the field experience training obtained through the online mode. Although the pre-service teachers may have to teach in the face-to-face mode in the future, online teaching is rapidly evolving as an important

medium of instruction in recent times. Integration of ICT is an essential skill for online teaching and classroom management.

Numerous teacher preparation programs resorted to online instruction during the pandemic to prepare the pre-service teachers for getting their in-service teacher license. Since many early childhood education centres were closed during the pandemic, the pre-service teachers were unable to get classroom practice with children, which left them with little options to complete their practicum requirements. However, the rapid development of ICT and online teaching platforms along with their ease in terms of time convenience, accessibility at most of the locations, ability to control the pace of learning and affordability of the online teaching platform (Hill, 2021) enabled the pre-service teachers and in-service teachers to continue their endeavours.

Face-to-face instruction is very different from online instruction. Integration of technology is essential in the online classroom to facilitate communication between the teacher and students as well as between the students. Therefore, the teachers must be skilled enough at using technological resources effectively in the virtual classroom to support efficient teaching. The scenario is different in face-to-face classes because technology is not essential. Therefore, online teachers need to be well-versed in pedagogy, teaching content and technology in order to successfully integrate all three in their virtual classrooms (Cirillo et al., 2020).

Since education involves a great deal of interpersonal connection between the teacher and learners, this condition poses a great challenge for remote learning platforms because the platform must permit meaningful two-way communication between students and teachers. Therefore, utilising the locally available and affordable technologies, with which the teachers

and students are familiar, may enable effective communication. Further, in the remote learning process, parents are to be considered as crucial collaborators with educators. It is impossible to mitigate some of the drawbacks of online learning without proper parental involvement, especially with regards to engaging toddlers and young students (Munoz-Najar et al., 2021). Therefore, taking measures that give parents direction and the resources they need to support students must be done as nations move toward more regularly implementing online as well as blended learning models. In the COVID-19 era, a dynamic ecosystem of collaboration is required in the education sector to efficiently coordinate various stakeholders and to ensure the standard of the overall learning experience.

Due to various reasons, the online mode of teaching can be very challenging for the pre-service teachers, while it can be equally beneficial for them when considering the chances for practically integrating and applying their knowledge in the area of ICT. The reports from the study conducted by World Bank revealed how remote learning during the COVID-19 lockdown affected various stakeholders (Munoz-Najar et al., 2021). This report states that the availability of technology is a requirement but cannot be regarded as a sufficient condition for effective remote learning. Technology integration in education has been essential during COVID-19 for ensuring that learning continued despite the lockdown at the schools, thereby creating new options for delivering education on a large scale. However, the impact of technology on education continues to be a challenge because teachers are more important than ever due to the unavailability of face-to-face teaching mode in the COVID-19 scenario. Teachers play a crucial role regardless of the type of learning mode or available technology. This implies that if the teachers lack adequate pedagogical skills, then the medium of teaching is irrelevant. Therefore, the pre-service and in-service teachers' professional development shall be regarded as key,

irrespective of the teaching mode. Indeed COVID-19 necessitated the creation of pedagogical and digital tools to facilitate effective instruction, both face-to-face and online.

In a recent study, Jin (2022) investigated pre-service teachers' online teaching experiences during the pandemic. Jin (2022) assessed the pre-service teachers' family reflection papers, lesson reflection papers, teaching videos, eBooks and teaching movies using the constant comparative analysis method, used by the pre-service teachers for their practicum. This study pointed out the fact that the pre-service teachers were not able to monitor the children's learning processes properly and they had difficulty in keeping the learners actively engaged and picking the right time to frame their learning process. However, the pre-service teachers were able to overcome the difficulties of online teaching by using various techniques like modeling a child-centred approach, thereby reflecting their pedagogical resilience.

Similarly, Hojeij et al. (2021) studied the advantages of a face-to-face teaching process over the online mode, as well as how to prepare the pre-service teachers for this new environment in the UAE. The researchers evaluated how the pre-service teachers felt about their virtual practicum experience during the COVID-19 pandemic. In addition, the effectiveness of the virtual practicum, as well as how it affects the development of pre-service teachers' instructional strategies, classroom management abilities and knowledge of online resources were also assessed in the study. The overall responses from pre-service teachers showed that they had concerns about the virtual field experience at the beginning of the course; however, they adapted very quickly to the new challenge and enjoyed taking part in a novel experience. They reported that the virtual field experience was a fruitful endeavour because they believed that it assisted in their professional and personal growth. Further, according to pre-service teachers, the online virtual experience improved their methods and techniques for teaching. Notably, the pre-service

teachers acknowledged that their ability to design an online lesson plan, raising students' capacity of analysis, identifying and supporting students' academic needs and increasing students' motivation and engagement were the four main areas that were most improved in their teaching pedagogies.

From the above studies it is clear that in order to support pre-service teachers and boost their engagement with online teaching, the role of an expert online supervisor/mentor is essential. Pre-service teachers can virtually observe their mentors in such a setting to learn how the mentor is interacting with the students and monitoring the students' progress. Through this kind of cognitive training preparation, the pre-service teacher can become great in-service teachers in a virtual setting as opposed to the traditional classroom (Luo, Sickel & Cheng, 2017).

Mohebi and Meda (2020) assessed how the COVID-19 global pandemic forced the pre-service teachers from the UAE to complete field experience virtually and how technology integration into the curriculum is important in this scenario. This study is of great importance because it was concerned about the pre-service teachers' struggles in early childhood education - a scenario similar to the present study. Also, in the present study, around 80% of the participants were from the specialisation of 'early childhood education'. It is always difficult to engage and manage toddlers and younger students online as compared to students from upper-level classes. Indeed, Mohebi and Meda (2020) assessed how the different stakeholders of the system, including young children, families, pre-service teachers and university faculty, perceived the online teaching system. The goal of this study was to investigate how the pre-service teachers and supervisors perceived the challenge of working with young children in the online mode. This qualitative study on the virtual field experiences of the stakeholders brought out three major themes. The pre-service teachers and supervisors were concerned about: a) incorporating

technology into lesson planning; (b) addressing the issues with classroom management through an online mode; and (c) expanding the pedagogical skills and techniques. The authors concluded that virtual field experience can be regarded as a milestone of achievement for the UAE education sector because the integration of technology into classrooms is one of the major goals of the UAE education policy. Hence, the COVID-19 pandemic-enforced virtual field experience made the pre-service teachers and supervisors learn the required technologies and to implement the same during online classes. Although there are many shortcomings in this online teaching mode like engaging the children and effectively arranging the classrooms/learning process, one has to consider the fact that virtual field experience helped to improve the technology integration in the UAE education sector.

Sulistyawati, Adams and Laksmiwati (2021) studied the readiness of the pre-service teachers for teaching through online platforms. The COVID-19 pandemic's world-wide spread forced educational institutions to reconsider how they carry out their training initiatives. Due to the compelled transition to e-learning modes, new strategies for teaching and learning became the need of the hour. Although many institutions have successfully transformed their teaching-learning process to e-learning modes, there are still concerns regarding the readiness of pre-service teachers and their level of participation in an online learning model of education. This study conducted a Differential Item Functioning (DIF) analysis on a sample of 285 pre-service teachers to specifically evaluate pre-service teachers' readiness and engagement for online learning based on their gender and age. Their findings show that during the COVID-19 pandemic in Indonesia, pre-service teachers were not prepared for online learning. However, the pre-service teachers were actively participating in the online learning process. Notably this study revealed that pre-service teachers' preparation for online learning and involvement in

online learning varied by their ages and genders. The female pre-service teachers put more effort into the online learning and were more interested in the online learning process than male pre-service teachers. Female pre-service teachers performed slightly better than male pre-service teachers in age-wise comparison as well. Furthermore, this study reported that only 12% of the pre-service teachers were highly engaged in online learning whereas 14% of pre-service teachers had little to no engagement during online learning. Around 70% of pre-service teachers were moderately engaged. This scenario is a serious concern because engaging the class is of great importance in an effective teaching-learning process.

The pre-service teachers from the science field were most widely affected due to the shift in the learning process from face-to-face to an online mode. This scenario was due to the fact that science education requires more hands-on practical sessions to prepare the pre-service teachers completely. Erumit et al. (2021) reported that the pre-service teachers were not fully accustomed to the online learning process and were faced with a lot of anxiety when face-to-face instruction was replaced with online instruction during the COVID-19 pandemic. This study evaluated the pre-service teachers' perceptions and concerns about studying science courses online during the COVID-19 lockdown. These pre-service teachers were enrolled in seven distinct science and science education courses. Online questionnaires were used to gather the data, which was then subjected to deductive and inductive content analysis before and after online learning. Consequently, Erumit et al. (2021) were able to come up with six distinct themes representing the pre-service teachers' perceptions, including concerns, hopes, chances, threats, drives and interests. The findings showed that the pre-service teachers of science and science education courses initially had a wide range of expectations as well as concerns about the opportunities in the online learning process. Majority of the pre-service teachers described limitations and

challenges that included the difficulty in comprehending online courses that involve math and equations, the inadequacy of online education for practical applications in science, the lack of healthy interaction encouraged by online education and technological interruptions. Further, a lack of classroom atmosphere, not being familiar with online education and language and cultural barriers were also mentioned by some of the pre-service teachers. Interestingly, many of the pre-service teachers had the perception that online science education was “not as effective as face-to-face education.” Their study concluded that most of the pre-service teachers in the science and science education field have the experience and opinion that face-to-face instruction offers more opportunities for hands-on learning. Being worn out by too much homework was another important theme that emerged from the negative category of interest and motivation. The pre-service teachers were unable to focus on their coursework as a result of the burden of too much homework/too many assignments. Some pre-service teachers believed that the supervisors gave more homework than they would in face-to-face instruction and that the amount of homework was occasionally overwhelming. Furthermore, the pandemic-related uncertainties had a profound impact on the motivation of the pre-service teachers.

Since the pre-service teachers participated in the present study could also have faced similar challenges during the COVID-19 pandemic, it is important to understand the possible challenges and concerns they faced. Therefore, the present study tried to understand and analyse the perceptions of the pre-service teachers who had their field experience through online learning mode and blended mode, considering the above studies.

5.3.8 Lack of adequate teaching and interacting opportunities

Another negative aspect of the field experience program that the pre-service teachers identified was its short duration. As per the curriculum, the pre-service teachers are mere observers most of the time. The schools provide the pre-service teachers with the real classroom teaching opportunity on Fridays, which are half-days in the UAE education setup. Therefore, there are fewer chances for real classroom teaching for the pre-service teachers in the UAE. Consequently, one of the most common themes revealed by pre-service teachers' perceptions regarding field experience was "Give us more lessons to teach". The abovementioned scenario justifies the pre-service teachers' call for extending the field experience program and indicates that the present curriculum fails to provide the pre-service teachers enough classroom teaching experience.

The Danielson's framework classifies the 22 pedagogical standards in to 4 major domains (Danielson, 2013). A recent study used 16 out of 22 standards from the Danielson's framework belonging to 3 domains namely -planning and preparation, classroom environment, and instruction, to evaluate the EFL pre-service teachers' teaching proficiency in Thailand (Kwangsawad, 2020). Based on the performance, four levels were set. They were - unsatisfactory, basic, proficient, and distinguished. The results of this study indicates that most of the pre-service teacher's performances were 'basic' and only a few exhibited 'distinguished' teaching capabilities. One of the main reasons for this lack of 'proficient' and 'distinguished' pre-service teachers was the lack of adequate opportunities to teach in the real classroom (face-to-face) and the lack of opportunities to assist the senior in-service teachers during the preparation of learning activities. This study indicates that classifying and evaluating pre-service

teacher's perceptions as per the four domains Danielson's framework can be useful in understanding the inconsistencies.

A comparatively recent study by Elmahdi and Fawzi (2019), assessed the pre-service teachers from Bahrain Teachers College (BTC) in meeting the 'Teachers' Standards' set by the Ministry of Education in Bahrain, using the Danielson's framework. They assessed the level of pedagogical knowledge, skills and attitudes among the pre-service teachers at BTC. Though the pre-service teachers at BTC perceived BTC's teacher education program as highly effective, their perceptions regarding the readiness to teach, content knowledge, interactions with parents, dealing with school administration and MoE, were not uniform. Many of the pre-service teachers expressed lack of opportunities for interacting with parents and school administration. In our study also, the pre-service teachers showed lack of opportunity for interacting with parents. Though we presumed that COVID-19 based restrictions as the reason for this lack of opportunity in interacting with the parents, this study states that is not the case. The study of Elmahdi and Fawzi was conducted prior to 2019 and the article got published in 2019. This implies that issues with interacting with the parents existed even when there were no COVID-19 restrictions. Therefore, factors hindering the involvement of parents in their children's education (in the Arabian cultural context) needs to be explored in detail.

5.3.9 Need for proper feedback and guidance from mentors

Some of the pre-service teachers involved in the present study believed that they did not get adequate support and guidance from their mentors, cooperating teachers and school authorities. Further, failure to provide constructive criticism/feedback by the cooperating teachers and mentors made it difficult for the pre-service teachers to assess their professional growth. Many

of the pre-service teachers wanted to have ‘the right to choose their mentors’ because they felt that selecting a good mentor was a key aspect of successful field experience training. Their perceptions support the findings of Newton et al. (2010). The afore-mentioned study reported that mentors don’t regularly visit pre-service teachers to provide guidance on their pedagogical practices. Consequently, pre-service teachers who are not under the close-supervision of mentors/supervisors may not be able to evaluate their pedagogy and may miss important assignments. These pre-service teachers often become ‘bad performers’ in the future due to a lack of key skills for efficient teaching, which they missed during the field experience. It is noteworthy to state that one of the pre-service teachers battled with conflict with her mentor, and the university authorities did not take any measures to ease the tension between the mentor and the pre-service teacher. Systems should be in place to address such scenarios.

A study by Vásquez Carrosa, Rosas-Maldonado, and Martin (2019) indicated that basic pedagogical aspects such as school supplies and timely and constructive feedback are not provided by some mentors to the preservice teachers. Indeed, these elements can impact the mentoring process and the aforementioned study narrated how ‘always-negative’ type of feedbacks from the mentor can affect the confidence of the pre-service teachers. Likewise, Wilcoxon and Lemke (2021) clearly described the importance of mentor in moulding the pedagogical skills through providing timely, and purpose-oriented feedbacks to the pre-service teachers. Indeed, pre-service teachers are well-aware about the role of mentor’s feedbacks in professional development. The pre-service teachers perceive the feedback received from their mentor as a helpful tool for improving their teaching performance (Fawzi & Alldabous, 2019). Though such completely negative incidents were not noticed in the present study, we do report clashes between the pre-service teacher and the mentor. Further, one of the pre-service teacher

participated in the present study complained that neither the school authorities nor the mentor took any initiative to lessen the tension between them. This scenario necessitates a proper system to address the possible issues of pre-service teachers, which can occur during the field experience training as well as during the entire teacher preparation program. At present, such professional systems are lacking in the UAE education.

5.3.10 Positive perceptions of the university instructors regarding the field experience program

Notably, the university instructors provided many positive perceptions about the field experience program. The instructors' positive perceptions included the "chances for collaboration and professional development", "willingness to provide emotional and educational support to the pre-service teachers", and "perceptions related to generally happy occurrences occurring during the field experience". Notably, many of the pre-service teachers complained about the lack of support from their mentors/supervisors. Studies evaluating the supervisors' perceptions on the teacher education system are very rare. As mentioned previously, feedbacks from the mentor has a 'making or breaking' effect on the pre-service teachers. A study by Hoque et al., (2020) assessed the relationship between the teachers' performance and supervision. Notably, this study evaluated the relationship between supervisory practices such as directive, collaborative, and nondirective approaches and the teachers' performance among 200 teachers and 50 supervisors in Malaysia. Interestingly, directive supervision was found to be influencing the teachers' performance in a positive and significant manner. One of the common themes that evolved while analysing the supervisors' perceptions is their willingness to help the pre-service teachers. This result seems contradictory. However, there is a chance that the supervisors who expressed their willingness to help the pre-

service teachers may not be the same non-cooperative people mentioned by the pre-service teachers.

5.3.11 Negative perceptions of the university instructors

The negative perceptions about the field experience program shown by the university supervisors include: 1) Lack of motivation among the pre-service teachers, 2) Issues with mentoring, 3) Lack of skills for integrating ICT in online classrooms, 4) Lack of involvement of stakeholders in decision-making, and 5) Other generally negative perceptions. Lack of motivation and inadequate effort from the pre-service teachers were considered as hindering factors by the university supervisors, which prevent the successful execution of the field experience program. A major contributory factor to this lack of motivation is identified by the supervisors as ‘persons joining the teaching profession, merely due to the fact that they have no other choice’. Notably, three of the above-mentioned negative perceptions, ‘issues with mentoring’, ‘lack skills to manage online classrooms’ and ‘lack of stakeholders’ involvement in decision-making’ were identified as convergent perceptions with the pre-service teachers.

5.3.12 Convergent perceptions of the pre-service teachers and the university supervisors

Interestingly, at least three themes were identified among the perceptions of the pre-service teachers and the university supervisors as *convergent perceptions*. This means that these perceptions are possessed commonly by the pre-service teachers and the university supervisors. Such common perceptions among different types of stakeholders in a system point towards ‘real pitfalls in the program’ or ‘key issues which need to be addressed’. These perceptions include: 1) Issues in online education, 2) Issues with mentoring, and 3) Lack of involvement of stakeholders.

5.3.12.1 Issues in online education

The pre-service teachers as well as the university supervisors showed negative perceptions regarding ‘teaching in the online mode’. Online teaching is the most widely used method of instruction during the COVID-19 era. Even now, many schools and institutions continue to give instruction to learners through ‘online’. The reasons the pre-service teachers provided for having a negative viewpoint about online instruction include: ‘their incapability to provide proper suggestions to students online’, ‘difficulty in managing the classroom’ and ‘lack of resources for interacting with the parents and with the community while teaching online’. The inefficiency of pre-service teachers to manage classrooms online may be due to their inexperience in classroom management. However, the university supervisors provided different perceptions regarding this scenario. According to the supervisors’ belief, lack of training in technology integration (ICT) is the main reason why the pre-service teachers are unable to perform well in the online mode. Further, the university supervisors believed that some of the pre-service teachers lack the ‘motivation’ to learn the pedagogical skills, which in turn resulted in their failure. Even if it is agreed that both these points are true, the pre-service teachers’ call for face-to-face teaching over the online mode needs to be addressed because the face-to-face mode can provide real classroom experience, which will be beneficial for moulding efficient teachers.

5.3.12.2 Issues with mentoring

Both pre-service teachers and the supervisors unanimously stated that there are issues with mentoring. Most of the pre-service teachers stated that they want ‘freedom’ to select their mentor, which may be a difficult ask. Lack of emotional support and/or technical support from the mentors and personal conflicts are the prime reasons for the pre-service teachers’ negative perception about mentors. According to Boyd et al. (2009), pre-service teachers’ teaching

methods are highly influenced by the close cooperation between them, collaborating in-service teachers and supervisors. In accordance with the afore-mentioned study, Britzman (1991) reported that holding weekly meetings between supervisors and pre-service teachers brings a balance between the pre-service teachers' capacity for developing their own teaching styles and the supervision provided by the mentor.

Notably, the present study identified that the mentors were not given any prior information about the pre-service teachers' appointment under the mentors' guidance. This scenario made the mentors less prepared to guide the pre-service teachers. Most importantly, both the pre-service teachers as well as the university supervisors perceived that it is necessary to provide some prior training to the mentors to make them prepared enough to mentor the pre-service teachers. There is no training program or established criteria for becoming a mentor at present. This scenario needs to be changed. The policymakers in the UAE education sector need to think about making reforms with regards to mentoring.

5.3.12.3 Lack of involvement of stakeholders in decision-making

Inadequate involvement of stakeholders in the program, for both pre-service teachers as well as university supervisors, is one of the main issues found in the present study. Involving the stakeholders and hearing their voice while designing and implementing a new program is essential for successful execution of the program. According to Epstein et al. (2002), effective stakeholder engagement requires leaders to intentionally interact with, gain knowledge from and communicate with individuals and groups throughout the decision-making process, not just at the end. Kwangsawad (2017) conducted a quantitative study to explore stakeholders' perceptions of EFL pre-service teachers. The study involved 576 stakeholders (472 students, 34

EFL pre-service teachers and 70 school administrators). Notably, all the three groups of stakeholders (students, EFL pre-service teachers and school administrators) valued attributes of EFL teachers as a strong aspect of their effectiveness. The implication is that such information from the stakeholders can be highly useful while designing future education programs.

A recent study by Orwenjo and Erastus (2021) reported that teachers in Kenya are open to use of Open Educational Resources (OERs) in the teaching and learning of various subjects in the school system. However, the teachers have different perceptions regarding the suitability and potential of these open resources in Kenyan classrooms. The authors found that the reason behind these differences in perceptions includes institutional, cultural, pedagogical and personal factors. The authorities did not consider the stakeholders, especially teachers, while developing the open resources. Therefore, proper planning, inclusion of the stakeholders and bottom-up approach while designing any educational innovation is needed to ensure success. This study is relevant to UAE classrooms which consist of socially and culturally diverse teachers and learners.

In the present study, pre-service teachers were not allowed to perform lesson planning and are not given a preview of the classes and topics prior to instruction. This in turn adversely affected their performance. Meanwhile, the mentors were not given any prior intimation regarding the allocation of pre-service teachers under their mentorship. This scenario created stress between the pre-service teachers and the mentors, because the mentors were not prepared enough for supervising. Therefore, the authorities should seriously re-think the way of implementing their decisions regarding field experience and should make sure that the stakeholders are involved when an important decision is made.

5.4 Implications

5.4.1 Stakeholders

The results of the present study imply that lack of involvement of stakeholders was one of the key issues in the UAE education sector. From the perceptions of pre-service teachers and supervisors, it is clear that there is no coordination between different strata of stakeholders. There should be some system in place for regularly updating the stakeholders. Further, the stakeholders' perceptions should be taken into consideration before making decisions and implementing programs. One of the incidents identified in this study was the allocation of pre-service teachers under a mentor's guidance, even after the mentor stated that he/she was not ready for mentoring. This is a classic example of 'not ready to hear the stakeholder's voice'.

5.4.2 Training programs for fine tuning

Lack of adequate training was another important issue identified during the qualitative analysis. For instance, there is no training program for the mentors to reduce the person-to-person differences in guiding the pre-service teachers and in providing feedback to them. Similarly, pre-service teachers need more training in terms of integrating technology, the lack of which leads to their failure during online teaching. Seminars, theoretical classes and hands-on training sessions on ICT may be useful in addressing the above-discussed problem.

5.4.3 Need for motivation

From the qualitative analysis of the university supervisors, it was realised that many of the pre-service teachers joined the program just because they did not find any other option. As a result, these pre-service teachers lack the motivation required for becoming an efficient teacher and

they will not take the field experience program very seriously. Furthermore, there are several other factors that can affect the motivation of the pre-service teachers. The COVID-19 pandemic-related uncertainties had a profound impact on the motivation of the pre-service teachers. Similarly, excess coursework, need to make long journeys to reach the site of field experience, and so on can also make them exhausted and unmotivated. Therefore, not only the pre-service teachers but also the curriculum makers and program schedule designers are accountable for the failure of pre-service teachers.

5.4.4 Standard operating protocols

At present there are no standard operating protocols (SOPs) for the schools/institutions which host the internship of the pre-service teachers. As a result, there is no control over the internship providers' actions. Many pre-service teachers were not happy with the facilities and cooperation they received during their field experience training. Therefore, SOPs may be formulated to control the various aspects of the field experience program.

5.4.5 Early field experience

From the analysis it is clear that technical support from the mentor alone is not enough to transform the pre-service teachers into efficient in-service teachers. The mentors/supervisors should understand that the pre-service teachers are active learners as well. Therefore, implementing induction programs that require high standards without addressing the immediate issues and need for teachers' professional development will only help to increase the pre-service teachers' stress. Therefore, an early field experience may be employed to provide enough information to the pre-service teachers to make a decision on whether or not a teaching career suits them. At present, the field experience is placed at the end of the teacher education program,

which leads to some of the pre-service teachers thinking: ‘four years of my life have been wasted’.

5.5 Recommendations

After evaluating the findings of the study, the following recommendations have been formulated to enhance the field experience program of teacher education in federal universities across the UAE.

5.5.1 Training programs, workshops and counselling to achieve optimum mentoring

One of the major issues identified in the present study was the issue associated with mentoring. Many of the pre-service teachers complained about the bad mentors/guidance they received during their field experience. One reason identified causing this issue was the lack of coordination with the mentors. Another reason for the mentors’ total failure in guiding or considerable differences between the styles of mentoring was the lack of proper training programs for mentors. Therefore, the present study makes the following suggestions for improving the mentors’ performance during the field experience program.

- a) Before the mentors and pre-service teachers meet each other (before entering the school) both the mentors and pre-service teachers should be provided with an orientation/counselling and they should be informed what they can expect during the field experience. By doing so, everyone will know the expectations which will avoid unnecessary expectations and will in turn avoid conflict.
- b) Design proper training plans for the mentors: The present study urges the policymakers in the UAE education sector to formulate a certification program for mentors. At present,

there is no training program for mentors, which is the source of drastic personal variations in mentoring. Only certified mentors should be allowed to enroll the pre-service teachers as trainees for their field experience/internships.

- c) Free workshops and seminars on research methods and pedagogy should be conducted for the pre-service teachers to improve their knowledge pertaining to these subjects. This suggestion originates from the perception of pre-service teachers' lack of competency related to the research process and reluctance in explaining pedagogic principles in detail.
- d) In addition, the field experience office should insist all the schools sign a Memorandum of Understanding (MOU) to have certainty of agreement and commitment in mentor selection.

5.5.2 Arrange for adequate training in ICT and technology integration

One of the main themes that evolved during the qualitative analysis of the perceptions was the lack of competency in technology integration and associated issues in delivering quality online classes. Many pre-service teachers complained that they were unable to manage the classroom properly, lacked proper interaction with students and were unable to provide suggestions to the learners during online classes. Although the pre-service teachers' lack of experience in teaching was a contributory factor, the mentors have a different perception about why pre-service teachers lack competence in technology integration in classrooms. Therefore, the authorities should provide free workshops in technology integration with hands-on training to the pre-service teachers to improve their online field experience. Further, recently qualified and willing pre-service teachers and in-service teachers willing to participate should also be provided with such training because the future of online teaching and technology integration is very bright.

Reforming the curriculum may also be considered to include theoretical and practical lessons for the pre-service teachers before they enter the field experience program.

5.5.3 Enrol only motivated and passionate students for the teacher education program

Teaching as a career choice requires a lot of commitment and only the highly motivated learners and observers will become good teachers. It was evident from the perceptions of the university supervisors that many people see the teaching career as a last resort when they do not have any other option. Such candidates take the teacher education program and field experience lightly. These candidates pose a lot of issues to mentors and university supervisors because of an easy-going nature, lack of commitment and lack of motivation. Students are also badly affected by these people. To avoid this scenario, the present study suggests:

- a) An ‘early field experience’ program should be conducted during Practicum I. This can be beneficial in two ways. First, the teacher candidates can identify whether or not they are suitable for the job. If a teaching job does not suit them, then they can quit the program at an early stage. Some of the pre-service teachers in the present study complained that they had wasted four years of their life because they only realised that they were not suited to teaching during field experience in their final semester. Second, during the early field experience, the teachers/supervisors/mentors can identify the level of motivation in a teacher candidate. Under such scenarios, they can either take necessary steps to motivate the candidate or can explain to the teacher candidate that the teaching career does not suit him/her.
- b) Asking the teacher candidates to write notes on ‘the statement of purpose’ to assess their motivation and preparedness to undertake the program.

- c) Providing the unmotivated pre-service teachers with counselling to understand their issues and then providing them with handpicked/personalised training in the areas in which the pre-service teachers have trouble. This in turn can enhance their pedagogy and professionalism. The teacher' training schools may form committees of experts or expert in-staff to provide counselling and guidance to unmotivated candidates. The policymakers in the UAE education sector should make necessary reforms to achieve this goal.

5.5.4 Involve the stakeholders during curriculum designing and policy making

Lack of involvement of the stakeholders was a common negative perception held by both the pre-service teachers and the university supervisors. The pre-service teachers should be involved in lesson planning, in conducting seminars and workshops, small educational activities etc. Similarly, the mentors/supervisors may be informed and prior consent may be sought before allocating pre-service teachers to them for guidance. The pre-service teachers, university supervisors, the mentors and schools may be invited and allowed to provide their suggestions while designing the curriculum and teaching plans in the federal universities.

5.5.5 Pre-service teachers' placement

During the study, it was identified that many of the pre-service teachers were placed in several schools far away from each other. This scenario can make the teacher candidates tired and may make them stressed because the long journeys are often time-consuming and the pre-service teachers may find it difficult to manage their time during this tight schedule. Therefore, the pre-service teachers should be placed in comparatively nearer geographical locations to avoid the

wastage of time and energy. Their opinion may be taken, if they have to be placed in distant locations for their internship/field experience.

5.5.6 Introduce the pre-service teachers to culturally diverse schools during practicum I

As discussed before, the UAE is a culturally and linguistically diverse country. Due to this diversity, the pre-service teachers may take the manners of a student from another culture as bad behaviour. According to previous studies, students' bad behaviour in the classroom is too stressful for most of the pre-service teachers. This scenario can be regarded as a 'cultural shock' because in reality the student did not make any mistake and it is the pre-service teacher who mistook it. By introducing the pre-service teachers as observers to the culturally diverse classrooms during the practicum I itself, they will become familiar and adapt to the diverse cultures and mannerisms.

5.5.7 Provide the pre-service teachers more time to teach in real classrooms

Most of the pre-service teachers participating in the present study had the opinion that the chances for real classroom teaching were very few in the UAE system. It was noted that many internship providers place the pre-service teachers only on Fridays, whereas some others use them as substitutes for the in-service teachers when they are 'on leave'. Fridays are half-working days in the UAE system, with a smaller number of learners. As a result, the pre-service teachers posted on Fridays have fewer chances of getting exposure in real classroom teaching. On the other hand, those pre-service teachers being used as substitutes suffer more because they are informed about the need to take classes at the last moment in many cases and they do not get much time to prepare their lessons for presentation. This scenario affects their confidence in a negative manner. Therefore, the curriculum must be reformed to give the pre-service teachers

more chances of conducting real classroom lectures. On an average, they may be asked to take one or two hours of class per day over six days of the week, each day being posted in different schools. The proposed system would not only provide the pre-service teachers with adequate experience, but would also improve their capacity to adapt to student populations of different cultures and different classroom settings.

5.5.8 Establish campus recruitment cells and establish connections with MOE

Another area of concern expressed by the pre-service teachers was their fear about the future. Not every UAE campus has campus recruitment cells, especially for recruiting teachers. This scenario is partly because teaching is not a ‘professional technical job’ like engineering or medicine. The policymakers in the UAE and school authorities should consider establishing recruitment cells for campus recruitment as well as establishing connections with the MOE. The pre-service teachers’ CVs should be collected and sent to the recruitment cell and MOE. These steps may ensure better prospects for pre-service teachers.

5.6 Strengths and Limitations

5.6.1 Strengths of the study

The most notable strength of the present study was that it is a forerunner in the area of research. This means, there is an absolute scarcity of research studies in the UAE context that evaluate the perceptions of pre-service teachers and instructors regarding their field experience. Importantly, the present study enrolled more than one type of stakeholder - the pre-service teachers and the university instructors - a feat which has not been attempted in similar studies. In other words, by evaluating the perceptions of the pre-service teachers and their

complementary part (the university instructors) this study was able to assess the scenario in a well-balanced fashion. The research questions and objectives of the present study were formulated after an extensive review of available literature in the field, thereby ensuring its credibility. Further, the quantitative surveys were followed by qualitative face-to-face interviews with both pre-service teachers and their instructors. The sequential mixed-methods approach employed in the present study provided equal importance to both qualitative and quantitative methods. The sequential analysis of the data enabled the interpretation of quantitative data more comprehensively using the data from the qualitative personal interviews. To strengthen the reliability of the data during the qualitative phase, the recorded interviews were transcribed and the typed transcriptions were given back to the respondents for verification of accuracy of transcription.

The researcher remained as neutral as possible throughout the entire process of the interviews in order to appreciate the trustworthiness of the outcomes of the study. The framework used to support this study, the Danielson framework, is a renowned framework that has been used world-wide to assess the pedagogic efficacy of a person. This framework serves as a comprehensive set of teaching philosophical considerations, preferences and teaching values that enables a versatile teacher to generate a fruitful learning environment. The Danielson framework along with Bem's self-perception theory formed meat of the present study and made the data presented by this study trustworthy. Finally, the researcher, being a teacher by profession, was able to grasp and analyse complicated perceptions using pedagogical principles and scenarios with a neutral mindset.

5.6.2 Limitations of the study

The present study has some limitations, which are summarised below.

Despite the study's pivotal role in understanding the perceptions of pre-service teachers, the study has potential limitations. For instance, this study relied on the Danielson framework to obtain the data from the sample population. Employing more than one framework for the study is necessary for drawing more wholesome data. However, future researchers can compare the results derived from different frameworks. The second limitation is that the study focuses on cross-sectional data. In such a type of data, it may not be possible to establish the causal inferences about the relationship between the variables. Another notable limitation of the study is that, the sample of the study only included pre-service teachers from a single federal university in the UAE and focused on the education department. The main reason for this was the COVID-19 inflicted restrictions in travelling and access. Since faculties other institutions were not interested in face-to-face interviews during, mainly due to the fear of getting COVID-19 infection, the qualitative part of the study also become limited to a single university. Limitations in access to departments other than Education due the restrictions also became a hurdle. Therefore, a future prospect exists in extending the research to include other teacher training institutions in the UAE.

Although most of the pre-service teachers had highly positive perceptions about the field experience training, they did not explain their positive perceptions about the field experience program in detail. Their comments were superficial; for instance, they merely stated their perceptions in simple words making the detailed analysis of positive perceptions not possible. For instance, Rubeenah said that: "Every aspect regarding the field experience training was

good.” Analysing positive perceptions is as important as negative perceptions because understanding ‘what worked well’ is equally important as the ‘what failed?’ An understanding of the patterns and methods that succeeded in a particular subject can work as a guideline for other research in future.

Another limitation of the present study is that it did not look into the mentors’ and school authorities’ perceptions. These two important stakeholders involved in different aspects of the field experience also have their stories to tell. Further, the present study used open-ended, self-administered questions for data collection for the quantitative analysis section. Since the present study relied on the Danielson framework, there were 22 modules of pedagogy and 83 questions associated with it. Too many questions can make the participants exhausted and they may not be interested in providing sincere answers to the questions. However, the present study employed QQ plot to assess the normality of data, along with Pierson Correlation Analysis to check whether there are any biases in data collection.

Another limitation that we want to discuss the unintended sampling bias, which was observed in this study. Though the researcher has not intentionally made any bias during the sampling, it was observed that pre-service teachers from the specialisation namely ‘Early childhood education’ outnumbered (they represented around 80% of the total sample size) the pre-service teachers from all other specialisations. As discussed earlier, COVID-19 inflicted restrictions and good co-operation from the authorities associated to this specialisation significantly enhanced the participation of pre-service teachers from ‘Early childhood education’. The researcher’s personal connections with the department of Early childhood education also enhanced their participation and access. However, due to the fear of getting infected with COVID-19, pre-service teachers from other departments were not willing to participate in the current study. Lack

of permission from other departments was also an important factor that influenced their decision. So, this scenario is a limitation of the present study because most of the participants are from a single specialisation implies that the perceptions and suggestions from pre-service teachers of other specialisations may be under-represented.

Another limitation that we want to discuss the unintended sampling bias, which was observed in this study. Though the researcher has not intentionally made any bias during the sampling, it was observed that pre-service teachers from the specialisation namely ‘Early childhood education’ outnumbered (they represented around 80% of the total sample size) the pre-service teachers from all other specialisations. As discussed earlier, most of the pre-service teachers at the study site were from the specialisation of ‘early childhood education’. Automatically, they became the lion’s share in our sample. Further, COVID-19 inflicted restrictions and good co-operation from the authorities associated to this specialisation significantly enhanced the participation of pre-service teachers from ‘Early childhood education’. The researcher’s personal connections with the department of Early childhood education also enhanced their participation and access. Lack of permission from other departments was also an important factor that influenced their decision. So, this scenario is a limitation of the present study because most of the participants are from a single specialisation implies that the perceptions and suggestions from pre-service teachers of other specialisations may be under-represented.

The present study employed self-administered surveys for the quantitative analysis section. However, a self-administered survey has significant drawbacks that could affect the results of the study. For instance, a self-administered survey can only ask straightforward questions; if a participant’s response is unclear, clarification questions cannot be asked. Overestimation or underestimation are common mistakes in self-observation surveys, which can act as a source of

bias. Finally, there is no interviewer present while participants do self-administered surveys. As a result, the researcher has very little control over the participants. During the personal interviews, many of the participants provided their answers in Arabic. The translator being a native Arabic speaker was able to translate the participants' perceptions into English. However, due to cultural and contextual differences, there can be slight differences in meaning after translation.

5.7 Scope of Future Research

The reason behind the present study is the absolute scarcity of research works pertaining to the perceptions of pre-service teachers regarding field experience in the UAE context. Still, there is scarcity of studies in the field because only through multiple studies can well-defined concepts about a particular area in education research be established. Therefore, more focused as well as broader research works pertaining to field experience should be conducted at the federal universities in the UAE. In addition to the pre-service teachers, future research studies may include other stakeholders like school authorities, mentors, internship providers, parents, students, etc. to gain a deeper insight into the problem. Such comparative studies can provide more convergent themes, which can identify the common issues in UAE teacher education. Furthermore, the number of pre-service teachers and supervisors participating in the study was 113 and 15 respectively. Therefore, future multi-centric research works with a larger number of participants are anticipated. Such works will generate practical recommendations for implementation in the teacher training programs. Studies involving the policymakers and curriculum designers in the UAE teacher education system can also be useful for the UAE education system and student community. The present study employed a cross-sectional method

for data collection. This method is not able to collect information regarding causal factors. Therefore, one aspect for future research is the application of a longitudinal study on the impact of field experience.

5.8 Concluding Note

The present study attempted to evaluate the perceptions of pre-service teachers and instructors regarding their field experience at a federal university in the UAE. The present study evaluated the perceptions using a sequential explanatory mixed-methods strategy. During the quantitative survey, the pre-service teachers provided their beliefs regarding different pedagogical standards. Most of them showed positive perceptions. However, during the qualitative face-to-face interviews, they talked mostly about their negative perceptions and suggested potential strategies for improvement. Similarly, one-on-one interviews with the university supervisors showed their willingness to guide and prepare pre-service teachers for their future teaching career. Most importantly, both these stakeholders pointed out several issues in the policymaking level and in the curriculum as well. This thesis shows important shortcomings in the teacher education program in the UAE and also suggests possible solutions. For achieving the UAE Vision 2030, authorities will have to start from classrooms, and the pre-service teachers are the future baton holders of the UAE education system. Therefore, this thesis suggests policymakers should consider making amendments to the current field experience program for achieving the goals.

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APPENDICES

Appendix A: Complete list of Danielson's Framework and Survey Questions designed according to each domain.

Danielson's Framework	Survey Questions for assessing the Pre-service Teachers' Perception
Applying Knowledge of Content and Pedagogy	The content I teach is relevant to students' needs
	The content I teach is relevant to students' interests
	The content I teach draws on their previous experiences
	The content I teach draws on their previous knowledge
	I understand the links between topics and use this knowledge to ensure understanding by learners
	I understand the links between concepts and use this knowledge to ensure understanding by learners
	I use multiple teaching methods, including examples, group discussions and teaching aids to ensure understanding by learners
Knowing and Valuing Students	I know the skills and abilities of my students and use this information to enhance their learning experience
	I have a clear understanding of how students learn and apply this to enhance students' learning

	I know about the patterns of learning behaviour during child development and relate this knowledge to individual learning patterns
Setting Instructional Outcomes	The outcomes of my lesson objectives cover the important knowledge that my students should learn
	The outcomes of my lesson objectives cover the important concepts that my students should learn
	The outcomes of my lesson objectives cover the important skills that my students should learn
	The outcomes of my lesson objectives are clear for diverse learners
	The outcomes of my lesson objectives are balanced for diverse learners
	The outcomes of my lesson objectives are suitable for diverse learners
Using Resources Effectively	I am fully aware of the classroom resources that I should use to enhance my students' understanding of relevant content
	I am fully aware of the resources that students should use to obtain knowledge about the relevant content
	The materials and resources that I use are appropriate for learners
	The materials and resources that I use support the instructional outcomes
	The materials and resources that I use are designed to enhance learning and understanding

Planning Coherent Instruction	The learning activities that I use are appropriate for diverse students
	The learning activities that I use are appropriate for diverse learning objectives
	The structure of my lessons is clear, allowing for the engagement of diverse students
Designing and Analysing Assessments	My assessment approaches are in line with the learning outcomes
	My assessment approaches are useful in planning future instruction
Cultivating Respectful and Affirming Environments	My interactions with my students show mutual respect and care
	I expect my students to be polite, caring and respectful to each other
Fostering a Culture for Learning	I expect my students to actively participate in class to attain higher grades
	I expect my students to be attentive to detail
	I expect my students to be proud of their work
	I expect my students to actively participate in class to attain higher grades
	I expect my students to be attentive to detail
	I expect my students to be proud of their work
	There is a high level of organisation in small group work

Maintaining Purposeful Environments	In small group work all students actively participate
	My students follow the routines for handling resources and materials
Supporting Positive Student Behaviour	I use indirect methods to monitor students' behaviour
	I use preventive methods to monitor students' behaviour
	I use appropriate methods to correct misbehaviour
	I use effective methods to correct misbehaviour
Organising Spaces for Learning	The classroom is a safe place
	The classroom's furniture arrangement is designed for maximum accessibility
Communicating about Purpose and Content	I make clear to my students the topic expectations for learning
	I make clear to my students the topic directions for learning
	I make clear to my students the topic procedures for learning
	I use explanations of content which link with previous students' knowledge and experience
	My written language is correct and conforms to standard
	My spoken language is correct and conforms to standard
Using Questioning and Discussion Techniques	I pose high quality questions to students
	I give my students adequate time to respond
	I provide room for students to suggest discussion topics

	I provide room for students to offer voluntary contributions
Engaging Students in Learning	My students are cognitively engaged in learning activities
	My students are cognitively engaged in assignments
	My students are cognitively engaged in exploration of content
	I use instructional material that mentally engages students
	I use instructional material that is appropriate for learning outcomes
	I use a lesson structure that is coherent, allowing for reflection and closure
Using Assessment for Learning	I provide timely feedback to students which helps them improve their performance
	I provide quality feedback to students which helps them improve their performance
	Students are measured in their performance and are able to use that information to improve their performance
Responding Flexibly to Student Needs	I am able to successfully adjust my lesson when needed
	I spontaneously adjust my lessons in response to students' interests
Engaging in Reflective Practice	I am accurate and thoughtful in my assessments of my lessons' effectiveness
	I am accurate and thoughtful in my use of knowledge to enhance my teaching skills

Documenting Student Progress	My system for maintaining information on student completion of assignments is effective
	My system for maintaining information on student progress is effective
Engaging Families and Communities	The relationship that I have with my colleagues is characterised by mutual support
	The relationship that I have with my colleagues is characterised by mutual respect
	The relationship that I have with my colleagues is characterised by mutual cooperation
	I usually volunteer for school events and district projects
	I provide information to parents about the instruction program
	I provide information to parents about the students' progress
	I successfully engage with parents in helping my students undertake projects
Contributing to School Community and Culture	I contribute to the culture of the school by modelling school values
	I contribute to the culture of the school by helping to identify underlying problems and taking positive action toward their solution
Growing and Developing Professionally	I always seize opportunities for professional development
	I always make an effort to conduct action research
	I am receptive to feedback from colleagues and make sure to use the feedback to develop my teaching skills

	I am receptive to feedback from supervisors and make sure to use the feedback to develop my teaching skills
Acting in Service of Students	I demonstrate a commitment to the success of students by acting ethically and taking deliberate action on their behalf
	I make wise decisions, especially under challenging circumstances, that are in the best interest of students and their families

Appendix B: Pearson Correlation analysis - to assess the association between different Danielson's Framework groups.

	DF1	DF2	DF3	DF4	DF5	DF6	DF7	DF8	DF9	DF10	DF11	DF12	DF13	DF14	DF15	DF16	DF17	DF18	DF19	DF20	DF21	DF22
DF1	1.000	0.580	0.667	0.601	0.585	0.501	0.485	0.522	0.463	0.520	0.274	0.538	0.484	0.565	0.560	0.469	0.529	0.515	0.375	0.484	0.576	0.459
DF2	0.580	1.000	0.687	0.686	0.690	0.687	0.467	0.623	0.643	0.603	0.450	0.552	0.533	0.519	0.705	0.740	0.586	0.639	0.553	0.539	0.566	0.505
DF3	0.667	0.687	1.000	0.759	0.750	0.657	0.581	0.598	0.584	0.660	0.513	0.645	0.607	0.645	0.683	0.626	0.643	0.586	0.476	0.597	0.583	0.596
DF4	0.601	0.686	0.759	1.000	0.792	0.677	0.590	0.627	0.667	0.647	0.424	0.670	0.608	0.658	0.709	0.654	0.677	0.591	0.530	0.578	0.639	0.596
DF5	0.585	0.690	0.750	0.792	1.000	0.744	0.587	0.699	0.614	0.613	0.437	0.655	0.634	0.650	0.746	0.718	0.682	0.705	0.578	0.671	0.729	0.658
DF6	0.501	0.687	0.657	0.677	0.744	1.000	0.542	0.667	0.550	0.577	0.400	0.655	0.614	0.622	0.663	0.663	0.645	0.619	0.509	0.561	0.669	0.611
DF7	0.485	0.467	0.581	0.590	0.587	0.542	1.000	0.579	0.476	0.599	0.272	0.661	0.475	0.565	0.467	0.491	0.516	0.417	0.382	0.475	0.532	0.597
DF8	0.522	0.623	0.598	0.627	0.699	0.667	0.579	1.000	0.717	0.716	0.493	0.594	0.608	0.662	0.655	0.628	0.675	0.658	0.527	0.594	0.632	0.684
DF9	0.463	0.643	0.584	0.667	0.614	0.550	0.476	0.717	1.000	0.743	0.591	0.616	0.613	0.612	0.675	0.597	0.601	0.627	0.611	0.467	0.541	0.619
DF10	0.520	0.603	0.660	0.647	0.613	0.577	0.599	0.716	0.743	1.000	0.518	0.604	0.526	0.608	0.616	0.482	0.623	0.556	0.509	0.509	0.533	0.646
DF11	0.274	0.450	0.513	0.424	0.437	0.400	0.272	0.493	0.591	0.518	1.000	0.472	0.424	0.488	0.470	0.490	0.435	0.536	0.424	0.279	0.318	0.415
DF12	0.538	0.552	0.645	0.670	0.655	0.655	0.661	0.594	0.616	0.604	0.472	1.000	0.706	0.769	0.549	0.636	0.667	0.668	0.466	0.559	0.674	0.645
DF13	0.484	0.533	0.607	0.608	0.634	0.614	0.475	0.608	0.613	0.526	0.424	0.706	1.000	0.791	0.661	0.588	0.546	0.635	0.521	0.484	0.606	0.556
DF14	0.565	0.519	0.645	0.658	0.650	0.622	0.565	0.662	0.612	0.608	0.488	0.769	0.791	1.000	0.654	0.641	0.619	0.662	0.494	0.521	0.638	0.639
DF15	0.560	0.705	0.683	0.709	0.746	0.663	0.467	0.655	0.675	0.616	0.470	0.549	0.661	0.654	1.000	0.681	0.653	0.732	0.570	0.528	0.624	0.602
DF16	0.469	0.740	0.626	0.654	0.718	0.663	0.491	0.628	0.597	0.482	0.490	0.636	0.588	0.641	0.681	1.000	0.701	0.707	0.597	0.676	0.674	0.647
DF17	0.529	0.586	0.643	0.677	0.682	0.645	0.516	0.675	0.601	0.623	0.435	0.667	0.546	0.619	0.653	0.701	1.000	0.618	0.510	0.693	0.722	0.664
DF18	0.515	0.639	0.586	0.591	0.705	0.619	0.417	0.658	0.627	0.556	0.536	0.668	0.635	0.662	0.732	0.707	0.618	1.000	0.650	0.549	0.676	0.567
DF19	0.375	0.553	0.476	0.530	0.578	0.509	0.382	0.527	0.611	0.509	0.424	0.466	0.521	0.494	0.570	0.597	0.510	0.650	1.000	0.655	0.610	0.603
DF20	0.484	0.539	0.597	0.578	0.671	0.561	0.475	0.594	0.467	0.509	0.279	0.559	0.484	0.521	0.528	0.676	0.693	0.549	0.655	1.000	0.731	0.651
DF21	0.576	0.566	0.583	0.639	0.729	0.669	0.532	0.632	0.541	0.533	0.318	0.674	0.606	0.638	0.624	0.674	0.722	0.676	0.610	0.731	1.000	0.796
DF22	0.459	0.505	0.596	0.596	0.658	0.611	0.597	0.684	0.619	0.646	0.415	0.645	0.556	0.639	0.602	0.647	0.664	0.567	0.603	0.651	0.796	1.000

Appendix C: Format of e-mail to the Supervising Teachers (instructors)

Respected Sir/Madam,

How are you? I am Fatima AlMohsen, a Ph.D. student in Education, supervised by Dr Christopher Hill at The British University in Dubai, UAE. I am currently carrying out research on the perceptions of pre-service teachers and instructors' field experience. I am asking you to kindly participate in this study by responding to questions during the personal interview. The title of my topic is 'Investigating Perceptions of Pre-Service Teachers and Instructors about Field Experience: An Explanatory Study from a Federal University in the UAE.

Providing a quality field experience to the pre-service teachers contributes to preparing them to be qualified teachers after graduation. To reach a level where one can say the field experience is of quality, we need to understand the stakeholders' perceptions about it first then try to enhance it with proper programs and courses. Therefore, this research proposal is an attempt to investigate perceptions of pre-service teachers and instructors about their field experience and whether this experience can be further enhanced to meet the needs of a global perspective. This research uses Bem's self-perception theory as the theoretical framework and Danielson framework as its model. The study will use a mixed methodology of surveys and semi-structured interviews. It is anticipated that the results will highlight the overall perceptions about field experience in its present structure. Based on the results, the study will make suggestions on how that experience can further be enriched and strengthen the teachers-in-training experience before graduating as certified teachers. The findings will also help the policy makers in the education sector to strengthening pre-service teachers' preparation. It is hoped that the study, done at a federal university in the UAE, will inform other teachers' colleges in the region about recent developments in teacher preparation.

Your voluntary participation in this study will be highly appreciated. If you decide to participate, your identity and any other personal information gathered about you, during the study will be kept strictly confidential. The published results of the study will contain only statistical or group data from which no individual participant can be identified. Please find the study information sheet and consent form for obtaining further details.

Please feel free to ask me, if you have any further queries.

Thank you for your time and consideration,

Fatima AlMohsen.

Contact Information

Fatima Al Mohsen

Ph.D. student in Education,

The British University in Dubai, UAE

Telephone: +971(0) XXXXXXXX123

Appendix D: Format of e-mail to the Pre-service Teachers

Dear Sir/Madam,

How are you? I am Fatima AlMohsen, a Ph.D. student in Education, supervised by Dr Christopher Hill at The British University in Dubai, UAE. I am currently carrying out research on the perceptions of pre-service teachers and instructors' field experience. I am asking you to kindly participate in this study by responding to questions in a survey. The title of my topic is 'Investigating Perceptions of Pre-Service Teachers and Instructors about Field Experience: An Explanatory Study from a Federal University in the UAE.

This study aims at assessing the pre-service teachers and instructors' perceptions regarding the field experience training as part of teacher preparation. By doing so, the research work aims to gain a deeper understanding on the pedagogical knowledge, to identify the pitfalls and potential areas of that needs improvements in the teacher preparation program in the UAE. This work also aims to form recommendations for improving the teacher preparation program in the UAE. Your valuable suggestions for improving the program will also be appreciated. Therefore, this research work is expected to be beneficial to the UAE education system.

Your voluntary participation in this study will be highly appreciated. If you decide to participate, your identity and any other personal information gathered about you, during the study will be kept strictly confidential. The published results of the study will contain only statistical or group data from which no individual participant can be identified. Please find the study information sheet and consent form for obtaining further details.

Please feel free to ask me, if you have any further queries.

Thank you for your time and consideration,

Fatima AlMohsen.

Contact Information

Fatima Al Mohsen

Ph.D. student in Education,

The British University in Dubai, UAE

Telephone: +971(0) XXXXXXXX123

Appendix E: Format of consent form for participants

Title of the Research Study: Investigating Perceptions of Pre-Service Teachers and Instructors about Field Experience: An Explanatory Study from a Federal University in the UAE

Name of the Researcher: Fatima Al Mohsen

I have been provided with adequate information about the research work entitled “Investigating Perceptions of Pre-Service Teachers and Instructors about Field Experience: An Explanatory Study from a Federal University in the UAE” and I have discussed the research work with Fatima Al Mohsen, who is conducting this research as part of her Ph.D. in Education, supervised by Dr Christopher Hill at The British University in Dubai.

I have been provided with a clear description of the objective of this research, which includes investigating my perception about my field experience training in the education context. I understood that this study aims at assessing my perceptions regarding my field experience training and my understanding on the pedagogical knowledge as part of teacher preparation, using the Danielson’s framework and Bem’s self-perception theory.

Further, I have been provided with opportunities to ask Fatima Al Mohsen questions, in order to clear my doubts about the research work and about my participation in this study.

I am aware about the fact that my participation in this research is voluntary and I am free to refuse to participate and to withdraw my consent to participate in the research at any time.

I also understand that my unwillingness to participate in the study or withdrawal of consent at a later stage will not affect my relationship with Fatima Al Mohsen or my relation with The British University in Dubai.

I am aware about the confidentiality and anonymity, that my identity will be masked and that there will be no identifiers from the quantitative Likert scale survey and the face-to-face

interview transcription. Further, the researcher has also guaranteed me that all my responses, respondent information and university name will be anonymised. I understand that when the data collection is completed, my name and identity will be replaced with a code name or number and will be stored in a locked place which only the researcher will have access to. Further, all the electronic data will be stored in an electronic format and will be password-protected, and only the researcher will have access to this.

I also understand that the hard copies of the data will be destroyed after the survey data is entered into the data analysis software, namely SPSS.

I am aware that I can contact Fatima Al Mohsen on 12345678910 at any time regarding my doubts or concerns about the research. I am aware that if I have any complaints regarding the way the research is or has been conducted or if the researcher has violated ethics, then I can contact the Ethics Officer, Human Research Ethics Committee or Office of Research at my university.

By signing below, I am providing my consent to participate in the research study voluntarily as discussed above through a survey and/or through a personal interview.

I completely understand that the data generated from my participation will be used for the purpose of the PhD thesis of Fatima Al Mohsen and I provide my consent for this as well.

Name of participant:

Date and signature:

Appendix F: Study and participation information sheet (provided to the participants).

Study Title: Investigating Perceptions of Pre-Service Teachers and Instructors about Field Experience: An Explanatory Study from a Federal University in the UAE

Investigator: Fatima Al Mohsen –Zayed University / British University in Dubai

This consent form, a copy of which has been given to you, is only part of the process of informed consent required by the Zayed University Ethics Committee. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, please ask. Please take the time to read this form carefully and to understand any accompanying information.

Invitation to Participate

My name is Fatima Al Mohsen a Ph.D. student at a University in the UAE. I am currently carrying out research on the perceptions of pre-service teachers' and instructors' field experience. I am kindly asking you to participate in this study by responding to questions in this questionnaire. The title of my topic is; 'Investigation Perceptions of Pre-Service Teachers and Instructors about Field Experience: A Study from a Federal University in the UAE.

Research Purpose

Providing pre-service teachers, a quality field experience contributes to preparing them to be qualified teachers after graduation. To reach a level where one can say the field experience is of quality, we need to understand the stakeholders' perceptions about it first then try to enhance it with proper programs and courses. This research proposal is an attempt to investigate perceptions of pre-service teachers and instructors about their field experience and whether this experience can be further enhanced to meet the needs of a global perspective. This research uses Bem's self-

perception theory as the theoretical framework and Danielson framework as its model. The study will use a mixed methodology of surveys and semi-structured

It is anticipated that the results will highlight the overall perceptions about field experience in its present structure. Based on the results, the study will make suggestions on how that experience can further be enriched and strengthen the teachers-in-training experience before graduating as certified teachers. The findings will also help the policy makers in the education sector to strengthening pre-service teachers' preparation. It is hoped that the study, done at a federal university in the UAE, will inform other teachers' colleges in the region about recent developments in teacher preparation.

Research Method

The data collection method of the research is interviews. If you decide to participate, I will invite you to participate in an interview about your perceptions. The interviews will be recorded and notes will be taken, but your identity will remain anonymous.

Confidentiality - Anonymity - Security

If you decide to participate, your identity as a participant in this study, and any other personal information gathered about you during the study will be kept strictly confidential and will never be made public. All data containing personal information from which you could be identified will be stored in a locked file cabinet in my office during the study. Electronic data will be password protected. When the study is completed, I will destroy all data containing personal information. The published results of the study will contain only statistical or group data from which no individual participant can be identified.

Okay To Say No

You are being asked to make a voluntary decision whether or not to participate in this study. Please read and think about the information given above. If there is any part of the information you do not understand, please ask me to explain it. If you would like to consult with someone not associated with this study that will be all right, too. If you decide not to participate, or if you later decide to discontinue your participation, your decision will not affect your present or future relations with the Zayed University. Upon request, a copy of the information, data, and results will be made available to you. You will always be free to discontinue participation at any time, and all data collected up to that time as a result of your partial participation will be destroyed without being used in the study. If you decide to participate, please provide your signature as indicated below. Your signature below indicates that you have read, considered, and understood the information provided above, and that you have decided to participate.

What Your Signature Means

Your signature on this Consent Form indicates that you have understood to your satisfaction the information regarding participation in this research project and agree to participate as a participant. In no way does this waive your legal rights nor release the investigators, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time. Your continued participation should be informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

Signature of Participant Date

Print Name:

Signature of Investigator Date

Contact Information

Fatima Al Mohsen

Dubai, UAE

Telephone: +971(0) XXXXXXXX123

A copy of this consent form has been given to you for your records and reference.

Appendix G: Interview Guide (for the interviewer)

Study Title: Investigating Perceptions of Pre-Service Teachers and Instructors about Field Experience: An Explanatory Study from a Federal University in the UAE

Date:

Interviewer:

Interviewee:

Script (directions for the interviewer)

Introduction: First, introduce yourself and who you represent. Provide a clear, but brief introduction about the study. Clearly explain the purpose of interview. Explain how the information collected during the interview will be used and how it can benefit the interviewee and/or the society. Then, explain the confidentiality and how the participant's personal information and identity will be kept confidential.

The interviewer may use the outline of interview (given below) as a guide. Since this is a one-on-one interview, the interviewer may ask additional questions and record the responses of the interviewee, which are relevant to the aims and objectives of the present study.

Purpose	Outline Question	Probe question
Icebreaker	Please tell me about yourself	Your good name please, what is your education background, experience, etc.
To develop better interaction with the interviewee	Please tell me about your present role in your college/institute.	Do you have any role in the field experience program of your college?
To bring more clarity on the	Can you please narrate your personal experience	1. Tell me about your positive experiences with field experience?

perceptions of the interviewee	with field experience program?	2. Tell me about your negative experiences with field experience?
To understand the scenario in detail	Can you explain the areas of field experience program, that needs to be amended or improved?	1. What are the aspects of the field experience training, that needs be improved? 2. Should the mentor – preservice teacher interactions be optimized? 3. What is your opinion about an early field experience training? 4. If you have any specific comments related to the present state of field experience training in the UAE, please let me know.
Problem solving	What are the recommendations and/or suggestions you can provide for implementing the teacher candidates field experience program more effectively?	1. Please provide your suggestions for optimizing the mentor – preservice teacher interactions during the field experience training. 2. How can the teacher candidate be motivated? 3. Can you make your remarks on how can the field experience training be used for improving the personal and professional skills of the pre-service teachers? 4. If you have more suggestions for improvement, kindly provide them as well.

Appendix H: Samples of Arabic to English translation (pre-service teachers' suggestions for improving the field experience program in the UAE).

Sl. No	Response/suggestion in Arabic	Translation to English
Example 1	أود أن أقترح تخصيص فترة زمنية أطول للتدريب العملي الثاني والثالث. حيث يمكن للمدرسين المرشحين (معلمات قبل الخدمة) الذهاب للتدريس لأيام متتالية بدل من مره في الأسبوع حتى يتمكنوا من تحقيق أقصى استفادة من تجربتهم في المدرسة. بهذه الطريقة سيكونون قادرين على بناء علاقة أفضل مع الطلاب وبالتالي إنشاء بيئة صفية أفضل لهم. سيكونون أيضاً قادرين على تجربة جداول الأيام المختلفة خلال الأسبوع والتعرف على الإجراءات الروتينية للحياة المدرسية للطالب والمعلم. I	I would suggest setting aside a longer period for the second and third practicum periods. Where Candidate teachers (pre-service teachers) can go to teach on consecutive days rather than once a week, so that they can make the most of their experience in the school. This way they will be able to build a better relationship with the students and thus create a better classroom environment for them. They will also be able to experience the schedules of different days during the week and learn about the routines of the school life of the student and the teacher.

Appendix I: Samples of Arabic to English translation (instructors' responses during the face-to-face interviews).

Sl. No	Response/suggestion in Arabic	Translation to English
Example 1	كانت من أجمل المسافات التي حصلت عليها. لقد استمتعت للغاية بتدريس جميع دورات الخبرات الميدانية من التدريب العملي 1 حتى التدريب العملي الأخير. لقد رأيت كيف طبقت الطالبات كل ما تعلموه في المسافات الدراسية الحقيقية وخاصة في فترة التدريب التي كانت المحطة الأخيرة لهم. لقد رأيت كل ما ناقشناه في فصولنا بنجز في خبراتهم الميدانية. شعرت بالتواصل حقًا واستمتعت بكل لحظة أمضيتها مع طالباتي ، وشعرت أنني أستحق تقديم المشورة لهم أثناء وجودهم في مجالهم. كنت أعمل معهم مباشرة بعد التدريس وأعطيتهم ملاحظات سريعة ، والتي أجدها مفيدة لهم وسهلة بالنسبة لي. بصفتي أحد أعضاء هيئة تدريس في الجامعة ، ذهبنا الى المدارس والأماكن التعليمية وبيئات المتعلمين الصغار أضافنا لي قيمة أكبر على المستوى الشخصي أيضًا. حيث يمكنني ربط جميع التجارب التي لاحظتها واستخدامها كسيناريوهات حالة حقيقية لطالبي الآخرين واستخدامها في تحضيرات مواد الفصل. أيضًا ، كنت أستخدم هذه السيناريوهات كمواضيع للمناقشات ومواد إعداد للطلاب الذين سيدخلون الميدان. لقد كانت واحدة من أكثر الدورات إثارة للاهتمام وقيمة وفائدة لي ولطالبي.	It was the most beautiful courses that I had. I extremely enjoyed teaching all the field experiences courses from practicum 1 till internship courses. I saw how the students applied all what they have learned in real classroom contexts especially in the internship which was the last station for them. I saw all what we have discussed in our classes accomplished in their field experience. I felt really connected and enjoyed every moment spent with my students, I felt worth giving the them the advice while they are in their field. I was setting with them direct after they teach and giving them prompt feedback, which I find it useful for them and easy for me. As university faculty, when we go to the schools and the educational settings and the young learners' environments added more value to me in personal as well. As, I could relate to all the experiences that I observed and use them as real case scenarios to my other students and use them in my classroom materials preparations. Also, I was

		using these scenarios as a discussion topics and preparation materials for the students who are going to enter the field. It was one of the most interesting, valuable and useful courses I had for me and my students.
Example 2	بشكل عام، تجربتي الشخصية كانت إيجابية ومثمرة وأرى أنها جزء مهم من إعداد أي معلم. يسترشد البرنامج برؤية الجامعة ورسالتها وهدفها. كما يسعى البرنامج لتلبية احتياجات السوق وتوقعاته وأيضاً مكونات الهيئات التنظيمية، والمساعدة في الحفاظ على المعايير والقيم الثقافية لدولة الإمارات العربية المتحدة. "	Overall, my personal experience was positive and productive and I see it as a vital part of any teacher's preparation. The program is guided by the university's vision, mission and objectives. It also strives to meet market needs, regulatory bodies' expectations and components, and help preserve the UAE's cultural norms and values.
Example 3	أؤمن تماماً ببرنامجنا حيث يتم تنسيقه وربطه من خلال مساقات معينة يتم توزيعها في كل فصل دراسي. وهو شرط من متطلبات التخرج، يتحمل الطلاب المسؤولية عن وقتهم وتوقعاتهم في هذا المجال؛ إلى جانب متطلبات البرنامج الأخرى، مما يعني أنه يجب عليهم إكمال الخبرة الميدانية من أجل التقدم في البرنامج. هنا، يربط معلمي مرحلة ما قبل المدرسة جميع النظريات والاستراتيجيات والتقنيات التي تعلموها بالتطبيق العلمي داخل الفصول.	I totally believe in our program as it is coordinated and linked through particular courses distributed every semester. As a course requirement, students are held accountable for their time and expectations in the field; along with the other program requirements, meaning they must complete field experience in order to progress in the program. Here, where the pre teachers linked all the theories, strategies and techniques that they

		learned and applied them in the classrooms settings.
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