Preparing general teachers to work in inclusive classrooms: An exploratory collective case study of two Elementary and Early Childhood (K-grade 3) teacher education programmes in the United Arab Emirates.

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by

KALTHAM RASHED ALYATEEM ALMEHAIRI

A thesis submitted in fulfilment

of the requirements for the degree of

DOCTOR OF PHILOSOPHY IN EDUCATION

at

The British University in Dubai

Professor Eman Gaad
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Thesis Supervisor
Professor Eman Gaad

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ABSTRACT

The issue of including students with disabilities in general schools is getting more and more attention from leadership and educational authorities in the United Arab Emirates (UAE). Although initial teacher education for inclusion is an area that has been widely researched on the international level, little is known about how elementary general pre-service teachers with expertise in teaching students with disabilities are prepared in the UAE's educational context. This exploratory case study investigated the current state of how teacher programmes in two government universities in the UAE were preparing prospective teachers to work in inclusive classrooms. Curriculum used in course work and how inclusive teaching strategies and practices are addressed in this curriculum were examined. The study also explored pre-service teachers and faculty views about the contribution of these programmes to prepare prospective teachers to teach in inclusive settings.

The rationale for choosing government universities was that they are the main feeders of national UAE teachers who usually join government schools and are expected to impact the future of public education in the country. These universities are also working in alignment with the UAE education policies and national vision.

This study employed a qualitative research approach and a multi-case study methodology that takes interpretivism as its philosophical foundation. Data was collected by the methods of document analysis, interviews with faculty members in elementary and early-childhood (Pre K-grade 3) programmes, and focus groups with the pre-service teachers.

Findings showed that there were no clear philosophies of inclusive education with regards to students with special needs guiding both programmes' frameworks. There were also major differences between the two cases in the contribution to the process of preparing their teaches for inclusive schools. The differences were mostly in linking theoretical content with practice, the quantity and the quality of field experiences, collaboration between faculty of elementary and special education, and the alignment between courses' objectives, outcomes, and educational resources regarding inclusive practices. One distinct finding in Programme (A) was that the faculty views about inclusion inclined to consider mainstreaming for students with disabilities rather than full membership to be educated in general classrooms. This view was in contrast with the views of faculty in Programme (B) who showed a strong commitment toward the principles

of equity and equality in education which consequently was reflected in teaching practices. Moreover, the main challenge facing programme (A) specifically "[was] not the lack of knowledge or standards, but putting it into practice in diverse contexts" (Hollenweger, Pantić & Florian 2015, p. 11). From another perspective pre-service teachers who were interviewed in both programmes acknowledged the positive impact of the knowledge and training on preparing them to work with diverse learners. However, they expressed different challenges faced in their internship training. In programme (A) the main challenges were the lack of training on differentiation strategies and the lack of assistive services for teaching students with disabilities. While the main challenge for the pre-service teachers in Programme (B) was facing negative school culture regarding the inclusion of students with disabilities.

The importance of this study is to raise awareness about the offerings of teacher education programmes in the UAE regarding preparing teachers for inclusion, and the need to make foundational changes in curriculum content to meet this aim and additionally, to pay more attention to the elementary pre-service teachers' opinions about their preparation to teach in inclusive schools.

ملخص

يحظى دمج التلاميذ المعاقين في المدارس العامة باهتمام متزايد من قيادة البلاد والمسؤولين التربويين في دولة الإمارات العربية المتحدة. وعلى الرغم من شيوع الأبحاث التربوية المعنية بإعداد المعلمين للعمل في مدارس الدمج التربوي عالميا، إلا أن القليل يُعرف عن هذه الظاهرة محليا وخاصة تحضير معلمي المرحلة الابتدائية المعدين لتدريس التلاميذ من ذوي الإعاقة في المدارس العامة في الدولة.

وقد حقّقت دراسة الحالة هذه الوضع الراهن حول كيفية قيام برنامجين للمعلمين في جامعتين حكوميتين في الإمارات بإعداد معلمي ما قبل الخدمة للعمل في فصول دراسية دامجة. تم فحص المناهج المستخدمة في هذين البرنامجين وكيف يتم تناول استراتيجيات وممارسات التدريس للدمج التربوي فيها. كما استطلعت الدراسة آراء معلمي ما قبل الخدمة ووجهات نظر أعضاء هيئة التدريس حول مساهمة هذين البرنامجين في إعداد المعلمين المرتقبين للتدريس في أوساط الدمج التربوي. جاء اختيار الجامعات الحكومية على أساس أنها المغذيات الرئيسية للمعلمين الإماراتيين الوطنيين الذين ينضمون عادة إلى المدارس الحكومية ومن المتوقع أن يؤثروا على مستقبل التعليم العام في البلاد. كما أن هذه الجامعات تعمل أيضًا وفق سياسات التعليم الإماراتية والرؤية الوطنية للبلاد.

وظفت الدراسة طريقة كَيْفِيّة ودراسة عدة حالات كأداة بحثية مستندة على الفلسفة التفسيرية. تم جمع المعلومات باستخدام أسلوب تحليل الوثائق، والمقابلات مع عدد من أعضاء هيئة التدريس في برنامجي التعليم الابتدائي وبرنامج الطفولة المبكرة. كما تم استخدام أسلوب المقابلة التي تستخدم مجموعة أفراد وذلك مع المعلمين المرتقبين.

تظهر النتائج أنه لا توجد فلسفات واضحة للتعليم الدامج فيما يتعلق بتعليم الطلاب ذوي الاحتياجات الخاصة التي توجه كلاً من أطر برنامَجَيْ المعلمين. هناك أيضا اختلافات كبيرة بين الحالتين في المساهمة في عملية إعداد معلميهم للمدارس الدامجة. الاختلافات في الغالب كانت في ربط المحتوى النظري بالممارسة العملية ، وكمية الخبرات الميدانية ونوعيتها، والتعاون بين هيئات التدريس في تخصصي التعليم الابتدائي والتربية الخاصة، والمواءمة بين أهداف المساقات الدراسية ومخرجات التعلم مع الوسائل التعليمية الخاصة بممارسات الدمج التربوي. إحدى النتائج المميزة في البرنامج (أ) هو أن آراء أعضاء هيئة التدريس حول الدمج تميل إلى النظر لدمج التلاميذ ذوي الإعاقات جزئيا بدلاً من الدمج الكامل للتعلم في الفصول الدراسية العامة. هذا المنظور على النقيض من وجهات نظر أعضاء هيئة التدريس في البرنامج (ب) الذين أبدوا التزاما قويا تجاه مبادئ العدل والمساواة في التعليم والتي بالتالي انعكست على ممارسات التدريس في البرنامج. وعلاوة على ذلك كان التحدي الرئيس الذي يواجه البرنامج (أ) على وجه التحديد لم يكن الافتقار إلى المعرفة أو المعايير ولكن بوضع هذه المعرفة في سياق ممارسة التعليم الدامج.

من جهة أخرى، اعترف معلمو ما قبل الخدمة الذين تمت مقابلتهم في البرنامجين بالتأثير الإيجابي للمحتوى المعرفي والتدريب على إعدادهم للعمل مع مختلف التلاميذ. ومع ذلك ، أعربوا عن تحديات مختلفة واجهتهم أثناء تدريبهم. كانت التحديات الرئيسة في البرنامج (أ) تتمحور حول نقص التدريب على استراتيجيات التمايز بالإضافة إلى نقص الخدمات المساندة لتعليم الطلاب ذوي الإعاقة . بينما كان التحدي الرئيس الذي واجه معلمي ما قبل الخدمة في البرنامج (ب) هو الثقافة المؤسسية السلبية في

المدارس فيما يتعلق بدمج الطلاب ذوي الإعاقة.

تكمُن أهمية هذه الدراسة في رفع مستوى الوعي حول ما تقدمه برامج إعداد المعلمين في الإمارات العربية المتحدة فيما يتعلق بإعداد المعلمين للتعليم الدمج، والحاجة إلى إجراء تغييرات جوهرية في محتوى المناهج لتحقيق هذا الهدف. بالإضافة إلى إيلاء المزيد من الاهتمام إلى آراء معلمي ما قبل الخدمة المتخصصين في التعليم الابتدائي بشأن استعدادهم للتدريس في المدارس الدامجة.

DEDICATION

This thesis is dedicated to the late founding father of our nation Sheikh Zayed bin Sultan Al Nahyan. The year of 2018 was declared the year of Sheikh Zayed celebrating the 100th anniversary of his birth. We share with the world his wisdom, values, patience and human compassion. He considered his people the true resource for this country.

> "The state gives priority to developing the human element and the welfare of citizens everywhere. Citizen are the true resource on this land".
>
> *Sheikh Zayed bin Sultan Al Nahyan*

ACKNOWLEDGMENT

TABLE OF CONTENT

TABLE OF CONTENT

TABLE OF CONTENT

TABLE OF CONTENT

TABLE OF CONTENT

TABLE OF CONTENT

TABLE OF CONTENT

LIST OF ILLUSTRATIONS

LIST OF TABLES

LIST OF TABLES

LIST OF BOXES

CHAPTER 1

Introduction

1.1 The UAE background

The United Arab Emirates (UAE) is a constitutional federation of seven emirates: Abu Dhabi, Dubai, Sharjah, Ajman, Umm Al Quwain, Ras Al Khaimah and Fujairah. The UAE declared its independence on December 2nd, 1971, following the completion of treaties with the United Kingdom. Prior to 1971, the Trucial Sheikdoms of Abu Dhabi, Dubai, Sharjah, Ajman, Umm Al Quwain, Fujairah, and Ras Al-Khaimah were under a British protectorate (The UAE Government Portal 2017a).

In the UAE, we are in a time of unprecedented change brought about by effects of sweeping reforms of government policies represented by the recent National Agenda. In 2010 His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai, launched the UAE Vision 2021, which aims to make the UAE one of the best countries in the world by the Golden Jubilee of the Union (Ministry of Cabinet Affairs 2017a).

The UAE National Agenda "Vision -2021" was translated into six national priorities or pillars which represent the key focus sectors of government action in the next coming years. These sectors include "cohesive society and preserved identity, safe public and fair judiciary, first-rate education system, competitive knowledge economy, world-class healthcare, sustainable environment and infrastructure" (Ministry of Cabinet Affairs 2010). One aim that was outlined by the UAE "Vision- 2021" regarding education states:

> Education will provide equity of opportunity and balanced outcomes for all students. Special needs students will be properly integrated within the education system with the benefit of support programmes and infrastructure that guarantee fair access". (Ministry of Cabinet Affairs 2010, p. 23).

The government considers education as "a fundamental element for the development of a nation and the best investment in its youth" (Ministry of Cabinet Affairs 2017b). Equal opportunity and access to first rate education is one of the basic rights for all Emiratis.

1.1.1 Education in the Federal budget

The education sector has always been considered one of the most important sectors in the country. The government was very careful to make the education budget a priority, and considered it as an investment. In 2015, the UAE Cabinet approved a federal budget of 48.5 billion AED (United Arab Emirates Dirham) for the year 2016. The education sector received the maximum allocation of 21.2% which amounts 10.28 billion AED (The UAE government portal 2017b). Similarly, in the year 2017 the government public schools and higher education sector received 10.2 billion AED from the federal budget (Emaratalyoum 2016).

In its strategic plan 2017-2021, the Ministry of Education (MoE) asserts this scope. It is mentioned in the MoE mission that the ministry will develop a creative education system to include all age groups to meet future labour market demand which emphasizes the importance of developing an educational system on the basis of six values. Two of these values include: equality and justice. This stipulates commitment from the MoE to community partnership and accountability in the education process. The second value is participation and accountability, in which the MoE ensures equal educational opportunities for all (MoE 2017a).

1.2 Higher Education in the UAE

The development of the higher education sector in the UAE began by launching the United Arab Emirates University (UAEU), the first federal university in the country in 1977 (Kirk 2010). This federal university is located in Al Ain, a city on the east of the capital Abu Dhabi and provides two separate campuses for females and males keeping with local Arabic culture. Prior to 1977, all students who wish to pursue their studies after completing high school were sent by the government or at their own expense to some Arab countries, such as Kuwait and Egypt or foreign countries, such as the United Kingdom (GBR) or the United States of America (USA).More federal, government and private universities and colleges have been increasingly adding to the tertiary education sector since then.

1.2.1 Federal public higher education universities and colleges

There are three public government universities in the UAE. The first is the United Arab Emirates University (UAEU), which currently enrols approximately 14,000 Emirati and international students. The UAEU offers a range of accredited graduate and undergraduate programs through

nine colleges: Business and Economics, Education; Engineering, Food and Agriculture, Humanities and Social Sciences, IT, Law, Medicine and Health Sciences, and Science (UAEU 2017a).

The second institution is the Higher Colleges of Technologies (HCT) that was founded in 1988 and based on practical experienced learning to provide vocational or technical training for Emiratis (Raven 2011). The HCT has more than 23,000 students based on 17 campuses in Abu Dhabi, Al Ain, Dubai, Fujairah, Madinat Zayed, Ras Al Khaimah, Ruwais and Sharjah. It offers many different, work-relevant, English-taught programmes in Applied Communication, Business, Computer & Information Science, Engineering Technology & Science, Health Sciences and Education at various levels. All programmes are designed in consultation with business and industry leaders to ensure the students' skills are job-relevant and to the highest standards (HCT 2017).

The third university is Zayed University (ZU) that was established in 1998 in Dubai as a females' campus only and later a second campus was opened in Abu Dhabi for females and males. The number of undergraduate in both campuses in the fall of 2015 was 8910 Emirati and international students. Zayed University offers bachelor degrees in Arts and Sciences, Business, Education, IT and Media (ZU 2017a).

Total number of licensed higher education universities and colleges:

The number of licensed higher education institutions in the UAE has increased sharply during the last two decades. Licensed institutions are classified into the following three categories: University, institute and college/ academy/ university college. According to the Ministry of Higher Education and Scientific Research (MoHESR 2014, pp. 10 - 11) the operational higher education institutions increased to 71 in 2013 and are distributed by type as follows:

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

On the other hand licensed operational international branch campuses in the UAE are located in Abu Dhabi or Dubai and include: 6 universities, 1 college and 3 institutes.

It is worth mentioning that following the UAE Cabinet's reshuffle in 2016, Ministry of Higher Education and Scientific Research (MoHESR) was merged into Ministry of Education with two Ministers of State in support. Accordingly, the present Ministry of Education oversees the general planning of higher education and scientific research in the UAE.

1.2.2 Teacher Education programmes in the UAE

To examine teacher education, Kirk (2010, p. 31) argues that it must be placed within the specific cultural context in which it exists. In the UAE educational context, government schools rely heavily on expatriate teachers due to shortage of national teachers. And in spite of the government plans to attract and retain teachers, according to Kirk (2010) these plans have not succeeded to attract nationals to the profession. Consistent with that is Revan's (2011, p. 19) point of view on the importance of the relevancy of education programmes being offered in tertiary institutions to the UAE unique cultural context, especially that all of these programmes are accredited from Western countries that have different cultural values and beliefs from Arabic local culture. He also links this challenge to the language of teaching in universities which is English, while the language of instruction in government schools is Arabic. He finds it causes a challenge for Emerati teachers to develop resources and teaching techniques in Arabic as well as English. The former causes also can be considered as causes for the shortage of teachers' programmes in government and private universities, and the serious shortfall in the number of Emarati graduates from these programmes compared to other specialization like business, engineering and information technologies (MoHESR 2014).

According to the Ministry of Higher Education and Scientific Research (2014) statistics, the number of universities and colleges that offer Bachelor's programme in education are 14 institutions. Table (1) shows the distribution of these universities across the UAE.

	Abu Dhabi	Dubai	Sharjah	Ajman	Ras Al Khaimah	Fujairah	Umm Al Quwain
Bachelor's programs	7	2	1	1	2	2	0

Table 1. Number of universities and colleges that offer Bachelor degree in education in the year 2014 (MoHESR 2014).

1.3 Inclusion policy in the UAE

Expansion in education services after the country's independence required providing opportunities for all citizens to receive education. Therefore, increase attention was paid to educating children with disabilities. The MoE started for the first time to include students with disabilities in public schools in Dubai and Abu Dhabi in the school year 1979/1980. The number of students who were included in special classes within public schools in 1980 was 41 and grew to 1844 in the year 2001(Abbod 2005). According to Gaad (2011, p.70), including students with disabilities in government schools at the beginning was limited to students with an Intelligence Quotient (IQ) score of 75 and mild disabilities until the introduction of the new federal law in 2006.

After the introduction of this new law schools started to accept students with a wide range of disabilities, such as autism and Down Syndrome who were not able to enter public schools previously (Gaad & Almotairi 2013). Some students received education in segregated special classes and others received support through resource room pull-out system. It is worth mentioning that educating children with disabilities is the responsibility of two federal authorities in the UAE: The MoE and the Ministry of Social Affairs (MoSA), and the latter has the authority over all government and private centres for special needs (Gaad 2011).

These developments encouraged implementing the inclusion project. The number of public schools providing education for students with special education needs (SEN) has increased to 202 in 2014, up by 40% from 2010. Besides, more than 12,500 students with SEN were included in mainstream schools in the year 2015 (Olarte-ulherr 2015). Figure (1) shows the increase of the number of students with disabilities who have been included in public schools since 1980.

1.4 Statement of the Problem

Although initial teacher education for inclusion is an area that has been widely researched on the international level (Symeonidou 2017), little is known about how primary general pre-service teachers with expertise in teaching students with disabilities are prepared in the UAE educational context.

Despite the inclusion of students with disabilities in general classrooms being at the forefront of attention in education for the last few decades (Vaughn et al. 1994, p.3), growing evidence in empirical studies demonstrates that general teachers are not well prepared for teaching in

Year	1980	2001	2008	2012	2015
No. of Students	41	1844	6500	9300	12,500

Figure 1. The number of students with disabilities who have been included in public schools since 1980 (Abbod 2005; Olarte-ulherr2015; Ministry of Cabinet Affairs 2017c).

inclusive classrooms (DeSimone & Parmar 2006; Fuchs 2010; Pijl 2010; Spratt & Florian 2013; Zulfija, Indira & Elmira 2013). Research in the UAE shows also that primary general teachers are facing challenges and constrains in meeting the educational needs of all students in inclusive classrooms. There is evidence that suggests that general education teachers do not believe that they are fully prepared for the inclusion of students with disabilities (AlAhababi 2009; Alborno 2013; Almehairi 2010; Anati 2012; Bradshow 2009; Gaad & Khan 2007; Gaad & Thabet 2009).

1.5 Purpose of study

This study investigated the current state of how teacher programmes in government universities, as the largest providers for UAE national teachers, are preparing prospective teachers to work in inclusive classrooms. Curriculum used in course work and how inclusive teaching strategies and practices are addressed in this curriculum are examined. In addition, pre-service teachers and faculty views about the contribution of these programmes to prepare the prospective teachers to teach in inclusive settings are addressed. The focus is on teacher preparation programmes for

inclusive education for children with disabilities or special education needs. Other types of diversity like ethnic origins, language, economic status and gender are not considered.

1.5.1. Rationale

School systems have been changing dramatically to become more inclusive and this phenomenon which seeks to embrace diversity of learners is expanding and turning into a permanent fixture in our education system; as a result, it is essential for general teachers to be prepared to meet the needs for all students and most importantly to provide pre-service teachers with skills and knowledge to teach in inclusive classrooms (Forlin & Chambers 2011; Rosenzweig 2009; Ryan 2014; Taylor & Ringlaben 2012; Whitworth 1999).

The rationale for choosing government universities is that they are the main feeders of national UAE teachers who usually join government schools and are expected to impact the future of public education in the country. These universities are also working in alignment with the UAE education policies and national vision.

1.6 Significance

Research in the area of pre-service teacher education programmes in the UAE is scarce, and few studies are available. These studies have focused on pre-service science teachers' experiences of teaching science during college internships (Kadbey & Dickson 2014), technology integration in the classroom (Almekhlafi 2007), relationships among pre-service teachers and university supervisors (Ibrahim 2013), and the use of reflection to enhance professional growth (Clarke & Otaky 2006). There is also research done on the effects of teaching experience on pre-service elementary teachers' self-efficacy beliefs (Al-Awidi & Alghazo 2012) and teachers' perception of teaching competencies (Dickson et al. 2013; Hassan, Khaled & Al Kaabi 2010; Khalid, Dukmak & Dweikat 2017; Mohamad, Valcke & De Wever 2015). There is shortage of research about general pre-service teacher education programmes for inclusion in the UAE or Arabian Gulf countries.

One ground breaking study explores pre-service teachers' attitudes towards special education as a teaching profession by Gaad (2004). The study investigated how cultural, moral, societal and professional factors affected pre-service teachers' attitudes towards and selection of special

education as teaching profession (Gaad 2004, p. 619). Although Gaad's study was concerned with pre-service teachers in the UAE context, it differs completely from my study in two areas which are: The focus of the study and the methods of collecting data. The focus of her study was on cultural and beliefs issues regarding taking special education as a profession. In addition, Gaad used interview and questionnaire as the main methods to collect the data. Another study was done by the Jordanian scholar Muna Amr (2011) who mapped teacher education for inclusion in the Arab region. Amr's study differs from this current study in many aspects. First, the main focus in Amr's study was the teacher programmes in Jordan. Second: She included both pre-service and in-service teachers' programmes. Third: Although it mapped teacher programmes in some Arab countries (e.g. UAE; Bahrain, Eygpt), in doing so she used only literature, and universities websites as sources of information for the Arab countries other than Jordan. As such, this proposed study's aim to explore general pre-service programmes for inclusion in the UAE educational context can be deemed as unique.

It is anticipated and hoped that the findings of the research will be relevant to a wide range of practitioners and policy makers in this country who are interested in widening the participation of all young learners and improving their educational achievement for them. The research is also significant in the way that it illustrates how the UAE higher education institutions are responding to emerging policies regarding equality of educational opportunities for all students and preparedness of prospective teachers to work in inclusive schools.

1.7 Research questions

- Main Question:

- How are current pre-service teacher programmes in two government universities preparing Elementary teachers for inclusive classrooms?
- Sub-questions:
a - What coursework outcomes and content (e.g. assessment, resources) related to inclusion and diversity of learners were provided to elementary pre-service teachers during their teacher preparation programme?
b. How were some elements and concepts of inclusive education integrated and addressed in the Elementary teacher education curriculum/syllabi across the two government universities?

c- What were faculty opinions about the contribution of coursework and field experiences to the teachers' ability to meet the educational needs of all students?

d- What were the pre-service teachers' experiences and opinions about the contribution of coursework and field experiences to the teachers' ability to meet the needs of all students?

Diversity in education includes, but not limited to, a wide range of identities that exist in people such as gender, race/ethnicity, religion, disability, economic status, culture and other categories. In this study diversity of learners is limited to students with disabilities in the UAE government schools context. Other types of diversity such as ethnic, cultural or economic status are not the focus of this study. Therefore, these types of diversity will not be included in the data collection or mentioned in the results of this research. The terminologies: 'disabilities' and 'special educational needs' (SEN) are used interchangeably.

Students with disabilities in the UAE government schools who are eligible to receive special education programmes and related services may have one (or more) of the following types of disabilities (MoE 2010):

- Specific learning disabilities (e.g. brain injury & dyslexia).
- Physical and health related disability (e.g. Attention deficit disorder with hyperactivity, cerebral palsy).
- Visual impairment (partially sighted and blindness).
- Hearing impairment including deafness.
- Speech and language disorders.
- Autism spectrum disorders.
- Emotional and behavioural disorders.
- Intellectual disabilities.

Primary education in government schools is known as cycle one stage. It consists of students aged 5 to 13 in grades 1 to 5. This study focused on cycle one education and the term primary or elementary education was used to indicate cycle one stage. Government university indicates one under the authority of the UAE government represented by the Ministry of Education.

1.8 Design of the study

This study was designed to address research questions using a qualitative research approach to explore pre-service teacher programmes for inclusive education. Qualitative collective case studies were utilized to achieve this goal (Creswell 2013; Stake 1995). A sample of two Elementary teacher programmes in two government universities were examined because it was anticipated that their educational policies should be in alignment with the federal law regarding including students with disabilities in regular classrooms. Moreover, it was expected that prospective primary teachers are more exposed to inclusive classrooms during field experiences than other stages. Based on researcher's experience, in the UAE public school context students with disabilities and services to accommodate them are included in most cycle one primary schools. Therefore, it was expected that rich information can be gained from teachers' experiences in such environments.

Data was collected from documents about programmes' curricula with a focus on syllabi related to inclusive education. These documents were obtained from university web-sites and instructors. Interviews were conducted with instructors and head of departments in elementary education programmes. In addition, focus groups with pre-service teachers in the elementary education specialization were conducted. The research investigated the current state of how teacher programmes in two government universities, as the largest providers for UAE national teachers, are preparing prospective teachers to work in inclusive classrooms.

1.9 Structure of the thesis

This thesis is divided into five chapters. This chapter includes a background about the country, the status of higher education, teacher education programmes and inclusion policies in the UAE. Chapter one also includes statement of the problem, study's purpose, significance, research questions, and an overview of the study design. Chapter two consists of two main sections: The literature review and the theoretical framework as the philosophical foundation for the study. Chapter three includes research methodology and design. Moreover, it includes data collection methods, ethical considerations, trustworthiness and validity of the results. Chapter four includes findings interpretation of data and discussion. Conclusions drawn from the study, implications, recommendations and limitations are represented in chapter five.

1.10 Definitions of terms

Credit:
 The unit of value, awarded for the successful completion of certain courses, intended to indicate the quantity of course instruction in relation to the total requirements for a diploma, certificate, or degree. Credits are frequently expressed in terms such as semester credit hours, and quarter credit hours.[1]

Credit hour:
 The unit of measuring educational credit usually based on the number of classroom hours per week throughout a term.[2]

Differentiation:
Differentiation of instruction is a teacher's response to learner's needs guided by general principles of differentiation, such as respectful tasks, flexible grouping and ongoing assessment and adjustment. Teachers can modify content (what teacher wants students to learn and the materials or mechanisms to accomplish that), process (describes activities for students to use key skills to make sense out of essential information), and products (vehicles through which students demonstrate and extend what they have learned); according to student's readiness, interests and learning profile.[3]

Disability:
Disability is an evolving concept and that disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others.[4]

Disability Medical Model:
It is also known as a defect or 'within-child model'. In the context of learning difficulties it points to practices which call on pathology.[5] It is also based on the assumption that the learning difficulties lie within the child. Accordingly, in order to help the child we need to assess his/or her strengths and weaknesses (diagnose) and plan intervention based on this analysis. The aim is to help the child to fit the system in order to benefit from what the school has to offer. There is no assumption that the school needs to change to accommodate or respond to the diversity of students' population.[6]

Disability Social Model:
Disability Social Model key elements are: The distinction between disability (social exclusion) and impairment (physical limitation) and the claim that disabled people are an oppressed group.[7] Further, this model views the barriers that prevent people [with disabilities] from participating in

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[1]National Center for Educational Statistics (2016).

[2] Merriam-Webster (2018).

[3] Tomlinson (1999, pp. 9-15).

[4] UN (2006, p. 1).

[5] Clough (2000).

[6] Mittler (2000, p. 4 & p. 10).

[7] Shakespeare (2006, p. 198).

any situation as being what disables them.[8] Disability can be seen as a limitation of equal opportunities in participating in community activities and life caused by physical and social barriers.

Inclusion:

I see inclusion as a process that identifies and eliminates barriers to access education for all children, and consequently facilitates their full participating in society. Accessibility to education must be provided by suitable accommodations in curriculum, accessible physical environment supportive services and positive attitudes from educators, peers and staff.

Impairment:

The term impairment is used to refer to the loss or limitation of physical, mental, intellectual or sensory function on a long term or permanent basis. [9]

Integration:

It involves preparing pupils for placement in ordinary schools. It implies a concept of educational or social readiness for transfer from special to ordinary school. The pupil must adapt to the school [4]. It denotes a normalizing process that is primarily concerned with relocation of students with disabilities into unchanged, rigid educational systems.[10]

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[8] Rieser (2006, p.135).

[9] UN (2011, p. 71).

[10] Liasidou (2012, p. 9).

CHAPTER 2
Literature Review

This chapter reviews the literature related to six key topics connected primarily to the current study: The first section includes a background of education in the UAE, with a special focus on the public sector where pre-service teachers are trained and receive field practicum. The second section explores the concept of inclusion and inclusive education from several perspectives: The international conventions aspect, the national policies documents and from literature. It also discusses inclusive pedagogies, advantages and challenges as evidenced by literature. The third section reviews inclusion policies and regulations in the UAE. The fourth part is an exploration of teacher education programmes for inclusion from an international perspective. The fifth section examines some trends in teacher programmes research such as content regarding inclusive education, ways of delivery, and teachers' attitudes towards inclusion. The sixth section identifies the study's theoretical framework which consists of two main parts the Disability Social Model and Rodríguez's (2012) Model for preparing teachers for inclusion. The chapter concludes by a summary that identifies the key points mentioned in the review.

Diversity in today's schools has important implications especially on how general teachers are prepared to deal with such diversity and be responsible for students' learning (Florian 2013). Having highly qualified teachers to teach students with disabilities in general classrooms has [i] been suggested by many inclusive education scholars (Bouillet 2013; Florian 2008; Florian & Linklater 2010; Idol 2006; Loreman 2007; Soleas 2015; Walton & Rusznyak 2014; Winter 2006). On the other hand preparing teachers for inclusion is a complex and challenging endeavour as Symeonidou (2017) argues. She calls upon all stakeholders who are involved in the process of the development of inclusive education and teacher education to be fully aware of each country's characteristic distinctive culture, nature of educational system, specific history and political context (Symeonidou 2017).

Three criteria were used to choose the studies examined in this literature review. First, the studies must concern undergraduate pre-service general primary/or early childhood teacher education programmes. Also, studies were chosen if teachers' education stage was not mentioned but still apply to general teachers. Studies for special education, in-service only or secondary teachers

were excluded. To limit focus and effort, the second criterion was the time range of studies. Studies conducted from 1990s to 2016 were included. Third, more focus was placed on studies related to Arab or developing countries, that covered curriculum, field experiences and teaching strategies as they are more related to the objectives of this current study.

2.1 Educational Background

2.1.1 History of Education in the UAE

Education in the UAE developed through three main structures or stages: Mutawa and the Katateeb, semi-organized education and the modern educational system (Alshaikh 2004; Alhebsi, Pettaway & Waller 2015). The first stage was Al Mutawa, or Mutawaah in its feminine form, which refers to a person who usually memorized the Holy Quran and his or her work was to teach young boys and girls reading and memorizing the Holy Quran. Most of the times teaching the children took place in the teacher's house, and in some communities education occured in an assigned place by some rich people that is called the Kuttab (its plural is Katateeb) (Alshaikh 2004; Alhebsi, Pettaway & Waller 2015). This type of religious education has been known in all Muslim countries for centuries and still exists in remote areas in Asia and Africa.

The second type of education in the UAE was led by the largest pearl traders during the period between 1907 and 1953, who were influenced by the Arab Enlightenment movement in other countries. Many schools were established in different cities, one example was Al-Ahmadiyya school, established in 1910 in Dubai. Another example was Al-Islah school in Sharjah which was established in 1930 (UAEPedia 2017). The third stage was the establishment of modern western education systems which was not well known in the UAE until the year 1953 when the first Kuwaiti educational mission opened a school in the emirate of Sharjah. After that schools flourished throughout the UAE; in Dubai the first modern school opened in 1956 and the first school in Abu Dhabi was established in 1958 (UAEPedia 2017).

2.1.2 General public and private education K-12

Public education in the UAE is available and free to all Emirati children from K-12 levels and through all higher education stages. K-12 public (government) schools consist of three

educational stages: Basic stage, cycle one that includes grades1-5; basic stage, cycle two that includes grades 6-9 and secondary stage that includes grades 10-12 (MoE 2010).

Public schools catered to 277,733 students in the academic year 2015/2016. Emirati students consisted 81.81% of the total number of students, while the rest percentage was of students from other Arab countries. On the other hand, general private schools catered for a total of 755,882 students; the Emerati students were 123,469 (16.33 %) and the non local (from Arab and foreign countries) constitutes 632,413 students (83.67%) (MoE 2016). The public schools follow the Ministry of Education curriculum and language of education is Arabic. Furthermore, most private schools in the UAE follow the British, American curriculum, or Indian. However, there are few Arab schools which follow the Ministry of Education curriculum as well (KHDA 2018).

2.1.3 Regulatory authorities of K-12 education and higher education

There are three regulatory authorities of K-12 education and higher education in the UAE; Ministry of Education, Abu Dhabi Education Council (ADEC) in Abu Dhabi and Knowledge and Human Development Authority (KHDA) in Dubai. Following is a brief description of each authority and its responsibilities.

2.1.3.1 The Ministry of Education (MoE):
In the UAE, the federal authority of Ministry of Education (MoE) supervises public schools in all the emirates except for Abu Dhabi; and private schools in all emirates except for Abu Dhabi and Dubai. All public and private colleges, universalities and higher education institutions are also overseen by the MoE since the recent government restructure in 2016 (The UAE Government Portal 2017b). Before that higher education had its own Ministry of Higher Education.

2.1.3.2 Abu Dhabi Education Council (ADEC) in Abu Dhabi:
The local authority of Abu Dhabi Education Council (ADEC) regulates public and private K-12 schools in Abu Dhabi. ADEC was established in 2005 by His Highness Sheikh Khalifa Bin Zayed Al-Nahyan, the UAE President and the Ruler of Abu Dhabi. ADEC is responsible for managing, guiding, adopting and implementing various educational development strategies and initiatives in Abu Dhabi (ADEC 2017).

2.1.3.3 Knowledge and Human Development Authority (KHDA) in Dubai:

Dubai has two key bodies which regulate the education process in the Emirate; Dubai Education Council (DEC) and Knowledge and Human Development Authority (KHDA). DEC regulates international accreditation and comprehensive quality assurance programmes. The KHDA was established in 2006 and responsible for private education in Dubai which includes schools, universities, investors and government partners (The UAE Government Portal 2017b; KHDA 2017a).

2.1.4 Education reforms

2.1.4.1 UAE Vision 2021:

The UAE Cabinet launched a seven-year UAE National Agenda leading to the UAE Vision 2021 which coincides with the UAE's 50th National Day. As mentioned previously, one of the pillars of the National Agenda emphasizes on the development of first-rate educational system. Eight performance indicators were set to monitor the achievement of its goals (Ministry of Cabinet Affairs 2017b). Table (2) displays key performance indicators for the education sector in the UAE National Agenda and some measured results achieved by the responsible authorities so far.

2.1.4.2 Licensing system for teachers:

The UAE has introduced a new licensing system for teachers. According to National Qualifications Authority (NQA), teachers across the country will soon be subject to a uniform licensing system. The system will standardise qualifications for Emirati and expatriate teachers in private and public schools. The new licensing system was introduced in 2017 and will be fully implemented by 2021. The system is co-developed by NQA, MoE, ADEC, KHDA and Abu Dhabi Centre for Technical and Vocational Education Training. NQA is also working with MoE on a handbook on teaching career which will outline employment categories and knowledge and skills required for each level of education (The official portal of the UAE government 2017b). The licensing teachers system is one of the key performance indicators for the education sector in the UAE National Agenda, and hopefully is a step towards preparing qualified teachers who can work in a diverse environment and who are able to accommodate for students with SEN including those with disabilities.

2.1.4.3 Unified inspection standards:

Index	Indicator	Definition	Source	Results
1	Average TIMSS Score	An indicator that reflects the nation's ranking and score in the TIMSS test, which evaluates the math and science skills of students in grades 4 and 8.	International Association for the Evaluation of Educational Achievement	TIMSS 2015: - Mathematics Grade 4: Rank 39 - Science Grade 4: Rank 40 - Mathematics Grade 8: Rank 23 - Science Grade 8: Rank 23
2	Upper Secondary Graduation Rate	An indicator that measures the percentage of national students graduating from secondary education out of the population in the age group of 18 years (measured as the number of graduates, regardless of age, divided by the population aged 18 years).	Ministry of Education and The Federal Competitiveness and Statistics Authority	96.7% (2016)
3	Enrolment Rate in Preschools (public and private)	An indicator that measures the percentage of children between the age of 4 and 5 who are enrolled in preschools (This indicator emphasizes the importance of providing children with a good foundation at an early age).	Ministry of Education and The Federal Competitiveness and Statistics Authority	91.0% (2016)
4	Average PISA Score	An indicator that measures the country's ranking and scores in the PISA exam, which evaluates the reading, mathematics and science skills of 15 year old students.	Organization for Economic Co-operation and Development	PISA 2015: - Mathematics: Rank 47 - Science: Rank 46 - Reading: Rank 48
5	Percentage of Students with High Skills in Arabic, According to National Tests	An indicator that measures the share of ninth grade students with high skills in the Arabic language (reading, writing) according to national tests. The indicator covers students in public and private schools at the national level (NKPI specific to UAE).	Ministry of Education	67.0% (2016)
6	Percentage of Schools with High Quality Teachers	An indicator that measures the percentage of schools that meet certain quality standards of teachers based on a clear system of measurement and evaluation.	Ministry of Education	Work in progress
7	Percentage of Schools with Highly Effective School Leadership	An indicator that measures the percentage of public and private schools that achieve high scores on effective school leadership based on the school monitoring and evaluation scheme.	Ministry of Education	Work in progress
8	Enrolment Rate in Foundation Year	An indicator that measures the share of local students who have to undergo foundation year (a program usually focusing on strengthening Arabic, English, Math and IT) out of the total local students enrolled in the universities in the same year.	Ministry of Education	46.8% (2016)

Table 2. Key performance indicators for education sector in the UAE National Agenda and some measured results achieved by the responsible authorities (Ministry of Cabinet Affairs 2017b).

The Ministry of Education, the Abu Dhabi Education Council, the Dubai Knowledge Authority and the Applied Technology Institutes have unified the inspection standards for schools. A joint guide has been issued setting out the framework of the inspection standards across the country for both public and private schools (Bayoumi 2015). The new framework calls for schools to place a greater emphasis on promoting a culture of innovation, entrepreneurship, inclusive education and national culture (Pennington 2015). And since the school year 2015/2016 the UAE National Agenda framework "requires all schools to participate in international and external benchmarking assessments on an annual basis other than TIMSS and PISA, and use them to monitor their progress in meeting their UAE National Agenda individual targets" (KHDA 2016, p.6).

The role of school's unified inspection is to achieve the vision of the UAE 2021 and to establish a world-class educational system in the country. Inspection standards are based on a comprehensive framework of performance standards that define the fundamental aspects of the quality of educational process. Each standard includes a set of performance indicators and quality elements, a detailed description of the quality elements, and illustrative examples that provide a full explanation of school control assessments and how schools are developed.

To conclude this section, we can draw from what has been put forward, that the educational reforms support the development of the education sector in general and inclusive education in particular. The intended licensing system for teachers and the unified inspection standards contribute in serving the National Agenda to achieve the UAE Vision 2021 through different aspects such as the teacher quality and the quality of teaching. Moreover, these types of legislations are expected to hold higher education institutions and the government accountable for the quality of teacher preparation and licensing. For example, higher education institutions must develop their teacher programmes to be licensed by education authorities (e.g. MoE) in order to qualify their graduates to be licensed later and work in general (public & private) schools.

Two examples from the key performance indicators for education sector in the National Agenda are strongly related to the aim of this study which was preparing teachers to work in inclusive contexts. The 6th and the 7th indicators are related directly the preparation of high quality teachers and highly effective schools leaderships. It is worth noting that we must distinguish between teacher quality and quality of teaching to understand how these reforms are strongly connected to prepare teachers to be able to work in diverse contexts.

From the researcher point of view, in the UAE education context, teacher quality can be related to teacher licensure. Although teacher licensure system is a new system in the UAE education context, and there is no information currently available about it, we can anticipate teacher licensure requirements by examining international systems. On the international level, teacher licensure tests usually examine beginning teachers' competencies in subject areas (knowledge), skills, abilities and dispositions (teaching methods). Mitchell et al. (2001, p. 3) argue that "the primary goal of licensing beginning teachers is to ensure that all students have competent teachers". In other words candidate teachers must be ready to teach students with diverse needs in the regular classrooms in order to be licensed to teach in schools. Further, Mitchell et al. (2001, p. 1) explained that "these tests have significant consequences for teacher candidates and potentially for students and schools".

From another perspective, teaching quality can be linked to the unified inspection system for all schools in the UAE. From this study perspective, the recent unified inspection is anticipated to play a critical role in promoting teaching quality of students with disabilities in public and private general schools. Teaching quality depends on different factors such teachers' competencies, schools organization, educational resources, administrative and parental support. Moreover, the unified inspection framework guide considered the Vision 2021 as the foundation for its role. And explained that to achieve the world-class education systems (or Vision 2021), "the UAE must "apply a high-quality evaluation system to measure reliably the quality of school performance and to support school improvements and students' outcomes, through rigorous and regular school inspections" (KHDA 2016, p. 7). Inclusion was one of the main components of the inspection guide, it stated:

> The UAE is determined to become an inclusive, barrier-free, rights-based society that promotes, protects, and ensures the success of all groups of students. The impact of inclusion should be seen through the learning experiences of all children within UAE schools. Governors and senior leaders have a responsibility to facilitate and develop inclusive attitudes and practice within their schools. In the most successful schools, a highly- inclusive ethos will be reflected in the values and culture of the entire school community so that learners feel welcome, accepted, safe and valued. (KHDA 2016, p. 13).

The guide also highlighted that students who are identified with a special educational need such as learning difficulties, disabilities and giftedness "could mean that students require specialist support, specific curriculum modification or individualised planning to ensure that they make the expected levels of progress given their starting points" (KHDA 2016, p. 117).

2.2 Inclusion

Inclusion has different meanings in different contexts. The previous statement can be attributed to several reasons. One reason is that 'inclusion in education' is a controversial term because it is used by different stakeholders (e.g. governments, policy makers, educators, administrators, parents), who give the term their own meaning from their perspective (The Open University 2016). Another reason is related to the broader understanding and conceptualization of inclusion on the international level and in different countries. On the international level all children must be included in schools regardless of their gender, ethnic group, language, economic status, or disability. However, in some educational contexts the attention is focused only on including students with disabilities and learning difficulties leaving others (not necessarily with disabilities) excluded from mainstream education (e.g. many developing countries). Those different groups of children have been excluded or marginalized from education because of gender, being from a minority ethnic or language groups, or other needs. From another point of view, Ainscow et al. (2006) remarks also that inclusion is defined in a variety of ways. According to them, definitions can be descriptive prescriptive, they explain:

> A descriptive definition of inclusion reports on the variety of ways 'inclusion' is used in practice, whereas a prescriptive definition indicates the way we intend to use the concept and would like to be used by others. (Ainscow et al. 2006, p.14).

Because of this it is important that the term be defined in advance prior to any discussion. The inclusion of students with special education needs (SEN) in general school systems have been increasingly supported and adopted globally and locally by policies. Rieser et al. (2013) argue that "these interpretations have significant knock-on effects for what teachers are being taught about inclusion and how they subsequently teach, and how children are impacted".

Therefore, this section will start by looking at the concepts of inclusion and education of children with disabilities, and how these concepts were interpreted by the international agencies (e.g. the UN; the UNESCO) through a number of conventions and declarations. Then the concept of inclusion/or inclusive education was defined by government documents in the UAE educational context, and finally some relevant definitions from the literature are presented.

2.2.1 Definition

2.2.1.1 Inclusive education in international declarations and conventions:

The United Nations Convention on the Rights of the Child UNCRC (1989):

The UNCRC protects and promotes the rights of all children, including children with disabilities. Article 23 emphasised on the rights of children with disabilities. It asked governments to recognize the right of the child with disability to special care, access to education, training, health care services, rehabilitation services, and preparation for employment. Article 28 was particularly relevant to education. It reinforced making primary education compulsory and available free to all; encouraging the development of different forms of secondary education, and make them available and accessible to every child; making higher education accessible to all; and making educational and vocational information and guidance available and accessible to all children (UN 1989, pp.7-8).

The UNESCO's World Declaration on Education for All (EFA), Jometien 1990:

Although inclusion term was not used before the 1990s, inclusive education principles were emerging in some international declarations such as The UNESCO's World Declaration on Education for All (EFA) which adopted in Jometien in1990 (UNESCO 1990). This global movement led by the UNESCO emphasised on "education [as] a fundamental right for all people, women and men, of all ages throughout the world" (UNESCO 1990, p. 2). For example, Article one of Education for All titled: Meeting basic learning needs, called for: Every person-child, youth and adult-shall be able to benefit from educational opportunities designed to meet their basic learning needs". Article three of the same declaration called also for universalising access and promoting equity, it stated:

> Basic education should be provided to all children, youth and adults. To this end, basic education services of quality should be expanded and consistent measures must be taken to reduce disparities. (UNESCO 1990, pp. 3-4).

World Conference on Special Needs Education in Salamanca, Spain in 1994:

Later, the UNESCO introduced the principle or approach of inclusive education through the World Conference on Special Needs Education in Salamanca, Spain in 1994. The "Framework for Action on Special Needs Education" that was adopted by the UNESCO and the 92 countries which participated in this conference and known as Salamanca statement stated: "schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions" (UNESCO 1994, p. 6). It called to combat exclusion and promote inclusion and

participation as an essential exercise of human rights. The UNESCO (2005, p. 13) went on in its report 'Guidelines for Inclusion' to define inclusion as:

> a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education. It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children.

The UNESCO (2005) also views inclusion as "a dynamic approach of responding positively to pupil diversity and of seeing individual differences not as problems, but as opportunities for enriching learning".

The concept of inclusive education has gained worldwide attention in the past few decades. Several key international conventions and declarations followed Salamanca's Statement to support the education of all children without discrimination. Following are the most prominent ones:

The Dakar Framework for Action (2000):
The World Education Forum (26-28 April 2000, Dakar) adopted the Dakar Framework for Action, Education for All: Meeting our Collective Commitments. The governments participated in this forum reaffirmed their commitment to the World Declaration on Education for All adopted ten years earlier (Jomtien, Thailand, 1990). The participants ensured their collective commitment to achieve quality basic education for all by 2015 (UNESCO 2000, p. 8).

The Convention on the Rights of Persons with Disabilities CRPD (2006):
The purpose of the convention is to "promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity (UN 2006, p. 4). By adopting this convention, the United Nations shifted towards the Social Model of Disability that affirms the human rights of people with disability, and the disability is socially constructed (Hernandez 2008). The CRPD consists of 50 Articles that cover areas such as general principles (e.g. dignity; Non-discrimination; equality of opportunity), women with disabilities, children with disabilities, accessibility, equal recognition before the law, respect for privacy and education.

The Convention is considered also "the first human treaty to explicitly call for inclusive quality education" (UN 2016, p. 6). Some details about Article 24 of the CRPD (2006) will be reviewed in following section.

Article 24: Education

According to Article 24, inclusive education requires governments to:

> Recognize the right of persons with disabilities to education with a view to realizing this right without discrimination and on the basis of equal opportunity, States Parties shall ensure an inclusive education system at all levels and lifelong learning. (UN 2006, p. 17).

In addition, this Article includes the principles that can guide governments to create inclusive education. According to Hernandez (2008, p. 504) in order to achieve that, states are required to:

> 1) Refrain from excluding persons with disabilities from the general education system on the basis of disability,
> 2) ensure that people with disabilities have equal access to a free and quality education,
> 3) provide reasonable accommodation of the individual's requirements,
> 4) support persons with disabilities in the way required to facilitate their effective education, and
> 5) provide effective individualized support measures in environments that maximize academic and social development.

It is worth noting that the UAE signed the CRPD on 8 February 2008; and ratified it on 19 March 2010 (WAM 2015). To gain a comprehensive perspective, sections of Article 24 are included in Box (1).

2.2.1.2 Inclusive education in the UAE formal documents:

Document 1: General rules for the provision of Special Education programmes and services (public and private schools) (MoE 2010):

The first time inclusive education was defined in the UAE was in a document titled "General rules for the provision of Special Education programmes and services (public and private schools)". This document was published by the MoE in 2010 when the country ratified the Convention on the Rights of Persons with Disabilities. It was the first document from the MoE as the formal authority responsible for education that introduced the philosophy of inclusion. This philosophy was presented in a statement by the Minister of Education at that time, in which he said:

> The Ministry of Education of the United Arab Emirates supports the national and international educational philosophy of inclusion, which means that [students] being educated in regular education classrooms with peers in their age range, in their neighbourhood schools with

CRPD-Article 24
Education

1. States Parties recognize the right of persons with disabilities to education. With a view to realizing this right without discrimination and on the basis of equal opportunity, States Parties shall ensure an inclusive education system at all levels and lifelong learning directed to:

(a) The full development of human potential and sense of dignity and self-worth, and the strengthening of respect for human rights, fundamental freedoms and human diversity;
(b) The development by persons with disabilities of their personality, talents and creativity, as well as their mental and physical abilities, to their fullest potential;
(c) Enabling persons with disabilities to participate effectively in a free society.
2. In realizing this right, States Parties shall ensure that:

(a) Persons with disabilities are not excluded from the general education system on the basis of disability, and that children with disabilities are not excluded from free and compulsory primary education, or from secondary education, on the basis of disability;

(b) Persons with disabilities can access an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live;

(c) Reasonable accommodation of the individual's requirements is provided;

(d) Persons with disabilities receive the support required, within the general education system, to facilitate their effective education;

(e) Effective individualized support measures are provided in environments that maximize academic and social development, consistent with the goal of full inclusion.

3. States Parties shall enable persons with disabilities to learn life and social development skills to facilitate their full and equal participation in education and as members of the community. To this end, States Parties shall take appropriate measures, including:

(a) Facilitating the learning of Braille, alternative script, augmentative and alternative modes, means and formats of communication and orientation and mobility skills, and facilitating peer support and mentoring;
(b) Facilitating the learning of sign language and the promotion of the linguistic identity of the deaf community;

(c) Ensuring that the education of persons, and in particular children, who are blind, deaf or deafblind, is delivered in the most appropriate languages and modes and means of communication for the individual, and in environments which maximize academic and social development.

4. In order to help ensure the realization of this right, States Parties shall take appropriate measures to employ teachers, including teachers with disabilities, who are qualified in sign language and/or Braille, and to train professionals and staff who work at all levels of education. Such training shall incorporate disability awareness and the use of appropriate augmentative and alternative modes, means and formats of communication, educational techniques and materials to support persons with disabilities.

5. States Parties shall ensure that persons with disabilities are able to access general tertiary education, vocational training, adult education and lifelong learning without discrimination and on an equal basis with others. To this end, States Parties shall ensure that reasonable accommodation is provided to persons with disabilities.

Box 1. Article 24 of The Convention on the Rights of Persons with Disabilities CRPD (UN 2006, pp. 16-18)

necessary supports is the optimal environment to meet the educational, social, emotional and vocational needs of individuals with special needs. (MoE 2010, p. 7).

The document included a definition of inclusive education that was aligned with international conventions and declarations (e.g. Salamanca statement; EFT), it states:

> Inclusive education means that all students have the right to be educated to the extent possible with their age-appropriate peers who do not necessarily have disabilities in the general education setting of their neighborhood school with support provided. Inclusive education is not intended to limit the participation of students with special needs to regular education programs and services. Rather, inclusive education means that students with special needs have the opportunity to participate in educational programs and services in the least restrictive environment that is commensurate with their individual strengths and needs. (MoE 2010, p. 14).

It is worth noting that this document defined also the different categories of disabilities, the different supportive services the MoE offers for students with SEN, and descriptions of the Individual Education Program (IEP) plan for students with SEN or the Advanced Learning Plan (ALP) for the gifted students.

Document 2: The UAE School Inspection Framework (2016)

It was mentioned in the previous section (2.1.4) education reforms, that the unified framework of inspection "has been designed to support the inspection of the full range of schools in the UAE that provide education to students from the early years to the end of secondary education" (KHDA 2016, p. 7). The inspection is a higher government authority that supervises the main four education authorities in the UAE which are: The MoE, the KHDA, ADEC, and Abu Dhabi Centre for Technical and Vocational Education and Training ACTVET. The document of this frame work specified a section for inclusive education guided by the UNESCO's understanding of inclusive education. The document defines inclusive education as:

> Inclusive education is the process through which schools develop systems, classrooms, programmes and activities so that all students are able to learn, develop and participate together. In an inclusive school, the curriculum, physical surroundings and school community should reflect the views and characteristics of its students. An inclusive school honours diversity and respects all individuals. (KHDA 2016, p. 13).

It further added that:

> The UAE is determined to become an inclusive, barrier-free, rights-based society that promotes, protects, and ensures the success of all groups of students. The impact of inclusion should be seen through the learning experiences of all children within UAE schools. (KHDA 2016, p. 13).

Document 3: Dubai Inclusive Education Policy Framework (KHDA 2017b)

This is the recent policy document regarding inclusive education. Whereas the previous two documents have federal authority on all the Emirates, this policy was developed by Dubai's government for Dubai's school only. However, it is in alignment with the UAE Federal Law 29/ 2006, and its document asserts that the policy supports:

> the UAE's commitment to the United Nations Convention on the Rights of Persons with Disabilities as well as federal and local legislation that calls for the inclusion of all learners, regardless of ability, in the education sector. (KHDA 2017b, p. 11).

Moreover, the document defines inclusive education as:

> a provision that is committed to educating all students, including students identified as experiencing special educational needs and disabilities in a common learning environment. In such settings, all students have access to quality instruction, intervention and support, so that they experience success in learning. (KHDA 2017b, p. 10).

It can be noticed that all the documents were aligned with the UN and the UNESCO declarations and conventions that call for education as a human right and the right of equal opportunities for all children to be educated in general school systems.

2.2.1.3 Inclusive education in literature:

One of the perspectives of inclusion that resonates with the focus of this study is Ainscow et al.'s (2006, p. 5) view of inclusion "as an approach to education embodying particular values such as equity, participation, community, compassion, respect for diversity, sustainability and entitlement. It therefore concerned with all learners and with overcoming barriers to all forms of marginalisation, exclusion and under achievement". Moreover, Florian and Black-Hawkins (2011) pointed out that "there is a broad consensus and understanding that inclusive education is 'a process of increasing participation and decreasing exclusion from the culture, community and curricula of mainstream schools'" (Booth et al. 2000, cited in Florian & Black-Hawkins 2011, p. 814). Mitchell (2008) differentiates integration from inclusive education. He argues that inclusive education goes beyond the placement of learners with special education needs (SEN) in age-appropriate regular classrooms in the learner's neighbourhood school (integration). Whereas inclusion involves:

> Putting in place a whole suite of provisions including adapted curriculum, adapted teaching methods, modified assessment techniques and accessibility arrangements, all of which require support for the educator at the classroom level. (Mitchell 2008, p. 27).

2.2.2 Inclusive pedagogies

While the previous section identifies the origins and interpretations of inclusive education concept, it also raises important questions that must be addressed about the meaning of appropriate skills and pedagogies needed to train and prepare teachers to teach in inclusive classrooms (Acedo 2011). It is necessary to be noted that each educational setting has its specific needs of strategies, but as Lee and Herner-Pantode (2010, p. 223) argue "research -based strategies [...] can become part of teacher candidates' knowledge base [and can] give the teacher an edge in learning about and responding to diverse classroom". The following are some studies that explored examples of these pedagogies.

Some studies emphasis was on developing pre-service teachers skills to cater for students with diverse abilities. A number of 'inclusive pedagogies' have been developed by Florian and her colleagues for the past two decades through a project of studying teachers' practices in Scotland schools (Florian 2009; Florian 2012; Florian & Black- Hawkins 2011; Florian & Linklater 2010; Florian & Rouse 2001; Rouse & Florian 2012; Spratt & Florian 2013). Mainly, the inclusive pedagogies' framework is built upon socio-cultural understanding of learning that rejects 'ability labelling' for children (Hart et al. 2004) and promotes "a view of human difference as an aspect of every person, rather than something that characterises or differentiates some learners from others" (Rouse & Florian 2012, p. i). Furthermore, what has emerged from these studies indicated that inclusive pedagogy requires:

> 1. A shift in focus from one that is concerned with only those individuals who have been identified as having 'additional needs', to learning for all-the idea of everybody (not most and some);
> 2. Rejection of deterministic beliefs about ability and the associated idea that the presence of some will hold back the progress of others; and
> 3. Ways of working with and through other adults that respect the dignity of learners as full members of the community of the classroom. (Florian & Black-Hawkins 2011, p. 818)

A second example is a study by Loreman (2010). Through search and data gathering, Loreman (2010, p. 124) examined the knowledge, skills, and attributes that he viewed that "Alberta pre-service teachers need to develop over the course of their teacher preparation programmes in order to work effectively in inclusive classrooms". He then aligned these

"essential skills" with the Teacher Quality Standards (TQS) and Standards for Special Education. Furthermore, these skills were confirmed as areas of importance by experts who Loreman interviewed for this study in a focus group. As a result seven key areas were identified and were broken down to sub skills. He also suggested that these skills can be applied as foundations for pre-service teachers education to be built on into future, and teachers are expected to develop these skills at the time of graduation. However, he concluded that "this does not imply that their skill set is in any way complete" (Loreman 2010, p. 138). Table (3) summarizes these seven key areas of skills and examples of sub-skills that consist each skill as suggested by Loreman (2010).

Another model of strategies that promotes inclusive practices was proposed by Mitchell (2008). He suggested a compilation of 24 educational strategies encompassing classroom organization, cognition, behaviour, assessment, school culture, and parent involvement. In presenting these strategies he explained how each one helps in performing a specific task. According to Mitchell these strategies were drawn from 2000 research articles of teaching learners in primary and secondary school levels. Examples of these strategies include: Cooperative group teaching, peer tutoring, collaborative teaching, parent involvement, school culture, school-wide positive behaviour support, mnemonics and other memory strategies, and assistive technologies.

Finally, the document of European Agency for Development in Special Needs Education (2009) regarding principles for promoting quality in inclusive education recommended also acquisition of skills and knowledge to prepare them to work in inclusive setting. These skills involve differentiation of instructions, working collaboratively with parents and collaboration and teamwork with other service professionals within the schools.

From the previous studies, we conclude that there are common teaching pedagogies, research-based, that promote inclusive practices by the teachers and help to provide quality education to all students. These essential common pedagogies include collaboration between stakeholders (e.g. teachers, parents; administrators; supportive services providers), modifying instruction and assessment (differentiation; mnemonics and memory strategies); classroom and behaviour, and the skills to use assistive technologies in the classroom.

Identified Essential Skills, Knowledge, and Attributes for Inclusive Teachers	Examples of Sub skills
1. An understanding of inclusion and respect for diversity	- Articulate an understanding of the benefits of and principles behind inclusion, along with demonstrating a positive attitude toward it. - Articulate an understanding of the value of diversity. - Accept and welcome heterogeneity in the classroom and demonstrate a commitment to providing quality education for all children. Articulate an understanding that it is the role of the teacher and school to adapt to meet the needs of all students rather than students adapting to meet the needs of the classroom or school.
2. Collaboration with stakeholders	- Run a parent conference. - Establish regular home-school communication protocols. - Involve parents in the classroom and establish roles and responsibilities. - Reflect teacher assistants TA activities in instructional plans. - Use TAs to reduce the need for pull-out tie for children with exceptionalities. - Draw on expertise and assistance of others as required. Integrate ideas from other professionals (e.g. physiotherapists, OTs) into classroom life. - Approach administrators with ideas, concerns, and requests. - Team with others for planning, instruction, and assessment.
3. Fostering a positive social climate	- Teach social skills in context. - Demonstrate explicitly that all students are welcome, valued, and important. - Foster friendships between students. Manage challenging behaviour effectively while respecting the dignity of the child. Develop and maintain classroom routines that promote learning.
4. Instructing in ways conducive to inclusion	- Employ constructivist strategies such as peer tutoring and small group learning. - Ensure that instructional techniques allow for universal access to what is being taught. - Instruction should be presented using multiple formats (visual, auditory etc.). - Ensure that children with exceptionalities are involved in classroom activities, albeit with modified objectives (possibly from the IPP) as necessary. - Differentiate instruction by providing multiple paths to content, process, and product. - Use technology appropriately to enhance learning. - Partner with colleagues for instruction as appropriate.
5. Engaging in inclusive instructional planning	- Modify and/or adapt long-term plans to account for diversity in each subject area taught. - Modify and/or adapt individual lesson plans to account for diversity in each subject area taught. - Plan lessons that allow for universal access. - Plans for multiple presentation formats, and multiple approaches to assessment etc. should be evident.
6. Engaging in meaningful assessment	- Use a variety of assessment techniques aimed at assessment for learning. - Be able to quantify learning in order to meet reporting requirements. Understand common psychological and other formal assessments. - Adapt and modify assessment tools (tests etc.) as required. - Implement alternative assessment techniques as required. - Communicate assessment results to students and parents.
7. Engaging in lifelong learning	- Engage in activities consistent with reflective teaching, including the use of reflective journals and classroom visits. - Seek out professional development activities as required. Access and engage with current literature in education. Elicit support from disability specific groups and societies as needed.

Table 3. Seven key areas of skills and sub-skills suggested by Loreman (2010) to prepare pre-service teachers to work in inclusive classrooms. (Loreman 2010, pp. 129-137).

2.2.3 Inclusion advantages

Inclusion has many advantages and benefits for society. Following a number of these advantages:

Firstly, inclusion offers equal opportunities for quality education for all (Saqr & Tennant 2016) and solution to encounter existing inequalities in education and society (Sharma et al. 2013). It can also give positive outcomes in primary schools as it offers opportunities for children to "learn to increase their tolerance and understanding of individual differences, and their respect for others" (Boyle et al. 2011, p.73).

Secondly, other positive outcomes of inclusive schooling were drawn by McGregor and Vogelsberg (1998, pp. 57-63) from a comprehensive review of empirical studies. For example, some studies showed that students with disabilities demonstrated high levels of social interaction with their typical peers, improvement in their social competence and communication skills, in addition to development of friendships between them and students without disabilities.

On the other hand, in spite of the concern that is frequently raised about the impact of the presence of students with disabilities in general classroom on other students, McGregor and Vogelsberg (1998) remarked that performance of students without disabilities in general classroom is not affected by presence of students with disabilities in their classrooms. They highlighted empirical research that showed how students without disabilities benefit from their involvement and relationships with students with disabilities (e.g. improvement in self-concept, growth in social cognition, and reduced fear of human differences). In addition, inclusion accelerated opportunities for learning that might not otherwise be part of the curriculum such as issues about fairness and equity. These issues were naturally raised in the context of providing ongoing accommodations even in pre-school level.

In conclusion, such research is not without its critics both from the authors of preceding studies or other researchers. For example, Florian (2009), and Florian and Black-Hawkins (2011) argued that inclusive practice which indicates what teachers do in the classroom to give meaning to the concept of inclusion is not well articulated because the term 'inclusive' has different meanings in different educational contexts. A similar debate was raised by Gerber (2012, p. 71) who argues that in spite of multitude publications on how teachers can be inclusive and the presence of inclusive practices content in teacher preparation programmes, "there remain little empirical

evidence that shows how or under what circumstances or at what scales these practices are effective".

2.2.4 Inclusion challenges

Although inclusive education is one of the most dominant issues in the education of students with SEN and has been supported by numerous studies (Ainscow 2011; Booth 2011; Boyle et. al 2011; Loreman 2007; Romero-Contreras et. al 2013), it is important to realise, however, inclusive education is facing major challenges around the world (Ainscow et. al 2003, p. 5; Ainscow & Sandill 2010; Barton & Smith 2015; Gunnþórsdóttir & Jóhannesson 2014; Mitiku, Alemu, Mengsitu 2014).

The first challenge is that the concept of inclusion is difficult to be defined, and even the existed definitions lack clarity (Boyle et al. 2011; Moran 2009; Srivastava, de Boer & Pijl 2015). Moran (2009, p.46) goes on to clarify that "the term 'inclusion' itself a complex, contradictory and contested concept that lends itself to varying interpretations and manifestations in educational practice". She attributed inclusion to different factors above all else is cultures that value and embrace diversity and equity. She also noted that inclusion is about controversial issues of "social justice, social change and increasingly located within human right discourse" (Moran 2009).

The second challenge is the widening gap in implementing inclusive education between western developed countries which brought into being this concept and developing countries whose experiences have not exceeded a decade. For example, children in developing countries struggle to enroll in basic primary education, let alone children with disabilities (Srivastava, de Boer & Pijl 2015). The latest UNESCO report that monitors 'Education for All' goals achievements and challenges shows that only half the countries achieved the goal of universal primary enrolment (UNESCO 2015). Srivastava, de Boer & Pijl (2015) argue that the preference in these countries during the last decade is to make children with disabilities be visible and start to attend general schools first. Therefore, measuring the academic and social outcomes of implementing 'inclusive education projects' comes second. Another issue is that inclusive education is seen as a western practice that has been adapted without taking into consideration the

educational culture and the environment in eastern Asian countries (Jelas & Ali 2014; Kim 2014; Vorapanya & Dunlap 2014).

Other challenges are related to difficulties faced by teachers where inclusion most often is implemented. Teachers frequently reported lacking resources, inadequate administrative support, inadequate training, rigid curriculum, class sizes, school culture and negative beliefs and attitudes towards inclusion (Forlin 2012; Loreman & Deppeler 2002 cited in Loreman 2010; Vorapanya & Dunlap 2014).

2.3 Inclusion policies and regulations in the UAE

The first law that addressed the people with disabilities rights was the federal law No. (29) of the year 2006. Article 12 of this law stressed on the role of the state responsibility to provide "equal education opportunities in all educational institutions, vocational training and continuing education in regular classes or special classes where necessary" (MoSA 2006, p. 7), and highlighted clearly that the disability does not preclude admission to any government or private educational institution.

The UAE has also joined other countries in a global effort to promote equal and active participation of all people with disability. UAE signed the United Nations Convention on the Rights of People with Disabilities (CRPD) on 8 February 2008; and ratified it on 19 March 2010 (WAM 2015).

More federal regulations were launched by the MoE after the law No. (29) to organize the education of students with disabilities in general schools. One is the 'general rules for special education programmes for public and private schools' that have been prepared to lay the foundations and scientific and practical standards for the submission of suitable services for students with special needs (categories of students with disabilities and gifted students) in accordance with international standards and practices (MoE 2010). And recently, school inspection system regulated the evaluation of all government and private schools across the UAE regarding the education of students with SEN (MoE 2017b).

More initiatives and laws had been enacted after Law No. (29)/2006. The first initiative was 'the national project for inclusion of people of determination' which was launched by Zayed

Higher Organization for Humanitarian Care and Special Needs (ZHO) in 2008 in Abu Dhabi (Abu Dhabi e-government 2017). And after receiving a huge positive response from the participants in other emirates, the project expanded to the rest of the UAE, underscoring the importance of the community role and partnership in achieving excellence.

Another initiative was Dubai's Law No. (2) of 2014 on the "protection of the rights of persons with disabilities in the Emirate of Dubai". This law came to support federal law No 29 of 2006, on the rights of the disabled and the confirmation of the attention paid by Dubai for persons with disabilities and their leading role in construction and development. The law establishes cooperation between all stakeholders in Dubai to provide health care services, and rehabilitation, in addition to providing equal education to their peers at all levels and providing them with public services that include the use of roads and transportation and the judicial services to ensure their integration with the rest of society. Article (3) states main objectives that this law aims to achieve as follows:

> 1. Provide accessibility to ensure that persons with disabilities enjoy all their rights under existing legislation.
> 2. Promoting respect for the dignity of persons with disabilities.
> 3. Protect persons with disabilities from all forms of discrimination, abuse or neglect or exploitation
> 4. Integration of people with disabilities in society and making them an active element in society. (Government of Dubai 2014, p. 3).

Finally, Dubai Inclusive Education Policy Framework which was launched recently by the KHDA and it is active for the Emirate of Dubai only. Some details were included above in section (2.2.1.2).

The process of including students with disabilities in public schools is an ongoing process, and the government through the MoE and other legal authorities has been following that through issuing necessary legislation to facilitate inclusion and establish principles of equality among all citizens and who lives on this land.

2.4 Teacher education programmes for inclusion from national and international perspectives

Inclusion has become common trend in educational systems since the 1990s and is considered "a key part of the development of education policy and practice around the world" (Al Shoura &

Ahmad 2015; Farrell 2004, p. 5). Countries responded to international conventions regarding inclusive education in two ways: First by formulating policies that support the broader principles of inclusion to educate students with and without disabilities together in the public schools. Second by reforming teacher preparation programmes in order to enable prospective teachers to support and response to the learning needs of all students (UNESCO 2009).

The next section will explore studies that investigated different countries' approaches to prepare skilled prospective general teachers to teach in inclusive classrooms. But it is worth mentioning that using countries names may not be exemplifying wider views in these countries. A related point to consider is that the researcher chose samples of studies that started from the national (UAE) context to the Arab Gulf countries, then a sample from the international context.

2.4.1 Pre-service teacher education for inclusion in the UAE

The UAE, like other Arab countries, has been recently introduced to including students with disabilities in general classrooms. Although many studies that were done focused on teacher preparation programmes in the UAE context (Almekhlafi 2007; Baker 2013; Dickson et al. 2013; Gaad 2004 ; Hassan, Khaled & Al Kaabi 2010; Ibrahim 2013; Mohamad, Valcke & De Wever 2015), very little research has been conducted in the area of teacher programmes for inclusive education. As a result, little is known in the UAE about how pre-service general teachers are prepared to teach increasing numbers of students with disabilities attending regular classrooms.

As far as my search for such studies, three studies were located and found related to the current study and included some aspects of teacher education for inclusion. As aside note, inclusivity concept in public education was first introduced officially in 2006 by releasing the law No. (29). However, no particular policies or legislations regarding inclusion in higher education institutions are known. The three studies from the UAE educational context will be examined:

The first study was conducted by AlGhazo, Dodeen and Alqaryouti (2003). The purpose of study was to explore the attitudes of pre-service teachers towards students with disabilities as a predictor for including them in regular classrooms (AlGhazo, Dodeen and Alqaryouti (2003, p. 515). It was also a comparative study, in which survey was used as the method of collecting data about pre-service teachers' attitudes towards inclusion in three universities; two of them in Jordan and one in the UAE. The only part relevant to my study was the information that described

briefly the UAE University, and the introductory course titled education of exceptional children which was offered for all students in the COE at that time. The authors explained that the aim from providing this course was to better prepare general teachers for diverse classrooms, and to seek accreditation from the National Council for Accreditation of Teacher Education (NCATE).

The other study was conducted by Amr (2011) who mapped teacher education for inclusion in the Arab region both for pre-service and in-service teachers in ten countries with a focus on her country, Jordan. The UAE educational context was included in this study. She reviewed the syllabi of the programmes in three leading universities, known as the big providers of teacher education in the UAE. The researcher used universities websites and literature to review available information on teacher programmes. She concluded that early childhood and primary teacher programmes in these universities offer one or two special education courses. She noted that "the syllabi of these courses show that they provide introductory knowledge about disabilities, particularly mild disabilities" (Amr 2011, p.403). Table (4) shows Amr's review of the universities in the UAE, primary and early childhood programmes, and courses that were offered which were related to inclusive and special education at the time of the study.

University	Programmes	Courses in inclusive education	Courses in special education
Zayed University	Elementary education (pre-school to 3rd grade, 4th to 9th grades)	None	- People with special needs - Teaching students with special needs
United Arab Emirates University	Early childhood Primary education	None	Education of exceptional children
Higher colleges of technology	Early childhood education Educational technology/English language	None	Special needs in early childhood education Special needs in education

Table 4. The universities in the UAE that had primary and early childhood programmes, and the courses related to inclusive and special education that were reviewed by Amr (2011, p. 404).

The third study by Saqr and Tennant (2016) investigated Emirati general pre-service teachers' readiness to teach diverse learners during their internship course through focusing on the phenomenon of their teaching experiences. The study was conducted in one teachers' college in the UAE, and very little was mentioned about programme description or content. According to

this study, the college offers a Bachelor of Education that awards certification for teacher candidates to teach English, mathematics and science in primary level. Pre-service teachers have to complete twenty- weeks of field experiences during their degree, ten weeks of them are assigned for internship in inclusive classrooms. It is also stated that pre-service teachers are "prepared for a role involving a collaboration-consultation, a form of collaboration in which they, as general education teachers, request services of special education teachers to help generate ideas to address ongoing situations" (Saqr & Tennant 2016, p.110). Researchers concluded that although participants responses showed their awareness of some strategies and accommodations to meet individual needs of students, they felt also that neither the course work nor field experiences prepared them to meet the diverse needs of learners in inclusive classrooms.

The previous three studies presented a sample of the few studies available on teacher education programmes for teaching students with disabilities in inclusive context the UAE. The researcher found substantial differences between these studies and the current study. These differences make the current study unique in its focus, and it is expected to fill a gap in the literature in the area of preparing general teachers for inclusion using the analysis of curriculum documents and the views of faculty members and pre-service teachers in two government universities. The main differences found were in the focus of the studies, and the research methodologies.

First, when examining the studies' focus, it was found that the first and the second were comparative studies between several universities in more than one Arab country, and the UAE was one of these countries. The focus for the first study was on teachers' attitudes towards inclusion. Neither the programme's content nor faculty and pre-service teachers' opinions about their programmes were the focus. While the second study aimed to map and describe general education programmes that offer courses for teaching students with SEN in several countries; with a focus on pre-service and in-service teachers training in Jordan. And although the aim of the third study is similar with the current study in one aspect, which was exploring the pre-service teaching experiences, there are two main differences with the current study. The first is the focus was the phenomenon of pre- service teachers' experiences, their gains during the internship, and how they perceive their preparedness to teach diverse students. The second difference is the findings (from interviews and portfolios) were centred on the pre-service experiences only; programme's content and faculty opinions were not included in the study objectives.

Second: Table (5) shows also the methodologies and the methods used to collect the data in each of the three studies in contrast with the current study.

Studies	(1) AlGhazo, Dodeen and Alqaryouti (2003)	(2) Amr (2011)	(3) Saqr & Tennant ((2016	**Current study**
Methodology or Approach	Quantitative	Not determined, but qualitative approach was used	Phenomenology/ qualitative	Collective case studies /qualitative
Data collecting methods	Survey	Universities websites (documents analysis) & interviews	Interviews & portfolios	Document analysis, interviews & focus groups

Table 5 . The methodologies and the research methods used to collect the data in three studies conducted in the UAE in contrast with the current study.

2.4.2 Pre-service teacher education for inclusion in the Kingdom of Saudi Arabia (KSA)

In order to understand the current situation of teacher education for inclusion, a background that consists of a summary of KSA special education history and existing laws regarding people with disabilities is presented in following sections.

Background:

In Saudi Arabia, as in all Gulf Cooperation Council (GCC) countries education is considered a priority and has emphasized education is to be 'Education for All' (Murry & Alqahtani 2015). Alanazi (2012, p. 17) explains that "Saudi Arabia policy of special education and inclusion implements the concept of a 'least restrictive environment' in the form of a blended system of segregative-integrative education". Special education was introduced to KSA in 1960 by the establishment of the first institute for special education which was Al-Noor Institute for the Blind in Riyadh in 1960 (Al-Mousa 2010).

Laws regarding people with disabilities:

Several legislations were also passed to address the rights of people with disabilities. Following an overview of main laws regarding people with disabilities as reported by Alquraini (2010, p.140) and Murry & Alqahtani (2015, pp. 58-9):

The first legislation: The first one is the Legislation of Disability which was issued in 1987. It includes important provisions that guarantee individuals with disabilities rights equal to

those of other people in society define disabilities, describes programmes for prevention and intervention, assessment to determine eligibility for special education and other services.

The second legislation: The second legislation is the Disability Code which was passed in the year 2000 which guarantees the free access for people with disabilities to appropriate medical, psychological, social, educational, and rehabilitation services through public agencies.

The third legislation: The third one is Law Number 224- Regulations of Special Education Programs and Institutes which is considered the first regulation for the rights of students with disabilities in the KSA and passed in 2001. This law was modelled after the U.S. laws and policies of the Education for all Handicapped Children Act (EHA) and Individuals with Disabilities Education Act (IDEA). It defines the main categories of students with disabilities, elements of the IEP, procedures for evaluation and assessment, in addition to special education services and how schools accommodate and provide these services to eligible students.
Teacher education for inclusion:
Limited research on pre-service teacher preparation programmes for inclusion in KSA was found. Two studies only were located and included some important information regarding preparing teachers for inclusion.

The first study: The first one is Aldabas's (2015) who conducted research about Saudi history of special education and areas of reform. He found that general teacher education programmes do not offer any courses about special education needs or knowledge and skills for teaching diverse learners. Consequently, Saudi teachers who graduate from teacher programmes "are often unprepared for inclusive education and how to address the needs of students with diverse characteristics" (Aldabas 2015, p. 1164). Aldabas suggested that Saudi universities must work to reform teacher programmes by including courses that address learners diverse needs, clear knowledge about inclusive practices and field experiences in inclusive classrooms.

The second study is by Murry & Alqahtani (2015) who examined pre-service teachers' knowledge about laws concerning special education laws and policies in one university in KSA, the sample included 52 teachers. The results indicated that the majority (77.6%) of pre-service teacher sample did not know about special education Law Number 224 and other legal policies, neither knew (78.8%) about educational rights of students with disabilities . Other results also

showed that the majority (73%) of participants did not received formal training and this result is consistent with Aldabas (2015) review. The researchers recommended creating a curriculum to train teachers "on how to demonstrate the knowledge of the components necessary to implement special education programs according to Law Number 224" (Murry & Alqahtani 2015, p.63). In their opinion, implementing these laws and policies in schools with daily practice will help in discovering the amendments needed to develop inclusive education and will offer clarification of learners needs.

2.4.3 Pre-service teacher education in Australia

In all Australian states and territories (e.g. Western Australia, Queensland, New South Wales) pre-service teacher education is the responsibility of individual universities (Carroll, Forlin & Jobling 2003, p.67; Forlin 2006). According to Forlin (2006) there were more than 400 teacher education programmes in 36 universities with 35000 pre-service teachers across Australia in the year 2005. Registration to be a teacher is not mandatory in all Australian Jurisdictions, but more control by these bodies on the content of training courses exists where teachers are required to register. Findings from a review by Loreman, Deppeler and Harvey 2005 (cited in Forlin 2006) of 73 pre-service teacher programmes in 16 universities showed that 45.5% only included compulsory courses and 12% offered elective courses that contained any aspect of special or inclusive education.

Stephenson, O'Neil and Carter (2012) examined courses relevant to special education/inclusion in primary undergraduate teacher programmes in Australian tertiary institutions delivered in 2009. Through this web-based examination they located courses descriptions and guides on university websites, they looked at kinds of these courses (core or elective), the incorporation of a practicum, and academics (instructors) interests and activities in special or inclusive education. The researchers identified 35 institutions offering a four-year primary bachelor programme with 61 courses that met criteria to be included across these institutions (41 core & 20 electives). The content of these courses included several areas, such as:

- Government policies, legislation and/or disability standards ,
- supports available to teachers instructional strategies,
- assessment strategies, skills in planning programmes,
- communication/ consultation/collaboration with teachers, other professionals and/or families,
- inclusion strategies (adaptations and accommodations),

- developing positive attitudes towards people with disabilities and special needs,
- behaviour support and/or behaviour management,
- evidence-based or research-based content. (Stephenson, O'Neil & Carter 2012, p.19).

Interestingly, they concluded depending on their analysis of the courses content and instructors' interest in special or inclusive education that teachers were less well prepared than they were in 1993 in spite of the increased number of courses which were offered. They referred that to less coverage of teaching and assessment strategies. Moreover, fewer courses seemed to be taught by instructors who were active academics in special education. On the other hand they admitted that their web-based review was affected by the fact that detailed course guides and instructors' interests were not available for all universities through web sites.

2.5 Some trends in teacher preparation programmes

Various courses are offered by teacher preparation programmes around the world to explore effective ways to address inclusive education (Symeonidou 2017). Teacher education for inclusion literature have researched inclusion from a number of aspects; however, some main aspects were addressed on a large scale, such as programmes content regarding inclusive pedagogies, how programmes are delivered, and pre-service teachers attitudes towards inclusion. The following sections will explore these three sides.

2.5.1 Primary teacher education programmes content and ways of delivery

The Elementary teacher programmes' content regarding inclusive education and how this content is delivered differ considerably. In the next sections the content of courses of inclusive education and two ways of delivering this content within teacher programmes will be explored. Other topics pertinent to programmes content, such as impact on pre-service teachers, advantages and challenges of these programmes will be also analysed.

2.5.1.1 Teacher programmes that offer stand-alone courses:
Some programmes offer only one or two courses related to inclusive education or teaching students with SEN (Amr 2011; Bradshaw & Mundia 2006; Burton & Pace 2009; Carroll, Forlin & Jobling 2003; Forlin et al. 1999; Gehrke & Cocchiarella 2013; Koay 2014; Lartec et al. 2015; McCrimmon 2015; Sharma & Sokal 2015; Swain, Nordness & Leader-Janssen 2012; Woodcock, Hemmings & Kay 2012). These courses are usually taught as stand-alone modules and

independent from other courses in the programme. Many studies examined such programmes, three studies included the content of the inclusive and/or special education courses are presented in Table (6), as examples of such studies.

The first example is a research by Swain, Nordness and Leader-Janssen (2012) who studied the impact of a special education course on pre-service teachers' beliefs and attitudes about inclusive practices. This course was paired with twenty hours practicum experience. The content of this course is presented in Table (6). A total number of 1212 students were surveyed, who enrolled in one education programme between 2004 and 2008. In field experience, pre-service teachers were able to "observe inclusionary practices such as collaboration, universal design for learning principles, and a variety of behaviour management techniques with a mentor teacher" (Swain, Nordness & Leader-Janssen 2012, p. 77).They concluded that pre-service teachers perceptions towards inclusion were positively impacted by observing and working with experienced teachers especially in accommodations in inclusive schools. More specifically, course work accompanied by field experiences reduced the vague understanding and misperception of working with students with disabilities or giftedness. Pre-service reflected on the expansion of their knowledge of special education services and significant positive change on their beliefs regarding the feasibility of teaching students with disabilities in the general education classroom. Moreover, general teachers had the ability to facilitate inclusion in the general education setting (Swain, Nordness & Leader-Janssen 2012, p. 79).

Another example is a study conducted in the U.S. by Allday, Neilsen-Gatti & Hudson (2013) in which they examined109 elementary education bachelor's degree curricula related to inclusion provided to pre-service across the country. The focus of this analysis was to determine number of credit hours located for four areas in coursework which included characteristics of disabilities, differentiating instruction, classroom and behaviour management and collaboration. From their point of view these dispositions facilitate successful inclusion of student with disabilities in general classrooms to meet the requirement of federal policy mandates of No Child Left Behind (NCLB) and Individuals with Disabilities Education Act (IDEA). The results showed a clear evident of locating minimal coursework to issues of inclusion and may not be preparing elementary pre-service teachers adequately to work in inclusive classrooms. They stated that:

> Across our sample, nearly half of the university course credits needed to earn a bachelor's degree were dedicated to teacher preparation. Of that proportion, between 7% and 10% (7 credits) of education-specific coursework was dedicated to issues related to educating students with disabilities in inclusive settings. (Allday, Neilsen-Gatti & Hudson 2013, p. 306).

The advantages and positive impact of one /or two separate inclusive education courses in teacher programmes were reviewed in some studies:

The first example is a study by Gehrke and Cocchiarella (2012, p. 214) which reported that taking courses focused on special education combined by field experiences helped elementary pre-service to bridge the gap between theory and practice in relation to inclusion. On this note, researchers commented that:

> [Elementary pre-service teachers] reported more exposure to adapting materials in their field experience classrooms, more of them witnessed students with disabilities interacting with students without disabilities in their settings, and (...) were able to identify positive aspects of inclusion. (Gehrke & Cocchiarella 2012, p. 212).

Likewise, Burton and Pace (2009) on their examination of evidence of the impact of instructional and structured field experiences on mathematics teacher candidates, they reported increased positive attitudes and greater self-efficacy towards inclusion. The components of inclusive education course in their programme are shown in Table (6).

Another advantage was cited by Lartec et al. (2015) in their study of how pre- service teachers viewed the effectiveness of inclusive subject in their programme. The researchers stated that: "the student teachers have manifested positive behaviour and attitude towards children with special learning needs and other learners who are marginalised" (Lartec et al. 2015, p.32). The study also showed the importance of highly qualified instructors in teaching inclusive education subject and their role as facilitators of delivering curriculum objectives, content and strategies for effective implementation.

Although pre-service reported positive impact of inclusive or special education courses, many disadvantages and challenges were also revealed in research findings by pre-service teachers when studying such type of programmes.

The most cited challenge was that programmes did not qualify teachers with sufficient knowledge and training to provide students with diverse needs and disabilities with productive learning opportunities (Amr 2011; Gehrke & Cocchiarella 2012; Kirillova & Ibragimov 2016). Other challenges were difficulties to understand how to remove barriers of learning (e.g. societal;

medical; pedagogical) and modifying instructions in various subjects such as mathematics, science and social studies (Lartec et al. 2015).

Other challenges were inefficiency of the design of field experiences to develop pre-service teachers' skills and pedagogies to teach students with disabilities in general classrooms. Amr (2011) made it clear that general pre-service teachers practicum courses in some Jordanian universities were designed to prepare them to work only in educational contexts where curriculum and assessment are planned for students without SEN. Likewise, McCrimmon (2015) review of the four largest Canadian universities descriptions of courses revealed a paucity of inclusive education courses in their bachelor education (BEd) programmes, and mostly include single course on diverse learners or related topics. Additionally, in discussing challenges with inclusive education in teacher programmes he indicated that:

> Canadian BEd programmes lack effective preparatory coursework for inclusive classrooms (...), [these] programmes focus more on preparing future teachers to work with typically developing students, resulting in a discrepancy between current policies and practices regarding inclusive education and teacher performance within this environment. (McCrimmon 2015, p. 235).

Table (6) includes content of some courses related to inclusive education in stand-alone type primary teacher programmes.

2.5.1.2 Teacher preparation programmes that use infusion, collaborative or dual certifications models:

The studies in this area include various topics. Some of these topics are: Review of existing literature on infusion approach programmes (Voltz 2003); programmes' design and content (Anderson et al. 2015; Ashby 2012; Cook 2002; Hoppy, Yendol-Silva & Pullen 2004; Loreman & Earle 2007; Sobel, Iceman-sands & Basile 2007), suggested theoretical models for designing dual-certification programmes (Jelas 2010; Cramer, McHatton & Little 2015) and programmes content analysis (Pugach & Blanton 2012). In this section, the focus is on programmes content as it is more related to the current study focus.

Studies	Swain, Nordness, and Leader-Janssen (2012, p. 77)	Burton & Pace (2009, p. 111)	Lartec et al. (2015, p. 34-35)
Course Content	**The introductory special education** course included five sections. The course covered content related to: - special education laws and litigation, the disability categories supported by Individuals With Disabilities Education Act, - adapting and modifying instruction for the inclusion of students with disabilities - and behaviour management. **20-hr field experience** in which they were able to observe and work with students with disabilities in a variety of general and special education settings. During this experience pre-service teachers: - Observed inclusionary practices such as collaboration, universal design for learning principles, and a variety of behaviour management techniques with a mentor teacher. - One major project that was required during the field experience was the completion of a	**Module one:** - A short history of instructional practices in mathematics - The content and process standards of the National Council of Teachers of Mathematics (NCTM, 2000). - Areas of mathematics skills students need to be successful in a mathematics. -Traits to look for to identify students with low cognitive ability and learning disabilities were identified. - An examination of a work sample distributed to the class, analysis of the error pattern and strategies to assist the student. **Module two:** -NCTM's Learning Principle, and Assessment Principle. - Four types of mathematical instructional activities. - Developmental activities used to build a new idea. - Practice activities for new concepts . • Application activities in an authentic setting. - Assessment activities for students to demonstrate in an observable way their depth of understanding . • Alignment of instructional strategies with student needs. - Review of traits to identify students with mathematical learning disabilities processing issues.	**Course content** - Introduction on content, objectives and rationale, structure, and major terms used in inclusive education. - Benefits, elements, and principles of inclusion on education. - Moving policy forward through developing inclusive education systems, challengers to policy makers, RA 7277, and ten reasons for inclusion. - Barriers to learning. - Responding to diversity through the nine golden rules of inclusion. - Assessment in an inclusive classroom, purposes, individuals involved, and the components of a comprehensive assessment. - Understanding the diverse educational needs of students with disabilities. - 13 categories of children with special needs (IDEA) - Factors to consider in determining and understanding the needs of culturally and linguistically diverse students. - Promoting communication and collaboration. - Facilitating acceptance and individual differences and friendships.

Table 6.The content of some courses related to inclusive education in stand-alone type primary teacher programmes.

Studies	Swain, Nordness, and Leader-Janssen (2012, p. 77)	Burton & Pace (2009, p. 111)	Lartec et al. (2015, p. 34-35)
Course Content	case study on the basis of experiences during their special education field experiences. Students were required to collect data related to the classroom behaviours they observed during the field experience and write a case study about what they had learned.	**Module Three:** - Overview of Piaget's Four Stages of Mathematics Concept Development . - Expanded discussion of the identification of areas of non-mathematics skills students need to achieve in mathematics. - Expansion with examples of the four types of mathematical instructional activities; developmental, practice application, and assessment. - Viewing of a documentary video of a young girl, Lily, with Down Syndrome which allowed students to see a child with a disability in a number of different venues including mathematics instruction. The study took place over three years with three different cohorts of teacher candidates enrolled in a one term general education undergraduate mathematics methods course.	- Helping students make transitions to inclusive settings. -Adapting large and small group instruction. - Modifying instruction for diverse learners. - Modifying reading, writing, spelling and handwriting. - Modifying math, science, and social studies instruction. - Modifying classroom behaviour and classroom environment. - Evaluating progress of students.

Table 6 (continues).The content of some courses related to inclusive education in stand-alone type primary teacher programmes.

As an alternative to a single course approach, many teacher education programmes have been redesigned by merging special education courses in general subject specialisations to better prepare teachers for diverse student populations (Anderson et al. 2015; Sobel, Iceman-sands & Basile 2007). According to Voltz (2003, p. 5) "this approach infuses special education content throughout the teacher preparation programme, rather than housing it in a separate course".

One of the studies that has been largely cited in literature is the one conducted by Voltz (2003), in which she sought to examine the use of collaborative infusion approaches in teacher preparation programmes across the United States (US). These programmes were in four-year institutions of higher education that include both general and special education teacher preparation programmes. Using a survey followed by interviewing some participants, she was able to get 252 responses from 432 institutions she communicated with. The results showed that many institutions were seeking to integrate special education content through their general programmes. The majority of these respondents (about 45%) indicated that separate course approach was the most dominant method of delivering special education for general teachers, but not the sole method. Moreover, few institutions (7 %) their programmes relied solely on collaborative infusion approaches and 18% reported using infusion approach with other methods.

Another example is a programme created by one urban teacher university team as a respond to changing state regulations regarding teacher education standards, mandatory field experiences hours and performance-based assessment (Sobel, Iceman-sands & Basile 2007). The programme was redesigned to give teacher candidates a choice of dual-licensure elementary or secondary education. Researchers and their academic partners tackled features of effective teacher education programmes presented in the following process of general and special strands:

> a) a coherent programme vision; b) the blending of theory, disciplinary knowledge and subject-specific pedagogical knowledge and practice; c) crafting field experiences; d) standards for quality; active pedagogy; a focus in meeting the needs of a diverse student population; g) collaboration as a vehicle for building content of [the] teacher program. (Sobel, Iceman-sands & Basile 2007, p. 244-245).

Content of this and other programmes is presented in Table (7).

In the same vein was a programme developed to serve a teacher preparation in a rural university (Anderson et al. 2015). The first phase of developing this programme involved constructing a 125-credit hour plan of study that included three core content areas or

foundations, which are: (a) Collaboration/Inclusive Practices, (b) Instructional Responsiveness, and (c) Inclusive Leadership. The second phase was identifying high quality school placements for clinical experiences. The final phase involved the alignment of evaluation measures to the core content of the dual program (Anderson et al. 2015). According to Anderson et al. (2015), in order for a dual certification teacher preparation programme to be effective developers must invest time to address evidence-based strategies and professional standards in course work and clinical field experience. They also emphasised on collaboration between teacher educators and community partners (e.g. school principals; professional experts) and continuous evaluation of "the quality and content of the dual licensure preparation program relative to local contextual fit".

These recommendations are in consistent with Voltz's (2003) conclusions about factors that contribute to success of infusion collaborative models. Further, he added other factors such as having shared understanding of desired outcomes within all stakeholders, availability of logistics, high commitment from faculty to implement the programme, and "to share similar philosophies about teaching and learning" between the collaborative team (Voltz 2003, p. 12). Moreover, Kent and Giles (2016, p. 28) emphasised on dual infused programmes to "not become so diluted that graduates are not well prepared in general education or in special education.

On the other hand, several effective aspects and benefits gained by pre-service teachers from taking infused programmes. One study found a significant improvement in pre-service teachers knowledge about inclusive practices, confidence in teaching students with disabilities after completing content- infused programme, and teachers' attitudes towards inclusive education became more positive (Loreman & Earle 2007). Furthermore, results from some collaborative programmes indicated that pre-service teachers within these programmes and specifically during field experiences in internship phase or other pre-intern field work had developed through co-teaching structure "differing perspectives on instruction and the dynamics of school and state politics". Thus teachers had the opportunities within a safe space to explore political issues surrounding teaching in schools today, offer constructive criticism to each other and implement learnt teaching strategies (Hoppy,Yendol-Silva & Pullen 2004, p.21). Kirillova and Ibragimov (2016, p. 184) consider that studying and formation of inclusive competences are "one of the major tasks in training the future teachers" to work in inclusive classrooms.

2.5.2 Pre-service teachers' attitudes towards inclusion

Other programmes focused on exploring pre-service teachers' attitudes towards inclusion and worked on raising awareness toward acquiring positive prepositions to teach in inclusive classrooms. Although theoretical and practical knowledge are fundamental requirements for teacher preparation for inclusion, Forlin (2010, p.649) argues that it is critical that "teachers need to have developed positive values, supportive ideals, high moral responsibility for the education of all children regardless of the diversity of their needs". She further explains that without relevant knowledge and positive dispositions towards inclusion it is unexpected that teachers will participate fully in developing inclusive schools.

Positive attitudes towards inclusion of students with disabilities are argued to impact positively implementation of including students with disabilities in general classrooms (Al Zyoudi, Al Sartwai & Dodin 2011; Avramidis, Bayliss & Burden 2000; Sharma, Forlin & Loreman 2008). Teachers' attitude towards inclusion was positive in general (Avramidis, Bayliss & Burden 2000; Cook 2002; Lambe & Bones 2006; Muwana & Ostrosky 2014), However, the research in this area is not conclusive. For example, in their study on 597 Arab teachers (Jordanian and Emirati), AlGhazo, Dodeen and Algaryouti (2003) found that those teachers expressed mostly negative attitudes towards persons with disability. When compared between groups, they found that the type of educational background of the teachers impacted pre-service teachers attitudes, as teacher from Education and Humanities colleges were more positive than their counterparts in Science college. They concluded that it could be due to different courses requirements between Education and Science colleges, where Education college concentrate on approaches that deal with students characteristics and individual differences. Another example is a study by Thaver & Lim (2014) on 1538 Singaporean pre-service mainstream teachers attitudes towards people with disabilities and inclusive education. Results of the research indicated that teachers possessed negative attitudes towards people with disabilities. Researcher suggested some explanations for these negative attitudes such as socio-cultural reasons referred to a history of segregated education settings for students with disabilities and limited participation in general schools. Other reasons are little knowledge or skills in teaching, having few or little contact with people with disabilities and the lack of awareness or experience in efforts to integrate these students.

2.5.2.1 Impact of teacher attitudes:

Research on how teachers adopt to teaching in inclusive classroom indicates that teachers bring to their classrooms their personal beliefs, attitudes and values that have strong impact on their interaction with all students. Consequently, not only teachers' performance will be influenced by these beliefs and values but also students learning outcomes (Arthur-Kelly et al. 2013; Forlin 2006, p. 272; Rouse 2008). According to Fuchs (2010, p.30) "teachers' beliefs about inclusion influence their beliefs about their own ability to educate diverse learners in the general education setting".

A number of factors were found to impact teachers attitudes towards inclusion of students with disabilities such as training in inclusive education or special education, severity of student's disability, contact with a person with disability, culture, self-efficacy and others. Some of these factors will be explored. Completing training or courses in special or inclusive education was found to have positive impact on teachers' attitude towards inclusion in extant number of studies (Lartec et al. 2015; Sharma, Forlin & Loreman 2008).

In an international comparison study between four countries which are: Australia, Canada, Hong Kong and Singapore conducted by Sharma, Forlin & Loreman (2008, p.779), they found that "a significant change took place in the attitudes of pre-service teachers from all countries except participants from Singapore". These training courses differed in model of delivery. In some countries were stand-alone course mandatory or elective as in Australia, Hong Kong and Singapore while it was infused inclusive education practices through all the courses during the elementary programme. These courses pedagogies delivery ranged from lectures to group discussions, poster presentations and community involvement such as working with people with disabilities (buddy support) or visits to inclusive education schools. The courses content focused in general on knowledge about disabilities, instructional strategies (e.g. differentiation, peer tutoring), and alternative forms of assessment.

The type and severity of student disability is another factor that affects teachers' attitude toward inclusion. For example, results of three different studies conducted by Avramidis, Bayliss & Burden (2000) , Cook (2002) and Hastings & Oakford (2003) showed that pre-service teachers were more negative toward the inclusion of children with developmental, sensory , emotional and behaviour disorders and more positive of the children with learning difficulties or intellectual disabilities.

Studies	Sobel, Iceman-sands & Basile (2007, p. 246-249)	Ashby(2012, pp. 90-91)	Kent & Giles (2016, pp. 22-23)
Name of the program-me **Course Content**	The School of Education & Human Development - University of Colorado at Denver **Dual elementary/or secondary & special education programme** <u>Roles and responsibilities</u> expected to be **learning outcomes** and were embedded in programme handbooks, syllabi and assessments : - Teacher as a scholar; teacher as instructor; teacher as student advocate; teacher as professional; teacher as leader; teacher as school and community collaborator; teacher as case manager. **Performance -based assessment:** - Assessing teacher candidates' knowledge and performance in areas of mathematics, literacy, and classroom management. - Completing a profile or an in-depth case study of a particular student with a special need. - Teacher candidates' must generating and implement a sample of a comprehensive, standards-based curriculum unit. Then collect and analyse student performance. **Curriculum:** **Coursework** - Ten courses are compulsory for all teachers candidates regardless of their specialisation (general, special or dual licensure). In these courses issues of special education, technology, cultural/linguistic diversity, and teacher standards from state & general and special education professional associations were purposely infused.	The School of Education-Syracuse University **The inclusive elementary and special education teacher preparation program** The process of merging the programs began in 1987 and continued until the first class was admitted in 1990. **Shared values served as guiding principles** in the program: development process: (a) inclusion and equity, (b) teacher as decision maker, (c) multiculturalism, (d) innovations in education, and (e) field-based emphasis. **Program philosophy** illustrates key tenets of the belief system that relate directly to the work of disability studies **Key Tenets of the Syracuse University Inclusive Elementary and Special Education Teacher Preparation Program:** • Commitment to serving diverse populations in inclusive classrooms. This includes students of differing class, ethnicity, linguistic, family and community backgrounds, gender, color, religion, and ability. • Commitment to on-going learning to integrate technology into one's practice, ensuring that students benefit from advances in technology, and utilize technology to augment learning.	The university in the southeast United States **Dual certification in elementary (K–6) and collaborative special education** **<u>The focus was on Intense field requirements :</u>** - Candidates complete 450 field experience hours in the two semesters they are enrolled in their methods courses prior to student teaching (Tier 2 + Tier 3). - The 450 hours prior to student teaching are partitioned: 150 hours in general education, 150 hours in special education, and 150 hours in the candidates' area of greater interest or the school's greatest need. - Candidates complete the field requirement in a single school, with placement changes within the school. Candidates are assigned both special education and general education cooperating teachers every semester. **course and field program requirements** <u>K–6 Course Progression by Tiers</u> **Program Level→ Tier 1 (18 hours):** **Courses:** • Micro computing Systems in Education • Education in a Diverse Society • Human Growth and Development • Evaluation of Teach and Learning • Health and Movement Education • Arts in the Elementary Classroom • **Field Experience→20 hours**

Table 7. The content of three infused or/ and dual certifications approach teacher preparation programmes.

Studies	Sobel, Iceman-sands & Basile (2007, p. 246-249)	Ashby(2012, pp. 90-91)	Kent & Giles (2016, pp. 22-23)
Course Content	- Courses address areas of literacy, science, social studies, math child development, learning theories, class management, positive behavioural support systems, curriculum, assessment, instruction differentiation, and culture. **Internship Experiences:** Candidates engage in experiences such as: 1) Shadowing special educators and related service faculty (e.g. psychologist, occupational therapists); 2) participating in a special education staffing; 3) reviewing a student's Individualised Educational Plan (IEP) and accompanying lessons in which that student is a participant; reading with a student who is on an Individualised literacy Plan; 4) interviewing students with SEN or second language needs; 5)interviewing at least one family member who provides care for a child with disabilities or English is his second language; 6) analyzing how services are delivered in that building and7) researching the community resources that are within two miles of the school that support the students' and families' economic, linguistic or disability needs.	• Commitment to team from parents, guardians, community members, and others in the wider community who are part of creating educational opportunities for students. • Commitment to integrating into practice technical information about teaching and learning, while at the same time understanding that teaching also includes subjectivity. • Commitment to on-going professional development, through participation in educational associations, conferences, research, and training programmes. • Commitment to designing and adapting instruction so that it can be accessed by all students, including those from diverse linguistic backgrounds as well as those who have varying abilities. • Commitment to social justice for all students and to reflecting on how their own practice reflects a commitment to equality of opportunity for students. • Commitment to identifying, defining, and refining one's own educational philosophy within a commitment to democratic education. • Commitment to placing difference at the centre of one's considerations in planning instructional practice, so that access to academic instruction as well as social participation in the life of the school are never treated as afterthoughts. • Commitment to listening to and learning from students about how they construct and understand their own education. • Commitment to reflective practice.	**Program Level→ Tier 2 (17 hours):** **Introductory Methods** **Courses:** K–6 Education courses: • Foundations of Reading Instruction • Teaching Social Studies • Learning and Behavioral Disorders • Behavioral Management • Classroom Management 1(1 hr.) • Field Experience (1 cr. hr.) **Field Experience→200 hours** **Program Level→ Tier 3 (17 hours)** **Advanced Methods:** **Courses:** • Teaching Mathematics • Teaching Science • Teaching Reading • Partnerships in Special Education • Intellectual and Physical Disabilities • Classroom Management 2 (1 hr.) Field Experience (1 hr.) **Field Experience→250 hours** **Program Level→ Tier 4 (12 hours)** **Internship Courses:** • Student Teaching EEC (6 hrs.) • Student Teaching Collaborative K–6 (6 hrs.) **Field Experience→5250 hours**

Table 7. The content of three infused or/ and dual certifications approach teacher preparation programmes.

Another factor is to provide pre-service teachers with teaching or contact opportunity with students with SEN during specific field experiences or courses (Brownlee & Carrington 2000; Jobling & Moni 2004; Hemmings & Woodcock 2011; Proctor & Niemeyer 2001). Teachers who have close contact with persons with disabilities (e.g. teachers are trained in special education, exposure to inclusion during school/completing study in inclusive schools; implementation of inclusion policy or legislation) are more likely to have positive attitudes towards inclusion. For example, Sharma, Ee & Desai (2003) found in a comparison study between Australian and Singaporean pre-Service teachers' that Australian teachers had more positive attitudes towards including student with disabilities. The researchers attributed the reason to the fact that in Australia had implemented the inclusive education policies before Singapore. In Australia, inclusive education has been implemented since 1984 compared to Singapore that did not have any policies regarding inclusion at the time of the study. The second reason was that Australian teachers were exposed to peers with disabilities during their years of schooling while Singaporean teachers did not have same opportunities as students with disabilities were taught in segregated settings.

From the UAE perspective, few published studies investigated pre-service general teachers attitudes towards the inclusion of students with disabilities in general classrooms (AlGhazo, Dodeen & Algaryouti 2003; Al Zyoudi, Al Sartwai & Dodin 2011; Saqr & Tennant 2016). The first two studies were comparative studies where attitudes of pre-service teachers in both UAE and Jordan were investigated. Results showed that pre-service teachers in both countries hold negative attitudes towards inclusion. There was significant difference between the UAE and Jordanian teacher attitudes, where the latter was found more positive than the first. According to the authors, the difference between teachers' attitudes could be attributed to the prevailing level of implementation of inclusive schooling in the two countries.

2.6 Theoretical Framework

The basis of this study is built on the assumption that teacher and teacher education both have significant and complementary impact on young learners (Darling-Hammond 2006; Ryan 2014). It is argued that teacher education is "a critical aspect [to improve] access to and quality of education for students" (Forlin 2012a, p.85). As general teachers experience a demand to teach diverse learners, "the extent and quality of teacher education matter for teachers' effectiveness and add significant value to the general knowledge and skills that teachers [...] bring to the classroom" (Darling- Hammond 2006, p. 20). The pre-service

programmes not only equip prospective teachers with the knowledge and inclusive pedagogies but also prepare them to have the ability to "build inclusive student-centred learning communities that are based on appreciation of diversity and openness to the world" (Guðjónsdóttir et al. 2007, p. 165).

As it is a pioneered study to examine pre-service teacher education for inclusion in the UAE, two models were chosen to examine existing teacher preparation programmes in two government universities in the UAE. Every topic can be looked at from a number of different perspectives. Taking into consideration that education is grounded in social and political values (Alexander 2008), the theoretical framework was drawn upon a socio-political and social models. For this study, the theoretical framework for examining teacher programmes for inclusive education was established by utilizing Disability Social Model (Oliver 1996, 2009) and Rodríguez's (2012) teacher preparation programme Model. Models are ways of translating ideas into practice (Oliver 2009), hence both models were used as tools to guide exploring what was offered to prospective general teachers to be able to teach diverse learners and work to facilitate and have equal opportunities for their learning.

Moreover, the Disability Social Model offered a rich theoretical foundation to view disability as "a matter of social relations" (Shakespeare 1993, p.251). On the other hand, Rodríguez's (2012) teacher preparation Model consists of seven essential components for teacher education for inclusion. The above models were further complemented by the use of Cooper et al.'s (2008) model, Mitchell (2008) and Florian and her colleagues on inclusive pedagogies (Florian 2009; Florian & Black-Hawkins 2011; Spratt & Florian 2013) as tools to examine programmes' curriculum content and teacher educators roles in helping to prepare teachers. Detailed information about the two models is included in the following sections.

2.6.1 Disability Social Model

2.6.1.1 History of Disability Social model
The origin of Disability Social Model stemmed from a publication by the Union of the Physically Impaired Against Segregation (UPIAS) in 1976, an organization whose membership restricted to people with disability located in the UK (Oliver 2009). The UPIAS focused on disability from a complete contrast viewpoint to the one established by society presented by services providers, policy makers and academics. Disability is seen by the UPIAS as a social problem and not an individual problem. Moreover, it is created by cultural,

environmental and economic barriers that cause disadvantage, poverty and oppression to people with physical impairments (Barenes 2015).

Disability Social Model key elements, are: "The distinction between disability (social exclusion) and impairment (physical limitation) and the claim that disabled people are an oppressed group" (Shakespeare 2006, p. 198). Further, "this model views the barriers that prevent people [with disabilities] from participating in any situation as being what disables them" (Rieser 2006, p.135). In other words disability can be seen as a limitation of equal opportunities in participating in community activities and life caused by physical and social barriers. Accordingly, moral responsibility is placed on the society including educational institutions to remove all the barriers that prevent people with disabilities from full participation and from receiving equal opportunities as non- disabled people in education, work and other services. For example, barriers can be institutional (e.g. policies, practices, curriculum) cultural (e.g. attitudinal) and structural or physical environments (e.g. buildings and resources). One example for institutional barriers are difficulties to access and receive equal educational opportunities represented by rigid teaching and assessment systems, lack of resources and support for schools, negative attitudes and inaccessible environments (Lansdown 2013).

According to Barnes (2013) the challenge against established views of the individual and collective causes of disadvantage to people with disabilities did not come from academic institutions, but from people with disabilities themselves. These activists in Britain and in the USA "produced a radical new interpretation of disability that generated a new approach to disability practice and theory, commonly referred to as the 'social model of disability" (Barnes 2013, p.4). The phrase 'Disability Social model' was coined by Mike Oliver which appeared in a number of his articles published in1981 (Oliver 2009).

2.6.1.2 Definitions of Disability Social Model, disability, and impairment:
In its broadest sense, social model of disability is a specific "focus on the economic, environmental and cultural barriers encountered by people who are viewed by others as having some form of impairment-whether physical, sensory or intellectual" (Oliver 2009, p.47). Oliver further clarified that these barriers that are encountered by people with disability include inaccessible education system, transportation and building, working environments, discriminatory health and social support services and negative images of people with disability in the media such as films and newspapers.

The social model consequently is based on the distinction between disability and impairment, Oliver (1996, p. 32) argues that:

> Disablement is nothing to do with the body. It is a consequence of the failure of social organisation to take account of the differing needs of disabled people and remove the barriers they encounter. The schema does not, however, deny the reality of impairment nor that it is closely related to the physical body. Under this schema impairment is, in fact, nothing less than a description of the physical body.

In his argument, Oliver was trying to respond to the debate about the alternative schemas which have emerged in the articulation of conflicting definitions of impairment and disability between organizations of disabled people and between the World Health Organisation (WHO).

In many cultures and until recent time, disability was seen as a medical personal tragedy (Barnes 2015; Oliver 2009). The Social Model defines disability as: "the product of specific social and economic structures and [the model] aims at addressing issues of oppression and discrimination of disabled people, caused by institutional forms of exclusion and by cultural attitudes embedded in social practices" (Terzi 2004, p.141). Further, disability is seen as "the disadvantage or restriction of activity caused by a society which takes little or no account of people who have impairments and thus excludes them from mainstream activity" (Thomas, Gradwell & Markham 1997, p. 2). Hence, impairment can be defined within the Disability Social Model as:

> A characteristic, feature or attribute within an individual which is long term and may, or may not, be the result of disease, genetics or injury and may:
> 1. Affect that individual's appearance in a way which is not acceptable to society, and / or
> 2. Affect the function of that individual's mind or body, either because of or regardless of society, and / or
> 3. Cause pain, fatigue, affect communication and / reduce consciousness. (Thomas, Gradwell & Markham 1997, p. 2).

And impairment according to that covers learning difficulties, physical impairments, sensory impairments, facial disfigurement, speech impairment, mental illness, and even health conditions which are acquired through the general life course (Barnes 2015; Thomas, Gradwell & Markham 1997).

It is also essential in this section to distinguish between the medical and social models of disability within the educational context. The medical model or as called by Mittler (2000, p.3) "within child model is based on the assumption that the origins of learning difficulties lie within the child" and this is followed by a diagnostic assessments for the child's strengths and weaknesses. The aim is to make the child fit in the system to receive special education

services and not to assume that the school needs to accommodate and respond to the child's needs or the diversity of student population in general (Mittler 2000, p.3). Barnes (2015) argues that the medical model of disability is been used to justify a whole range of issues which are both discriminating and limiting in terms of allowing people with disability to live the life style which they chose.

2.6.1.3 Critiques of disability social model:

Although the Disability Social Model has provided a significant political agenda which allowed the notion of disability to become a powerful force influencing social policy, it has undergone a fundamental critique from positions within and outside the model (Dewsbury et al. 2004). For example, Terzi (2004, p. 141) critiqued the Social Model in conceptualising the cause of disability from one side only (which is restrictions caused by society and its organizations). She argued that by doing so "the social model presents a partial and, to a certain extent, flawed understanding of the relation between impairment, disability and society".

Another critique comes from main founders of this model, Tom Shakespeare and Nickolas Watson. They presented three criticism of the British social model: "The issue of impairment; the impairment/disability dualism; and the issue of identity" and they suggested that "an embodied ontology offers the best starting point for disability studies" (Shakespeare & Watson 2001, p.9). Moreover, Shakespeare (2006) believes that Disability Social Modelled its purpose in launching the disability movement, however it became a barrier in the progress of further progress. And although he does not agree of medicalising the disability, he found the Social Model is unsophisticated tool in theorizing disability anymore, and other complex approaches are needed in understanding the complex interplay of individual and environmental factors in the lives of people with disabilities. Shakespeare (2006, p. 203) suggested to start by "building on the WHO initiative to create the International Classification of Functioning, Disability and Health".

2.6.1.4 Why choosing the Disability Social Model as a theoretical framework: Linking current study with this Model:

The UAE, like other countries in the international community, is committed to develop educational policies regarding including students with disabilities in general schools, and to eliminate the barriers to provide them with equal opportunities for education. Therefore, the Disability Social Model as theoretical framework was chosen for this thesis came from my

belief in the basic principle that all persons with disabilities including children should be able to enjoy opportunities for educations on an equal basis with others. I found that the basic elements of this model (see the above section 2.6.1.1) is the most relevant to my study's aim and would form a strong theoretical foundation and help to answer the study questions on how general teachers were prepared to work in inclusive classrooms, and how the barriers to educate children with disabilities specifically the institutional ones can be identified. Several reasons promoted my choice for the Social Model as a theoretical foundation for my study, some of these reasons presented below:

First, Disability Social Model has major impact on policies regarding people with disabilities across the world including the UN conventions on the rights of persons with disabilities (e.g UN CRPD 2006) (Hernandez 2008). Barenes (2015) argues also that one of its major impacts of the Disability Social Models is that most countries across the world now recognize that disability discrimination is a major problem. Similarly, Lang (2007) argues that the development of disability movement underpinned by the theoretical foundation of the Social Model has:

> "Created a quantum shift in the manner in which disability has been perceived, and what is now considered to be the appropriate and legitimate manner in which disability policy is to be developed and implemented. It has now become the dominant hegemony underpinning policy-making and service provision. (Lang 2007, pp. 16-7).

Second, working from the Disability Social Model perspective, teacher education for inclusion begins with viewing disability as a social creation and focusing on removing social and institutional barriers that limit children equal opportunities to learn, rather than viewing disability as a personal tragedy (Barnes and Mercer 2005). This thinking has important implications for our education system, particularly with reference to schools and teachers. Consequently, teachers candidates are expected to identify these barriers and be clear about them, then it is easy to come up with solutions to eliminate these barriers.

In the current study, the researcher of the view, as Mike Oliver (2009), that the Social Model deals with the collective experiences of disablement and not the personal impairment. However, this view does not ignore at the same time limitations and pain that are imposed by impairments nor the importance of medical, rehabilitation or education interventions when needed. Furthermore, taking into considerations the criticism against the model (see above discussion section 2.6.1.3), many principles of the Social Model are generally accepted and impacted principles, beliefs and policies regarding inclusive education. From this standpoint, Disability Social Model was appropriate for this study especially that it was used to examine

programmes' documents and course contents, faculty and pre-service views regarding inclusive education and the contribution of their programmes to prepare teachers for inclusive classrooms. The principles of the model helped also in exploring how programmes contents were in line with the international shift from medical model to social model approaches in education.

Moreover, I am personally agree with the Social Model in its emphasises on the need for political action and social change to remove 'disabling' barriers for all people with disabilities, including children, to have their rights for education equally as people without disabilities (Barnes & Mercer 2005, p.2). However, the current study does not concur with the radical interpretation of the Disability Social Model. It agrees with Finkelstein (2007, p.2) who argues that "social models only make sense when understood in particular contexts" and changing the context may change the models effect. In other words changes in society or the change of a society can cause change in the disability model. This important interpretation should be taken into consideration when applying Disability Social Model in the UAE higher educational programmes contexts. The reason is that inclusion concept is relatively new. Gaad and Almutairi (2013) emphasised that all the educational initiatives in this young nation are new and research that can reveal 'inclusion' interpretations in this area is scarce.

Third, one of the fundamental aspects of the Social Model concerns is equality. The model focuses on changes required in society (e.g. attitudes, social support) and demands society acceptance of the disabled as they are and not as society thinks they should be (Oliver 1996). Direct action was a very important part of the disabled people movement as Shakespeare (1993) pointed out in his comparison between the movement in North America and Britain. He writes:

> Direct action has a number of important elements: It is a way of focusing attention on the institutions and environments that create disability [e.g. inaccessible transport, education]. It is an overtly political act, showing that disability is a matter of social relations, not medical conditions. (Shakespeare 1993, p.251).

Shakespeare's point has a powerful implication for this study as it relates theory with practice. Moreover, working from the perspective of Disability Social Model offered a lens to focus the attention on institutions and environments to explore programme content and pre-service teachers perceptions of inclusion, and to determine whether these contents and perceptions create barriers (disablements) for young learners.

2.6.2 Rodríguez's (2012) Model for preparing teachers for inclusion

The second theoretical base for this study was Rodríguez's (2012) Model for preparing teachers for inclusion. Rodríguez's (2012) ideas are built upon his belief that in order to attend to a broad range of diverse needs of learners in inclusive classrooms, the teachers need to have inclusive vision that he explains as high expectations for all students. Moreover, teachers need to develop inclusive practices such as diverse strategies, knowledge and positive attitudes, and to participate in inclusive language with colleagues.

2.6.2.1 Aspects of Rodríguez's teachers' preparation Model:
Rodríguez's teachers' preparation Model can be seen from three interconnected aspects which are:
Firstly, aspects to be present in inclusion:
He emphasizes on three essential aspects required from the teacher to be included in her/his practice: "Equity: Promoting the same opportunity for all, quality: Offering functional and meaningful learning and equality: Responding to the special educational needs of all children" (Rodríguez's 2012, p. 105).

Secondly, the inclusive teacher profiles:
According to Rodríguez's the inclusive teacher is an educator who is committed to his community by recognizing and considering individual differences. And this teacher faces the challenges imposed by diversity through dialogue and collaboration with all of the stakeholders (e.g. colleagues, parents and other professionals). The second profile is to get holistic educational skills and experiences through multi-tiered training to be able to work in diverse contexts. Inclusive teacher needs to be accompanied by a mentor through early professional career (Rodríguez's 2012, p. 105). Figure (2) shows inclusive teacher profiles in Rodríguez's (2012) Model.

Finally: Components for teacher preparation programmes for inclusion:
Rodríguez (2012, pp. 105-111) introduced seven essential components for teacher preparation for inclusion. These elements are presented in Figure (3).
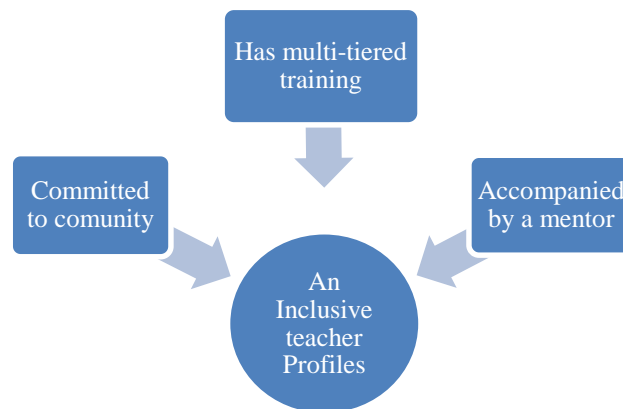
Figure 2. Inclusive teacher profiles in Rodríguez's (2012) Model.

2.6.2.2 The seven essential components of Rodríguez's (2012) Model:

The seven essential components for preparing teachers for inclusion for inclusion that were proposed and practiced by Rodríguez's (Figure 3) are:

1. Subjects with high social and community content:

This is expected to result a number of positive outcomes, such as: Pre-service teachers to be sensitive to the students' diverse needs and their environments, promotes agreement between community members, removes barriers to meaningful learning, and creates and promotes high expectations and positive environments.

2. Quality, equality and equity:

Teaching is oriented towards attending diversity in the classroom by applying strategies that promote learning for all (equality), for many as for the individual (equity). Due to the importance of the elements of quality, equality and equity in preparing pre-service teachers for inclusive classroom, I will expand on their conceptualizations in the next section (2.6.2.3)

3. Working collaboratively:

According to Rodríguez inclusion is founded in collective team of teachers who work to improve schools and increase learning for all through sharing decisions and generating actions (Rodríguez 2012).

4. Dialogue:

Dialogue and collaboration are key elements for inclusive education and can be generated through interpretive and critical paradigms. Rodríguez believes that research activities especially action research skills are fundamental for inclusive teacher. Dialogue needs two

elements in order to recognize other's views: A strong relationship and collaboration, to transform visions from two (you and me) to a new focus (us) (Rodríguez 2012).
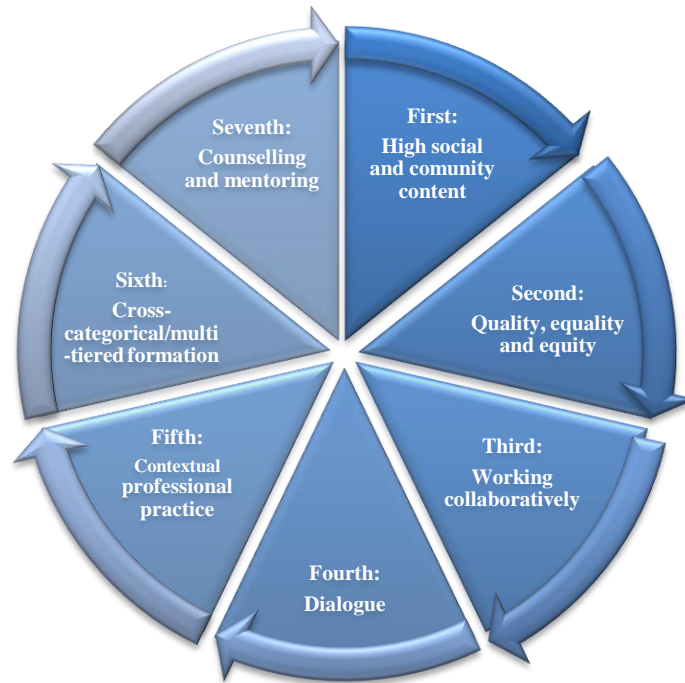
Figure 3. The seven essential components for preparing teachers for inclusion in Rodríguez's (2012) Model.

5. Contextual professional practice:

Contextual professional practice refers to allowing pre-service teachers to connect with a range of educational services through training, approaching schools by doing diverse activities and doing internship under the supervision of a mentor. Rodríguez summarizes this process of teacher training in Figure (4).
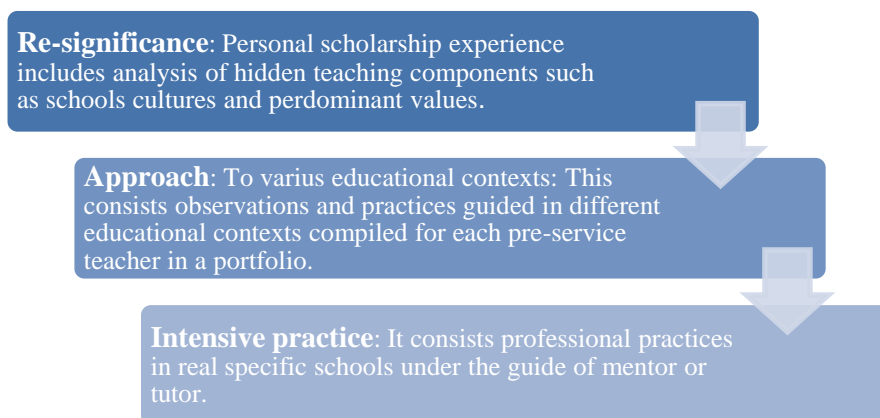
Figure 4. The teacher training process (Rodríguez 2010, cited in Rodríguez 2012, p.108-9).

6. Cross-categorical/multi-tiered formation.

Inclusive education framework must be present in teacher training and can be summarized in the following elements: Common vision that consists of the philosophy of inclusion, legal frameworks (quality and equity for all) and educational policy promotes diversity. Another element is language and common knowledge that emphasizes education for all children, and working to prevent barriers for learning. The last element is educational attention to diversity practices such as curricular teaching, diverse assessments, co-teaching and collaboration with other professionals (Rodríguez 2012, p.109-10).

7. Counselling and mentoring:

Rodríguez (2012, p.110) includes participation of pre-service with experienced teachers and defined three essential modalities to a novice teacher which are: Intervention (guidance), facilitation (advice). and cooperation (co-responsibility). More details of all these elements are shown in appendices (e.g. 9 & 17) in analyzing programmes content.

2.6.2.3 Introduction on the concepts of quality, equality and equity:

The researcher considered clarifying the meaning of the concepts of quality, equality and equity as related to education and to the teacher preparation for inclusion. The reason for that was to be specific about what to look for in the courses content in the analysis process. The researcher found also that the three concepts of quality, equality and equity are interrelated in the literature. For example, the UNESCO (2004) report titled "Education for All, the quality imperative" considers quality as a prerequisite for achieving the goal of equity in education. And equality considered as a component of educational quality. From another perspective, Sayed (2000, p. 3) argues that equity can be perceived as a strategy to achieve equality.

First: The quality concept:

There is no consensus or single correct definition of the concept of quality in education (Harvey & Green 1993; Sayed & Ahmed 2011). Not only that, but also there is a vast quantity of research about it in the literature (Barrett et al. 2006). Hence, it is better to be concise and to focus on quality concept from a perspective that is consistent with the current study framework.

The work of the UNESCO (2004b) "Education For All (EFA), the quality imperative/ Global Monitoring Report -2005" regarding 'quality in education' was found very convenient for this study's purpose to help in identifying issues related to quality in the courses content. So from this perspective the "quality in education (in schools or other forms of organized learning)

should facilitate the acquisition of knowledge, skills and attitudes that have intrinsic value and also help in addressing important human goals" (UNESCO 2004b, p. 39).

The UNESCO's (2004c) report provides also a comprehensive framework for understanding, monitoring and improving education's quality. This framework was built on mapping the main elements of education systems and how they interact; it included five major factors that affect quality and encompassing issues of access, process and outcomes (UNESCO 2004c, p. 6). The five factors are: Learner characteristics, context, inputs, teaching and learning and outcomes (Appendix 10).

Moreover, according to the UNESCO's report it was found that two principles characterize the definition of the concept of quality in education. The first principle" identifies learners' cognitive development as the major explicit objective of all education systems". The second principle "emphasizes education's role in promoting values and attitudes of responsible citizenship and in nurturing creative and emotional development"(UNESCO 2004c, p. 2). Therefore, the quality of any education system depends on the degree to which these two principles are achieved. More details about the concept of quality are found on this free report online. It is worth noting for our study purpose that some factors only (e.g. Learner characteristics & teaching and learning) were chosen from this framework because our focus is on pre-service preparation, other components like infrastructure and the wider context of the framework were not relevant.

  Second: The concepts of equity and equality:
Samoff (1996 cited in Sayed 2000. p.3) argues "that equity should be differentiated from equality, whereas the former refers to justice, the latter refers to the 'principle of sameness' ". Therefore, equity aims to understand the needs of each individual and distribute the resources fairly. On the other hand equality involves ensuring that every individual gets the same amount of resources regardless the differences between them (Hasa 2016)**.**

Concluding notes:
The components of the two models of the theoretical framework were used as the main criteria to explore and analyze the contents of the programmes and courses in the intended study. Also they were used as a source to formulate items of questions for educators and pre-service teachers' interviews. Figure (5) illustrates elements drawn out from Disability Social Model and Rodríguez (2012) model to examine general teacher programmes for inclusion in two government universities. To conclude, Figure (5) illustrates elements drawn out from

Disability Social Model and Rodríguez (2012) Model to examine general teacher programmes for inclusion in two government universities.

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┌─────────────────────────────────────────────────────────────┐
│   Elements used to examine the two general teacher programmes │
│                       for inclusion                           │
└─────────────────────────────────────────────────────────────┘
              │                              │
   ┌────────────────────┐        ┌────────────────────────┐
   │ Rodríguez (2012) Model │    │ Disability Social Model │
   └────────────────────┘        └────────────────────────┘
```

Content to be analyzed includes

Aspects of inclusion

An Inclusive teacher

7 components of teacher programmes

Principles of quality, equity & equality

- Committed to community
-Has multi-tiered training
- Accompanied by a mentor

1- Subjects with high social and community content
2- Quality, equality and equity
3- Working collaboratively
4- Dialogue
5- Contextual professional practice
6- Cross-categorical/multi-tiered formation
7- Counseling and mentoring

Barriers that prevent inclusion

Equality in learning opportunities

Social, physical, attitudinal, education, institutional, etc. barriers

Strategies to remove barriers

Figure 5. The elements used to examine general teacher programmes for inclusion in two government universities.

Summary of the chapter

The literature review paved the road in order to explore teacher preparation programmes for inclusion in the UAE higher education context. It played also the role of setting the stage to situate the current study in the international literature matrix. The researcher identified several topics that she found appropriate to address the research problem and to serve accomplish its aims. Moreover, literature review helped in justifying and supporting the findings of this study, and contributed in the interpretation process (Bloomberg & Volpe 2012). It included six topics:

<u>First</u> topic displayed the background of education in the UAE. It included: The history of education in the UAE and its development from the religious education stage to the modern education system, the structure of public education system, and the recent education reforms. The review discussed also how these reforms which include Vision 2021, the unified inspection standards and the teacher licensure system impacted developing new regulations for the quality of teachers and teaching practices which are expected to influence inclusion and teaching students with disabilities.

<u>The second</u> topic was about conceptualising inclusion from three perspectives: Internationally, with a focus on the international conventions in the past two decades, specifically the Article 24 of the UN CRPD; nationally was in main formal documents such as the general rules for the provision of Special Education programmes and services document (MoE 2010). Finally, the definitions of inclusion in literature, especially the ones that I adapted to constitute the foundation for my theoretical framework and the interpretations for inclusive practices were presented. These definitions included Ainscow et al.'s (2006) and Florian's and colleagues conceptualization of inclusion (e.g. Florian and Black-Hawkins 2011). This section concluded by identifying some inclusive pedagogy, and then discussed advantages and challenges facing inclusion in education.

<u>The third</u> topic included inclusion policies and regulations in the UAE (e.g. Law No. 29/ 2006) that govern the inclusion of students with disabilities in regular schools and higher education, and rule their education and the supportive services for that. Higher education sector is expected to purse regulations and align programmes offerings with these policies. The <u>fourth</u> and the <u>fifth</u> sections provided a synthesis of international teacher education for inclusion trends, similarities and differences with relevant contextual information. The importance of these two sections came from informing the researcher how the topic of teacher education for inclusion has been researched up to date. Moreover, it showed why this study was conducted; and what contribution it added to the existing literature especially in the UAE.

<u>The sixth</u> topic concluded by the theoretical framework which guided this research work. The choice of the Disability Social Model and the Rodríguez's (2012) Model came as a result of researching literature and found their suitability to help in researching the phenomenon of preparing teachers for inclusion. Further, the Disability Social Model helped in building a strong theoretical foundation to answer the study questions on how general teachers were prepared to work in inclusive classrooms, and in identifying the institutional barriers to educate children with disabilities. While Rodríguez's (2012) was the tool that was used to

analyse the courses content because it has seven components which indicate elements that are essential to build a teacher programme for inclusion.

The remainder of this study will show the research design and methodology which benefited extensively from the exploration of the national and international literature done to study teacher education programmes for inclusion. Further, findings of the two cases of teacher programmes are presented and discussed. Finally conclusions drawn from the key findings are presented, which include the contribution of this study to the literature, the recommendations for improvement and suggestions for further research.

CHAPTER 3

Study Design
Methodology and research methods

Chapter three identifies the procedures used to investigate teacher education programmes for inclusion in two government universities in the UAE. The purpose of the study was to research how two government universities were preparing general teachers to work in inclusive classrooms through their teacher programmes. Programmes' content, faculty views and pre-service teachers' learning and teaching experiences were explored to gain knowledge about Elementary teacher preparation programmes for inclusion in the UAE educational context. The first section of this chapter includes research design which consists of three basic elements: The knowledge claims (the philosophical foundation), the strategy or methodology of the inquiry and the methods of data collection. The second section presents data analysis process which consists of the technique used in the data analysis known as the analytic hierarch by Spencer, Ritchie and O'Connor (2003), and the stages of the data analysis. The third section is about the ethical considerations of guidelines and values that regulated the conduct of the research. The fourth section includes the validation strategies used to demonstrate the study's credibility. The Fifth section demonstrates the limitations that confronted the research process. The chapter concludes by a summary of the main approaches used in designing and conducting this study.

3.1 Research Design

Research design is the basic plan for any study and connects the research questions to the data (Punch 2009, p. 112). Creswell (2003) addresses three elements of inquiry that are central in conceptualizing the research approach and translating it into process in the design of the research. These elements are: The knowledge claims (*the philosophical foundation*), the research approach, the methodology and the methods of data collection. All of these elements are shown in Table (8).

3.1.1 The Philosophical foundations
3.1.1.1 The Theoretical Paradigm:

According to Bryman (2012) a variety of considerations relate to the distinction between quantitative and qualitative research. Three of these considerations are explored and

discussed in relation to this study, which are: the epistemological issue, the ontological issue, and the relation between theory and research.

Research Design			
The philosophical foundation		*Research Methodology*	*Methods of collecting data*
Theoretical Paradigm	Research Approach		
Interpretivism/ constructivist	Qualitative	Case Study	Document analysis, Interviews& focus groups

Table 8. The knowledge claims, research approach, strategy of inquiry & data collecting methods of the study.

The first consideration is the epistemological position that the current study is related to. It is the interpretivism paradigm. Paradigm is described as "a whole system of thinking. It includes basic assumptions, the important questions to be answered [...] and the research techniques" (Neuman 2011, p.94). Bryman (2012) explains that "an epistemological issue [or assumption] concerns the question of what is (or should be) regarded as acceptable knowledge in discipline". In other words it is related to the creation of knowledge and how it is known (Creswell 2013, p.20; Neuman 2011, pp.92-93). The researcher in this study subscribes to the tradition that views researching people and institutions from a different perspective than natural sciences do. Therefore, the researcher sought subjective evidence from several sources. One source was analysing and interpreting programmes and curriculum contents that related to teachers' preparation for inclusion; other sources were pre-service teachers and faculty views that were obtained by getting as close as possible to them and spending some time in the field (the epistemological assumption) (Creswell 2003, 2013).

The second consideration is the ontological issue. While epistemological assumptions are related to the creation of knowledge and how it is known (Creswell 2013, p.20; Neuman 2011, pp.92-93), ontological issues are related to what exists, the nature of reality and its characteristics. In this study the social world (universities or teacher programmes) is not seen as something external to social actors (faculty, pre-service teachers and the researcher), rather their social world is "fashioned" by them (Bryman 2012, p.19). Therefore, the intention of this study was to report the teacher programmes' content and their dynamics from different perspectives and as seen also through the participants views. Philosophically speaking the reality in our case is multiple (*the ontological assumption*) (Creswell   2003, 2013).

The third consideration is the relation between theory and research. Taking the interpretative tradition as a theoretical base for this study, the interpretation of the different data collected through documents, interviews and focus groups was the starting point that developed knowledge about teacher preparation programmes (the social world) (Prasad 2005). Accordingly, this inquiry sought understanding of the complex world of teacher programmes and lived experiences of pre-service teachers and faculty (Mertens 2015). At the same time, It was assumed that the participants (pre-service teachers and faculty) who were involved in the research "constructed different realities regarding their programmes; thus these realities existed in the form of multiple mental constructions" (Fraenkel, Wallen & Hyun 2015, p. 427).

3.1.1.2 The research approach:

Choosing a qualitative approach is directly linked to the research's problem and purpose (Bloomberg &Volpe 2012). Because this study is an exploratory one that aims to explore teacher programmes' content and to understand the experiences of pre-service teachers about their preparation for inclusive education, what was needed to accomplish this purpose was the qualitative approach. Another reason for this choice is that the qualitative approach has among its common objectives subjective description, understanding and explorations (Creswell 2013; Glesne 2009; Johnson & Christensen 2012, p. 34).

Qualitative research is defined by Denzin & Lincoln (2013, pp. 6-7):

> An interpretive, naturalistic approach to the world. It is an activity that consists of a set of interpretive, material practices that make the world visible [and turn it] into a series of representations, including fieldnotes, interviews, conversations, photographs, recordings, and memos to the self.

There are several features in this current study which explores pre-service teacher programmes for inclusive education that characterizes it as a qualitative research. One feature is that natural setting was the direct source of data. Another characteristic is that the researcher spent a considerable amount of time in the campuses to observe and collect the required data about the programmes, and to be able to gain a holistic perspective of the phenomenon under study (Fraenkel, Wallen & Hyun, 2015). This holistic account of the phenomenon under study was also presented by reporting multiple perspectives of participants who included pre-service teachers and faculty members. Hence, the researcher worked and tried to be conscious to focus on the participants' meaning in relation to how their programmes prepare teachers to work in inclusive classrooms (Creswell 2013).   Moreover, the qualitative data was collected in the form of words rather than numbers. The data

included programmes documents, interviews transcripts, audio recording and fieldnotes. Finally, context sensitivity was maintained by placing the findings in their social and temporal context. This means that the information was related to the specific programmes under study (Fraenkel, Wallen & Hyun 2015).

It is worth noting that a quantitative approach was not viewed as a viable option for this study because its guiding principles of research are used for purposes such as isolating causes and effects, investigating relationships, measuring and quantifying phenomena and creating a design that allows findings to be generalized (Bloomberg & Volpe 2012; Flick 2009), which are not the core objectives of this study. On the other hand, the appropriateness of the qualitative approach to this study had risen from taking a number of reasons into consideration. One reason was that qualitative research helped in describing the social phenomena under study, which is pre-service teacher education programmes, as they occurred naturally without any manipulation (Hancock 1998; Punch 2009; Snape & Spencer 2003). Qualitative research also promoted gaining a deep understanding of pre-service education programmes from the view of the participants who were the faculty members and pre-service general teachers (Bloomberg & Volpe 2012).

To conclude, there are a number of debates and challenges that face qualitative inquiry. Mason (2002, p. 6) argues that "we should not let the practice of qualitative research become unfairly paralyzed by them". One of these debates is the quality of the qualitative research which according to Mason is judged by a scientific, positivist mechanism. Another challenge is the generalization of an issue. In this study, the researcher in several parts and specifically in the validity section shows how applying criteria from different paradigms, such as a positivist paradigm on an interpretive research does not make any sense. Accordingly, other strategies are used that make more sense and logic.

3.1.2 Research Methodology

This section serves several purposes. In addition to defining case study as a methodology for the current study, it explains the sites and participants selection. Second, it identifies the methods used to collect data needed to answer the research questions and the rationale for choosing them. Third, ethical and validation issues that were taken into consideration are stated. Finally, limitations encountered in the process of preparing and conducting the research are presented.

It is important to point out that all the instruments and interviews manuals I created were informed by the study's theoretical framework which draws upon the Disability Social Model and a number of educational models for inclusive teachers programmes (e.g. Cooper et al. 2008; Mitchell 2008; Oliver 1996, 2009; Rodríguez 2012).

3.1.2.1 Case study research:

Case study research is the methodology used in this study. Creswell (2013, p. 97) defines case study as "a type of design in qualitative research that may be an object of study, as well as a product of the inquiry". The case study is a qualitative approach in which the researcher explores a real-life, contemporary bounded system (*a case*). In this study the pre-service teacher programmes in two government universities were 'the cases' that were chosen. These multiple bounded systems were explored over time, using many multiple sources of qualitative data such as documents, interviews and focus groups (Creswell 2013, p. 97-98).

Our phenomenon (the cases) were pre-service teacher preparation for inclusion in two Elementary/ and or Early Childhood teacher programmes. So from this point on, the focus of the study (the phenomenon) in the first programme will be named Case (A). Accordingly, the university and the programme in which the case is situated in will take the names University (A) and Programme (A). On the other hand, the second case in the Early Childhood programme will take the title Case (B). Therefore, the university and the programme in which the case is situated will take the names University (B) and Programme (B).

Creswell (2013) recommends starting with the outcome that a specific approach tries to accomplish when choosing between one approach over another. The case study methodology is relevant when the research questions require in-depth description of the social phenomenon that allows retaining a holistic real-life perspective of it (Yin 2014). Looking back to the qualitative approach and case study strategy characteristics and assumptions, and linking it to this study, it can be construed that they are oriented towards exploring, description, and gaining holistic understanding of the pre-service teachers programmes for inclusive education.

The intent of conducting this case study research was to best understand how general pre-service teachers are prepared to teach students with different abilities in mainstream classrooms "the phenomenon". It is worth noting that this study is an instrumental case study

and because it includes more than one case, it is called a 'collective case study' (Stake 1995) or multicase study (Stake 2006).

3.1.2.2 Case studies and generalization:

One of the most challenging issues in case study as a research methodology is generalization issues. One important question to be asked in this particular case is: Does the study aim to generalize the findings of this case study? The answer is generalization is not the aim. The intention here is to shed light on the preparation of teachers for inclusive education that has many important aspects worthy of study (Punch 2009) and have not been explored before in the educational context of the UAE. For example, one aspect is the courses content that provides teachers with the knowledge and skills that are essential to meet the needs for all students in mainstream classrooms. Another aspect was to explore pre-service teachers' experiences about how they saw these programmes qualify them to work in inclusive classrooms. Stake (2006, p. 8) holds a similar position; he argues that a case study and multicase both are studies for "particularization more than generalization", thus the power of this methodology is "its attention to the local situation , not in how it represents other cases in general". Patton (2002, p. 46) also confirms this view by pointing out that although one cannot learn from a small sample nor can generalise, one can learn a lot from them, "often opening up a new territory for further research".

3.1.2.3 Sampling approach:

This study uses a purposeful sample (Patton 2002), which is considered a nonprobability sampling method (Merriam 2009; Seale 2012), or a non-random sample (O'Leary 2004) to choose the sites, the cases and the participants. The researcher found that this type of sampling had the potential to meet the research goals. Moreover, this assumption was based on that she wanted to discover, understand and gain insights from this sample (Merriam 2009). Therefore, it was expected that the most can be learned about how general teachers were prepared to teach in inclusive classrooms from this sample. The sample included: Government universities (sites), elementary education programmes and their processes or procedures of preparing pre-service teachers for inclusion (cases), and faculty and pre-service teachers (participants).

In this strategy, particular settings, persons, or activities were selected deliberately to provide information that was relevant to this study's questions and goals (Maxwell 2013). Moreover, a nonprobability sample was used to access government universities and their education

programmes whose activities are "normally 'hidden' from public or official view". In addition, "not much is known" about these programmes (Seale 2012, p. 144). Merriam (2009, p. 82) points out that in qualitative case studies two levels of sampling are usually necessary: "sample selection occurs first at the case level, followed by sample selection within the case". She also confirms that researchers should determine selection criteria in choosing sites and participants to be studied.

As elaborated in the following sections, two types of purposeful strategies sampling were used, one for sites and the second for participants. A handpicked strategy was used for selecting sites (O'Leary 2004). For participants a snowball sampling was mostly used, where respondents were identified through referrals (Seale 2012).

3.1.2.4 Selection of sites and cases:

For sites (government universities), purposeful or nonprobability sample was used. The researcher uses a type called 'handpicked sampling' by O'Leary (2004, p. 110) as this strategy involves "the selection of a sample with a particular purpose in mind" and more specifically, "selecting cases that meet particular criteria (…) [and] represent expertise".

The first step was to choose the sites and the cases that were anticipated to help in achieving the study objectives and to answer the research questions. The criteria for choosing the sites and the cases were: being a government university, having a teacher education programme and having the teacher programme that includes at least one elementary education specialization. Therefore, government universities were selected as sites and one elementary and one early childhood (Pre K-grade 3) teacher education programmes as cases. Because it was an exploratory study, the researcher sought to include a number of various government universities in order to gain multiple perspectives in the area of teacher education programmes for inclusive education. The reason for choosing government universities is because it was anticipated that their educational policies are probably in alignment with the federal laws regarding including students with disabilities in regular classrooms. The elementary specialization was chosen because the teachers training experiences (practicum) were expected to be in elementary schools where students with disabilities and services to accommodate them are mostly found in every school; this was based on the researcher's practical experience in doing research in government schools context since 2008.

According to Stake (1995) the priority when selecting the cases for collective case studies is the opportunity to learn from chosen cases. Stake also asserts the importance of balance and

variety of choice. Aligning with this view, at the start three government universities sites were contacted to be included, however, as explained in the access section, the approval for access was gained for two universities only. The two cases are situated within one Elementary Education specialization and the other an Early Childhood (Pre K-grade 3) programme in the colleges of education campuses. It is important to note that only few government universities in the context of higher education in the UAE exist and at the same time have education programmes.

3.1.2.5 Selection of participants:

The approval to enter the two universities (A & B) and the two colleges of education was sought before the access to both sights through their respective research ethical committees. The selection process for participants started after that. It is worth reminding that the first case is named Case (A) and the second case is named Case (B). These steps were also followed by choosing the participants who included the faculty members in Programmes (A) and (B) and the pre-service teachers in the Elementary/ or the Early Childhood (Pre K- grade 3) education programmes. Not to forget, the choice process was guided by the research's theoretical framework and questions. The faculty members were essential in gaining information regarding their role in preparing teachers and as a resource for providing the relevant documents for the study (e.g. syllabi, activities sheets). On the other hand, pre-service teachers were anticipated to provide information about their experiences and opinions on the contribution of the coursework and the field experiences in inclusive schools.

Faculty members:

After gaining the approval from the ethical committees in both universities, the researcher faced some difficulties and delays at the beginning . This owed to the fact that she was not referred to a specific faculty or administration member to mediate her access. Some explanations are offered in the limitations section regarding this issue. For example, in Programme (A), the researcher was introduced to the faculty of the college of education and pre-service teachers through the Office of the Deputy Vice Chancellor for Academic Affairs (Provost) in the university (not the COE). On the other hand, in Programme (B) although faculty members were suggested by the assistant Dean, the researcher herself contacted them after the procrastination and delay that were experienced from her.

As mentioned, a purposeful sampling method was used to enable the researcher to select participants (especially faculty members) who can provide rich information about their

programmes. In each programme, one faculty member was assigned to help, especially in finding participants. In Programme (A) the 'Chair' (Head) of the Curriculum and Instruction department was assigned. And in Programme (B) the assistant Dean for Research and Graduate Studies was assigned. The "snowball or chain sampling" strategy was used to identify the faculty members of interest (Patton 2002, p. 243). This type of strategy was followed because the researcher was an outsider and the population of faculty was, for her, not easily identified or accessed (O'Leary 2004). The assigned faculty in both universities were asked to help in identifying the suitable participants (the researcher also had sent in previous time copies of research proposal and instruments to all the suggested faculty). In other words, the strategy was used to identify some instructors who were "information rich, good examples for the study and good interview participants" (Patton 2002, p. 243).

Basically, this sample was built by referrals; however, and at the same time, it had to meet the following criteria:

Some faculty members must be in leadership positions such as the dean of the college of education or head of department. The reason for choosing faculty members in positions of power and influence (elite) is because he/or she is a valuable source of information due to their very position in their organization. According to Marshall and Rossman (2011) when interviewing such individuals- elites-, they are able to discuss their faculties' or departments' policies, plans and latest developments both from a particular and a broad view. Such participants were also of high value in indicating documents, practices and individuals relevant to inclusive education and beneficial for the study.

Other faculty in the sample needed to be participating in curriculum design. This informant is very important to understand types of courses and to what extent inclusive concepts were integrated in education programme courses. He or she also was anticipated to be a great source for documents regarding courses syllabi.

Finally, there had to be instructors of courses who were in contact with pre-service teachers. One of them at least must teach a course that has direct connection with teaching students with disabilities. There are several reasons to include courses instructors. One was that through those instructors details about the programme dynamics can be explained. It was also anticipated that they would provide information about their instruction experiences in teaching subject areas especially related to knowledge and skills about inclusive education. Moreover, they were anticipated to be an important source for courses syllabi's documents.

It is worth noting that there were very different structures of departments in each programme. It was also found that curriculum design was a cooperative process that all faculty members participate in it. Accordingly, some adjustments were made to the sample criteria aforementioned and so the sample included faculty who were in leadership positions (who were also instructors) and faculty members who were mainly instructors of different courses.

Following are the number of faculty whom were interviewed or facilitated a service for the researcher. The researcher also explains the reasons for choosing those participants, and more clarifications are offered in the methods section. It should be noted also that participants were classified according to their programmes.

First: Faculty from Programme (A):

One faculty was asked by the Provost office to facilitate my access to the college of education and specifically to the Elementary Programme. He was the Chair of Curriculum and Instruction department at the time of this study. He played an important role in recommending faculty members who met the study criteria. I asked him for documents of some selected courses syllabi which he provided. He also gave me the guide book for field experiences and this was a valuable and the only resource, as other faculty members who were expected to provide such documents either did not provide or did not show up at the time of interview at all. The researcher also asked him to help in arranging focus group, however, he could not. It should be noted that this faculty was not interviewed although he helped in providing documents and recommending other instructors.

Four faculty were interviewed, three of them were heads (Chair) of departments and at the same time were instructors. The first faculty was the Chair of Elementary Education programme at the time of this study. He was interviewed, but he did not provide any documents as anticipated. I followed up with him for the documents but without result. The second faculty was the Chair of Foundation of Education department (FOED), who was interviewed. She was recommended by the Chair of Curriculum and the Instruction department and she was teaching some compulsory courses that were relevant to my research (e.g. ethics in education & foundation of education courses) that were expected to benefit my study. The third was an instructor in the FOED department also. The forth was the Chair of Special Education department who I conducted an unstructured interview with.

Second: Faculty from Programme (B):

Faculty members who participated in interviews were three. Following is a description of the sample:

The Assistant Dean for Research and Graduate Studies was assigned to facilitate my access to the College of Education. She was not interviewed; however, she recommended some individuals during my meeting with her. Then I e-mailed the Dean of the college and faculty members directly who responded and offered help all the way until the work was finished.

One faculty was the head of Early Childhood Education (Pre K-Grade 3), because Upper Primary, Preparatory Education (2-9) specialization was not available on the campus at the time when the study was conducted. She was very collaborative and she recommended the other faculty members for me. She also indicated me to get all the syllabi documents from the Dean directly as she (the Dean) was responsible for that, and I did. This faculty was also an instructor and through the interview she gave clear description of the programme and the collaborative roles of faculty members in teaching and field experiences. Two faculty members were also interviewed. One of them was from the special education specialization and the other from leadership specialization. Both of them were collaborative and gave clear view of their roles and collaborative work. The second one also helped in organizing and setting the date for the focus group interview with six pre-service teachers.

Pre- service teachers:
The researcher planned to conduct one focus group interview in each campus. Each focus group consisted of 6 pre-service teachers. Those teachers were in their last semester in year 4 in Programme (A) and in the first semester in year four in Programme (B). It was predicted that they would provide information about their experiences regarding how they were prepared to teach in inclusive classrooms, experiences of teaching students with disabilities and their viewpoints about inclusive education. The criteria for choosing pre-service teachers was teachers in their last year of the programme, to ensure that they studied most or all of the courses and started their field experiences or practicum course.

The two samples of the focus groups were both purposeful and homogeneous (Patton 2002); all the pre-service teachers in each group were from the same programme and at the same year, however they differed in their specializations. They learn the same core courses of the Elementary/ or Early Childhood (Pre K- grade 3) programmes.

In Programme (A), I interviewed the pre-service teachers with the help from the Dean's office. The group of the pre-service teachers was difficult to be interviewed because they finished all the courses except the field experience course, and all their work was in school settings only. The focus group interview was organized on that day (22nd February 2016). The meeting took place in one of the lectures rooms.

On the other hand, the focus group in Programme (B) was a homogeneous sample. The meeting was organized in the 24th April 2016. The day was chosen because the pre-service were in the campus and not in the field work. The meeting took place in one of the meeting rooms in the administration department. In this university pre-service teachers were in year four, but in their first semester. And they were in Practicum III (EDC 450A). In this university, practicum courses start from the second year and as it will be shown in the findings chapter, the pre-service teachers take several courses of practicum. The last one which was called 'student teaching' (EDC 490) consisted fully of field work, and it was in the last semester for the pre-service teachers.

To conclude, the data that was provided from the different participants can be summarized as follows: Faculty provided data about instruction strategies and curriculum in their courses and the contribution of the programme to prepare their teachers to work in inclusive schools. They also expressed their conception of inclusive education, in addition to the extent to which inclusive concepts were integrated in these courses. On the other hand, pre-service teachers provided information about their experiences regarding how they were prepared to teach in inclusive classrooms, their experiences of teaching students with disabilities and their viewpoints about inclusive education conceptualization.

3.1.3 Research Methods

Data collection followed the steps shown in Figure (6). The first step was gaining access to the universities. It was followed by two steps which were overlapping with data analysis process: Collecting documents relevant to teachers education programmes, interviewing faculty members and interviewing pre-service teachers by using focus groups. This process was repeated in the two sites.

3.1.3.1 Documents:

For the purpose of this study, a document is defined as an electronic or printed record of an event or process (McCulloch, 2011). And document analysis is defined as "a systematic procedure for reviewing or evaluating documents" (Bowen 2009, p. 27). The focus

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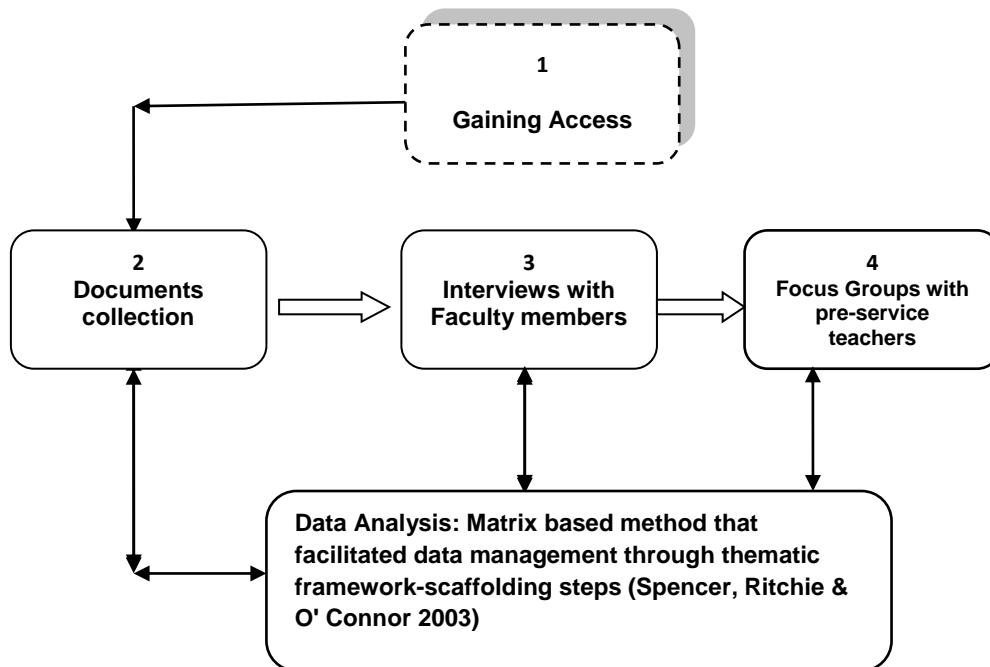

Figure 6. Steps for the data collection process.

of this analysis was on primary documents that were produced as a direct record for the courses in these colleges of education and Elementary programmes (Bell 2005; McCulloch 2011). Documents included the universities catalogues that consisted of the colleges' educational philosophy, objectives, course descriptions, course syllabi, and student teaching handbooks or field guides. Electronic documents were also sought from the universities' websites regarding the types of streams or specializations which were offered at the time of study, and the type of courses in the Elementary or Early Childhood (Pre K- grade 3) education programmes.

Documents analysis was guided by the research's main question on how pre-service teachers were prepared for inclusion and the first and second sub-questions. The documents were the main source for empirical data. Merriam (2009) points out that systematic search of documents in fieldwork allows for tracking down leads, uncovering valuable data and being open to new insights. The documentary materials served many functions (Bowen 2009; Fitzgerald 2007): First, the documents that were obtained from the Chair of Curriculum and

Instruction department in Programme (A) and the Dean and the programme's administrator of Programme (B) (e.g. courses syllabi, colleges' philosophies and objectives; students' field work handbooks) provided information about the background of the programmes, what knowledge and skills pre-service teachers were expected to acquire, and issues that impacted the phenomenon of inclusive education. Second: Documents that were available on the universities websites included: Colleges catalogues, course organization, types of education programmes, and college activities. These documents helped in identifying significant features of these programmes and activities. In addition, it provided a sense of the context in which the pre-service teachers and faculty (research participants) operated, especially that the researcher experienced access restrictions to the campuses. Third, the periodic reports or catalogues of the universities (e.g. programmes; statistics) were available and helped in getting a clear perspective on how the programmes changed over time.

Documents analysis process in this study took two steps. The first was assessing the authenticity of the document which includes its origin, its author, reasons for being written and the context in which it was written (Merriam 2009). For this aim, the researcher developed an instrument based on the work of Bell (2005) and Clark (1967, cited in Merriam 2009) that has criteria to assess the documents that were collected. This criteria includes: categorization system, nature of documents and critical analysis of documents (internal and external criticism) (see Appendix 5).

The second step was: The qualitative content analysis which is defined as "a process of organizing information into categories related to the central questions of the research" (Bowen 2009, p. 32). It should be noted that content analysis in this study did not take the quantitative approach that involves counting the number of times that particular terms appear in the texts nor discourse analysis that search for coherence and other linguistic issues. The content analysis took the form of thematic analysis. This process involves the identification of themes through careful reading and re-reading of different documents (e. g. colleges catalogues, courses descriptors or outcomes) (Fereday& Muir-Cochrane 2006). More clarifications are offered in the data analysis section.

3.1.3.2 Interviews:

Interviews were used to explore and understand each programme's context, curriculum and experiences of the pre-service teachers and faculty members. Consent for interviews and

focus groups was sought at the initial visits to the universities, the researcher also e-mailed the consent forms to them beforehand.

Interviews were valuable tools to access directly the participants' worlds and examine what they did in real life (Silverman 2011). The interviews were conducted in a semi-structured format and all participants received a copy of the interview guide by e-mail (ahead of time) and also before the interview. The interview guides are included in the interviews' transcriptions Appendices (11& 16). These initial guides include plans to explore and ask open-ended questions about specific topics regarding curriculum and skills related to preparing teachers for inclusive education (Johnson & Christensen 2012). For example, interviews were used to explore how concepts of inclusive education were integrated in education programme courses, and the contribution of the coursework and the field experiences to prepare the teachers' to meet the needs of students with diverse abilities. This exploration was from the point of view of faculty members.

Semi- structured interviews with open-ended questions were chosen for various reasons. They allowed the researcher to respond to the situation at hand and to new ideas on the topic (Merriam 2009). Participants' views were also explored "in ways that cannot be achieved by other forms of research and report [the] findings as near as reasonably can in their own words" (Ribbins 2007, p. 208).

The researcher was able to interview four faculty members in Programme (A) using a semi-structured format. One faculty was interviewed in an unstructured format because I met her without previous appointment. She was the only faculty from the special education specialization that I was able to meet, and this was a valuable interview in content. However, I used the interview guide to facilitate the discussion. In Programme(B) three faculty members were interviewed using semi-structured interviews modified for each of them according to their specializations, since as mentioned one faculty was from the head of Early childhood specialization, and the second was from the special education specialization and the third from leadership specialization.

3.1.3.3 Focus Group Interviews:
Kvale & Brinkmann (2009) argue that the focus group method is most preferred for exploratory studies because the lively collective interaction can bring forth more spontaneous expressive views than individual interviews. According to them, a focus group usually consist of 6-10 participants. Choosing the focus group as a method in this study provided insights

into experiences of pre-service teachers in their programmes regarding preparation for inclusive education. It also helped in obtaining general background information about teacher education programmes (Oates 2000). The researcher found that using this method with pre-service teachers also encouraged a variety of viewpoints on inclusive education (Kvale & Brinkmann 2009). In addition to that, the flexibility of the format enabled the researcher to explore unanticipated issues that arose in the discussions (Marshall & Rossman 2011).

In each campus six pre-service teachers were chosen to participate in the focus group interview. In Programme (A) the pre-service teachers were from the Elementary Education programme. They were from different tracks (specializations) which included English, Islamic studies and Arabic and Social studies. On the other hand, the pre-service teachers in Programme (B) were all from the Early Childhood (Pre K-Grade 3) specialization; because the specialization of the Upper Primary/Preparatory Education (Grades 2-9) that I applied for did not include students in this campus and was closed at the time of this study. Each meeting took place in the campus in lecture or meeting rooms that were familiar environments for the pre-service teachers. The interviews started with a brief presentation that clarified the study's purpose and included background about the researcher. The researcher also distributed handouts of the questions that helped in guiding the discussions.

Focus groups were used with pre-service teachers at the end stage of the study for the refinement of ideas that were collected from documents about how those teachers were prepared and their experiences on teaching students with disabilities in regular classrooms. The focus group question guides are included in Appendices (12 & 17).

The total number of participants:
 The participants included faculty members and pre-service teachers from both programmes (Table 9). Seven interviews were conducted in the two programmes, four faculty members were in Programme (A) and three faculty members in Programme (B). In the two focus groups twelve pre-service teachers participated.

Data Collecting Methods Description	Interviews	Focus groups
Conducted in 2 programmes	7 interviews with 7 faculty members.	2 focus groups (2x 6 pre-service teachers)
Total Number of Participants	7	12

Table 9. Number of participants in the interviews and the focus groups in 2 programmes.

To conclude this section, Table (10) summaries the links between research questions, the methods used to answer the questions, and the justifications for using these research methods.

Research questions	Methods, and data sources	Justification
a - What coursework outcomes and content (e.g. assessment, resources) related to inclusion and diversity of learners were provided to elementary pre-service teachers during their teacher preparation programme? b. How were some elements and concepts of inclusive education integrated and addressed in the Elementary teacher education curriculum/syllabi across the two government universities?	Method: Document analysis. Data sources: universities catalogues, course syllabi, and student teaching handbooks or field guides. Electronic documents (e.g. universities & COE websites content (e.g. types of specializations, type of courses, visions & objectives).	• Documents provided information about the background of the programmes, • Provided knowledge and skills pre-service teachers were expected to acquire, or **programmes' contribution from the documents aspect**. • Analysis of these documents revealed issues related to curriculum that impacted the phenomenon of preparing teachers for inclusive education, • And helped in identifying the gaps in the skills needed, • Finally, finding if theory transformed into practice, or there were discrepancies between the two elements.
c- What were faculty opinions about the contribution of coursework and field experiences to the teachers' ability to meet the educational needs of all students?	Method: Interviews Data sources: Faculty of the Elementary or Early Childhood programmes in the COE.	Interviews were valuable tools to access directly the participants' worlds and examine what they did in real life. used to explore how concepts of inclusive education were integrated in education programme courses, **and the contribution of the coursework and the field experiences** to prepare the teachers' to meet the needs of students with diverse abilities **from the point of view of faculty members**
d- What were the pre-service teachers' experiences and opinions about the contribution of coursework and field experiences to the teachers' ability to meet the needs of all students?	Method: Focus group Data sources: Pre-service teachers in Elementary or Early Childhood Programmes.	Focus groups provided insights into experiences of pre-service teachers regarding preparation for inclusive education: • Revealed **teachers opinions about the impact of their programmes in the preparation process** for inclusive schools. • Provide data about the context of field experiences, real life experiences, challenges to teach students with disabilities • Enabled the researcher to explore unanticipated issues that arose in the discussions such as conceptualization of inclusive education, preparedness to teach diverse students.

Table 10. The links between research questions, the methods used to answer these questions, and the justifications for using these methods.

3.2 Data Analysis

The data analysis conducted for these collective case studies occurred at two levels within each case and across the cases (Stake 1995). For this study, thematic analysis designed by Spencer, Ritchie and O' Connor (2003) was used as a method. More specifically, this form of analysis is referred to as thematic framework method. 'Framework method' is defined by Ritchie, Spencer and O'Connor (2003, p. 262) as "a matrix based method that facilitates data management through thematic framework which is used to organise data according to key themes, concepts and emergent categories". The analytical structure of this framework consists of a number of scaffolding steps each of which involves different analytical tasks. They refer to this structure as 'the analytic hierarchy'. It should be noted that the thematic framework is the central component of the method. Rapley (2011, p. 274-275) summarises this hierarchy in the following steps:

> Familiarise yourself with the dataset, generate thematic framework (themes, sub-themes from data), apply thematic framework, label data with number or term, sort data by theme or concept and summarise (create thematic charts), develop and refine categories and finally look for patterns, associations, clustering and explanations.

The researcher chose this method because the processes were relevant to the research purpose which was to understand how the teacher education programmes in two government universities were preparing pre-service teachers for inclusive classrooms. The thematic framework enabled the researcher to be grounded in the original data and served as a tool to do a comprehensive coverage for this data. Using this method allowed for the application of the same analytic treatment to each unit of analysis (e.g. document; interview, focus group) (Spencer, Ritchie & O'Connor 2003). Moreover, it enabled the researcher to make comparisons between programmes (A) and (B) regarding the preparation of teachers for inclusion (the cases) and at the same time associations within each programme (Spencer, Ritchie & O'Connor 2003; Srivastava & Thomson 2009).

3.2.1 Stages of data analysis:

The stages or steps that the researcher followed were adapted from Ritchie, Spencer and O'Connor's (2003) chapter titled "Carrying out qualitative analysis" and the chapter titled "Analysis: Practices, principles and processes" (Spencer, Ritchie and O'Connor, 2003). The technique is known as the analytic hierarch. It relates to "thematic, largely cross-sectional analysis based on interpretation of meaning" (Spencer, Ritchie and O'Connor, 2003, p. 213).

The main three stages of this technique are the data management stage, the descriptive accounts and the explanatory stage. These stages are described briefly below, and comprehensive details of this method are found in the previous reference.

3.2.1.1 The data management:

The first step is data management. The total data that was collected from both programmes included seven interviews, two focus groups, syllabi of a number of courses, web site data about universities and programmes' structure, visions, goals and relevant information. The researcher also benefited from some field notes that were included in the form of journal logs. The documents (e.g. syllabi, field experiences book) were sorted, reduced and organized into tables of courses' description, rationale and outcomes (Appendices 6, 8, 9, 13, 14 & 15). All interviews were in English except one which was in Arabic. This was the interview with the Head of the Special Education department in programme (A). The focus group was also conducted in Arabic in programme (A). All of the interviews were transcribed and the Arabic ones were translated by the researcher and the editor (who proofread this study) and then compared and differences were resolved.

The second step was identifying initial themes or concepts. This step was considered crucial to conduct the data analysis. It started by familiarizing myself with the data set by reading all the documents and even listening to the interview audios several times to have full coverage and be familiar with the two programmes and the diversity of the participants' characteristics and circumstances.

Following the revision of the data, the researcher started to identify the recurring ideas and making lists of them. This was followed by sorting and grouping these themes and ideas to levels of categories that consisted of a hierarchy of main themes and subthemes. This process of sorting and re-sorting continued until a workable conceptual framework or index was created. Numbers were also assigned to differentiate between the individual categories (Ritchie, Spencer and O'Connor 2003).

The third stage was labelling the data. This was done by applying the index to the raw data. It is worth drawing attention to two points. The first point is that this method of data analysis uses 'indexing' rather than 'coding'. According to Ritchie, Spencer and O'Connor (2003, p. 224) "indexing' rather than 'coding more accurately portrays the status of the categories and the way in which they 'fit' the data". The second point is that this initial step allowed the researcher to do more refinements to the first thematic framework or index.

The fourth stage was synthesizing the data. This is the final stage of data management. It served in reducing the original raw data to a manageable amount, and enabled the researcher to examine all parts, and even words, in the original set of data and check its relevance to the phenomenon of preparing pre-service teachers for inclusive classrooms. In addition, in this step the process of extracting initial meaning and findings for later interpretations is carried out. Synthesis was constructed by creating thematic charts (matrices). The number of thematic charts depended on the number of categories which differed from syllabi content to the interviews and focus groups data sets. Each participant, course syllabus, programme and university allocated a row in the matrix and each subtopic is displayed in a separate column (Ritchie, Spencer & O'Connor 2003).

3.2.1.2 The descriptive accounts:

This refers to three stages which are detection, categorization, and classification. The aim of this task was to construct a coherent structure that displayed the content of the descriptive elements and dimensions leading to categories of the data.

This process was done by looking within a theme, within a column on the thematic chart, across all participants and programmes in the study. This allowed me to observe and to understand the range of participants' opinions and experiences, in addition to programmes' objectives and outcomes that were labelled. This led to define elements, then to refine categories and to classify the data. This process continued until all the elements that can be extracted were summarized and grouped to higher order labels (themes) (Ritchie, Spencer & O'Connor 2003).

3.2.1.3 The explanatory accounts:

In this stage the researcher started to find associations /patterns within themes. First this process began by the search for associations at the individual case level than between cases. At the same time, the researcher retained links to the original data to ensure the accuracy of interpretations of the participants accounts and avoid misinterpretation as much as she can (Smith and Firth (2011). This was followed by developing explanations of these themes.

Some coding methods were also used to support the data analysis process. Saldaña's (2016) coding methods, especially the primary ones that had basic and focused filters, helped in reviewing the corpus of documents and interviews, and built the foundation for following

stages of data analysis. Basically, the researcher used attribute,[11] structural,[12] values[13] and holistic[14] coding methods in managing documents such as courses syllabi, programmes descriptions from the catalogues and the universities websites (e.g. visions, objectives, streams), in addition to interviews transcripts. I also used, specifically in interviews, what Saldaña (2016, p.105) calls 'In Vivo' coding method that "refers to a word or short phrase from the actual language found in the qualitative data record". Detailed description of these methods are found in Saldaña (2016, pp. 83; 98; 131). For example, the holistic method is a preparatory approach which was used "to grasp basic themes and issues in the data as a whole". This was done before the process of detailed indexing and building themes. The documents were read and reread by units (e.g. one interview at a time, or one programme specializations at a time) and then coded.

It is worth mentioning that the 'Framework method' was the general strategy for dealing with the data during and after the collection process from the different methods in each case. Taking into consideration that the process of collecting data was recursive and dynamic and no matter what a researcher writes about how she analysed the data, "it is not until you work with your own data in trying to answer your own research questions that you are really see how data analysis works in qualitative research" (Merriam 2009, p. 175).

3.3 Ethical considerations

Ethics from a philosophical perspective is related to "practical knowledge and the application of theory to human activities" and the values that regulate the conduct of social and cultural research (Ali & Kelly 2012, p. 60). Further, Ali and Kelly (2012, p. 61) argue that research ethics influences and underlies the balance "between respecting the rights of the individual and making the world is a better place", in addition to taking the decisions about what and how to research.

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[11] "Is the notation, usually at the beginning of a data set rather than embedded within it, of basic descriptive information such as: The field setting, participant characteristics or demographics, data format (e.g. interview transcript, document), time frame" (Saldaña 2016, p. 83).

[12] "Refer to its categorisation functions. It applies a content-base or conceptual phrase representing a topic of inquiry to a segment of data relates to specific research question used to frame the interview. The similarly coded segments are then collected together for more detailed coding and/or analysis" (Saldaña 2016, p. 98).

[13] "Is the application of codes to qualitative data that reflect a participant values, and beliefs, representing his or her perspectives or world view" (Saldaña 2016, pp. 131-32).

[14] Is an attempt "to grasp basic themes or issues in the data by absorbing them as a whole rather than by analysing them line by line" (Dey 1993, p.104).

A number of ethical issues were identified and considered during the planning, conducting and analyzing data phases. The following section show how the researcher dealt with these issues (Punch 2009). The guidelines for ethical conduct followed and applied in this research were drawn out from a number of social research literature resources (Ali & Kelly 2004; Flick 2014; Miles and Huberman 1994; Punch 2009; Silverman 2011).

3.3.1 Ethics committees

3.3.1.1 The British University in Dubai (BUID) Research Ethics subcommittee:
The proposal was defended on 15 June 2015", then "Pre- Defense/Viva Report Form" from proposal examiners was received with some recommendations. On 15th of July I received a "conditional pass" document from the Research Degree Committee (RDC) attached to examiners feedback and the recommendations for some amendments. Two weeks later a modified copy of the proposal was submitted to "The Board of Examiners" and the final pass was received on 6th October 2015 (Appendix 1). In addition, an Ethics Form was sought from and submitted to the ethics committee in the British University in Dubai (the researcher's institution) (Appendix 2). Specifically, a "Low Risk Research" form was submitted to the Dean representatives in the Research Ethics subcommittee. An approval was received in February 2016. In addition, the researcher also requested "to whom it may concern" document to be submitted to the universities where the study took place, and it was received on 6th December 2015 (Appendix 3).

Information about the Research Ethics Committees in other universities for the study are included in the next section of 'access' to avoid the repetition.

3.3.1.2 Access and obstacles:
The Research Ethics Committees in three government universities and colleges:
The researcher applied for access to three government universities and colleges. These universities from this point forward will be referred to as University (A), or (B) or (C). Communication with research departments in all universities was an obstacle that impacted the sample size and artefacts needed. Details are included in the following section and limitation section as well.

University (A):
In this university I was directed, through a phone call, to submit my request to conduct the research to the Division of Research and Graduate Studies, Ethics Approval System on 16th

December 2015. My application was approved on 12 January. However, no directions were given to direct me to the person who was in charge to be contacted in order to arrange the data collection process. I tried to contact the Office of the Deputy Vice Chancellor for Academic Affairs (Provost) in the college of education through phone and e-mails for two weeks, and at last the director of the Provost office answered and she helped me through this process.

University (B):

As the researcher did not know how to communicate with this university, she went to the location of one of this university's campuses, and asked about submitting a request for conducting a research. Following is a detailed description to show the challenge of the difficult communications with this university. The researcher had the opportunity to meet the Graduate Development Programme associate on 8[th] of December 2015 who helped her in submitting the request to conduct the research in this university. She was asked to submit an online ethical clearance form, copies of informed consent and tools that were intended to be used in the study. All of these documentations were submitted to the "Research Ethics Committee" (REC). The researcher followed up with a number of e-mails; however, did not receive any reply from the Chair [head] of the Committee until the 26[th] January 2016. On 28[th] January the researcher received the approval. Then the researcher was forwarded to the Assistant Dean for Research and Graduate Studies in the college of education at that time who was appointed to facilitate the access to the college. However, no reply was received from her. Many other unfruitful communications followed back and forth between the Chair of Ethics Committee, the Assistant Dean and the researcher.

The researcher contacted the Dean of the college on 28[th] January 2016. The Dean was the first person who replied within 24 hours, and the researcher is so grateful for all her help throughout the work in the college of education. However, the challenge of communication was not resolved until the month of March. From that point on the researcher decided to contact the faculty members personally starting from 14[th] March and found them very collaborative. The interviews started on 16[th] March and ended on 24th April with the focus group.

University (C):

The communications with this institution did not yield positive results as the researcher tried for two months to communicate; however, difficulties were faced (e.g. many requests from

this institution included making unacceptable major changes in the research methodology) and time was passing. The researcher decided to cancel any further communications with this university. This decision was taken after consulting her Director of Studies (DOS) who also tried also to help with the communication with this university.

3.3.2 Protection of human subjects

This was regulated by institutional review boards within each university. The request from universities' committees for anonymity was fulfilled. There was no situation that the researcher was aware of that participants were subject to any harm. All participants were adults and the questions in the interviews and the focus groups revolved around the teacher programmes and did not deal with any problematic or personal issues.

3.3.3 Informed consents, anonymity and confidentiality

Informed consent was one of the documents which was required from the researcher in all the universities where research was conducted. Guidelines for writing informed consents for this study were drawn from Kent (1996, cited in Silverman 2011). The researcher asked all the participants that included faculty members and pre-service teachers for voluntary participation in the study. Faculty was asked through e-mails for voluntary participation. Pre-service teachers were asked at the beginning by their instructors to volunteer in the study, and then asked personally by the researcher for their permission and choice to participate or withdraw. All participants were given written consents copies to sign (Appendix 4), and signed copies were sent back via e-mails to those whose e-mails were available.

The researcher was also keen to clarify the topic of the research and its objectives for the participants. In addition, copies of a summary of the research proposal and interview questions were sent to all the faculty members beforehand. Copies of the interview questions were distributed to the participants before the start of each interview too. The researcher also promised all the participants to hide their identities, and reiterated their choice to withdraw at any time. The researcher's e-mail address and phone number were given to the participants and universities administrations.

It must be noted that a compromise had to be made in maintaining anonymity and ensuring credibility. While I refrained from explicitly naming the two universities throughout the body of this study, it was near impossible to hide the identity of the institutions in the references, especially given that they are the main two federal universities of the UAE. This is because

this study heavily relies on documents gained from both universities and referencing these materials cannot be circumvented to uphold credibility. However, the names of individuals mentioned in this study were anonymised as much as possible.

3.3.4 Securing the data

The researcher followed Flick's (2014) protection guidelines for all the materials, which included documents, interviews recordings and interviews transcripts. The recordings, after transcribing all the interviews and focus groups, were locked in the researcher's desk drawer in her home office because she was the only interviewer. The participants whose e-mails were available to the researcher received the audio recordings and the transcriptions of their interview through e-mail for their access and reference. Moreover, names and locations mentioned in the interviews or documents were anonymised as far as necessary. The researcher made sure that the interviewees' identities will not be revealed when this thesis is published.

3.4 Validation strategies

This qualitative study is built on an interpretive approach which assumes that reality is socially constructed. Therefore, its underlying ontological and epistemological assumptions reject objective reality beyond the human mind, "instead stipulate that knowledge is constituted through lived experience reality" (Sandberg 2005, p. 44). Moreover, truth according to Guba and Lincoln "is a matter of consensus among informed and sophisticated constructors, not of correspondence of objective reality"(Guba and Lincoln 1989 cited in Patton 2002, p. 98). In the same vein, and from a relativist stand point which confirms that we live in a world of multiple realities, Hammersley and Gomm (1997) consider an account to be true when it is taken to be true within some community whose members share a particular perspective.

In this current study the researcher was confused at the beginning about the strategies she was going to apply as criteria for research credibility. The two central concepts of credibility are validity and reliability, according to Silverman (2011). This confusion was due to the criticism and concerns about qualitative research quality. These challenges were also referred to in the multiple perspectives used in literature about the meaning of validity in qualitative studies (Creswell & Miller 2000). For example, Creswell and Miller (2000, p. 124) listed an array of terms that were used in many articles and texts that indicated validity such as

"authenticity, goodness, verisimilitude, adequacy, trustworthiness, plausibility, validity, validation, and credibility". Consequently, reading different strategies used by various authors made me, since writing the thesis proposal and during research process, for a period of time, unable to decide which criteria I was going to use. There is no defined and clear "set of quality criteria available for judging" validity in qualitative research (Hammersley 2007, p. 287).

Further, the researcher found that there was a methodological debate and contrast about quality criteria between the strictly objective positivistic tradition of quantitative research and the subjective interpretive tradition of qualitative inquiry (Leung 2015; Seale 1999a). Many authors owed this debate to the distinctive differences in the ontological and epistemological assumptions underlying both positivistic and interpretive traditions (Creswell & Miller 2000; Kirk & Miller 1986; Sandberg 2005; Silverman 2011). The researcher was convinced after perusing literature, and before and after collecting the data that qualitative studies can produce valid knowledge. This can be achieved by asking highly critical question about the study as Silverman (2011, p. 355) explained. He emphasizes that "these questions should be no less probing and critical than we ask about any quantitative research study". Additionally, he argues that " we should not assume that techniques used in quantitative research are the only way of establishing the validity of findings from qualitative or field research" (Silverman 2011, p. 383). Not only that, but also "social sciences is in every sense of the word fully as physics, and has fully as much need for reliability and validity as any science"(Kirk &Miller 1986, p. 14). And qualitative research requests "theoretical sophistication and methodological rigour" (Silverman 2010, p. 268).

Therefore, and after a thorough investigation and examination of literature on topics of the quality of qualitative research issue, the researcher chose strategies from four authors whose techniques were most helpful to examine the quality of this qualitative study's methodology, data and findings. Those studies are Creswell's (2000; 2013), Merriam's (2009), Seale's (1999a; 1999b; 2012) and Silverman's (2010; 2011). The first two authors represent, for me, understandable practical techniques to assess my work all from the beginning. Creswell (2013) suggested that qualitative researchers who employ qualitative approach apply "accepted strategies to document the 'accuracy' of their studies " and demonstrate its credibility. On the other hand, the last two authors' strategies conform with the 'subtle realism' philosophical position. The researcher found that the strategies used by this paradigm were applicable and had practicality in using, so she used many of these strategies. The

'subtle realism' position is an approach taken mainly from Hammersley (1992), and it is best summarized by Seale (1999a, p. 470) as follows:

> Subtle realism involves maintaining a view of language as both constructing new worlds and as referring to a reality outside the text, a means of communicating past experience as well as imagining new experiences.[...] It is a marker of an approach to social research that takes the view that, although we always perceive the world from a particular viewpoint, the world acts back on us to constrain the points of view that are possible. The researcher treading this middle way is continually aware of the somewhat constructed nature of research but avoids the wholesale application of constructivism to his or her own practice, which would result in a descent into nihilism

In order to build credibility in qualitative research, all procedures that were taken to collect the data and to conduct it should be publicly accessible, or in other words to be as transparent as possible (Yin 2011). Accordingly, the next section presents how the researcher chose the strategies that were used to justify (validate) the knowledge (data) which was produced within this study. For validity, the following strategies were employed: Triangulation of methods, clarifying researcher bias, thick description and reflexivity, and also to some extent member checking. Member checking "involves taking data, analyses, interpretations and conclusions back to participants so they can judge the accuracy and credibility of the account" (Creswell 2013, p. 252), or as stake's (1995, p. 171) summarises it as "presenting draft materials to actors for confirmation and further illumination". For reliability, strategies suggested by Silverman's (2010) and Merriam's (2009) were used.

3.4.1 Validity

Validity is defined as "how accurately the account represents participants' realities of the social phenomena and is credible to them" (Creswell& Miller 2000, pp. 124-25). Merriam (2009) points out that validity depends on the meaning of reality. In conceptualizing validity, Hammersley (1992, p.69) used it as a synonym for truth assuming that an account is valid or true "if it represents accurately those features of the phenomena that is intended to describe, explain or theorise".

3.4.1.1 Triangulation:

Triangulation was employed by using multiple data collecting methods (documents, interviews and focus group) and sources (faculty, pre-service teacher, hard copies of documents and websites) to support evidence from different sources and confirm emerging findings (Merriam 2009). Using different methods "compensates for their individual limitations and exploits their respective benefits". On the other hand, using different

informants helped to construct a rich picture about viewpoints, experiences, needs and sometimes attitudes based on a range of people (faculty, pre-service teachers and administrators) (Shenton 2004, p. 65). Examples are shown in the following chapters of the data analysis and the findings where the researcher corroborated evidence to illuminate or confirm incidents and meanings (Stake 1995).

3.4.1.2 Thick description:

Thick description involves explication or interpretation of "unique, idiosyncratic meanings and perspectives constructed by individuals, groups, or both who live/act in a particular context" (Cho & Trent 2006, p.328). This approach was used throughout this study to provide information and description about teacher programmes and how general teachers were prepared for inclusive schools. In addition, it is used to show how the pre-service teachers and faculty members under the study interpret the phenomena of teachers' preparation for inclusion (Cho & Trent 2006; Merriam 1995). Thick description was expected to validate the findings because it "emphasised on capturing and conveying the full picture of the phenomenon being studied comprehensively and in context" (Punch 2009, p. 360), and consequently expected to promote the accuracy of the programmes and participants accounts (Creswell 2013).

According to Cho & Trent (2006), the prolonged engagement in the field enables the researcher to produce thick description which is necessary for the contextual meaning to emerge, and also to understand the participants views about the phenomena. For that, the researcher tried to visit the two universities' campuses as the circumstances allowed, especially with the restricted access regulations and the difficulties to communicate with faculty members who were suitable to be included in the sample and serve the study objectives. University (A) campus was visited four time; the visit times ranged from two hours to six hours, while University B was visited five times.

3.4.1.3 Reflexivity:

Reflexivity is "an awareness of the self in the situation of action and of the role of the self in constructing that situation[... It] focus[es] on the constitutive role of the self (Bloor & Wood, p.145-46). Further, Glesne (2011) elaborated that reflexivity entails/ requires/ critical reflection on the way researcher, participants, setting and research procedures interact and influence each other. On the other hand, Roller (2014) considers researcher's assumptions and prejudices as the biggest threats to the quality of the research data and yet are rarely

examined. She indicates using self-reflection as a tool to address preconceptions (e.g. assumptions, beliefs, values, and judgments) that might be brought unintentionally to the research design by the researcher .

 The researcher used a reflexive journal to reflect on how her personal values, life experiences and other factors (e.g. physical environment, emotions or feelings towards participants) may have affected her way in asking questions, data collection methods, behaviour and data interpretation. Furthermore, the researcher found that these reflective logs provided her with a detailed documented first- hand account of how the different players (researcher, participants, settings) interacted with each other, and also contributed and enriched data analysis. Moreover, these logs helped in making her more aware of the influence of her assumptions, beliefs and personal experiences on research procedures (e.g. interviews, communication) and findings.

Another way of expressing reflexivity was reflecting on the relationships between the researcher and the participants in different parts of this study. The reason for this focus is that in education and other social sciences "the human participants are most often the source of knowledge, and so relationships between researcher and participant[s] are also defined within these scientific paradigms" (Brodsky 2001, p. 324). By sharing these concrete examples of how researcher-participant relationships were negotiated, it was anticipated that the reader can be informed about how these relationships affect real-life work. Hopefully, it will help the reader of the final research report to assess any concerns about objectivity and interpretations of outcomes. In addition to mitigating the bias in the data (Roller 2012, 2014, 2016).

3.4.1.4 Clarifying bias:

Bias in qualitative research involves "influences that compromise accurate sampling, data collection, data interpretation, and the reporting of findings"(Ogden 2008, p. 60). From another perspective, Hammersley and Gomm (1997) argue that bias relies on the concept of validity or truth. They also point out that it is "a type or source of error, and in this respect it serves as an antonym of objectivity (in one of that word's senses)" (section 2.1). Further, they concluded their argument by defining it as "systematic and culpable error; systematic error that the researcher should have been able to recognize and minimize, as judged either by the researcher him or herself (in retrospect) or by others"(section 4.13). Accordingly, one strategy used to address and to handle biases of the participants was the "careful description of those who provided the data". In this study, the researcher starts by inquiring into her

biases and by acknowledging her subjectivity as part of her interpretive research. In this section some strategies that were used to eliminate my biases are explicated:

First, she acknowledges the influences of her former work as a teacher, and later as a researcher in the field of education with a focus on special and inclusive education. The researcher also believes that all learners have the right to receive equitable opportunities for education through understanding their strengths and weaknesses leading to creating accessible curriculum and meaningful learning experiences. She also knows that inclusive education is a new approach in the UAE educational context, and some research, in the UAE context, indicates that general teachers reported inadequate preparation for inclusive classrooms and teaching learners with disabilities (AlYateem2010, Saqr & Tennant 2016).

Second, the examination of validity was employed as a strategy to eliminate errors that may occur during collecting data and/or when interpreting and presenting them. Some of the tools that are used to promote validity include triangulation, thick description, reflexivity and others. Another strategy that was used by the researcher called by Maxwell (1992) the 'descriptive validity'. As shown in the findings chapter and the appendices, the researcher reported what she saw or heard during the fields visits to the two universities campuses. This also was accompanied with the delineation of the physical, social contexts where data was gathered and participants behaviour regarding taking part in the research and also towards the research topic (LeCompte & Goetz 1982). The researcher made use of her notes that was transferred to journal lots and the tape recordings of the interviews when referring to specific events or statements that were precisely in their own words. In addition, caution was taken by the researcher to include and make use of all the information that was available for her in the field; and try not to omit interview transcriptions or observations (Maxwell 1992).

Another strategy is describing in details the data collecting methods which were document analysis, interviews and focus groups. Not only that but also the data analysis techniques and coding methods that were used are described in detail. Moreover, being sensitive to the context of the study is another strategy too; this context may include physical setting, people and nonverbal behaviour (Merriam 1998). For example, when the researcher went to University A, specifically to the college of education for her visit, she met the Chair (head) of Curriculum and Instruction department who introduced her (after the meeting) to the faculty of the college of education. She noticed through their statements and behaviour some resistance and uneasiness, especially upon learning of her research topic and hearing the notion of "inclusion". To reflect on such actions, she adapted and used many questions from

different sources to help her in understanding and interpreting such information. Some examples of these questions were: "What does it reveal? How can it lead to the next piece of data? How well does it reflect what is happening?" (Merriam 1998, p. 21).

Finally, the researcher also reviewed what Miles and Huberman (1994) called 'researcher effect' bias. As an outsider researcher, at the beginning, when she first went to the universities' campuses, especially after gaining the ethics committees approval, she was less worried with bias or having any effect on the sites and participants. But when reflecting on her visits to both campuses, and although her field visits were not for long periods of time (e.g. weeks) as she was restricted by faculty schedules and security access regulations to the campuses, she was aware that in the college of education/ programme (A) the behaviour and responses of some faculty members were unusual, and sometimes extreme, and she felt the resistance. Miles and Huberman (1994) argue that outsiders researchers usually create social behaviour in others that would not happen ordinarily, and the matter of intentions of the researcher are always suspected by any organization no matter how well they are. They also explain that the research simply makes the private public and leave participants to take the consequences unless ethical considerations are taken to protect them. In this study, ethical considerations were followed from the first steps till the data analysis. The researcher also applied some strategies to reduce the biases that may be caused both by the researcher effects on sites and the sites effects on researcher. To conclude, all of these strategies that were adopted from Miles and Huberman (1994, p. 266) can be summarized as follows: Staying as long as possible in each site and making sure the intentions were unequivocal for participants. The researcher explained to all the participants and to the Deans the objectives of the study, why I need to be on the campuses sites, methods of collecting data and what I will do with it. The researcher also tried to translate some personal thoughts and feelings to theoretical ones (reflective notes).

3.4.2 Reliability

Reliability refers usually to "the degree to which the finding is independent of accidental circumstances of the research" (Kirk & Miller 1986, p. 20). In qualitative research and social sciences reliability is considered problematic because the constancy of a phenomenon or human behaviour is never static (Meriam 2009). In the positivist tradition reliability is built on the assumption of a single reality while in qualitative research there are many interpretations of what is happening depending on the experiences of who's involved in the

setting. However many researcher in the qualitative tradition have developed some strategies that make sure that the results are consistent with the data collected rather than having the research findings be replicable. Merriam (2009) suggested some strategies such triangulation and peer examination, some of which the researcher used as described previously. She also suggests research journals or memos to have an exact account of the research process. What the researcher tried also to do in this current study was to have a detailed account of how the study was conducted, how the data was analyzed and studied its limitations.

3.4.2.1 Research integrity:

Miles and Huberman (1994) argue that in order for the researcher to build a solid foundation for his study, he must attend to the issue of the goodness criteria for it. Not only that, but they also made it clear by stating: "It is not just that we must somehow 'please' our critical colleague audiences; the deeper issue is avoiding self-delusion" (Miles & Huberman 1994, p. 294). From another perspective, Whittemore, Chase and Mandle (2001) emphasized that integrity must be present during interpretation process through recursive and repetitive checks to assure it is valid and grounded within the data.

At the end of this section the researcher would like to conclude with Glesne's (2011, p. 177) reflection upon research ethical considerations and the role of the researcher, which , for me, eloquently articulates some of my own concerns. She states:

> Even when you are as honest and open as possible about the nature of your research, you will continue to develop ethical questions concerning your fieldwork. Many of the questions will be context-bound, arising out of specific instances in each study. For example, informed consent regulations indicate that you should disclose to potential participants all information necessary for them to make intelligent decisions about participation. Yet doing so is difficult in qualitative research because often you are not fully aware of what you are looking for among who, or with what possible risks.[...] [and] although the partial nature of your knowledge does not obviate the propriety of informed consent, it does make implementing it problematic.

3.5 Limitations of the Study

This study was confronted with several limitations, some limitations follow:

First limitation: There are few universities in the UAE that include colleges of education, in government and private sectors. This created limited choices for the researcher. Accordingly, the researcher applied for three government universities and got approval from two of them.

Second limitation: The setting of the study was limited to two universities only. Since different universities have different programmes' content for elementary teachers and have

unique student populations, the results were restricted to the characteristics of the participants in the study.

Third limitation: Difficulties of communication were found with both universities especially with the ethics committees and some of faculty of education members and administrators. This affected the access to both sites to conduct interviews, caused delay and difficulties when gathering documents. As a result the researcher could not interview some key faculty members who taught courses related to planning and teaching methods. In addition, difficulties were encountered to communicate with administrators in the curriculum department, and as a result some statistics and documents were not delivered to the researcher.

This researcher-researched relationship and the researcher role are highly debated in qualitative research (Dwyer & Buckle 2009; Råheim et al. 2016). The researcher of this study was considered an outsider researcher, who entered both campuses without previous connections with the participants. The difficulties encountered in communication with many faculty members (participants) in both programmes (especially in programme (A)) might be owed to a number of reasons, which are discussed next. However, the resistance encountered raises an important point that must be considered. This point is about the internal communications between different departments within each university and their efficiency. The universities accepted the research proposal at the first place and the researcher presented her study objectives and instruments, and was open to any request. It was obvious for the researcher that there were no signs of communications between the ethics committee and the COE departments.

Following are some reasons that might explain the difficulties that were encountered in communication with the participants. One reason could be that the researcher was an outsider, especially for the faculty members. Dwyer & Buckle (2009, p. 58) highlighted that by stating: "the benefit to being a member of the group (one is studying) is acceptance. One's membership automatically provides a level of trust and openness in your participants that would likely not have been present otherwise". Another cause might be the busy schedules of faculty members (e.g. classes & administrative work) or private circumstances which is understandable. A third reason might be that the researcher was not aware of the established cultural practices, values and attitudes (e.g. collaboration; trust) in each programme (Sherry 2008). A number of visits were needed to each campus to make arrangements, however this

was not possible due to the restricted security roles and strict access regulations for these campuses. It was difficult to stay also for longer periods without any work done, especially that some faculty avoided participation and some were busy. The researcher however noticed differences between the two campuses. More details will be highlighted in the findings and discussion chapter.

Forth Limitation: The lack of statistics on numbers of pre-service teachers and faculty in that academic year in the Elementary and the Early Childhood programmes. This was also related to the difficulties experienced in communication in both cases. Several phone calls and e-mails were sent to faculty or administrators concerned with colleges of education statistics without any replies. As a result of these difficulties the researcher was not able to know the number of the pre-service teachers in the Elementary and the Early Childhood specialisations at the time of study. The only statistics available were the ones obtained from the universities websites and were numbers for the students in the COE as a whole, which include undergraduates, graduates in all specialisations. Accordingly, the pre-service teachers' views about their programmes and field experiences must be taken with caution. The reason is that the percentage to the total number of Elementary pre-service teachers cannot be defined. In other words, the views might be referred to a small number from the cohort and did not reflect the views of credible number of them.

Fifth limitation: The sample did not include male pre-service teachers and was restricted to females. In these two universities all the undergraduate students in colleges of educations were females, especially those who were in the practicum/ field experience phase. As a result the views gathered in this study were only from the perspectives of females' teachers, male teachers perspectives' may have offered different insights. Although there were eleven male students in the college of education in programme (A) as stated on their website, not one of them as far as I found through asking faculty were in the undergraduate programme. In programme (B) it was confirmed from the beginning that no male students were in the college of education, specifically, in the undergraduate programmes.

Generally, missing men in teaching as a profession and considering teaching a predominantly female profession have been a global concern (Richardson & Watt 2006; Skelton 2002; Thornton & Bricheno 2006. Drudy (2008, p. 309) attributed the dominance of women as primary teachers to issues related "to economic development, urbanisation, the position of women in society, cultural definitions of masculinity and the value of children and childcare".

For example, Thornton and Bricheno (2000, pp. 197-98) asserted that there are research based evidence showing that "men, as students and workers, prefer to be seen as achieving and competent, and as having high status". This was also confirmed by other research conducted in the USA and Australia, which showed that the salary scales for teachers were less than rewarding especially in primary and early childhood stages. In addition, teachers were asked to do more for less rewards (Richardson & Watt 2006). However, most studies come from the USA and European countries and there are no gender-based data available concerning early years/primary teaching as a career in the UAE educational context. Therefore, this issue must be subject to empirical research to critically analyze why this is happening in the teaching profession, and to consider some solutions. Moreover, this issue could benefit from further discussion in the qualitative higher education and teacher education research literature.

Last limitation: The study design itself has inherent limitations, such as the generalization issue which is critiqued by some academics; as explained previously the study findings were not intended from the beginning to be extended to wider populations. This position is in line with Punch's (2009) and Stake's (2006) perspectives about qualitative case studies and generalizing as clarified previously in section "3.2.1.1". The researcher took into consideration what can be learnt from the two cases in this study. This was achieved by doing a detailed description of the context and participants in each case, and by emphasizing the importance of similarities and differences between the two settings (Mays & Pope 1995). From another perspective generalization stems from the positivist epistemological tradition, while this study was built upon interpretive epistemology. Therefore, applying mathematical and statistical modelling on social phenomenon is unlikely to make it scientific in the natural sciences sense of the word as Flyvbjerg (2005) asserted. He further clarifies that the purpose of social science is "to contribute to society's practical rationality by elucidating where we are, where we want to go, and what is desirable according to different sets of values and interests" (Flyvbjerg 2005, p. 42). In fact the purpose of this qualitative study is to illuminate where two teacher education programmes are in the process of preparing general teachers for inclusive classrooms and to illuminate what is desirable according to the values of equity, social justice and the interests of the learners with disabilities.

Summary of the chapter

This chapter provided a detailed description of the study design which included the knowledge or philosophical claims, the methodology and the research methods. The study was related epistemologically to the interpretivism/constructivist paradigm. Qualitative approach was used to explore the phenomenon o of the preparation of pre-service teachers for inclusion, by employing a case study methodology. Collective case study was used to illustrate the phenomenon in two government universities in the UAE. Purposeful approach was used to choose the sites and participant. Purposeful samples helped in locating the participants and the sites and in providing rich information about them (Creswell 2012). Two types of purposeful sampling were used. The first was hand- picked technique, which was employed to choose the sites, and the second was the snowball technique for choosing the participants. The total number of the participants sample was made up from seven faculty members in the Elementary and the Early Childhood departments and twelve pre-service teachers from the two programmes. Three data collection methods were employed, document analysis of programmes' content, semi-structured interviews with the faculty and focus groups with the pre-service teachers. The data was analysed using the analytic hierarch technique by Spencer, Ritchie and O'Connor (2003), which is a type of thematic analysis in which the themes that emerged from the analysis were organized in a conceptual framework or index, as it will be presented in the findings. Ethical considerations were taken to protect the human subjects and the data. Different procedures were followed to achieve research ethics and guarantee the rights of individuals and institutions. Informed consents for all participants were sought from all participants through ethics committees and personally, anonymity and confidentiality were guaranteed, and data sources that consisted of the recordings, the documents and the transcripts were protected and secured in safe place. Moreover, several strategies were used to justify (validate) the subjective knowledge (data) which was produced within this study. Different methods were used to enhance the study's validity such as triangulation of methods, clarifying researcher bias, thick description and reflexivity, and also to some extent member checking.

Finally, the limitations confronted the study and may affected the credibility of the findings were discussed. They included difficult communications, few numbers of government universities, the generalization issue that inherited in qualitative approach, and the lack of statistics on numbers of pre-service teachers and faculty.

Following are the findings obtained from the multi case studies in which document analysis, interviews and focus groups were used as tools to collect the data. It is worth noted that the findings that will follow were restricted to the characteristics of the sites and participants in the study.

CHAPTER 4

Findings and Discussion

4.1 Overview of the findings and discussion of the cases (A) and Case (B)

In this multicase research the characterization of the phenomenon was sought to get a better description of both cases. Stake (2006) emphasises on the importance of showing how the phenomenon appears in different contexts and the experiences of the people (pre-service teachers and faculty instructors) with this phenomenon. Our phenomena (the cases) were pre-service teacher preparation for inclusion in two Elementary and Early Childhood teacher programmes. One of the primary aims was to find out the content and the activities or the strategies that were used in each case regarding teacher preparation for inclusive schools.

Although the case in qualitative studies is defined as "a phenomenon (...) occurring in a bounded context", there is no determinate boundary that defines its edge (Miles & Huberman 1994, p. 25). This can be explained because of the interactivity between the phenomenon or the case and the contexts or situations influencing it (Stake 2005). For example, the Elementary or the Early Childhood teacher programme designs and provides different courses that contribute to preparing pre- service teachers for inclusive classrooms, responds to management by external authorities (e.g. the university; college of education; educational policies), and exchanges experiences between different departments. All of these activities are described and interpreted in the next sections of this and the following chapter, bearing in mind that the case is the unit of analysis and its different boundaries include the Elementary /or Early Childhood programmes, the college of education and the university (Figure 7). Moreover, the boundaries can be defined also by the sampling operation used in the case, or in other words who and what were included in the sample (Miles & Huberman 1994). Furthermore, the general context in which each of these cases were situated was considered an important issue in the data analysis.

Detailed descriptions of some of the contexts or situations that were expected to impact the preparation of general pre-service teachers in the Elementary or the Early Childhood programmes (the phenomenon) in two government's universities were included. Stake's (2005, p. 446; 2006, p.5) graphic design was adapted to illustrate each case, the contexts
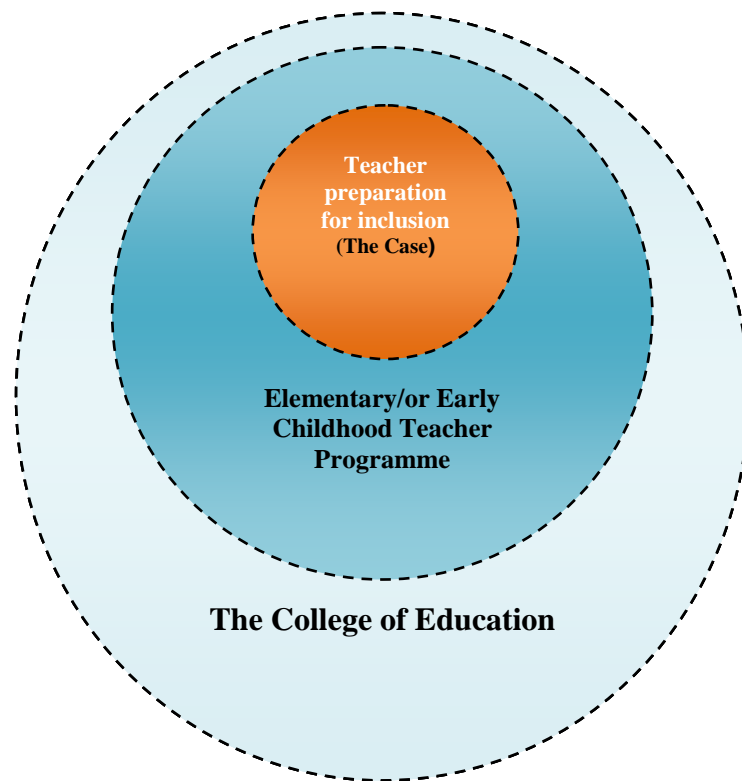
Figure7. The case as the unit of analysis and some of its boundaries (Adapted from (Miles & Huberman 1994, p.25).

or backgrounds that were expected to influence it, some crucial issues regarding the commitment of the teacher programme to prepare general teachers for inclusive classrooms and its response to national policy regarding inclusion of persons with disabilities.

Case structure

The graphic design of case (A) and case (B) is shown in Figure (8). In each case it illustrates the study's location and the background related to the case which includes: Educational policy regarding inclusion, higher education context, the university, the College of Education (COE) and the Elementary Programme, in addition to research methods that were used to collect data.
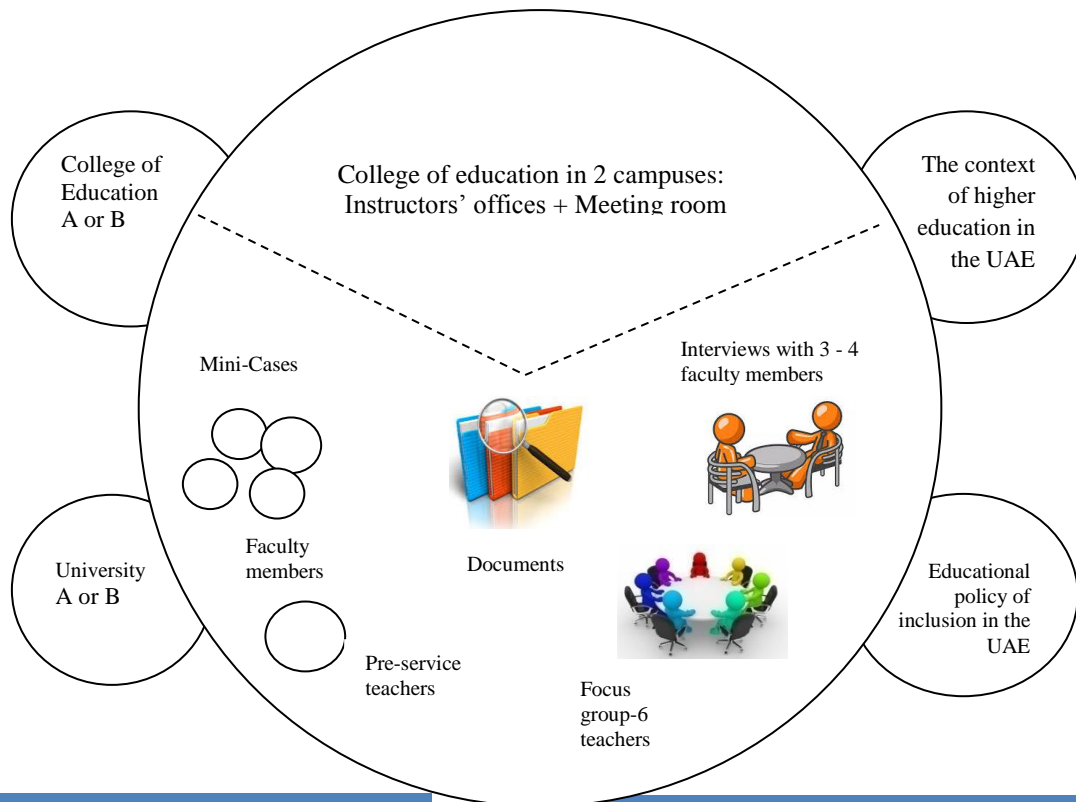
Issues	Main information questions		
- Elementary Teacher programme responses to government inclusion policy: **a- Elementary programme curriculum content of inclusive education concepts (courses- Field experience or practicum).** **b- Faculty commitment for teacher preparation for inclusion (Collaboration ; teaching methods; opinions about inclusive education).** **- Faculty of teacher programme views & roles regarding inclusive education.** **c- Pre-service teachers experiences about teaching in inclusive classrooms within their preparation programme .**	**general education (specialization) courses**	with direct focus on inclusive education	- What were the courses with direct focus on inclusive education? - What was the main content that support inclusion in each of these courses? - And how this content support inclusive education?
		With some outcomes or content that support inclusive	- Were the general and professional courses support inclusive education? - What are these courses? - What was the main content/or outcomes that support inclusion in each of these courses? - And how their content support inclusive education?
	Pre-service teachers' experiences		- What were the cases of students with SEN that pre-service taught in mainstream classrooms? - What aspects of the programme found by pre-service support their preparation for inclusive classrooms? -What concerns pre-service teachers had about teaching students with disabilities, the programme did not fulfill?
	Faculty views about inclusive education		- What were the views of faculty of the elementary programme about inclusive education? - How did they employ their expertise to prepare teachers for inclusion?

Figure 8.The graphic design of Case (A) and Case (B) (Adapted from (Stake 2006, p. 5).

Case (A) Findings and discussion

The following sections present the findings about Case (A) according to the themes that emerged from analysing the programme documents (e.g. courses syllabi, college's catalogs). Using the technique of the thematic framework method (Ritchie, Spencer & O'Connor 2003) a thematic framework or Index was created. This Index consisted from a hierarchy of themes and sub-themes (Appendix 20a). The researcher organised these themes into four main aspects: Case (A) context, the courses content, the faculty opinions and the pre-service teachers experiences and opinions (Tables 11, 14, 19 & 20). It is worth mentioning that all findings are discussed in alignment with the study's theoretical framework.

4.2 Case (A) context

University (A), the COE and the Elementary programme form the educational context that impacted the pre-service teachers receive preparation for inclusion. Two main themes resulted from the analysis of the university and the COE and Programme (A) documents, which were: university (A) features and the COE and the Elementary programme's features. Table (11) presents the findings regarding Case (A) context organized into themes and sub-themes.

Aspect	Themes	Subthemes
Case (A) Context	• The University features	• University values • Faculty and students • Physical layout • Special facilities for the COE

	• College of Education & Elementary Programme features	• College of Education
		   • Demographic data
		   • Principles & values guiding the college
		• Elementary Education Programme
		   • Programme objectives & outcomes
		   • The Degree requirements/courses

Table 11. Case (A) context findings organised into themes and sub-theme.

4.2.1 The University features

Case (A) in the Elementary teacher's programme in the College of Education (COE), was part of University (A). This University was founded in 1976 and is located in an urban area of a big city in one of the biggest Emirates in the UAE. University (A) offers a full range of accredited graduate and undergraduate programmes through nine Colleges: Business and Economics, Education, Engineering, Food and Agriculture, Humanities and Social Sciences,

IT, Law, Medicine and Health Sciences, and Science (UAEU 2017b). It also received accreditation in February 2016 from the international accreditation body the WASC (Senior College and University Commission: WSCUC) for the following 6 years (UAEU 2016a).

4.2.1.1 University's values and goals:

The principles underpinning and guiding university's vision and goals have a strong leadership focus and community service. These values are disclosed in its website, also see appendix (6) for a summary. The university emphasizes its commitment to "respect for heritage and cultural diversity" and "seeks to sustain them" (UAEU 2017c). Furthermore, the university's goals express and stress on: "Prepar[ing] students to be distinguished in their areas of specialization, leaders and productive members of society, and promot[ing] the University's role in the transfer of knowledge and skills to serve the society" (UAEU 2017c).

4.2.1.2 Faculty and students:

The number of faculty in the University in the academic year 2015/ 2016 was 636 members, and the number of students that enrolled in this university in the same academic year were 13,479 (Figure 9). The students include Emirati and international students (UAEU 2016b). A little increase in the number of students occurred in the academic year 2016/2017 as it reached 13,810 students (UAEU 2017d). The distribution of the enrolled students across the different colleges is presented in Table (12).
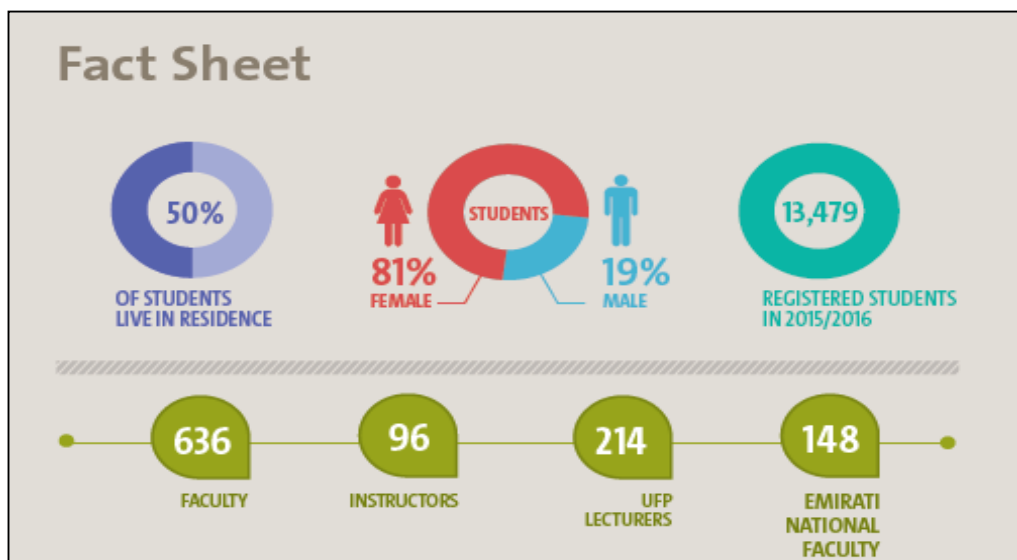
Figure 9. Statistics about the number of students and faculty in University (A) in the Year 2015/2016 (Adapted from UAEU 2016b).

College	Male Students	Female Students	Total
Humanities & Social Sciences	308	3732	4040
Science	205	985	1190
Education	11	604	615
Business & Economics	549	1779	2328
Law	279	674	953
Food & Agriculture	58	607	665
Engineering	847	1825	2672
Medicine & Health Sciences	146	477	623
Information Technology	158	566	724
Total	**2561**	**11249**	**13810**

Table 12. The distribution of the enrolled students across the different colleges in University (A) in the academic year 2016/2017 (UAEU 2017d).

4.2.1.3 Physical layout:

The new campus buildings, an extension of the existing campus, occupy an area of 80 hectares land grant from the government with a total built-up area of around 320,000 Sq. meters. The campus includes three main parts: Administration and main library building, female campus, and male campus. Both the females and males campuses includes similar facilities which are: Academic buildings, labs, sport facilities and residences (Al Owain, 2012).

4.2.2 College of Education (COE) features

4.2.2.1 Demographic data:

The college of education offers undergraduate, master's and doctorate degrees to prepare teachers, educational leaders and researchers. The college received international recognition from the Center of Quality Assurance in International Education (CQAIE) (UAEU 2016c). The college consists of four departments which are: Curriculum and Instruction, Foundations of Education, Special Education, and the Department of Physical Education. Figure (10) shows the structure (departments) of the COE in the undergraduate programmes. The undergraduate programmes include the following specialisations:

- Bachelor of Education in Elementary Education which had four tracks: The Islamic studies & Arabic language, the Mathematics & Science, the Social studies & Civics, and the English language tracks.
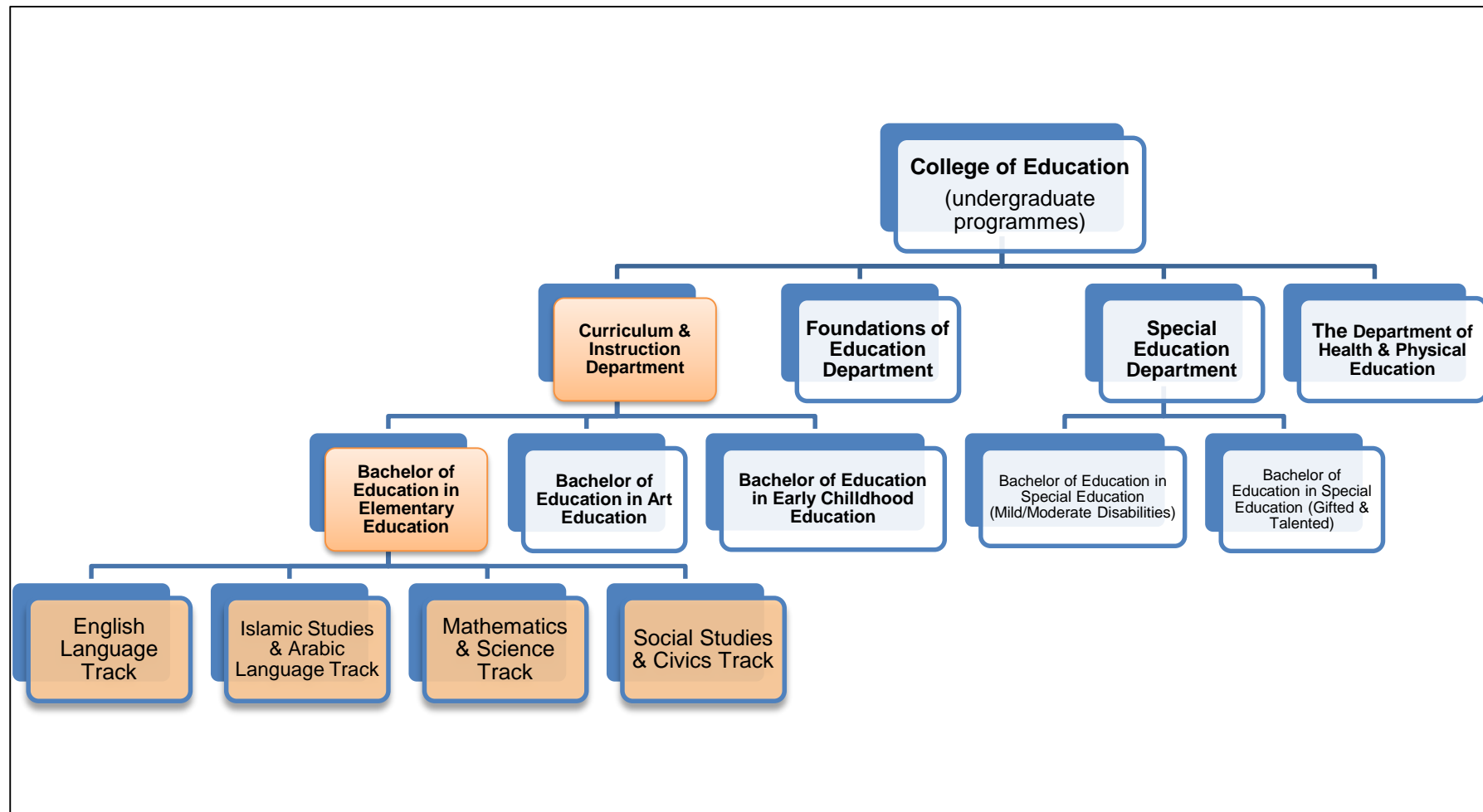
Figure 10. The undergraduate programmes' structure of the College of Education in Case (A).

- Bachelor of Education in Art Education,

- Bachelor of Education in Preparatory & Secondary Education,

- Bachelor of Education in Special Education which had two tracks: The Mild/Moderate Disabilities, and the Gifted and Talented (UAEU 2016c, p.7).

4.2.2.2 The principles underpinning and guiding the COE:

The college of education in Programme (A) is guided by its mission and the conceptual framework. The mission summarized the principles that underpin and guide the college work. It states:

> The mission of the College of Education is to facilitate the continuous improvement of education in the UAE through active and collaborative national and international partnerships. The college provides a learning-centred environment that promotes excellence in teacher education, research and scholarship, community service and programme development, and active participation in policy development. (COE 2017a).

Although the COE was committed in its mission to facilitate the improvement of education and the active participation in policy development, there was no specific goal in its mission that supports the inclusion of students with disabilities in general schools or conveys clear message about inclusive education. The goals of the COE as presented in the college website focused mainly on teachers' pedagogical knowledge, the teaching profession competencies and leadership roles (Appendix 6). However, the researcher found that most of these goals were in line with the aim of this study that emphasises the importance of preparing teachers for inclusive schools. These goals support preparing teachers who are committed to their community, professionals who have strong skills in research work and quality education for all (Rodríguez 2012, pp. 105-7). For example some of the goals stated that the college of education aimed to:

- Prepare graduates who are highly skilled and proficient in their areas of specialization.
- Enhance and expand scholarship/research, especially as it relates to the mission and vision of the college, the university, the community, and the profession.
- Offer high quality educational programs conform to national and international disciplinary or professional standards.
- Serve UAE citizens and students by effectively engaging and communicating .(COE 2017a)

4.2.2.3 The conceptual framework for the COE:

The organizing theme for the COE conceptual framework was 'teacher as professional practitioner' (COE n.d.). The framework consisted of nine elements which are:

1. Reflection and professional growth
2. Meaningful knowledge
3. Diversity and individual differences
4. Planning for teaching and learning

5. Teaching and learning
6. Communication
7. Technology
8. Community and ethics
9. Authentic assessment (COE n.d., p.3).

All of these themes accordingly were supposed to be interwoven in every course by the different faculty members together with specialist knowledge in each theme (O'Neill, Bourke & Kearney 2009). The frame of reference to examine these themes by the researcher was mainly the current study's theoretical framework represented by the principles of the Disability Social Model, Rodríguez' (2012) model, Cooper et al. (2008) and other relevant literature to teacher programmes for inclusive education. The researcher found that all of these themes are consistent with other international teacher preparation programmes for inclusive settings that are present on the international level. For example, the third theme of "diversity and individual differences" that highlights the following outcomes:

> - COE graduates have knowledge, skills and dispositions to respond effectively to students to students' differences, and
> - be able to provide learning experiences that are tailored to individuals' strengths, interests and needs in order to ensure that all learners can learn. (COE n.d. , p. 3).

is in line with the recent changes in teacher programmes around the world. In a comparative study between teacher preparation programmes for inclusive classrooms between the USA and China, the USA has adjusted the pedagogical content in the elementary level of pre-service teacher programmes to include "coursework in planning designed to instruct a diverse population of students, such as differentiation [...], Universal Design for Learning, and other planning techniques" (Drawdy, Deng & Howerter 2014, p. 255). On the other hand, in China and in late 1980s mainstreaming, inclusion and the initiation of the national movement on inclusive education happened in conjunction with in-service teachers preparation to teach students with SEN. The reason was that there were no training institutions for special education in China before the 1980s. And the mandated training for pre-service teachers "emphasises the importance of promoting the idea that education of students with disabilities would be a regular part of the general education teacher (Drawdy, Deng & Howerter 2014, 253).

Another example is the seventh theme "Technology" in the college's framework which stated the following outcomes:

> COE graduates: - know how to use a variety of technical tools to foster active inquiry, creative and innovative thinking, collaboration, and supportive community interactions.
> - Candidates are prepared to utilize technology to facilitate learning for all. (COE n.d. , p. 3).

It is argued that the educational technology creates an effective and adaptable learning environment when teaching in inclusive classrooms (Istenic 2010), and has great potential in providing access for all learners in general curriculum (Ahmad 2015, p. 64). This component in programme (A) is in line with Cooper et al.'s (2008) model of key inclusion competencies that should be addressed in teachers' programmes curricula. Cooper et al. (2008, p. 160) studied 30 education programmes in their university, including elementary programmes, and found that the "instructional resources and assistive technology" are one of the key components that were addressed in content and assessment activities in all these programmes.

4.2.3 The Elementary Education Programme

The students from this programme graduate as elementary school educators. Four tracks of specializations were available in the undergraduate education Elementary programme, they included: Islamic studies & Arabic, Social Studies & Civics, Mathematics &Science, and English language. The programme required 126 credit hours in minimum, more description of the degree requirement will follow in the next sections (COE 2017b).

4.2.3.1 The programme's objectives and learning outcomes:
The statements of the objectives cover a wide range of scope of knowledge, instructional skills, ethics and professional development (Appendix 6). One of the objectives delineates the outcome of creating learning opportunities that support individual students' development, acquisition of knowledge and motivation in the elementary school (COE 2017b). This objective is consistent with one of Rodríguez' (2012) essential components for teacher preparation programmes for inclusive education. This component emphasizes preparing teachers who recognize individual differences and implement learning strategies for all. Another objective is the one that states "develop[ing] relationships and partnership with families, colleagues and stakeholders to enhance elementary school children's intellectual, social, emotional, and physical growth" (COE 2017b). This is also in line with Rodríguez' (2012) model that calls for preparing teachers with a strong commitment to their community, and who collaborate actively with other educators.

4.2.3.2 The degree requirements:
Each track (specialization) in the Elementary Programme consisted of three major stages (Figure 11):

1. General Education Programme (39 hours)
2. Professional Requirements (48 hours)

3. Academic Major Requirements- Specialized Content (39 hours) (COE 2014a; 2014b; COE 2017b).

1. General Education Programme (39 hours)	• Cluster 1: Values to Live By (6 Credit Hrs.) • Cluster 2: Skills for Life (9 Credit Hrs.) • Cluster3: The Human Community (12Credit Hrs.) • Cluster 4: The Natural World (9 Credit Hrs.) • Cluster 5: Capstone Experience (3 Credit Hrs.)
2. Professional Requirements (48 hours)	• Compulsory Professional Requirements (36 Credit Hrs.) • Elective Professional Requirements (3 Credit Hrs.) • Field Experiences (9 Credit Hrs.)
3. Academic Major Requirements- specialized Content (39 hours)	• Compulsory Courses (33 Credit Hrs.) • Elective Major Requirements (e.g. Mathematics)* (3 Credit Hrs) • Elective Major Requirements (e.g. Science*) (3 Credit Hrs) • *Other Tracks are Islamic studies and Arabic, Social studies and Civics or English Language*

Figure 11. Degree Requirements for the Elementary Programme specialisations in Case (A) (COE 2014a; 2014b).

Table (13) shows courses of Mathematics and Science track in the Elementary programme as an example of the degree requirements. It is worth mentioning that the requirements in stages 1 and 2 are the same for all tracks. The differences occur in stage three for 'Academic Major Requirements- Specialized Content' courses. Detailed tables of the courses in two tracks of Elementary programme courses are also available in Appendices (7a-7b).

4.3 Courses' content that contributed to the pre-service teacher preparation for inclusion

To find out the content that was related to inclusive education in the courses of the Elementary programme, a thorough examination was undertaken by the researcher for all the available syllabi documents and information from the college's website. Taking into consideration that any course content was always aligned with the theoretical framework for this study to examine what aspects in these courses can be referred to inclusive education. It is important to reiterate that the framework was built upon the Disability Social Model, Rodríguez' (2012) Model and other studies related to teacher education practices for inclusive education (Cooper et al. 2008; Florian & Black-Hawkins 2011; Mitchell 2008).

114

Required Credit Hours : minimum 126 hours	
General Education (39 Credit Hours)	
Clusters - Courses	**Credit Hours**
Cluster 1:	
Values to Live By - Islam (3 Hrs.)	3
ISLM100 - Islamic Culture (3 Hrs.)	Compulsory
Values to Live By - Ethics (3 Hrs.)	
FOED102 - Professional Ethics in Education (3 Hrs.) Also counts towards the Major	3 Compulsory
Cluster 2:	
Skills for Life - English Communication Skills (3 Hrs.)	3
ESPU103 - Introduction to Academic English For Education (3 Hrs.)	Compulsory
Skills for Life - Information Literacy (3 Hrs.)	3
GEIL101 - Information Literacy (3 Hrs.)	Compulsory
Skills for Life - Thinking Skills (3 Hrs.)	3
PHI180 - Critical Thinking (3 Hrs.)	Compulsory
Cluster 3:	
The Human Community - Emirates Society (3 Hrs.)	3
HSS105 - Emirates studies (3 Hours)	Compulsory
The Human Community - Humanities/Fine Arts (3 Hrs.)	
ARCH340 - History and Theory of Architecture (3 Hrs.) HIS133 - Introduction to Art History (3 Hrs.) HSR120 - Introduction to Heritage & Culture (3 Hrs.) HSR130 - Introduction to Language & Communication (3 Hrs.) LIT150 - Introduction to Literature (3 Hrs.) LNG100-Introduction to Linguistics (3 Hrs.) LNG110 - Language, Society & Culture (3 Hrs.) MSC200 - Introduction to Mass Media (3 Hrs.) MSC240 - World and Arab Media (3 Hrs.) PHI101- Introduction to Philosophy (3 Hrs.) PHI270 - Philosophy of Education (3 Hrs.) PHI271- History and Philosophy of Science (3 Hrs.) TRS200-Introduction to Translation (3 Hrs.)	3 Hours Elective To select from
The Human Community - Social and Behavioural Sciences (3 Hrs.)	
PSY313 - Educational Psychology (3 Hrs.) Also counts towards the Major (3 Hrs.)	3 Compulsory
The Human Community - The Global Experience (3 Hrs.)	
AGRB360 - Global Agri-Food Trade (3Hrs.) ARCH346 - Contemporary World Architecture (3 Hrs.) BIOE240 - Principles of Environmental Science (3 Hrs.) GEO200 - World Regional Geography (3Hrs.) HIS120-Arab & Islamic Civilization (3 Hrs.)HIS121-World History: Origins to 1500(3 Hrs.) HIS125 -Contemporary Civilization (3 Hrs.) PSG250 - Principles of International relations (3 Hrs.)	3 Hours Elective To select from
Cluster 4:	
The Natural World - Mathematics (3 Hours)	
MATH120 - Contemporary Applications of Math (3 Hrs.) STAT101 - Statistics in the Modern World (3 Hrs.)	3 Hours Elective

Table 13. Elementary programme courses for Mathematics & Science track in Case (A) (COE 2017b).

Continue: General Education (39 Credit Hours)		
Clusters - Courses		**Credit Hours**
The Natural World - Natural Sciences (6 Hours)		
ARAG205 - Introduction to Fish & Animal Science (3 Hrs.) ARAG220 - Natural Resources (3 Hrs.) BION100 - Biology and Modern Application (3 Hrs.) CHEM181 - Chemistry in the Modern World (3 Hrs.)	FDSC250 - Contemporary Food Science & Nutrition (3 Hours) GEOL110 - Planet Earth (3 Hours) PHYS100 - Astronomy (3 Hours) PHYS101 - Conceptual Physics (3 Hours)	6 Hours Elective To select from
Cluster 5: Capstone Experience (3 Hours)		
CURR423 - Capstone Experience in Elementary Math & Science **Also counts towards the Major**		3 Hours Compulsory
Professional Requirement (48 Credit Hours)		
A. Compulsory Professional Requirement (36 hours)		
CURR101- Educational Technology (3 Hrs.) CURR102 - Principles of Curriculum & Instruction (3 Hrs.) CURR310 - Classroom assessment in Elementary Education (3 Hrs.) FOED201 - School and Family (3 Hrs.) FOED350 - Educational Research (3 Hrs.) SPED101 - Education of Exceptional Children (3 Hrs.) PHED201 - Physical Fitness and Wellness (3 Hrs.)	CURR204- Plan & Implement of mathematics/science curriculum (3 Hrs.) CURR356-Content and Pedagogy Development of MATH-ED (3 Hrs.) CURR357- Content and Pedagogy Development of Science-El (3 Hrs.) CURR366- Teaching Methods of Math in ELEM (3 Hrs.) CURR367- Teaching Methods of SC in ELEM (3 Hrs.)	Compulsory
B. Elective Professional Requirement (3 Hours)		
CURR201 - Language ED in Elem School (3 Hrs.) FOED101 - Learning Communities (3 Hrs.) FOED321 - School Management & Supervision (3 Hrs.) SPED321 - Gifted and Talented (3 Hrs.)		3 Hours Elective -To select from
C. Field Experiences (9 Hours)		9 Hours
CURR463- Student Teaching in ELEM/ MATH & SC (9 Hrs.)		Compulsory
Academic Major Requirements- Specialized Content (39 Credit Hours) **(Mathematics and Science Track)**		
A. Compulsory Courses (33.00 Hours)		
BIOC100 - Basic Biology I(3 Hrs.) BIOC270 - General Genetics (3 Hours) BIOC275 - Genetics Laboratory (1 Hour) CHEM111 - General Chemistry I (3 Hrs.) CHEM115 - General Chemistry Lab (1 Hour) GEOL105- Physical Geology (3 Hrs.) MATH105- Calculus I (3 Hrs.) MATH140- Linear Algebra I (3 Hrs.)	MATH260- Foundation of Geometry (3 Hrs.) MATH305- Mathematics For Teachers I (3 Hours) MATH335- Mathematics For Teachers II (3 Hours) PHYS105- General Physics I (3 Hours) PHYS135- General Physics Lab I (1 Hour)	Compulsory
B. Elective Major Requirement (Mathematics) (3 Hours)		
MATH320 - Numerical Analysis I (3 Hrs.) STAT101-Statistics in the Modern World (3 Hrs.) STAT245- Probability and Statistics for Education (3 Hrs.)		3 Hours To select from
C. Elective Major Requirement (Science) (3 Hours)		3 Hours
BIOC250 - Basic Ecology (3 Hrs.) CHEM281- Analytical Chemistry for Non-Majors (3 Hrs.) PHYS110- General Physics II (3Hrs.)		Elective To select from

Table 13/continues. Elementary programme courses for Mathematics & Science track in Case (A) (COE 2017b).

Areas of competence to work in inclusive context

Table (11) shows the Professional Requirement courses broken down into: The compulsory requirements which accredited 36 hours, the elective requirements with 3 accredited hours and the field experiences with 9 accredited hours. The compulsory and the elective courses consist of theoretical knowledge, mostly, while the practice comes in the Student teaching or field experience course. Another important note is that all of these courses come from the four departments of the COE which are: Curriculum and Instruction (CURR), Foundations of Education (FOED), Special Education (SPED), and the Department of Physical Education (PHED) (See Figure 10).

The examination of these courses showed that two types of content regarding inclusive education or special education were included:

The first type was the courses with direct focus and full content on teaching students with disabilities. This type included one compulsory course titled "Education of Exceptional Children - SPED 101" (3Hrs.), and the second course was an elective titled the 'Gifted and Talented- SPED321' (3 Hrs.). It is worth noting that both courses are from the Special Education Department (SPED).

The second type included courses with some outcomes or content that supported inclusive education. These courses as shown in Table (13) were all the other 'Professional Requirement' courses. These courses were from the Departments of Curriculum and Instruction (CURR), Foundations of Education (FOED) and Physical Education (PHED) (see Appendices 8a-8e).

In order to reach the required findings, the researcher carried out the analysis for all the syllabi of the courses using mainly Rodríguez' (2012) Model's seven elements, except for the courses from Special Education department, for which the Cooper et al.'s (2008) Model was used also. The reason was that these courses included intensive details regarding the strategies for teaching students with SEN. The alignment between the theoretical framework elements and the courses content resulted in three themes, which are: One compulsory subject with full focus on teaching students with disabilities (stand-alone course), professional requirement courses with some outcomes that support inclusive education, and general academic requirement courses with some outcomes that support inclusive education. Table 14

displays the themes and the sub-themes or the Index of the courses content regarding inclusive education.

Aspect	Themes	Subthemes
Programme (A) Courses Content that contributed to the preparation of pre-service teachers for inclusion / Areas of competence to work in inclusive context	• One compulsory subject related to teaching students with disabilities (stand-alone course)	• Full focus on teaching students with SEN • Theoretical knowledge on characteristics about learning with SEN, differentiation, IEP • No evidence of links with other courses. • No field experience attached.
	• Over-emphasis on knowledge acquisition over practice regarding inclusive pedagogies	• Special education course skills content not connected with other courses. • Assessment includes theoretical case studies scenarios and lesson planning for students with SEN. • No clear evidence of suitable learning resources/technologies for inclusive education training. • No information about the Capstone project.

	• Professional requirement courses with some outcomes that support inclusive education	Content with clear emphasis on teaching diverse learners.
		➢Outcomes relevant to educating diverse learners:
		  • Social & community content
		  • Collaborative work content.
		  • Quality & equity instructions content (e.g. Modification; differentiation).
		  • Counceling & Mentoring
		➢Features of the Field experiences related to inclusive education:
		• One course at last semester.
		• Internship course with 9 credit hours.
		• Working with a mentor.
		• Offers opportunities for pre-service teachers to work in inclusive schools.
		• No evidence of collaboration with pre-service teachers from other disciplines in COE (e.g. special ed.).

	• General academic requirement courses with some outcomes that support inclusive education	

Table 14. The themes & sub-themes or the Index of the courses content regarding inclusive education in Case (A).

The organizational structure of the courses' content analysis findings were divided into three these themes as follows:

4.3.1 One compulsory subject with full focus on teaching students with disabilities (stand-alone course)

As explained above, this type was from Special Education department. Education of Exceptional Children - SPED 101 course is one of the compulsory Professional Requirement courses. It worth noting there was from a second course Special Education department which is the Gifted and Talented- SPED321. But it was an elective from the Professional Requirement courses. I included this course in the findings because some pre-service teachers may studied it and benefited from the content.

The next sections include the alignment of the content of these two courses with some elements of the theoretical framework models (Rodríguez 2012; Cooper et al. 2008)

4.3.1.1 Social and community content:

The courses are with full content directed to teach students with disabilities or SEN. Although that both courses were introductory ones, the analysis showed that their outcomes and contents had comprehensive curricula content and competencies for teaching students with SEN. Curricula content or outcomes were aligned with some of the seven components for teacher education programmes for inclusion by Rodríguez (2012) (see Appendices 9e). In addition, another analysis was conducted by aligning courses' content with Cooper et al.'s (2008) Model of key inclusion competencies for general educators (Table 15).

The analysis of both courses indicated that all content areas included content that support the preparation of the pre-service teachers for working in inclusive classrooms. Both courses had high social and community content. Rodríguez (2012, p. 105) gives the following justification for the need for the social content in the learning subjects: Pre-service teachers "need to be sensitive to the needs of students and their environment". Both courses had content that serve the community in different aspects. For example, one of the main goals of the compulsory course Education of Exceptional Children - SPED 101 was to "demonstrate an understanding of the effects of cultural and linguistic diversity" (COE 2016a, p. 2). In addition, the syllabus document explained the reasons for establishing this course. These reasons were clearly expressed in the following rationale statement:

Key Inclusion Competencies (Cooper et al. 2008)	Module: Education of Exceptional Children-SPED 101 (COE 2016)	
	Goals	Course Content Overview, and Teaching Methods
1. Identification and placement procedures	Understand the basic principles, theories and legal provisions of special education.	**The foundation for educating students with special needs:** - Key terms & concepts define special education. - History of special education. - Issues related to inclusion. - Who receives special education.
2. Formal and informal assessment strategies		**Assessing students' needs:** -How do your students assessment contribute to special education decision. - Source of information in special needs. - Curriculum based-assessment. - Learning probes. **Evaluating Students Learning:** - Adapting classroom tests for students with special needs. - Adapting report card grades. - How can performance-based assessment benefit students with special needs.
3. Procedures for IEP Development	- Understand the basic principles, theories and legal provisions of special education. - Identify differential characteristics of individuals with exceptional needs. - Demonstrate a professional and ethical commitment to developing the highest educational and quality-of-life potential of individuals with exceptional learning needs.	**Special education procedures & services:** - Special education professionals. - Student's needs & disability. - Obtaining special education services. - IEP. - Services students with disabilities receive.
4. Instructional modification/ accommodation strategies	Differentiate instruction to meet the educational and behavioural needs of individuals with exceptional learning needs	**Students with Low Incidence Disabilities:** - Defining low incidence disabilities. - Accommodations for students with disabilities (Moderate, Severe & Multiple), with sensory impairment, with physical or health disabilities, with Autism. **Students with high Incidence Disabilities, and other SEN (see Appendix 9e).**

Table 15. Key inclusion topics or competencies for general educators in the course titled "Education of Exceptional Children-SPED 101" (COE 2016a, pp. 2-7). Competencies were adapted from Cooper et al. (2008, p. 160).

Key Inclusion Competencies (Cooper et al. (2008)	Modules: Education of Exceptional Children-SPED 101 (COE 2016)	
	Goals	Course Content Overview, and Teaching Methods
5. Responding to student behaviour	Differentiate instruction to meet the educational and behavioural needs of individuals with exceptional learning needs	**Responding to students' behaviour:** - Preventing discipline problems. - Promoting positive group behaviour. - Some simple & effective responses to individual behaviour. - Effective strategies for responding to serious individual students behaviour. - Helping students to manage their own behaviour. - Functional behaviour assessment.
6. Instructional methods for students with disabilities 7. Instructional resources and assistive [technologies]	Identify differential characteristics of individuals with exceptional needs.	**Planning instruction by analyzing classroom &students needs:** - Inclusion & accommodation for students with special needs. - Organizing inclusive classroom. - Grouping students in inclusive classrooms. - Evaluating instructional materials for inclusive classrooms. - Analyzing instructional methods in relation to students' needs.
8. Collaborating with parents and professionals	Gain the necessary knowledge and skills of collaboration with all concerned parties.	**Professional partnerships** - Basics of collaboration - Effective application of collaboration. - Working effectively with parents. - Working effectively with professionals. **Approaches for building social relationships:** - Teachers role in promoting positive social interactions. - How can teachers provide education about individuals with disabilities. - Developing & supporting peer tutoring. -Using cooperative learning strategies to facilitate social inclusion. - Helping students with disabilities improve their social skills.

Table 15/continues: Key inclusion topics or competencies for general educators in the course titled "Education of Exceptional Children-SPED 101" (COE 2016a, pp. 2-7). Competencies were adapted from Cooper et al. (2008, p. 160).

Public school classrooms usually contain students with special needs. These students require special attention on the part of schools, parents and community. Therefore, candidate needs to understand the nature of various types of exceptionalities and their characteristics; it is also necessary for them to assess and meet the needs of children with special needs and utilize effective teaching strategies in regular as well as special settings. (COE 2016a, pp. 1-2).

Another example regarding social and community content from the Gifted and Talented course was one of the course outcomes that stipulated that "students will develop knowledge and understanding of the influence of the social, cultural, political and economic environment on the field of gifted education" (COE 2011, p. 1).

This previous rationale and outcome statements reflected the social changes and education that have been taking place in the UAE society. The inclusion of students with disabilities in the public schools started since the 1980s and developed from segregated classrooms within the school to almost full inclusion (Gaad 2011). As a result of these societal changes, teachers' work "becomes more complicated and demanding. Therefore, developing an understanding of the nature of social changes and their effects on education is an important issue for educationists" (Lau 2001, p. 29).

4.3.1.2 Quality, equality and equity concepts content:

The content of these courses included several indications of insuring quality in it. The analysis of the course Education of Exceptional Children-SPED 101 content as displayed in Table (15) shows many aspects of quality. For example, one aspect of quality is including content on the learner's characteristics, especially students with SEN, such as the characteristics of students with: Low or high incidence disabilities, the gifted and talented and other characteristics (Appendices 9e-9f for more details). Another aspect of quality is the detailed description of teaching methods such as instructional methods for students with disabilities, instructional resources and assistive technologies that was included in the goals and content. For instance, one goal stated that the teacher is expected to "differentiate instruction to meet the educational and behavioural needs of individuals with exceptional learning needs" (COE 2016a, p. 2). The content that translated this goal was:

> Planning Instruction by analyzing classroom &students' needs:
> - Inclusion and accommodation for students with special needs.
> - Organizing inclusive classroom.
> - Grouping students in inclusive classrooms.
> - Evaluating instructional materials for inclusive classrooms.
> - Analysing instructional methods in relation to students' needs (COE 2016a, p. 4).

More examples on parental support, assessment and ethical considerations are also available in Table (15) and Appendices (9e-9f).

Equity and equality also were found in different parts of the contents of the courses titled Education of Exceptional Children-SPED 101 and the Gifted and Talented-SPED 321. The concepts of fairness in accommodating student's needs and tailoring the instruction for their specific needs were seen for example in the goals that stated: teachers must be able to "identify differential characteristics of individuals with exceptional needs" and to "demonstrate a professional and ethical commitment to developing the highest educational and quality-of-life potential of individuals with exceptional learning needs"(COE 2016a, p. 2).

4.3.1.3 Courses with collaborative work and dialogue among educators content**:** Collaborative work and dialogue in the courses content existed in several forms. One form is the collaboration between pre-service teachers in projects and assessments. Another form was the collaboration between pre-service teachers and other professionals such as mentors and special education teachers in the schools during the field experience course. The third form was the collaboration with parents.

The first example is from the course Education of Exceptional Children-SPED 101. In Table (15), one goal of this course expressed the collaboration component between different parties in by stating: "Gain the necessary knowledge and skills of collaboration with all concerned parties" (COE 2016a, p. 2). Some content and methodologies were aligned with this goal in order to be achieved. In addition to content about basic information about working effectively with parents and professional, some approaches were suggested also to build social relationships such such as promoting positive social interactions, developing and supporting peer tutoring and helping students with disabilities improve their social skills (COE 2016a, p. 7).

The second example is on group work in assessment in the course of Education of Exceptional Children also. This assessment requires pre-service teachers to prepare an Individual Education Plan (IEP) and describe how to collaborate with parents and different professionals (details in Appendix 8e2). A third example is from the course of Planning and Implementation of Math/Science Curriculum- CURR 204. Pre-service teachers have an assessment of planning a science/ mathematics unit where in this task each teacher "in collaboration with [her] class colleagues, will be assigned to plan using one theoretical perspective in curriculum development and teaching a unit on science or mathematics"(COE 2014e, p. 3).

Another example was on collaborating with parents and professionals comes from the course the Gifted and Talented -SPED 321. One of its outcomes states that teachers will develop knowledge and understanding of: "Foster[ing] partnerships with the families of gifted students"(COE 2011, p. 1).

The topic of collaboration between professionals in general and special education has been in literature for decades (Friend 2000). Generally speaking collaboration is pervasive in education in all levels (Loreman et al. 2015, p. 49) and collaboration is suggested for professionals in order to manage their jobs (Friend 2000). Bouillet (2013, p. 93) argues that organised collaboration between teachers and educational professionals "contribute to improving the quality of inclusive education". Furthermore, in a six-year study by Loreman et al. (2015, p.33) that investigates school inclusion through a collaborative series of research projects between Canadian university researchers and school districts; they conclude that collaboration "is a critical factor in both inclusive education and university-school district research partnerships". The necessity of collaboration can be referred to several reasons such as the complexity of teaching students with disabilities, the continuous educational reforms and the overwhelming amount of disseminated information about teaching and learning practices (Friend 2000).

4.3.1.4 Other noticeable features

The course of Education of Exceptional Children had outcomes with full focus on students with SEN as was presented in the above sections, with rich theoretical knowledge about students with disabilities or SEN characteristics, differentiation instruction, and preparing and reporting the IEP. However, the syllabus presented clearly noticeable features that impact the quality of preparing pre-service teachers for inclusive education. I will explain two examples about these features:
First, there was no evidence that links this course with other courses in the Elementary Programme except mentioning that it is co-requisites with a course titled "Educational Technology" (see Table 13). I could not find any content area in the syllabus that focuses on educational technologies for students with disabilities. Technologies were mentioned only briefly as a teaching method used by the instructor of the course.

Second, no evidence on field experiences about practicing important skills necessary for working in inclusive classrooms such as modifications, collaboration with other professionals in the classroom or responding to students' behavior. There were many content units and

outcomes on these skills. For example, one of the course goals was to "Gain the necessary knowledge and skills of collaboration with all concerned parties" (COE 2016a, p. 2) and content on "working effectively with professionals (COE 2016a, p. 4); however it was only theoretical knowledge and was not accompanied with practical field experiences. The same can be related to behaviour management. The syllabus mentioned using "field visits" as a teaching method to be used by the course instructor, but it was not included in the course goals, content or assessment.

Another example is related to assessment strategies. The assessment included different strategies such as case studies of developing an IEP and lessons modifications. However, the students were given a vignette about a student with a disability that includes student characteristics to build the IEP and the lesson modifications according to it. No evidence on real education experience on practicing these important teaching methods for students with disabilities.

4.3.2 Professional requirement courses with some outcomes that support inclusive education

The professional requirement courses include different aspects such as teaching methods, pedagogy and content development, assessment, field experiences or student teaching and other course (table 13). All of these courses are compulsory on all Elementary specialisations.

4.3.2.1 Social and community content:

There were various courses with some outcomes or content that support inclusive education. The analysis included the following courses: Principles of Curriculum and Instruction- CURR 102/51, Planning and Implementation of Math /Science curriculum- CURR 204, Teaching Methods of Science in the Elementary school- CURR 367, Content and Pedagogy Development in the Elementary Science- CURR 357, Classroom Assessment in Elementary education- CURR 310. The comprehensive analysis of the five courses is available in Appendix (9a-9d).

The researcher found in the sample of syllabi different examples of outcomes with social and community content. One example was an outcome in the course of Content and Pedagogy Development in the Elementary Science - CURR 357 which emphasized on the candidate's ability to "describe and represent science relationships with society, technology and environment" (COE 2016b, p. 2). Another example is a section of the Principles of

Curriculum and Instruction- CURR 102/51) course's content that included: "Social foundations of curriculum [which consisted of] definition of society, the relationship between society and the curriculum, types of social interaction, and curriculum and social change" (COE 2013, p. 2). The importance of the containment of subject content (e.g. science) about relationships with society or social foundations of curriculum is that the curriculum is considered a reflection of the social environment/context (Hartwell 1968). Moreover, the social knowledge is one of four accepted knowledge areas along with philosophical, historical, psychological knowledge that are considered foundations of any given curriculum. Consequently, these foundation areas serve as the basis for theory in the curriculum (Ornstein

Courses	Principles of Curriculum and Instruction- CURR 102/51 (Outcomes)	Teaching Methods of Science in the Elementary School- CURR 367 Content & goals
Content Related to Quality, equality and equity (Rodríguez 2012)	- Modify content to make it suitable to adolescent students. - Consider, accommodate, and integrate the physical, social, emotional, cognitive, and linguistic developmental characteristics of children and young adolescents in curriculum planning, instruction, and assessment of student learning. - Develop and implement an integrated curriculum that focuses on children's needs and interests and takes into account culturally valued content and children s home experiences - Select and create, as individuals and members of teams, learning experiences that are appropriate for curriculum goals, relevant to learners, and based upon principles of effective instruction.	**Chapter 9: Science for All Learners** - Common standards, common assessments, diverse pathways - Students with special learning needs - Students with disabilities - Science for Gifted and talented students - Science for students form linguistically and culturally divers - Fostering the learning and acceptance of all students Goals: - The candidates will create a community of diverse student learners who can construct meaning from science experiences and possess a disposition for further inquiry and learning. - The candidates will develop and apply coherent, focused science lessons and activities that address the diverse needs, abilities, and interests of their students. -The candidates will design and manage safe and supportive learning environments reflecting high expectations for the success of all students.

Table 16. Content related to the concepts of quality, equality and equity in two courses: First, the Principles of Curriculum and Instruction-CURR 102/51(COE 2013b). And the second, Teaching Methods of Science in Elementary School-CURR 367 (COE 2013c).

& Hunkin 1993). Further, Ornstein and Hunkin (1993, p. 14) point out that these foundations of curriculum "set the external boundaries of the knowledge of curriculum and define what

constitutes valid sources of information from which come accepted theories, principles, and ideas relevant to the field of curriculum".

4.3.2.2 Courses with quality, equality and equity concepts content:

These courses had findings regarding the content on quality, equity and equality. However, the content was very limited to mostly one outcome or section that serves these concepts. For example, Table (16) presents two courses' content or outcomes related to the concepts of quality and equity. One example is in the content of the course titled Teaching Methods of Science in the Elementary School- CURR 367 that focuses on teaching all students with justice and understanding their needs. Some of the course's goals as shown in Table (14) state:

> -The candidates will design and manage safe and supportive learning environments reflecting high expectations for the success of all students.
> - The candidates will design and manage safe and supportive learning environments reflecting high expectations for the success of all students. (COE 2013c, p.2).

A second example is a general education course titled Islamic Culture; some of its aims were to study Islamic culture, its concept, sources, and characteristics, the preview of its content states: "The course discusses a number of life vales in Islam, such as honesty and credibility" (COE2017c).

Another example is a compulsory course for the Elementary Education Major titled Physical Fitness and Wellness. The aims of this course included:

> Introducing students to the basic concepts of health and physical education. It covers topics such as health, physical fitness, nutrition, healthy lifestyle, diseases, and drug uses. It also enables students to apply those concepts of personal health in ways that are complementary to each other in various learning settings. (COE 2017d)

These two courses included content that can enrich the pre-service teacher knowledge with social values and life skills that are expected to impact the quality of their work, and reflect positively on the outcomes of the students. Other examples on quality and equity components are also available on Appendices (9a-9d) also.

Bringing the skills, pedagogical strategies and attitudes of the concepts of quality and equity into teacher curriculum can work to facilitate inclusive and equitable practices within education systems as a whole (UNESCO 2017, p. 13). For example, including concepts of differentiation and planning accommodation for students in teacher programmes' curriculum

are tools that will support prospective teachers to respond to their students diversity by providing all students with meaningful learning experiences (UNESCO 2004b).

In the same vein, Rikhye and Sall (2015. p. 59) studied how pre-service teachers in one early childhood programme (Pre-K through 2nd grade) used differentiated instruction. They concluded that "differentiation instruction, or recognizing students' individual strengths and needs, and teaching them accordingly, are the essence of 'good teaching'". However, their findings indicated also that there was a gap between theory and practice evidenced in the discrepancy between what the pre-service learned in the programme and the actual implementation of differentiation strategies in the field work. Further, they stressed on the need of supporting pre-service by not only relying on coursework in differentiation instruction (theory), but "should go beyond theory and include opportunities for practice in lesson planning and other direct instruction as well as assessment of children's learning" (Rikhye & Sall 2015. p. 68).

However, in a review of teaching strategies and approaches for pupils with SEN and their theoretical underpinnings by Davis and Florian (2004, p.6), they concluded that:

> The teaching approaches and strategies identified during this review were not sufficiently differentiated from those which are used to teach all children to justify a distinctive SEN pedagogy. This does not diminish the importance of special education knowledge but highlights it as an essential component of pedagogy.

Or as put by Ainscow (2011, p. 56) "effective teaching is effective teaching for all students". At the same time Davis and Florian (2004) did not neglect the importance of special education knowledge as an essential component of pedagogy.

4.3.2.3 Courses with collaborative work and dialogue among educators content:
In this section courses with focus of collaboration between pre-service teachers with each other, with parents and other professionals is explored. One example comes from the goals of the course Classroom Assessment in Elementary Education- CURR 310. It states that the teacher should be able to: "Analyze assessment data; demonstrate skill in accurately and ethically communicating academic progress to students and parents"(COE 2013a, p. 1). A second example is one goal from the course Teaching Methods of Science in the Elementary School-CURR 367 that states "the candidates will participate collaboratively in the professional community, improving practice through their personal actions, education and development"(COE 2013c, p.2).

Collaboration with teacher colleagues is also represented in assessment activities in some courses such as in the course Principles of Curriculum and Instruction-CURR 102/51 in which one assessment requires the pre-service teachers to "examine and understand the Ministry of Education curriculum for elementary (...) schools"(COE 2013b, p. 7; Appendix 8e1). In this group project each prospective teacher has to work collaboratively with other members in class and the team members have to analyze curriculum materials using a specific analytic framework.

4.3.2.4 Courses with contextual professional practice and counseling and mentoring:

I decided to combine these two elements in one section as both of them in Rodríguez's (2012) model are concerned with professional field experiences. The teacher training process in this model should be in direct link with the educational services and he suggested that the best period for training is in the last two semesters. According to Rodríguez (2012, p. 107) the contextual professional preparation refers to "allowing pre-service teachers to connect with a range of educational services, gives them an opportunity to identify diversity as an enriching element". Three important steps are proposed for the training process:

1- Re-significance of own school experience of future teachers.

2- Approach to various contexts of school children.

3- Professional practices in real environments (Rodríguez 2012, pp. 108-9).

Details of these steps are explained in the following sections that present examples from the Case (A) Elementary programme courses.

On the other hand, although the counseling and mentoring element was discussed by Rodríguez (2012) for new teachers in their first two years of work, it is applicable (as in our study) for pre-service teachers in the apprenticeship stage. He argues that new teachers must participate in training under the accompaniment and mentoring of experienced teachers (Rodríguez 2012, p. 110). However, in Rodríguez' (2012) Model the plan for training was on the skills and the curriculum for inclusive teacher education.

In the Elementary programme in Case (A) a number of courses consist of experiences that enable the pre-service teachers to connect with different educational services. The programme's training in this case is rich in experiences that show the following:

1- <u>Re-significance of own school experience of future teachers</u>:

Pre-service teachers were expected to be trained on reflective practices in different courses in the Elementary Programme specialization. Reflection on personal scholarship experiences took different forms. Below, a sample has been selected to demonstrate different outcomes and goals assigned for reflective experiences (Table 17). One example is from the assessment of a compulsory course titled Principles of Curriculum and Instruction- CURR 102/51, in which the candidate creates a portfolio that includes different sections. One section was assigned to reflective journaling (details are in Appendix 8d). The purpose of this reflective journal was:

> To record thoughts and feelings about your understanding of course materials and experiences. Based upon the Reflective Journal, you will prepare a comprehensive statement of philosophy of teaching and learning in regard to your role as a teacher and the developmental, cognitive, psychosocial needs of students, and how curriculum and instruction should address these needs.(COE 2013b, p. 6).

Courses	Learning outcomes	Goals
Planning and Implementation of Math/Science Curriculum- CURR 204	Reflects on and evaluates his/her choices and actions regarding the curriculum planning and implementation	
Principles of Curriculum and Instruction- CURR 102/51		Develop reflective assessment strategies that allow for adjustments/modifications to lessons and instructional approaches
Classroom Assessment in Elementary Education- CURR 310		Use the results of assessment to encourage candidates reflect upon their work, modify teaching, and monitor student progress based on assessment results.

Table 17. Examples of different outcomes and goals assigned for reflective experiences in the curriculum of some courses in the Elementary programme in Case (A).

Reflective practices' positive impact on teachers is well documented in literature. In a study by Mathew, Mathew and Peechattu (2017, pp. 126-27) they argue that the reflective practices such as using reflective journals to evaluates ones work, actions and emotions is considered as an important tool for pre-service teachers to " explore themselves and thereby leading to their professional development". Further they added that it "is also an important way to bring together theory and practice; through reflection a person is able to see and label forms of thought and theory within the context of his or her work". They finally concluded from their study that "teachers can deal with the needs and different issues of the learners and demand of time if they reflect on their daily teaching learning activities for their professional growth" (Mathew, Mathew and Peechattu 2017, p. 130). Jasper (1999, p. 452) in her study of

exploring how student nurses were using and developing reflective writing techniques as a tool to develop their practice, reported that "reflective writing is considered to be a tool which helps the practitioner to develop analytical and critical abilities". In addition to that, the reflective writing facilitated students' personal and professional growth.

2- Approach to various contexts of school children:

In this step the pre-service teachers carry out visits to some selected schools and conduct observations and other practices such as: Reviewing the educational context (diverse environments & educational services) and planning activities accordingly (e.g. also developing instruments such as questionnaires and interviews); implementing the activities and presenting the experiences (Rodríguez 2012, p. 108). The pre-service teachers also should compile their work in portfolios.

The first example for this approach was found in the compulsory course of the Capstone Experience in Elementary/Math & Science-CURR-423. This course is team-taught by faculty members, and is designed to build on skills acquired in earlier courses. It is expected in the capstone experience course that the pre-service teachers "analyse, synthesise, evaluate and reflect on learned knowledge in a project having professional focus, while demonstrating capacity for being a teacher leader and fostering school change" (COE 2017b). Although I was not able to acquire the syllabus document for this course, both the pre-service teachers and one faculty member informed me that prospective teachers were expected to create two types of lesson plans. These lesson plans include teaching strategies and assessments for two students in their classroom in the schools they are expected to be trained in the last semester of field experiences. One case includes a student with an exceptional educational need, and the second case includes a student who was not identified with specific SEN. The pre-service should present the results after implementing their plans that include learning strategies and activities for the two students.

The second example is from the course of Teaching Methods of Science in the Elementary School-CURR 367. The description of this course pointed out that the teacher candidates are introduced to different assignments (tasks) such as planning units, organizing resources and applying the learning activities. Moreover, the syllabus document stressed on:

> Candidates' ability to observe and think critically about children's thinking. The integration of science teaching methods, classroom activities with technology will be addressed as a factor for success in achieving science literacy. Field experience is part of the course requirements. (COE 2013c, p. 1).

131

In a study by Eisenhardt, Besnoy and Steele (2012, p.7), effective aspects of field experiences in elementary teacher preparation programmes, with specific focus on the impact of a structured field experience is investigated. The content of their study was similar to the capstone course content in Case (A) (e.g. the Capstone Experience in Elementary Math & Science- CURR423). The researchers mention that the purpose of the study was to investigate effective aspects of field experiences in teacher preparation, and that prospective teachers were assigned two case studies of students with learning or emotional needs and the second without such needs. The finding indicated that "the structured field experience provided the pre-service teachers with actual experiences to justify their knowledge of the importance of the relationship between knowledge of diverse students and effective instruction".

3- Professional practices in real environments:

According to Rodríguez's (2012) model, pre-service teachers' training must be under the guidance of an experienced school teacher for a long period of time (mentors), with the supervision of faculty members. When aligning the counselling and mentoring element with the content of some courses in the Elementary Programme, it was found that these experiences were provided through two types of field experiences: The first type is included in the teaching methods of some courses to increase learning experiences for the pre-service teacher. Examples of these courses include the course of Education of Exceptional Children - SPED 101 and the course of "Teaching Methods of Science in the Elementary School- CURR 367". The second type was the field experience in the last semester (e.g. Student Teaching in ELEM/ MATH & SC- CURR463) that was accredited nine hours. An expanded description of this training course follows.

Student Teaching course:

Student teaching or field experience takes place during the final semester in the teacher preparation programme. The pre-service teachers are placed in host schools for full time student teaching (COE n.d., p. 7). Through a 15 weeks period, pre-service teachers practice different aspects of 'student teaching' (Clinical Practice) content. They progress from familiarizing themselves with school curricula, classes and classrooms observation until teaching at least one well planned lesson in the third and fourth week. And from the fifth week to the fifteenth, pre-service teachers are expected to teach from 2-3 lessons every day (COE n.d., p. 7). The role of the pre-service teacher during this field experience course requires different activities. They were assigned cooperating with mentor teachers and

supervisors, planning teaching, maintaining a teaching portfolio and discussing teaching practices and portfolio reports with mentors and supervisors (COE n.d., p.8).

The course outcomes focus on teachers demonstrating knowledge of planning, creating an interactive learning environment and showing abilities to practice different professional responsibilities. One of these outcomes was related strongly to preparing teachers for inclusive classrooms; it states that teachers candidates are expected to "apply diverse instructional teaching strategies and/ or techniques to enhance learning outcomes (COE n.d., p. 6).

The course's content includes also a number of assessment components for pre-service teachers to assess their teaching experiences. One assessment tool is the 'student-teaching' portfolio where the pre-service teacher keeps their written reflections and classrooms observations. The second assessment procedure is conducted by a supervisory team that consists of college supervisor, school supervisor and teacher mentor (COE n.d.). The pre-service teachers are supervised, mentored, developed and evaluated by this team who uses rubrics from Danielson's (2013) framework. This framework organizes effective teaching practices into four domains each with several sub-domains. The four domains are:
Domain 1: Planning and preparation.
Domain 2: The classroom environment.
Domain 3: Instruction.
Domain 4: Professional responsibilities (COE n.d., p. 24). The COE adopted this framework to suit the UAE's Arabic and Islamic cultural environment. The researcher aligned the Student Teaching course content with the rubrics to assess pre-service teachers, an example is shown in Table (18).

As presented above, one of the main roles of the pre-service teachers through their field experiences was collaboration with a mentor. Hamman et al. (2013, p. 245) consider that the cooperation between mentors and cooperative teachers in the context of field experiences "represent one of the most important sources of information for student teachers about how to provide instruction to student with disabilities". The pre-service teachers were also expected to demonstrate and apply through their field experiences "diverse instructional teaching strategies and strategies to enhance learning outcomes" (COE n.d., p. 6). This is in alignment of a key principle of inclusive pedagogies in teacher programmes proposed by Florian and her colleagues and presented in several studies (e.g. Florian 2012; Florian 2013; Florian &

Black-Hawkins 2011; Florian & Linklater 2010). This principle states that:" Difference must be accounted for as an essential aspect of human development in any conceptualisation of learning" (Spratt & Florian 2013, p. 137).

Prospective Course	Course aims	Course outcomes	Example of the Rubrics for assessing pre-service teachers (Danielson's (2013, p. 9)
Student Teaching Course (Practicum) in Programme (A)	-To provide candidates with an opportunity to spend a full semester student teaching in one school - Candidates are expected to demonstrate mastery of all standards for beginning teachers that have been adopted by COE teacher programmes - Evaluation include four domains: Planning & preparation, instruction, the classroom environment and professional responsibilities. - To keep a student teaching portfolio to document work not demonstrated during a classroom observation visit (COE n.d., p. 4).	To: - Demonstrate knowledge of planning and preparation for teaching. - Create an interactive classroom environment to promote effective learning. **- Apply diverse instructional teaching strategies and/ or techniques to enhance learning outcomes.** - Show abilities to practice different professional responsibilities relevant to teaching career (COE n.d., p. 6).	**Domain 1** **Planning and Preparation** 1b-Teacher Demonstrates knowledge of students **The elements to be assessed are:** • **Knowledge of child and adolescent development** Children learn differently at different stages of their lives. • **Knowledge of the learning process** Learning requires active intellectual engagement. • **Knowledge of students' skills, knowledge, and language proficiency** What students are able to learn at any given time is influenced by their level of knowledge and skill. • **Knowledge of students' interests and cultural heritage** Children's backgrounds influence their learning. • **Knowledge of students' special needs** Children do not all develop in a typical fashion.

Table 18. An example of the alignment of the aims, outcomes and rubrics for assessing pre-service teachers in The Student Teaching course (Case A).

4.3.3 General academic requirement courses with some outcomes that support inclusive education

As it was demonstrated in Figure (11), the first stage of the degree requirements which is titled 'general education programme' consists of five clusters of courses. These courses were mostly from other colleges than education, and they focus on topics such as life skills, community and natural world, except for the capstone course which is related to the COE. Although these courses are from other colleges, some of them were essential to prepare the pre-service teachers for inclusive schools.

An example is the Professional Ethics in Education course from "Cluster 1: Values to live by". This course aims to help pre-service teachers to "construct an ethic knowledge-base that will illuminate their professional ethical choices about teaching and learning, curriculum, classroom management, and research"(COE 2017e). In addition it to enables pre-service teachers to incorporate ethical standards and codes in their future work. Teacher ethics is one of the influential aspects that affect the teacher's decision making regarding children educational needs because these decisions must be based on sound reasoning about what is in the best interest of the child. Consequently, this type of professional practice (ethics) will be translated into teaching strategies that promote learning for all children (equality) and at the same time the individual need for each child (equity) (Rodríguez 2012, p. 106).

A second example is the Emirates studies - HSS 105 course from "Cluster 3: The human community". This course has a high social and community content. The course description states that it:

> Seeks to establish the national belonging and appreciation of the UAE national achievements through educating students on the key social aspects of the Emirates society, basic values and its inheritance, offering studies in various and significant studies that are relevant to UAE history and geography, aspects of internal and external policy, aspects of the social systems, social human development and citizen's developmental role & social responsibility, women empowerment and its role in the society services delivered by the State(...). The course also explores the visions of the federal government 2021 and Abu Dhabi 2030, in addition to the future issues of the developmental strategic plans and challenges facing them. (COE 2017b).

Rodríguez (2012, p. 105) believes that including subjects with high social and community content in teacher preparation programmes helps teachers to be "sensitive to the needs of students and the environment" especially that the school is a place where different people meet. Hence, such subjects facilitate teachers' involvement in school community where dialogue and collaboration between different members of the community (e.g. students, parents & colleagues) take place. According to Rodríguez (2012, p. 105) this allows "full awareness to all as a community and thus ensure[s] experiences in inclusion".

Another example is a course titled Educational Psychology - PSY313 which covers principles of educational psychology. The course as described in the COE website includes: "Psychological principles of teaching and learning, planning and evaluation, student development, settings of class learning, intelligence and individual differences, and motivation in education and applications" (COE 2017b). The educational psychology provides a solid conceptual overview of a number of principles of effective teaching that help

the teacher to master a variety of skills such as the classroom management, communication and working with diverse learners (Santrock et al. 2010).

4.4 Faculty interviews findings & discussion- Case (A)

The researcher conducted three semi-structured interviews and one unstructured interview. The first semi-structured interview was with one instructor in the department of the Foundation of Education (FOED) who in this study is referred to as Dr. Ahmed. The second interview was with the head of the FOED department (Dr. Nora). The third semi-structured interview was with the head of the Elementary department (Dr. Mostafa). On the other hand, the unstructured interview was with the head of Special Education department (SPED) who will be referred to as Dr. Maryam. All of the faculty members were nominated by the head of Curriculum and Instruction. The researcher tried to interview one faculty member who was also nominated by from several professors as he was the specialist in teaching methods for several years. Additionally, I tried to interview other faculty members in the Curriculum department who were more involved in curriculum and teaching methods. However, I was not able to interview them because of communication issues. Access was a serious challenge in this university and specifically in the COE.

It is very important to note that the aim of these interviews was not to evaluate or assess the instructor's performances or their courses' content. The aim was focused only on their views and opinions about inclusive education and the contribution of the Elementary programme content in preparing teachers to work in inclusive classrooms. This study (Case A) involved one aspect of the programme which was teacher preparation for inclusion only and not the entire content of the Elementary Programme.

Excerpts from the four interviews are in Appendices 11(a-d); a number of themes emerged from the analysis of these interviews about faculty members' opinions with regards to the contribution of the Elementary programme in preparing pre-service teachers for inclusion. Other important themes related to inclusive education also emerged and are worth mentioning. These themes are presented in Table (19) as follows:

Aspect	Themes	Subthemes
Faculty opinions- Case (A)	• Consensus on considering inclusive education as part of special education/belief	• They have one or two courses in special ed. • Special ed. department job to prepare teachers for inclusion. 　• [We] don't deal with students with SEN. 　• We don't tackle it too much? Because special education department they have a course called...
	• Preferring integration over inclusive education/ • Call for segregating students with disabilities from their peers	• Difficult cases shouldn't be in the same classroom. • Including students with SEN should be restricted to some schools not all. • Some cases you can't really let them set with other children because they need someone who really specialised.
	• Dysfunction in implementing inclusion • Difficulties in implementing inclusion	• No collaboration between teachers (special ed. & subject). • No Supervision from the MoE. • General teachers lack skills of teaching students with disabilities. • Graduates from Programme (A) in Special ed. stream specialise in learning difficulties and not disabilities. • Schools are not prepared to accept the student with SEN. • Elementary pre-service teachers who are really majoring in one area or another focus on that area. • Teachers' attitude towards students with SEN is negative, how the student is going to be included. • Can't handle…
	• Lack of clarity in crystallising the contribution of the programme towards inclusive education	• No answers from instructors
	• One course in special ed. was not enough.	• There are cases of including students with severe disabilities, not mild. • They have one course or two in special ed. , it will not really give them full opportunity to deal with those kind of difficult cases. • And the teacher in general they don't have these kind of skills.
	• Negative attitudes /views about teaching students with disabilities.	• You will never be able to deal with them [student with SEN]. • We can't really open open say this is inclusive and you say we'll take every. • When I come and bring to you an special ed. student, a student who needs extra effort from you as a teacher.

Table 19. Themes and sub-themes (the Index) of the faculty views in Case (A).

The following sections include the findings about the faculty opinions about the contribution of coursework and field experiences to the pre service teachers' preparation to meet the needs

of all students. It is worth mentioning that some themes are infused under these sections titles to maintain the flow of the opinions' meaning, and because in some instances instructors mention two different views in the same statements. The sections are:

- Views of some of faculty members regarding inclusion and teaching students with disabilities or SEN in mainstream classrooms.
- Contribution of the elementary programme to prepare general teachers for inclusive classrooms.
- Information about some courses in the programme.

Final note: The interviews were conducted in English which was their second language, and quotes are the exact words of the instructors, except for the interview with the Head of Special Education Department which was in Arabic/ Emarati dialect, and for that reason I put some of her own words for Arabic readers.

4.4.1 Views of some Elementary Programme faculty regarding inclusion. Consensus on considering inclusive education as part of special education/belief & Preferring integration over inclusive education:

The general consensus among the faculty members who were interviewed was to consider inclusive education related to special education department or specialization. And although they indicated using some differentiation strategies in their instructions (e.g. Appendix 11d, Lines: 311-15; 13a, last page), they also took a clear stand against teaching students with special education in general schools and inclusive education. Three examples clarify their views.

The first example is the opinion of the Head (Chair) of the Elementary Department. He was teaching two courses at the time of the study both related to the Art specialization, but he was teaching other courses in the Elementary Department such as 'Classroom Assessment in Elementary Education' too. When this professor was asked at the beginning about his opinion of inclusive education, specifically including students with SEN in general classrooms, he replied as following:

> Like I said you know for special children, may be who have some difficulties, not really as we call it very strong cases because I always tell even my students that strong cases or difficult cases shouldn't be in the same classroom, because you will be never be able to deal with them. Because as a student who are really majoring in one area or another you focus on that area. But as you mentioned they have one course or two in special ed., it will not really give them full opportunity to deal with those kind of difficult cases. But sometimes we see in the

138

environment [...]We have some of these cases where teacher really don't know what to do, and this where I know. (Appendix 11d, lines: 72-84).

Then he added:

> But for me I said inclusive [education] is fine, inclusive is good thing but we can take [into] consideration we have to study case by case. We have to look at the cases, we can't really open::open say this is inclusive and::: and you say we'll take every one. Some:: some cases you can't really a::a let them set with other children, because they need someone who really specialised. They need someone who knows exactly or she knows exactly what to do with those children [...] They need those specific skills, they need specific knowledge, they need specific caring. And the teacher in general a:::a they don't have these kind of skills [...] And the abilities to deal with those students plus they have other students to work with. And that's what I say sometimes really those cases they need to go somewhere else, special centres..special schools, whatever, or even in the school but in::: with someone else. (Appendix 11d, lines: 88-105).

When the researcher commentated on his replies by saying: You are talking here [meant in his statements] about segregation, he then explained his reply by saying:

> We could give the children the opportunity to [be] in::::included in the classroom , regular in a classroom, but also we have also sometimes, we have to separate them to give them those specific instruction, specific skills in order for them! they go back let's say to engage with the rest of students. At least they have some some::some skills! But I'm not saying completely segregation but that's the way I look at it, that's the way. (Appendix 11d, lines: 111-17).

The Second example is from the interview with the Head of Foundation of Education, Dr. Nora. When she was asked about the contribution of their department in preparing pre-service teachers for inclusion she answered:

> In general we tackle these things slightly in the courses. In "School & Family" it depends sometimes. But, why we don't tackle it too much? Because special education department they have a course called (…) school and family [the correct name was Education of Exceptional Children]! [...]So in our course actually we do not::: it::: if we gonna talk about it may be one sentence, two sentences in one class [she meant that the topic is touched very briefly]. (Appendix 11b, lines: 12-22).

Another question was raised by the researcher: "So you do not integrate inclusive methodologies or strategies?" She answered:

> How to deal with students with special needs (...) no (...) even we talk in our course of professional ethics in education (..) we try to teach our students that they should give students fair opportunities. All of them should be equal, they should respect each other. So we have principles, values.(...) But strategies how as a teacher, (...) to integrate students with special needs (..) No (..) we don't do. (Appendix 11b, lines: 23-32).

> When Dr. Nora read the following question: What is your opinion about the contribution of course work and field experiences to the pre-service teacher abilities to meet the needs of all students including those with disabilities, she answered without continuing the question:

139

No, because our courses do not deal with instructions [...] Mainly, curriculum department they are planning strategies.. whatever.. but our.. we just.. write. As I told you we offer 4 courses, how to deal with parents, the school and family how teachers should treat students or how should be role models for their students. (Appendix 11b, lines: 50-5).

The third example about inclusion comes from the views of the Head of Special Education Department. Although it was an unstructured interview, it revealed an interesting view regarding inclusion and preparing teachers for inclusive classrooms. She made her view clear when we were discussing inclusion in general schools, an excerpt from the discussion with Dr. Maryam is presented below in Box (2) with some of the exact Arabic words that she said.

Dr. Maryam: Now, there is full inclusion   (time 09 <u>minutes</u>:00<u>seconds</u>)
Researcher: Yes, full inclusion, preparing IEP for the student. And the teacher of any subject such as science or Islamic studies supposed to be well-informed about it.
Dr. Maryam: Supposed to be, I will tell you, there is a big dysfunction in inclusion and IEPs (خلل كبير) في الدمج وفي الخطط الفردية , you see. They put these IEPs for some students and they don't put it for others.
Researcher: What do you mean that there is a dysfunction in the inclusion?
شو قصدك أن هناك خلل كبير في الدمج؟
Dr. Maryam: I mean..you said now that the teacher should be knowledgeable of the IEP so she can help in implementing it.
Researcher: Yes   (09:30)
Dr. Maryam: The special education teacher work by her own, the Science or Islamic studies or Arabic language teachers work separately also. They don't work with each other. Even if the special education teacher put the IEP...I'm telling you...They put the IEP...Okay. I am the supervisor for our students [pre-service teachers] in their field work (internship). The special education teachers put the IEP, who implement it? Who follow up their work? No one

مُدَرِّسَة التربية الخاصة تشتغل لوحدها ، و مُدَرِّسَة العلوم أوالتربية الإسلامية أو العربي يشتغلون مع بعض. حتى لو مُدَرِّسَة التربية الخاصة ، با أقولك إيَّاها، يحطُّون [يضعون]..أوكي.. لأنّي أنا أشرِف على بنات [طالبات] التربية العَملية، يحطُّون [يضعون] خطة فردية ، مَنْ يتابعهم ؟ (...صمت) محَّدْ [لاأحد] يتابعهم.

Further on, she explained what her opinion was about the best way to implement inclusion:

Dr. Maryam: I want to tell you that::: the inclusion should not implemented in all schools in each Emirate, I believe that they should identify two schools only for the inclusion. And to train teachers in these schools intensively for that.[...]. This is the right thing to do. Because the teacher through two or three years in such system can gain a lot of experience and deal with a variety of students, right!
Researcher: mmm, yeah but on the international level each country has its own privacy. Not only that but also each Emirate has its own private circumstances   (12: 05)
Dr. Maryam: Yes, right
Researcher: And as far as I know, I believe that the system of identifying one or two schools only for inclusion does not exist internationally.
Dr. Dr. Maryam:: No, No there is allocation for such schools [for inclusion]
Researcher: But legally speaking, most schools must accept students with SEN, isn't it that the student must be included in the nearest school to his resident?
Dr. Dr. Maryam: Okay, but if the school is not prepared to accept the student and the teachers' attitude towards students with SEN is negative, how is the student is going to be included. What the student will benefit, on the contrary he will be affected negatively. For this reason I'm telling you that [her voice was not clear].

Box 2. An excerpt from the interview with the Head of the Special Education Department in Case (A) (Appendix 11c, lines: 187-213; lines: 263-87.

The views of the Head of Elementary and the Head of Special Education departments aligned more with the view of mainstreaming education of students with disabilities in general schools where students are included only for some activities with their peers in the general classrooms. This view of inclusive education from the researcher's point of view is not likely to help in integrating inclusive practices in higher education teachers programmes, especially that it was coming from faculty members with leadership positions. Moreover, this mainstreaming approach has been implemented in the UAE's public schools since the 1980's

To conclude this section, the researcher understood that the professors' answers is an indication that teaching students with SEN was seen as the responsibility of someone else, and they were hinting that the preparing pre-service to teach students with SEN was the responsibility of special education or curriculum departments and minimally related to the courses that her/or his department offered. The Foundation of Education department offered to pre-service teachers in the Elementary Programme four courses which were: Professional Ethics in Education (compulsory), School and Family (compulsory), Educational Research (compulsory), and School Management and Supervision (elective).

The answers that were given previously by the three heads of departments who were involved and participating significantly in teaching elementary pre-service teachers have not been expected especially that the inclusive pedagogies were infused intensively in the courses content and outcomes. This is corresponding to the current situation in the international scene regarding the belief that special education teachers are mainly responsible for inclusive schooling and teaching students with disabilities (Smith 2000). Moreover, Spratt and Florian (2013. p. 133) described such approaches that try to separate students in the same school building and/or use labels to describe them in mixed abilities classrooms by stating:

> [These approaches] have been shown to place a ceiling on the learning opportunities of those thought to be less able. [...]. An alternative view maintains that social and educational inclusion can only be achieved when these practices are disrupted and replaced with other more participatory approaches to teaching and learning.

and the country's leaders and policies are looking forward to more inclusive practices in all aspects of life including education.

In the year of 2017 the Prime Minister and Ruler of Dubai His Highness Sheikh Mohammed bin Rashid Al Maktoum launched the holistic National Strategy for empowering people with disabilities which is built upon six pillars one of which is education (Emirates News Agency

WAM 2017). Moreover, on the occasion of issuing the new strategy he said that people with disabilities will be called "people of determination" from that point on . He noted also:

> Disability is in fact the inability to make progress and achievements. The achievements that people of determination have made in various spheres over the past years are proof that determination and strong will can do the impossible and encourage people to counter challenges and difficult circumstances while firmly achieving their goals. (WAM 2017).

The policy of the UAE's government "aims to create an inclusive society for people with disabilities and special needs and their families, through services and facilities that accommodate their needs" (The UAE Government Portal 2017c).

From another point of view, the current study findings are in line with the international literature. For example, Kurth and Foley's (2014) differentiate in their study differentiating between mainstreaming and inclusive education, and see that inclusive education is contrasted to mainstreaming. They argue that inclusive education is defined "as full membership in a general education class with the range of supports and services provided for a student to be successful in that setting" (Kurth & Foley 2014, p. 286). Hence, the faculty members opinions of this teacher preparation programme were not matching with the inclusion movement of students with disabilities in general classrooms in the UAE that is supported by the government policy.

Another important finding was the Head of Special Education's opinion which indicated that their teachers were prepared to work in resource rooms where students with educational challenges or SEN are pulled-out in some specific subjects from their classrooms to be educated in segregated classrooms or as they are called in the UAE schools' context "resource rooms". She explained that their graduates in special education specialise in learning difficulties only and not disabilities, especially the severe ones, she said:

> Now we are preparing for severe disabilities track. Our students who graduate from our department work as resource room teachers until now, not as teachers in special education centres because their specialization qualifies them for schools only. (Appendix 11c, lines: 133-37).

Then she expanded her description by stating:

> the available specialization now is mild disabilities. We are intending for the next academic year to open a specialization of sensory disabilities: Visual and hearing impairments, the last is difficult one. We have now only one course about severe disabilities. You know there are only few students [pre-service teachers who specialize in special education] and there are also few faculty...we can't open more than one track. (Appendix 11c, lines: 154-61).

From the researcher's point of view, this may influence the work of general teachers because the classrooms currently include diverse students including those with severe, sensory and

developmental disabilities. This is because special education teachers' role as part of the team of professionals that work with general teachers is to support the inclusion and provide for accommodations needed for the students to access the curriculum equally as their peers.

4.4.2 Lack of clarity in crystallising the contribution of the programme towards inclusive education

This finding was inferred from the faculty members statements and opinions, although no clear answer was given from them. The findings directly from the faculty's inputs regarding the contribution of the Elementary programme in the preparation of teacher's for inclusion were minimal; however, I attempted to interpret their comments. A number of statements and evidence pointed to that and are presented in the following paragraphs.

The first was the opinion of the head of special education department, in which she stated clearly that one general course of teaching students with exceptional needs is not enough for general teachers especially that it is only a general course. When Dr. Maryam was asked "Are these two courses [Education for Exceptional Needs-SPED 101& The Gifted and talented-SPED] enough to prepare the teacher to work in a classroom that include students with different abilities including students with disabilities?" She explained that "they [the pre-service teachers] get general information about types of disabilities, their characteristics, how to deal with students, and teaching strategies"(Appendix 11c, line: 171-73). She added also the following :

> No, no, not enough especially that there are cases of including students with severe disabilities, not mild or moderate ones [...]. It should be more than one course to be taken, especially a course for teaching students with severe disabilities, I mean.. Let me tell you, even our students who graduate as special education teachers are specialized in learning difficulties they learn about learning difficulties not disabilities. And their specialization is for mild and moderate [disabilities]. (Appendix 11c, lines: 122-31).

Another important opinion came from Dr. Ahmed from the Department of Foundation of Education (FOED) when asked about this issue he replied:

> I would say is up to date of the demand of the schools in terms of curriculum contents, programmes that we offer in the university here. We have curriculum instructions we have leadership programmes we have special Ed. pragramme and physical as well. (Appendix 11a, lines:17-20).

One of the courses he was teaching was the 'Professional Ethics in Education' and he was also the supervisor of the field experiences the year before that. Dr. Ahmed commented on my statements about my experiences about general teachers in public schools who were facing challenges in dealing with students with SEN (AlYateem 2010); He replied by saying "we cannot generalise especially in some instances. I teach ethics" (Appendix 11a, line: 123). The

researcher took the opportunity when he mentioned 'ethics' and asked information about his course. He pointed that it was "general education course which is for all students" (Appendix 11a, line: 137). He continued by saying "look, in our course we talk about ethical teacher or ethical educator" and mentioned equality also (Appendix 11a, line: 190).

The researcher posed the following question in the context of our discussion about ethics: "Where is equality in your ethics module? (Appendix 11a, lines: 148-50) ". He replied as follows:

> You as an educator person, as a teacher or a faculty member when you have things are changing within your context, programme changing, curriculum changing, loads is getting up high. Every day you have new things you have to do, that's put you in a situation where you feel that you are stressed, under stress. When I come and bring to you a special ed. student, a student who needs extra effort from you as a teacher.. Okay. The first thing that you will say: Oh please, I have enough and you bring me an extra student with special ed. and I need to deal with and I'm going to have difficulty to deal every day. So let me from the beginning do not accept the student who have situation likethis. I've seen situation like that, where they said [he meant teachers]: Doctor we can't handle.. we have many things to do, we have many chapters [in curriculum books] to finish. (Appendix 11a, lines:154-67).

He added also in another section that:

> We prepare the students, and say listen, you will not be able to control everything within your context but you trying to best [...]To do your best to prove that this person is your responsibility, that you need to guide, to mentor. It is my responsibility if I find something wrong to stop that. It is my responsibility if I see this student not learning I have to go to him and I say let me help you. And I am sure most of the content courses that we have in the university is covering that. I always have my interpretation regarding (Appendix 11a, lines: 211-20).

Although it was not mentioned in this answer issues about ethics and equality in an educational context, it showed that faculty supervisors were witnessing situations in which teachers were expressing their worries about including students with SEN in regular classrooms because of different factors such as the changing educational programmes and workloads. This can be also interpreted as an expression of their concerns if the equality between students can be achieved. Literature asserts these claims and concerns by pre-service teachers (AlYateem 2015; Forlin and Chambers 2011; Forlin, Keen & Barrett 2008; Horne & Timmons 2009). For example. one study conducted by Forlin, Keen and Barrett (2008, p.255) examined the concerns of 228 regular class teachers in Western Australia who worked in inclusive classrooms. They identified seven items that "teachers find most concerning during inclusion", namely, administration, support, student behaviour, the classroom, parents, professional competencies and personal competency. The seven items were related to two main areas which were the behaviour of the child and the teacher's

perceived professional competency. Another study was conducted by the researcher in the context of Dubai's government schools (Alyateem 2015). The study examined the concerns of 141 general school teachers regarding inclusion. The major concerns that were identified were about "skills required to assist students, inadequate para-professional staff, and increased work load".

4.4.3 Information about content of some courses and specializations in the programme

Some detailed information was drawn from the statements of the faculty members, especially Dr. Maryam, the Head of Special Education department and Dr. Ahmed from the Foundation of Education department. For example, as presented in the previous section she provided some details about the course of "Education of Exceptional Children-SPED 101", and about the qualifications the graduates from Special Education Programme gain. She described the course SPED 101saying:

> Yes, I taught this module, it contains general information about types of disabilities, their characteristics, how to deal with students, and teaching strategies [methods]. In teaching they [teachers] have two tasks to do: Modifications for a student with low [weak] achievement, and another one who is gifted or high achiever ...as you said [she meant differentiation]. The teachers do modifications within a lesson plan [first task]. [...] The second [task is] they plan a lesson for a student whose achievement is weak. (Appendix 11c, lines: 170-76).

The second example was brought forth by Dr. Ahmed from the Foundation of Education department who shed a light on the contribution of his department courses in preparing elementary teachers in general. For example, when he was asked: "What is the ethical teacher?" He replied:

> We define all the ethical terminologies within the context of ethics. We bring all these terms of how to use ...exchanging the old we use in the educational system with new terms: tolerance, compassion , kindness, being fair, being honest [...]. Being justice with the students, how can be patient with the students. We define all these terms to the students plus we [are] giving what is the definition of ethical teacher and what is the definition of ethical person [...].the definition of ethical teacher and what is the definition of person. What are the differences between them. What is the definition of professional ethics means or the definition of professional ethics teaching means, so we define all of that to the students. (Appendix 11a, lines: 194-219).

4.5 Pre-service teachers' focus group findings & discussion - Case (A)

This section presents the views of six Elementary pre-service teachers obtained through a focus group conducted in the Campus of the COE (Appendix 12). Pre-service teachers' opinions about inclusive education, the contribution of their programme to prepare them to teach in inclusive classrooms and their fieldwork experiences about teaching in inclusive schools are explored and discussed.

Pre-service teachers' views about their learning experiences

Different themes emerged from the pre-service teachers' focus group regarding the programme's contribution and impact on their preparation to work in inclusive classrooms

Aspect	Themes	Subthemes

Pre-service-teachers experiences and opinions- Case (A)	• Teaching experiences	• Conceptualisation of inclusion.
		• All the group members were teaching students with disabilities
		• Diversity in classrooms
		  •Students with mild and severe disabilities
		  •Students with behaviour, sensory and learning difficulties learning in general classrooms.
		• Variation in educational services available to support students with disability.

	• Adaptations and Modifications strategies	• Grouping. • Tailored activities. • Collaborating/communication with parents. • Take more time for instruction. • Differentiate activities/be creative/ make it enjoyable.
	• Impact of taking course on "Teaching students with exceptionalities"	• Changing perspective and seeing children with disabilities positively. • Able to deal with them in classroom. • Becoming less anxious of dealing with students with SEN. • Gave basic knowledge on disabilities • Motivation towards how to work and deal with students with special needs.

	• Challenges in field work	• Feeling not well prepared
		  • Not having much experience
		  • Difficulty to manage assistive technologies in classrooms.
		  • Managing behaviour
		• Felling stress
		• Shortage of special ed. teachers and supportive services in some schools.

	• Attitude towards including students with disability in the classroom.	• I want them to learn • We try our best • We don't act as if they are different from other, they just have different abilities.

Table 20. Themes & sub-themes (the Index) of the focus group of the Elementary pre-service teachers in Case (A).

146

(Table 20).

It is worth noting that the data was collected from the pre-service teachers through a focus group during their final semester. In the final semester, pre-service spend a full semester of practice teaching in one selected elementary school. This field experience course is called Student Teaching- CURR 463 for Elementary Education and it is for all elementary tracks which include English Language, Islamic Studies and Arabic Language, Mathematics and Science and Social Studies and Civics (COE 2017b). Six pre-service teachers participated voluntarily in the focus group and they were from different Elementary specializations. The findings are organized in the following five sections that include the themes:

- Conceptualization/ or Understanding of the concept of inclusive education,
- The diversity in general education classrooms.
- The contribution of the courses on their preparedness to teach in inclusive schools,
- Teaching strategies used by pre-service teachers to accommodate students with disabilities
- Challenges emerging during the field training.

4.5.1 Pre-service teachers understanding of the concept of inclusive education

The pre-service teachers explained the meaning of the concept of inclusive education from their perspective when asked about this concept (see appendix 12). Their answers are listed in Box (3) to have a comprehensive view about their opinions. These views show a diverse understanding and sometimes contradicting with inclusive education. Some of these opinions are aligned with the principles that were agreed upon by several entities (e.g. the UNESCO) and researchers in the field of inclusive studies (Ainscow et.al. 2006; Florian & Black-Hawkins 2011). For example, the UNESCO (2005, p. 12) views inclusion as "a dynamic approach of responding positively to pupil diversity and of seeing individual differences not as problems, but as opportunities for enriching learning". This view was evidenced in teachers' 1 and 3 conceptualization of inclusive education. For example, teacher 1 explained what inclusion meant to her as follows:

> To include all student from different levels [abilities] in the same classroom. Taking into consideration the individual differences and giving each of them activities that are suitable for his abilities and thinking. (Appendix 12, lines: 439-45).

And teacher 3 stated that:

> I learned how to deal with students with special needs and make [be] positive with these students. Inclusive education means [to] involve all students with different levels [abilities] together in individual [the same] classroom. (Appendix 12, lines: 434-38).

Others showed confused understanding of inclusive education as indicated in teacher's 4 opinion, she explained:

> Inclusive education is the inclusion of 'ordinary' students with students with special needs partial inclusion. I consider students with physical disabilities particularly with special needs. But I do not consider Hyperactivity, learning difficulties or minor disabilities to be special need , they just need good planning, patience and activities to help them. (Appendix 12, lines: 446-52).

These mixed views that were reflected in pre-service teachers statements about their understanding of the concept of inclusive education can be related to the continuous development of it. Armstrong, Armstrong and Spandagou (2011, p. 30) describe the situation of pre-service teacher perfectly, stating: "The meaning of 'inclusion' is by no means clear and perhaps conveniently blurs the edges of social policy with a feel-good rhetoric that no one could be opposed to". This was also confirmed by Florian (2014, p. 286) who argues that "a clear working definition of inclusion has thus far proved elusive". Further, she agrees with the critics on the necessity of designing a new type of studies that offer "a framework designed to capture evidence of inclusive education in action" in order to have a clear definition of inclusion.

Teacher 1: To include all student from different levels[abilities] in the same classroom. Taking into consideration the individual differences and giving each of them activities that are suitable for his abilities and thinking.
Teacher 2: I see that inclusive education means that we find students who [are] different in ability::interests::mmm..are in same class. There is differences in the levels on the class!
Teacher 3: I learned how to deal with students with special needs, especially after taking education for exceptional children course. It made me positive with those students..so I understand inclusive education that it involves all students with different levels together in one classroom.
Teacher 4: Inclusive education is the inclusion of 'ordinary' students with students with special needs partial inclusion. I consider students with physical disabilities particularly with special needs. But I do not consider Hyperactivity, learning difficulties or minor disabilities to be special need , they just need good planning, patience and activities to help them.
Teacher 5: Its to plan the knowledge according to students levels and what they needs, how can I give them the knowledge and make sure that they understand.
Teacher 6: Inclusive education is include students from different levels [abilities] and include who have special needs with 'normal' students.

Box 3. Pre-service teachers in Case (A) statements' about their understanding of inclusive education (Appendix 12, lines: 431- 64).

4.5.2 The diversity in general classrooms

The statements of the pre-service teachers indicated that the field training placement was in inclusive public schools. When they were asked if they taught any students with disabilities

during their field experience training, five out of six were familiar with the presence of students with disabilities in their classes. This meant that their training or field work was in inclusive classrooms and that they were exposed to diversity in inclusive classrooms. In pre-service responses, different aspects of the impact of the field experiences in inclusive classrooms and how they react with diverse learners was described. For example, one pre-service teacher explained:

> Teacher 4: I teach one student with learning difficulties::aa::another one with speech difficulties as well. A third student (0.1) also who has a difficult case, the boy seems that he doesn't know anything::mmm can't read or write. (Appendix 12, lines: 37-40).

A second teacher stated:

> Teacher 5: I teach students with speech difficulties, I have also a student who is very withdrawn, always shy and feels embarrassed from communicating::ahh::doesn't play with his class mates::mm and I teach also a student with ADHD [attention deficit syndrome]. I teach other::also::however:::mmm honestly.. I don't know how to deal with them! (Appendix 12, lines: 26-31).

Another pre-service teacher (Teacher 2) stated: "I teach a student with visual impairment, low vision and she uses a special screen to read" (Appendix 12, Lines: 75-6). Also, they noted learners with hyperactivity, speech difficulties, and learning difficulties.

The Elementary pre-service teachers were familiar with the Inclusion of students with disabilities in regular classrooms. This finding is in alignment with the scene on an international level (Florian 2014; McLeskey & Waldron 2002; Pugach & Blanton 2012; Smith 2000; Thaver & Lim 2014) which was described by Sharma, Forlin, and Loreman (2008, p, 773) in that "Inclusion of students with disabilities into regular schools is now one of the most significant issues facing the education community both nationally and internationally".

The human resources available to support inclusion varied in real school environments as it was indicated by pre-service teachers statements. Some schools experience shortage in educational staff that supports classroom teachers. The researcher asked the pre-service teachers if teacher assistants were available in their classroom, especially if there is a student with a severe disability that needs attention such as autism. Some pre-service noticed the absence of teacher assistants or special education teachers in the schools they were trained in. One pre-service teacher's answer was: "Teacher 3: She is available sometimes.. not always" (Appendix 12, line: 105). In different sections of the focus group, pre-service teachers noted that they did not work with any special education teacher because students with different

learning difficulties were pulled out to receive assistance at the resource room, or attend school once or twice a week only.

Teacher 6: I meant::I meant this subject benefited us as it has made us able to recognise [students needs], but we can't deal with those students because ::aaa:: this one subject is not enough. On the other hand this practicum and working in the field, we benefited from classroom and special education teachers' experiences.
Researcher: Okay.
Teacher 6: This mean it will help us when we will work on our own classes...
Teacher 5:[interrupting her colleague] but in some places we don't usually meet special education teachers.
Researcher: This is actually what is been asked in the last question in the manual of the interview.
Teacher 5: Okay.
Researcher: You said you do not meet with them [special education teachers]
Teachers: [Teachers: 1+3+5]: No we don't meet them
Teacher 5: She [special teacher] takes usually the students for certain periods [pull out]
Researcher: Does this happen almost every day, and differs from one student to another [I meant is it organized and each student is pulled for specific class]?
Teachers: [mixed voices]: Yes it differs.
Teacher 4: For example, the one [teacher] in my school works between two schools, she comes to our school once or twice a week.
Researcher: Hmmm[following her]
Teacher 4: Sometimes she doesn't work with the students [with SEN], the class teacher who I work with is always complaining that she doesn't have the experience or the qualifications to work with those students.

Box 4. An excerpt from the focus group interview with the pre-service teachers in Case (A) shows their experiences with assistant staff in inclusive classrooms (Appendix 12, lines: 336- 65).

In Box (4) an excerpt from the dialogue with the pre-service teachers that illustrates this situation. And on the contrary, some schools had assistant team available at one school. The following statement if for a pre-service teacher trained in a classroom which included a student with hearing impairment. She explained the support team that worked with this student as follows:

> Teacher 6: In the school where I'm training, in my classrooms I have a student with hearing problems. She had a surgery to install a hearing aid a year ago, and they are training her to speak as she was :: I think with total hear loss. [...] This girl has two special education teachers, one who works in the school, the second special education teacher helps her in learning and to speaking the words [speech-language teacher], and the third is a speech therapist who comes to the school for her. This means that there are three teachers working with the girl, in addition to the classroom teacher. The speech teacher [the second] keep coming to the classroom to help class teacher during the day. [...] The speech therapist comes once a week. But A::: the special education has also experience in speech therapy, she teaches the student. She is not a speech therapist, she is special education teacher[...]. Daily, for half an hour or an hour each day [...] And after a::she staying with the girl teaching her, she goes to the class teacher and explains to her what did she teach the girl, I mean letters and other things. (Appendix 12, lines: 373-404).

It is worth noting that those pre-service teachers were working in the same Emirate. From the researcher's point of view the variation in the educational services available to support students with disability can be referred to several causes: One is the shortage of specialized staff in the country, and at the international level in general. The inclusion of students with disabilities in public schools has been implemented recently in the UAE compared to other countries, but the shortage of special education teachers and supportive staff has been intensively acknowledged in the literature (Billingsley 2004; Boe & Cook 2006; Holdheide & DeMonte 2016; McLeskey, Tyler & Saunders Flippin 2004; Thornton, Peltier & Medina 2010; Vittek 2015). Thornton, Peltier & Medina (2010, p. 233) for example, attributed this shortage to two reasons; they explain that the "new demands and high attrition levels of special education teachers have created a crisis for education and extensive additional stress for special education directors and principals". Most studies identified a wide range of factors contribute in the shortage in numbers of special education teachers. One reason was the support a teacher receives in their first few years as an educator especially administrative support (Vittek 2015). Other factors include qualifications, personal characteristics, work environment, and teacher roles (Billingsley 2004). However, most of these studies were conducted in the USA and these factors may not apply to the UAE's educational context and need more exploration in future research.

4.5.3 Contribution of the courses on their preparedness to teach in inclusive schools

The pre-service teachers stated different aspects about the contribution of the courses in their preparation for inclusive classrooms such as the impact of the courses on their teaching experiences and their attitudes. From one perspective, the pre-service teachers stated that they experienced a positive impact from their study and training on preparing them to work with diverse learners. However, at the same time expressed their concerns of not being prepared enough to teach in inclusive classrooms. Following are examples of pre-service opinions.

The first example is about the view of a pre-service teacher who was specialized in English language. She explained the impact of specific courses on her teaching (e.g. School and Family & Education of Exceptional Children) by stating that:

> Teacher 3: First thing is that these courses and professors experiences, in addition to our work in the field have changed my perspective and how I view those children. [...] I see those children, on the contrary, more positively and they can learn and produce as any other child

does. [Then she added] These courses motivated us more towards how to work and deal with students with special needs. (Appendix 12, lines: 162-70 & 261-62).

A second pre-service teacher acknowledged the positive impact of some courses and she reflected also on her concerns regarding her preparedness to teach students with SEN, she explained:

> Teacher 5: This subject gave me an introduction and information about disabilities, but now when I'm going to implement this knowledge its not enough [..], you know.
> I don't feel I can [teaching students with disabilities] or can help the student. Even if it is what I want and like to do. but just can't(...silent) you know...If they give us at least workshops about learning difficulties. Then she added: They are giving us models..plans done by experts. For me when I design and have an activity for a student I need someone who has experience to teach [advise] me how with a child situation, I can work with him [the student]. Just then I can say I'm prepared to help this student. [...] You know.. For me in my leaning programme, one subject [course] ..frankly.. was not enough.. It isn't enough. (Appendix 12, lines: 300-20).

In addition, another pre-service teacher described a similar experience. She found that the programme benefited her, especially the practicum in different aspects, she pointed out:

> Student 6: This training [practicum] means (..) its true we studied one subject [module] that did not give me much information, however, we gained some experience. We gained (..) we were able to understand the cases. Now when I see a student with special need I can kind of know his need, I can classify if he has ADHD or learning difficulties or hearing difficulties. [...]I meant::I meant this subject benefited us as it has made us able to recognise [cases], but we can't deal with those students because ::aaa.:: this one subject is not enough. On the other hand this practicum and working in the field, we benefited from classroom and special education teachers' experiences. (Appendix 12, lines: 323-34).

The final example is from a pre-service teacher who indicated that she taught a student with severe vision impairment, and expressed clearly her concerns of not being well prepared to teach students with disabilities . Her statement was:

> Teacher 2: I don't even know how to use the assistive tool that is with the student [the one that enlarge the words]. I was telling both the class teacher who I work with, and the special education teacher who always attend the classroom with her that I don't know how I would deal with this student without their presence. (Appendix 12, lines: 96-100).

However, she acknowledged the positive impact of the practicum on her attitude:

> Teacher 2: [...] I want to say also that before this course [she meant field work], I was anxious of how I'm going to deal with students with special needs. However, after starting field work I was relieved, and there is some type of transparency when dealing with children in general (Appendix 12, lines: 212-16).

Teachers' opinions reflected some concerns and raised questions about the role of the faculty supervisors in the field regarding their preparation process for inclusive schools. These concerns confirmed also the researcher's conclusion that was arrived at in the faculty view's

section of the study that the supervisors were from the specializations of the pre-service teachers. Therefore, this implies the absence of collaboration between Elementary and Special Education faculty supervisors in the "Student Teaching" course or practicum. Another concern was that they considered themselves not adequately prepared to teach students with disabilities. Similar findings were reached recently by Saqr and Tennant (2016) in another COE in the UAE. They pointed out that their participants of general pre-service teachers mentioned the lack of collaboration between general and special education during the practicum.

To conclude this section, the Elementary programme contributed in preparing pre-service teachers for inclusion in several aspects. First, it provided real life experience (practice) through the field experience course in inclusive schools. They were exposed to real experience in facing their concerns, observing learners with diverse abilities and practice what they learned (theory) from the whole programme's courses. Second, the pre-service teachers seemed to develop positive attitudes towards all students from the field experiences. Finally, some pre-service teachers had opportunities to work within a team of professionals to support the education of students with disabilities, and also in classrooms where support was provided in the classroom and not in a resource room.

Moreover, pre-service teachers raised awareness about their need for mentors who can help them to learn by showing them or modelling for them teaching methods for diverse learners, or what is known as the apprenticeship method (Collins 2006). The pre-service teachers were following the clinical method training model in their practicum course (COE n.d., p.4), in which course work is joint with experience and connecting theory with practice (AACTE 2012). The concern of the pre-service may be referred to several causes. One cause can be that all their supervisors were from the departments of their specializations. This lead to the assumption that pre-service teachers were prepared more to acquire the skills and pedagogies necessary for their specialized subject, and less attention was paid to inclusive education and modifications needed to cater for students with disabilities, despite including one element in the COE framework for diversity and individual differences (COE n.d., p.3). Another reason can be referred to the regular mainstream schools in which pre-service teachers were trained. As it was concluded by Amr (2011) in her study of Jordanian schools, which have commonalities to the UAE's educational context, she found that regular schools mostly follow curriculum and teaching methods that were designed for students without SEN.

Therefore, prospective teachers will be trained to develop mainstream curriculum, teaching methods, and assessments.

4.5.4 Teaching strategies used by pre-service teachers to accommodate students with disabilities

Through their field teaching experience, the pre-service teachers used different strategies to accommodate their students and worked to meet their educational needs. The first example shows a pre-service teacher's compassion and empathy for all the students without exception. She stated:

> Teacher 1: For example, When I give students an activity, if a student with a special need faces a difficulty in doing the activity::aa:: it is not a problem:: mmm I mean he will get the help he needs to overcome this difficulty. You see::even students without special need can face difficulties in learning as well. I support all students. (Appendix 12, lines: 472-76).

Another pre-service teacher found that collaboration with parents and school staff and differentiation of the learning content, are essential parts to fulfill her students' needs. She noted:

> Teacher 5: Frankly, for me I am afraid to deal with a child who has difficulties in learning or communication until I study his or her case by collecting any available information about him...from other teachers or parents or any source within the school. In my classroom for instance the teacher assistant knows more information about the students than me..so the student who I mentioned in my class..aaa I was afraid to move on and deal with him without knowing anything about his background.(Appendix 12, lines: 52-8).

This pre-service teacher tried different strategies, and suggested creativity and motivation:

> Teacher 6: Even when activities are chosen, I mean you have to understand it, so when you teach these activities they enjoy learning [...] Yes to be creative, because students enjoy this type of activities [she meant differentiated ones] especially who struggle. With the students who struggle from group 3.. I take with them more time.. they are slow learner! I teach them slowly to motivate them. (Appendix 12, lines: 181-89).

She then added the elements of communication and collaboration with teachers and parents, stating:

> Teacher 6: Since it is my class.. and I have a student with special needs, naturally as a start I will communicate with her/or his mother or a parent. I will ask about his medical report so I can know information about his condition. Then I search the net for learning activities specially for him, that matter for him.. are suitable. (Appendix 12, lines: 478-83).

Finally, the following suggestions were presented by this pre-service teacher:

> Teacher 3: I feel that enjoying your work and your passion towards helping students with disabilities is the first step. Because this will open the door for many positive things, first my

job will be easier, I'll find who is going to help me::or::aa read things [she meant reading on this topic]. (Appendix 12, lines: 507-12).

The comments of pre-service teachers indicated that they used different strategies to accommodate their students. They used collaboration with parents, learning about the student's background, differentiating learning activities, being positive and having empathy for their students, continuing to learn by reading in related topics, in addition to using creative ways to create learning experiences. All of these strategies are supported by methods suggested by scholars in inclusive education such Loreman (2010) and Florian and her colleagues (e.g. Florian 2009; Florian 2012; Florian & Black- Hawkins 2011). For example, some skills suggested by Loreman (2010) for pre-service that they need to develop during their programmes include: Respect for diversity, collaboration with stakeholders, fostering a positive social climate and engaging in lifelong learning. From another perspective, Allday, Neilsen-Gatti & Hudson (2013, p. 299) argue that "meeting the needs of diverse abilities requires teachers to have attitudes and skills that can lead to positive changes in students' academic and social behaviour.

4.5.5 Challenges that faced general pre-service teachers during field training in inclusive schools

Pre-service teachers pointed out through the discussion some challenges which they faced as general teachers in inclusive classrooms. First example is the shortage of assistant and supportive services for inclusion. The second issue highlighted by the teachers was the lack of training on teaching strategies for students with different disabilities and the need to be knowledgeable about assistive technologies for students with disabilities. This challenge was concluded from several statements by the pre-service teachers; following are some examples:

> Teacher 2:I teach a student with visual impairment ..low vision and she uses a special screen to read [...] I don't even know how to use the assistive tool that with the student [the one that enlarge the words]. I was telling both the class teacher who I work with, and the special education teacher who always attend the classroom with her that I don't know how I would deal with this students without their presence. (Appendix 12, lines: 75-6 & 96--100).

And:

> Teacher 5: This subject [she meant Education of Exceptional Children course] gave me an introduction and information about disabilities, but now when I'm going to implement this knowledge its not enough.. you know.[...] I don't feel I can [teach] or can help the student. Even if it is what I want and like to do. but .just can't(...silent) you know...If they give us at least workshops about learning difficulties. (Appendix 12, lines: 300-3).

155

From another perspective, one pre-service suggested to give them more choices as elective subjects with content related to educating students with disabilities. She expected it would support their preparation for inclusive schools. She stated:

> Teacher 4: We want courses like Family course and the course about special needs. These are better for us from other courses such as general culture and history :: which I see that we don't need all [of] these courses. (Appendix 12, lines: 270-3).

The challenges mentioned above by pre-service teachers are acknowledged by general teachers and well documented in international literature as well (Amr 2011; de Boer, Pijl & Minnaert 2011; Winter 2006). To reduce such barriers and challenges to teach students with disabilities, Smith and Tyler (2011, p. 336) suggest that teacher educators who are in charge of teaching and the professional development in higher education institutions must ensure "producing new teachers and enhancing the skills of practicing professionals who are responsive to the individual needs of a diverse group of students".

Summary of the findings of Case (A)

The Elementary programme in Case (A) offered one compulsory course related to teaching students with SEN. The course seemedto be taught as stand-alone module and independent from other courses in the programme. Many positive impacts were witnessed on pre-service teachersfrom taking this course such as the familiarity with the different characteristics of disabilities and SEN, and the positive attitudes towards teaching students with disabilities. Different professional requirements courses offered also rich content and outcomes that support inclusive education.

However, the absence of a vision in the programme that alignes with the countrie's recent policies towards including students with disabilities in public schools, reduced the effectiveness of the courses that serve preparing pre-service teachers for inclusive education. The lack of a shared vision among faculty members towards inclusive education has reduced also the uses and benefits of some essential courses with knowledge and skills that play important role in implementing inclusive education and preparing teachers' for inclusion (ethics/psychology/teaching methods & teaching students with exceptional needs).

Case (B) Findings and Discussion

The following sections present the findings about Case (B) according to the themes that emerged from analysing the programme documents (e.g. courses syllabi, college's catalogs). Using the technique of the thematic framework method (Ritchie, Spencer & O'Connor 2003) a thematic framework or Index was created. This Index consisted from a hierarchy of themes and sub-themes (Appendix 20b). The researcher organised these themes into four main aspects: Case (B) context, the courses content, the faculty opinions and the pre-service teachers experiences and opinions (Tables 21, 24 , 31& 33). It is worth mentioning that all findings are discussed in alignment with the study's theoretical framework.

The first following aspect presents the findings about the case's context such as the university and the College of Education (COE) that were aligned with the theoretical framework of the study. (Table 21) illustrate the themes and sub-themes resulted from the data analysis regarding Case (B) context.

Aspect	Themes	Subthemes

Case (B) Context	• The University features	• University values
		  • Professional ethics, leadership, excellence, collaboration, innovation, civic responsibility, respect for diversity, positive educational environment
		• Students and faculty
		• Physical layout
		• Special facilities for the COE:
		  • Curriculum Resource Centre
		  • Early Childhood Learning Centre
		  • Model Classroom

	• College of Education	• Demographic data
		• The COE framework
		• The COE philosophy
		  • Theory of Change (Fullan 2007)
		  • Theories of care ethics (Noddings 2003)
		  • Multicultural education (e.g. Nieto 2004; 2010)
		• The COE outcomes
		• The COE dispositions

	• The Early Childhood (Pre K-grade 3) Programme features	• Program Learning Outcomes • The degree requirements.

Table 21. Case (B) context findings organised into themes and sub-themes.

4.6 Case (B) Context

4.6.1 The University features

Case (B) was situated within the early childhood (K-grade 3) specialisation in the College of Education (EDC) in University (B). This university was founded in 1998 and has two

campuses in two Emirates. The university offers undergraduate (bachelor) and graduate (masters) courses through seven colleges which are: Arts & Creative Enterprises, Business, Communication & Media Sciences, Humanities & Social Science, Natural & Health Sciences, Education, and Technological Innovation (ZU 2015). The University was accredited nationally by the Commission of Academic Accreditation in 2015. On the international level the university was first accredited by the Middle States Commission on Higher Education (MSCHE) in 2008 and the accreditation was renewed in 2013. The reaffirmation is valid for ten years (ZU 2016a).

4.6.1.1 University's values:

The university is oriented towards educational innovation. The vision statement shows that the university looks forward to be :

> Globally recognized as the leading university in the region for excellence in educational innovation, research, and student leadership development that serves the changing needs of the nation in economic, social and cultural advancements ". (ZU 2018).

There are a number of values that the university is committed to, which are:

- Professional ethics
- Leadership
- Excellence
- Collaboration
- Innovation
- Civic responsibility
- Respect for diversity
- Positive educational environment (ZU 2017a).

On the other hand, the university's six learning outcomes are: leadership, language, global awareness, critical thinking and quantitative reasoning, information technology and information literacy and communication (ESC 2015a); more details are available at Appendix (13-Case (B)).

4.6.1.2 Students and faculty:

The overall number of faculty members in University (B) was 685 in the academic year 2016-2017 and the total number of students who were enrolled in the university in the same academic year was 9363 (ZU 2017c). Table (22) shows the distribution of students across the different colleges:

Undergraduate Students: Fall 2016			
Colleges & programmes	Male	Female	Overall
Academic Bridge Programme	142	1278	1420
General Education	364	3195	3559
Bachelor of Arts in Art and Design		277	277
Bachelor of Science in Multimedia Design		168	168
Bachelor of Arts in International Studies	80	427	507
Bachelor of Arts in Emirati Studies		35	35
Bachelor of Science in Public health & Nutrition	1	118	119
Bachelor of Science in Environmental Science & Sustainability	9	178	187
Bachelor of Science in Psychology & Human Services		275	275
Bachelor of Science in Business	172	967	1139
Bachelor of Science in Communication & Media Sciences	8	608	616
Bachelor of Science in education		213	213
Bachelor of Science in Information Technologies	82	388	470
Bachelor of Science in Information Systems & Technology Management	7	99	106
Double Major Students		3	3
Total of Undergraduate students	865	8229	9094
Total of Graduate students enrolment in all colleges	76	193	269
Overall	941	8422	9363

Table 22. The distribution of the enrolled students across the various colleges in University (B) in the academic year 2016-2017 (ZU 2017c).

4.6.1.3 Physical layout:

The university has four campuses, two of them very small with limited facilities and faculty. One of the two smaller ones is located in Dubai's Knowledge Village and the second is in Dubai- Media City. The other main two large campuses are in two different Emirates located in urban areas. The first campus was moved to the current building in the year 2006. This campus is constructed on an area of 70 hectares with a total built up area of 100,000 square meters and is flexible for future expansion as well. The oasis shape design of the campus reflects the desert environment. The campus consists of 6 main buildings: Academic, administration, library, dining, gymnasium buildings and the convention centre. The space capacity of the current complex is 4000 students. The second campus was built in the year 2011 and it is housed on a land area of 77 hectares with a total built up area of 188,500 square meters. The built-up area features a segregated campus that can accommodate both males and females during the core hours but in separate and identical facilities that mirror each other. It consists of classrooms, administration offices, laboratories, auditoriums, fitness

centres and other facilities. It is the only campus that includes residential blocks and a day-care centre (ZU 2017b). The current study was conducted in the first main campus.

4.6.1.4 Special facilities for the College of Education:

The study of Education in this university is supported by special facilities which include:

Curriculum Resource Centre:

The resource centre provides "variety of curriculum outlines, lesson plans, books, CD-ROMs, videos, educational games, models, maps, kits, and other print and electronic resources" for pre-service teachers (EDC 2017, p.9).

Early Childhood Learning Centre (ECLC):

"The ECLC serves as a training programme for Early Childhood teachers, and is a research centre for the study of child development and language development". It is an innovate play based educational environment for children (EDC 2017, p.9).

Model Classrooms:

These classrooms are affiliated also with the COE in the two main campuses. Model classrooms provide inclusive learner-centred educational environments, used as a learning laboratory for different courses (e.g. methods & pedagogical) (EDC 2017, p.9).

4.6.2 College of Education (COE) features

4.6.2.1 Demographical data:

The college, in the two main university campuses, offered the following undergraduate and master's degrees in the academic year 2016-2017:

- Bachelor of Science in Education in four majors:
  - ➢ Specialty in Early Childhood Education (Pre K- grade 3).
  - ➢ Specialty in Upper Primary, Preparatory Education, Teaching Field in English Language Learning (Grades: 2-9 & 7-9).
  - ➢ Specialty in Upper Primary, Preparatory Education, Teaching Field in Mathematics (grades 7-9).
  - ➢ Specialty in School Social Work.

- Bachelor of Science (B.S.) in Psychology and Human Services (joint with College of Sustainability Sciences and Humanities).

- Master of Education in Educational Leadership and Administration.

- Master of Education in Special Education.

- Master of Education in Teaching and Learning (ZU 2016b; ZU 2017c).

It is important to note that the specializations of the upper primary are offered in response to education agency requirements. Figure (12) presents the undergraduate programmes' structure in the COE in Case (B). An important observation was that special education specialization did not exist with the undergraduate programmes, but was in the graduate ones. Moreover, the College of Education has received accreditation from the Council for Accreditation of Educator Preparation Continuous Improvement Commission (CAEP) under the National Council for Accreditation of Teacher Education (NCATE) standards (ZU 2017c).

4.6.2.2 The College of Education Framework:

The theme of the College's Conceptual Framework is: "Coming Together to Learn, Educate, and Lead" (EDC 2015a, p.3; Figure 15). The COE vision, mission, philosophy and goals underpin this framework. The vision of the college focuses on preparing graduates who will become high quality teachers, researchers and future leaders in the UAE (EDC 2015b). On the other hand, the college's mission focuses on professionalism in preparing teachers, administrators and leaders. It states:

> The College of Education will support the development of educators, school professionals, and leaders, who will be agents of change in the United Arab Emirates, by offering nationally and internationally recognized programmes of study. (EDC 2017b).

4.6.2.3 The COE philosophy:

The college's philosophy is guided by three main philosophical concepts. The first one is Micheal Fullan's Theory of Change that sees change as a force for school improvement (Fullan 2007). The research work of Fullan focuses on "educational reform with a mandate of helping to achieve the moral purpose of all children learning" (Fullan 2018). The second philosophical concept was Nel Noddings (e.g. Noddings 2003) theories about care ethics in education. The college emphasizes on preparing teachers who are skilled, caring and nurturing professionals (EDC 2015a). The third unit of the college's philosophy was guided by Sonia Nieto's work on multicultural education (e.g. Nieto 2004; 2010). Teachers who graduate from this COE programmes are expected to work in global society. Accordingly, teachers will need the knowledge of other cultures to work with diverse children and families (EDC 2015a).
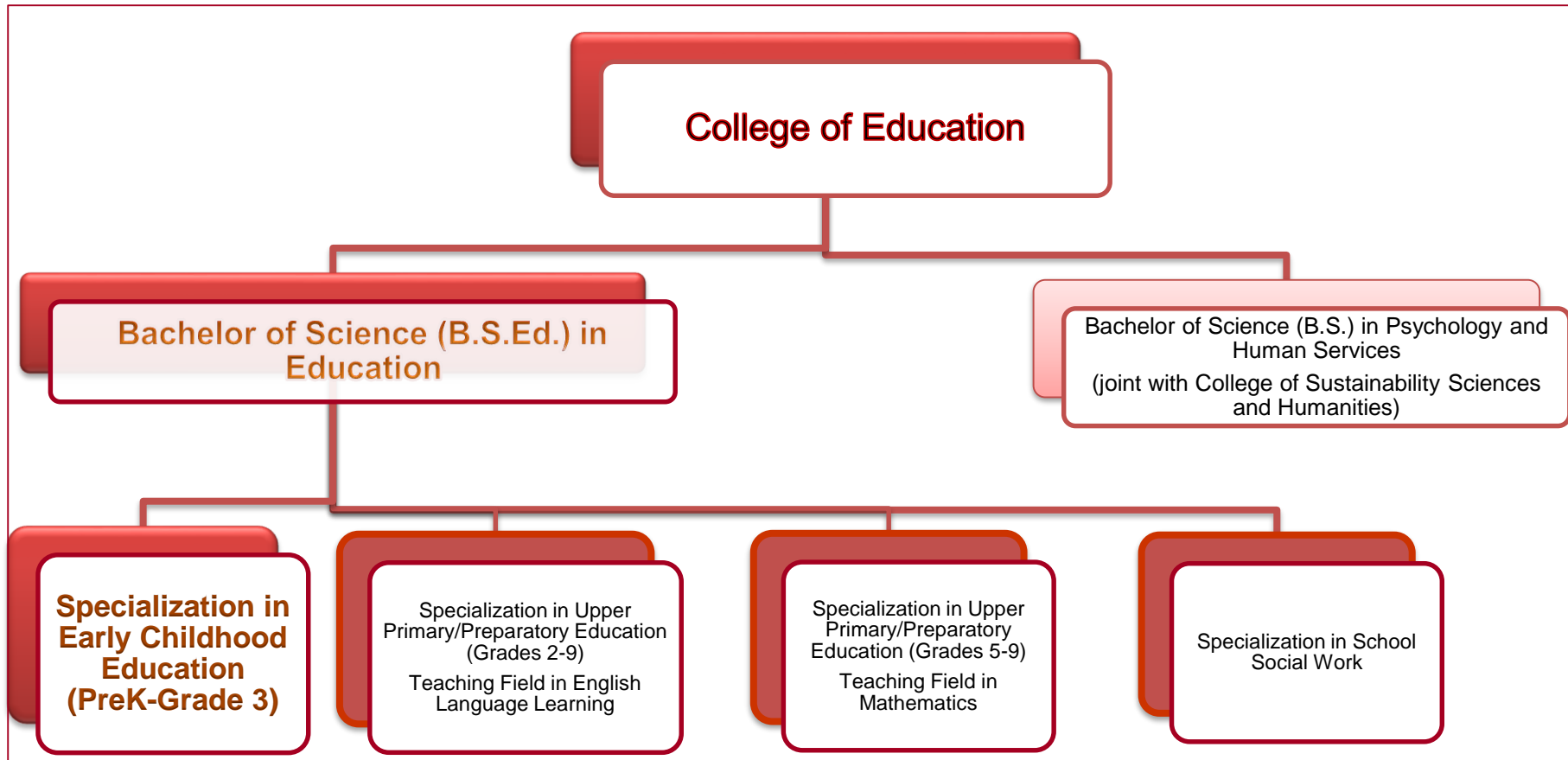
Figure 12. The undergraduate programmes' structure of the College of Education in Case (B).

4.6.2.4 The COE goals or outcomes:

There are four main goals or learning outcomes constituting the COE learning outcomes that are in turn framed by the university's learning outcomes (EDC 2015a). The COE outcomes include: Professional knowledge, professionalism, global awareness and cultural responsiveness (EDC 2015b). It is worth noting that outcomes were the foundation of the college's framework (see Appendix 13 for more details).

4.6.2.5 The COE dispositions:

The dispositions were developed as it was mentioned in the document of the College of Education student teaching handbook- EDC 490 from the college's vision, mission, philosophy, purpose and outcomes. In addition, these dispositions were aligned with some cultural values of the UAE society such as hospitality and honour (EDC 2015a). The five core dispositions that were considered for national teachers include: Caring, flexibility, respect, reflective and collaborative (Appendix 13).

The alignment of the COE framework components (vision, mission, dispositions & philosophy) with the current study's theoretical framework indicated that the underpinning principles that guided the college's programmes were very much focused on preparing high quality professional teachers, committed to the service of the society and at the same time to global communities. Components of the COE framework will be discussed in the following sections, and I chose some elements as examples for discussion which include the college's philosophy, the vision of Sheikh Zayed, and global awareness. Figure (13) illustrates the framework components.

The COE's philosophy included as aforementioned three main philosophical views, the first is Fullan's Theory of Change (2007) or as he called it 'change knowledge'. He argues that the theory "can be very powerful in informing education reform strategies and, in turn, getting results", only if the people involved must also push to the next level, to make their theory of action explicit about the assumptions and linkages that connect the strategies with the outcomes (Fullan 2007, p. 27). It is worth noting that Fullan lays out seven core premises as requirements to use the theory of change, which are: "A focus on motivation; capacity building, with a focus on results; learning in context; changing context; a bias for reflective action; tri-level engagement (school and community; district; and state); persistence and flexibility in staying the course" (Fullan 2006, p.8).The research work of Fullan focuses also

on "educational reform with a mandate of helping to achieve the moral purpose of all children learning" (Fullan 2018).
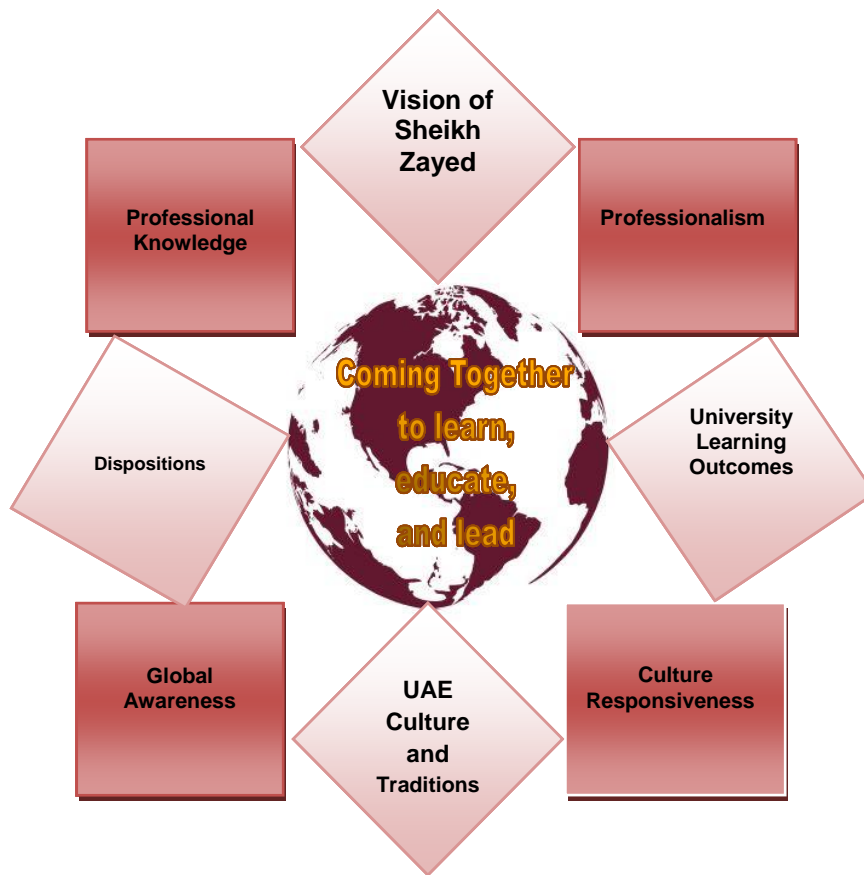
Figure 13. College of Education framework components in Case (B), Adapted from EDC (2015a, pp. 4-7).

Teachers in the COE (B) were expected to be agents of change through and after finishing the various education programmes as mentioned in the college's website. Change in the education system is necessary in order to take into consideration and manage the increasing diversity in the classrooms (European Agency for Special Needs and Inclusive Education, 2015, p. 48). Inequalities in schools (as experienced in different parts of the world) have impacted the educational outcomes in a negative way because education systems reproduce existing patterns of different forms of inequalities (e.g. socioeconomic status). Quality teachers and school leaders who have the ability to change those patterns, those only can break the cycle of underachievement of all students including those with SEN and bring about greater equality in education (European Commission 2015).

From a second perspective, the second philosophical unit was adapted from Nel Noddings theories about care ethics in education. According to Dunn and Burton (2017), Noddings' feminist philosophical perspective of care ethics uses a relational and context-bound approach toward morality and decision making and considers caring as a foundation of morality. Further, they added that "according to Noddings, each caring relation consists of at least two people, the 'one-caring' and the 'cared-for'". The third perspective was adapted from Sonia Nieto's research that focuses on creating multicultural learning communities (Nieto 2010) in addition to her studies on critical multicultural education which is related to the sociopolitical context of education. A sociopolitical context of education according to her "takes into account the larger social and political forces operating in a particular society and the impact they have on student learning" (Nieto's 2004, p. 180). Nieto's work therefore is concerned with studying students schooling experiences and perspectives who have been marginalized due to their ethnicity, culture, native language, social class or other differences perceived as deficiencies by mainstream society in which they live.

From the preceding expanded description of the theoretical framework and the philosophical underpinnings, we find that the COE dispositions (caring, flexibility, respect, reflective and collaborative) are impacted mostly by the previous three philosophical perspectives and at the same time in alignment with the current study's framework (Rodríguez 2012; Disability Social Model; Copper et al. 2008) in many aspects such as quality education for all students, dealing with inequalities in education and collaborative work between professionals.

Although the COE philosophy supports inclusivity in education, it was in the context of multicultural education and not disability. In this study the notion of inclusivity is from the perspective of educating students with disabilities in general schools. The current study's framework, which the data analysis is built on, is likewise concerned with inclusion from a disability perspective.

Sheikh Zayed vision:

The College of Education's vision and goals are underpinned and guided by the leader of our nation's vision Sheikh Zayed Bin Sultan Al Nahyan (May his Soul Rest in Peace). This leader not only unified the seven emirates into a single federation and a modern country, but also made the UAE what it is today as one of the successful countries in the world. According to Galadari (2003), Sheikh Zayed was a leader with a vision and mission. His wise vision has transformed our country from a desert into blooming fields of education, agriculture,

healthcare and economy. His great achievement has been his investment in his people that continued even after his passage. Galadari (2003) states:

> Shaikh Zayed [had] always emphasised the role of education in nation building and as such education topped the agenda of his priorities. [...] Educational institutions have been set up throughout the country to educate both boys and girls in all disciplines. They are being given every possible incentive, including aid, to go up the education ladder.

One of his profound quotes on values and tolerance was: "To treat every person, no matter what his creed or race, as a special soul, is a mark of Islam" (Father of Our Nation 2017). Including the element of the vision of Sheikh Zayed will help in keeping the legacy of the work of the building fathers of this nation and their belief in fairness and the importance of providing education to everyone, especially children who represent the future of any nation.

Global awareness:

Global awareness was present in the COE outcomes of University (B) (Appendix 13) and is also an element of the college's framework. It is concerned at the COE level with preparing candidates who demonstrate:

> Excellent communication and information literacy knowledge and skills; they elucidate the influence of context and culture on behaviour; and determine factors outside of school that may influence students' lives and learning. (EDC 2015a, p. 5).

Globalization has impacted the contemporary society in several areas such as information, communication and technology positively and negatively. Examples of positive impact are "democratization and spread of awareness of human rights". And examples on globalization negative aspects are "wars and conflict, rising economic disparities [...] and the destruction of the global ecology" (Ikeda 2005, p. ix). In a study by Kirkwood (2001, p. 14) about clarifying the definitional ambiguities about global education, he concludes that scholars "describes globally educated people as those who possess high-tech skills, broad interdisciplinary knowledge about the contemporary world, and adaptability, flexibility, and world-mindedness to participate effectively in the globalized world". Infusing globalization and education in the programmes' content was expected to equip twenty first century generations with "attitudes, knowledge, and skills they need to become competent, responsible, and humane citizens of their community, state, nation, and the world"(Kirkwood 2001, p. 10).

The impact of the global education and consequently the global awareness on pre-service teachers from the researcher's point of view can positively affect their attitudes towards people regardless of their ethnicity or culture. A global education can enrich pre-service

teachers with knowledge of human rights in all aspects. However, I cannot relate this directly to the skills of teaching students of disabilities, despite the importance of this type of education for teachers. The researcher found that the global education is part of the philosophy of the COE and especially Nieto's scholarship.

4.6.3 The Early Childhood (Pre K-grade 3) Programme features

Candidates majoring in the Early Childhood Education are prepared to teach children from birth to age eight. "Teachers in this major have extensive practice at all levels and are well prepared to foster language and literacy development, numeracy and quantitative reasoning, and investigative skills" (ZU 2016b, p.68).

4.6.3.1 Program Learning Outcomes:

The programme's learning outcomes were in alignment with the college's framework (Figure13). The outcomes focus was mainly on professionalism, cultural and global awareness in addition to specialization requirements. The pre-service teachers who are majoring in the Early Childhood are expected to be able to use:

- Professional Knowledge.

- Professionalism and Ethics.

- Cultural Responsiveness.

- Global Awareness.

- STEM Education and Research.

- Contextualized Practice (ZU 2016b, p. 68).

4.6.3.2 The degree requirements:

The Early Childhood Programme qualifies the teacher candidates to become pre-school, kindergarten, or primary teachers (birth-Grade3) by majoring in Education and following the eight-semester plan (ZU 2015). Pre-service teachers complete 132 hours requirements as it is displayed in Table (23). Although the practicum I, II, and III are written as one hour requirements, they actually last longer hours in the field. This is explained in more details later.

Field Experiences (Practicum):

The pre-service teacher majoring in Early Childhood completes "a corporation of their work in schools, observing and working with students, social workers and teachers and engaging in mentored teaching" (EDC 2015a, p.8; ZU 2015, p. 80). The practicum is divided to a

sequence of four levels, "all of which are the applied component to the Educational Studies sequence or methodology courses provided in the college" (EDC 2015a, p.8). The methodology courses include: Education Studies I, The Learner with Practicum I- EDC 350/A, Instructional Strategies or the Teacher with Practicum II- EDC 351/A, Education Studies III: Curriculum Design with Practicum III- EDC 450/A, and Student Teaching -EDC 490 (ZU 2015). The complexity of the field experiences increases from Practicum I to Practicum III which is embedded in a school environment for seven weeks. And in the final Student Teaching course, candidates spend a full-time semester in school (EDC 2015). More details are included in the following sections. In addition, pre-service teachers were required to develop and complete an electronic portfolio of their work, taking into consideration the key assessment points described in the courses (ZU 2015).

4.7 Courses' content that contributed to the pre-service teachers' preparation for inclusion

To find out the content that was related to inclusive education in the courses of the Early Childhood Programme, a thorough examination was undertaken by the researcher for all the available syllabi documents that were obtained from the Dean of the COE (Appendices 14a-b & 15a-e). Unfortunately, the website does not include any information about courses' content, so I depended completely on the available syllabi. The courses content aligned with the theoretical framework of this current study to examine what aspects in these courses can be referred to inclusive education. The study's theoretical framework being built upon the Disability Social Model, Rodríguez (2012) Model, and other studies related to teacher education practices for inclusive education (Cooper et al. 2008; Florian & Black-Hawkins 2011; Mitchell 2008). One important finding was that all pre-service teachers in the same specialization in the COE have the same curriculum schedule (Table 23), and all the courses in this schedule were compulsory. Even with the courses that will be described as elective, pre-service were requested by the college to take them (see Appendix 16b, lines: 13-17).

		Semester 1	Credits		Semester 2	Credits
Year 1	COL 110	Mathematical Modeling with Data	3	COL111	Mathematical Modeling with Fractions Or	3
				COL 112	Mathematical Modeling for Business	
	COL 120	Life Skills	3	COL 135	Islamic Civilization I	3
	COL 130	Arabic Concepts	3	COL 145	English Composition II	3
	COL 140	English Composition I	3	COL 155	Global Awareness II: Encounters: People, Places Traditions	3
		Global Awareness I: human Geography	3	COL 165	The Nature of Science Discovers	3
				COL 270	Introduction to Information Technology	3
		Total	15		**Total**	18
Year 2	COL 230	Islamic Civilization II	3	EDC 350	Education Studies I: The Learner	3
	COL 240	English Composition III	3	EDC 350A	Practicum I: The Learner	1
	COL 255	Emirates Studies	3	EDC 324	Inclusion of People with Special Needs	3
	COL 260	Living Science: Health & Environment	3	EDC 350AL	Education Studies I: The Learner. Arabic Lab	2
	COL 220	Entrepreneurship & Innovation	3	EDC 316	Parents as Educators	3
	EDC 207	Infancy and Early Childhood	3	EWS 222	English for the Professions I	3
				EDC 314	Early Childhood Program Models	3
		Total	18		**Total**	18
					Blocked	
Year 3	EDC 351	Education Studies II: Instructional Strategies/ The Teacher	3	EDC 473	Teaching Reading and Writing	3
	EDC 351A	Practicum II: Instructional Strategies	2	EDC 386	Children's and Adolescent Literature	3
	EWS 223	English for the Professions II	3	EDC 341	Learning English in schools	3
	EDC 373	Early Literacy and English Language Learning I	3	EDC 323	Integrated Curriculum for Early Childhood	3
	EDC 368	Communicative Competence in Arabic Lab	2	EDC 452	Early Childhood Mathematics & Science II	3
	EDC 352	Early Childhood Mathematics & Science I	3	ARA 335	Teaching Arabic Literacy	3
		Total	16		**Total**	18
		Blocked				
Year 4	EDC 450	Education Studies III: Curriculum Design	3	EDC 490	Student Teaching (Internship)	12
	EDC 450A	Practicum III: Curriculum Design	2			
	EDC 321	Classroom Management	3			
	EDC 460	Learning Technologies in the Classroom	3			
	EDC 465	The Inclusive Classroom	3			
	EDC 353	Principles of Assessment	3			
		Total	17		**Total**	12

Table 23.The Early Childhood Programme degree requirements in Case (B), adapted from ZU (2015, p. 83).

The organizational structure of the courses' content analysis findings were divided by the researcher into three themes as follows:

The first theme starts with the courses related to teaching students with special needs with a direct focus on inclusive education. This section includes two courses which are: Inclusion of people with special needs -EDC 324 and the Inclusive Classroom -EDC 465.

The second theme includes Educational Studies sequence or methodology, the Student Teaching -EDC490 course, and the course of Principles of Assessment -EDC 353. These courses are: Education Studies I: The Learner -EDC 350/EDC 350A, Education Studies II: The Teacher- EDC 351/ EDC 351A and Education Studies III: The Curriculum - EDC 450/ EDC 450A.

These courses were chosen because all of them were from the COE and were compulsory requirements for all the students in the college including the Early Childhood specialization at the time of the study. A second important characteristic was that for the Educational Studies courses each course is divided into two sections; a theoretical component and a practicum. A third characteristic is that the four practicum served other courses that included activities or assignments that require field or school environment to be carried out; one example is the assessment course was interrelated with these Educational Studies courses as will be discussed further on.

The third theme includes some specialization courses (Early Childhood Mathematics and Science - EDC 352) and other general courses that pre-service take as requirements for the Bachelor of Science in Education, majoring in the Early Childhood Programme. I found that these courses support preparing pre-service for inclusion. Table (24) shows the findings organized under the aspect of courses content that contributed to the pre-service teachers preparation for inclusion' and related themes and sub-themes.

4.7.1 Two compulsory courses on inclusive education

The pre-service teachers in the COE and in the Early Childhood (Pre K-grade3) were required to study two courses related to teaching people of SEN or inclusive education. The first was the Inclusion of People with Special Needs-EDC 324 and the second was the Inclusive Classroom -EDC 465. The following sections present the findings of the data analysis of courses' content. The data analysis was carried out by aligning the content of the two courses with the main elements of the study's framework (Cooper et al. 2008; Rodríguez

2012). The analysis indicated a rich content that supports the education of students with SEN in inclusive classrooms (Appendix 15d); the following sections have the details:

Aspect	Themes	Subthemes

Programme (B) Courses Content/ Courses' content that contributed to the preparation of pre-service teachers for inclusion	• Two compulsory courses on inclusive education
	• Areas of competence to work in inclusive context
		• Inclusion of People with Special Needs and the Inclusive Classroom courses.
		• Content with total emphasis on teaching diverse learners.
		➢ Outcomes on skills of educating diverse learners:
		    • Outcomes on collaborative work.
		    • Outcomes on quality & equity instructions (e.g. Modification; differentiation; assistive technologies).
		• Linking curriculum elements together (content, education resources & assessment).
		• Authentic assessments.
		• Linked to/co-requisite with other courses (e.g. Education studies).
		    • Links between the two courses assignments & practicum I & III
		    • Practicing research work (case study) under mentor's supervision

	• Linking theory with practice: Methodology sequence & Assessment course roles in supporting inclusive education	• Four levels of field experiences.
		• Each course linked with a practicum course
		• Integrating assessment course content with other courses learning experiences
		• Content/or outcomes with quality, equity & equality elements:
		    • Linking content, learning outcomes and assessment.
		    • Courses with supportive content to inclusion (learners differences; teaching instructions, behaviour management)
		    • Employing technology in teaching practices.
		    • Raise candidates awareness of diversity

	• Specialisation & general courses support for inclusive education	• Specialisation courses : • Content on quality • General courses • Content with social &community elements. • Content on parenting roles. • Behavior management & quality teaching.

Table 24. Themes & sub-themes or the Index of the courses content regarding inclusive education in Case (B).

4.7.1.1 Content with high social and community focus:

Several areas in these two courses showed content focuses on areas related to society and community. One example was in the description of the course Inclusion of People with Special Needs-EDC 324 (Appendix 15d) which stated that "people with special needs are studied [study] within the context of inclusiveness in family, community, workforce and schooling, Islamic and the other cultures" (EDC 2016e, p. 79). Two learning outcomes and some topics with educational resources were put forward and aligned with this description;

Table (25) presents the alignment of the learning outcomes that the pre-service teacher are expected to exhibit after learning about people with SEN and their community.

The resources that were provided as part of the aforementioned courses included newspaper articles regarding the responsibility of the society towards people with special needs, in addition to journal papers and government documents (e.g. Rules for provision of special programmes and services in public schools). The researcher found by examining these materials (and other materials in the other course, see Appendix 19) that they were contextually relevant because all of them were related to and serve the topics' objectives. It included local and international issues about the topics on educating people with SEN. The resources also were easy to be accessed and with high quality content and presentation (Kaplan & Lewis 2013b). Kaplan & Lewis (2013b, p. 2) argue that "materials offer valuable insights into key theoretical concepts, and should convey practical, real-life experiences that help to put the theories into context".

4.7.1.2 Content on quality, equality and equity concepts:

Several examples showed rich content on strategies to apply the concepts of quality, equality and equity by pre-service teachers in their future work. Detailed examples were offered on content that can help the pre-service teachers to recognize individual differences about learners' characteristics, and implementing strategies which suits all students including the needs for students with disabilities or SEN (Rodríguez 2012, p. 106).

The first example illustrates how quality content was infused in teaching and learning strategies. The example is from the course The Inclusive Classroom-EDC 465, in which one outcome states that pre-service teachers will be able to: "Examine the range of learning needs related to specific areas of disability" (EDC 2015c, p.2). This outcome was aligned with content and assignments that help the pre-service teacher to meet this learning outcome as presented in Table (25). In addition, the syllabus document suggested several teaching methods for the course instructor to use; it included: "interactive Power Points with embedded video clips, guided reading of selected texts, case studies that relate theory to practice, and group discussion. Attention is given to the development of discipline-specific terminology" (EDC 2016e, p. 82). The materials accompanied were suggested for the pre-service teachers as tools to enhance their learning. Many links to scientific and academic

Course description	Outcomes related to community and society	Content and educational resources related to society
People with special needs are studied [study] within the context of inclusiveness in family, community, workforce and schooling, Islamic and the other cultures	• Describe special needs within the context of family, community and culture. • Evaluate the contribution of Islam to understanding people with special needs.	Content: • Inclusion in society / in the UAE. • Inclusive education • Families and children with special needs Resources: Friend & Bursuck (2014). Chapter 1. http://www.thenational.ae/uae/100-per-cent-inclusion-for-disabled-people-is-uaes-goal https://www.moe.gov.ae/English/SiteDocuments/Rules/SNrulesEn.pdf https://psychcentral.com/lib/the-challenge-of-children-with-special-needs/ https://link.springer.com/article/10.1007/s10995-005-4870-x#/page-1

Table 25. Alignment between learning outcomes, content and educational resources related to community and society element in the course of: Inclusion of People with Special Needs (EDC 2016e, pp.80- 2).

articles, in addition to some newspaper articles about real life events related to people with disabilities are also provided. Some examples to these links:

- https://www.sciencedirect.com/science/article/pii/S0960982205011036

- http://kidshealth.org/en/parents/cerebral-palsy.html

-https://www.thenational.ae/uae/health/he-would-disrupt-the-other-child-it-was-frustrating-to-watch-his-behaviour-1.585572

The second example is about the content of equity and equality concepts. The example comes from the Inclusive Classroom-EDC 465 course. Table (26) shows several goals that help in achieving fairness between students when pre-service teachers work to accomplish it through their teachings. Following are some of these goals:

1. Design and implement modifications and adaptations for students with specialized needs.

2. Implement specific teaching strategies for students with specialized needs.

3. Identify different types of assistive and adaptive technology.

These goals were aligned with suitable content and assessment. For example, for the second goal, a topic about "adapting the curriculum" was suggested for the instructors to be used for assessment. The assessment tool was a "unit plan and [its] impact on student learning". The

assessment as described in the syllabus document was: "planning that includes differentiation for learners with specialized needs. [and] analysis of the teacher candidate's impact on the learning of all the students in the practicum class" (EDC 2015c, pp.2-4). Two important points were also observed and are worth mentioning: The first is that the complementary goal about the use of assistive technology was associated with all other goals in this syllabus. The second point is that courses were connected with each other through assessments especially during the practicum. There were four courses assigned for the practicum in programme (B) which served multiple tasks including some assignments from other modules as explained later in the section of methodology courses. Kaur (2012, p. 486) believes that "teaching and teacher education for social justice and equity is a moral and political undertaking". Kaur asserts also that one of the key missions of equity in education is about "creating rich learning opportunities for all children".

4.7.1.3 Content on collaborative work**:**

According to Rodríguez (2012), collaborative work among teachers facilitates inclusion. Rodriquez expands his opinion by stating that "inclusion is founded on a collective of teachers, a team sharing knowledge, making decisions, solving problems together [..] in order to improve the school and to increase the learning for all" (Rodríguez 2012, 106). The analysis of the two courses' Inclusion of People with Special Needs and the Inclusive classroom content mirrors this understanding of collaborative work, and more substantially in the assessment content.

Authentic assessments:

It is worth mentioning that both courses are blocked with a set of courses, one of them was a practicum course (Tables 27-28). This enabled the pre-service teachers to work collaboratively with colleagues in different assignments, in addition to working with school teachers and other professionals. The description of these two courses pointed out to this type of collaboration; for example, The Inclusive Classroom course description reads:

> This course examines the role of differentiation in teaching all children, including those with special needs, in inclusive classrooms. Students explore the range of learning needs found in their practicum experiences and work closely with mentor teachers and faculty supervisors to consider possibilities for support of students who require special instructional support. This course is taught in a set of blocked courses defined as co-requisites. This course is a part of a 7-week laboratory experience in schools that allows faculty and candidates to engage in differentiation in the context of the day to day work of teachers. (EDC 2016e, p.1; Appendix 14a).

174

Modules	The Inclusive Classroom- EDC 465	
Key Inclusion Competencies (Cooper et al. (2008)	**Goals**	**Course Content Overview, and Teaching Methods**
1. Identification and placement procedures	- Examine the range of learning needs related to specific areas of disability. - Discuss current trends and issues related to special education services in the UAE	**Topic:** Learner Diversity and Inclusive Education Trends and Issues **Assessment tools:** Case Study, Description: Gathering information about learners with specialized needs in the practicum school
2. Formal and informal assessment strategies		**Topic:** Assessment In Schools—Case Study
3. Procedures for IEP Development	Identify and plan the components of an Individual Education Plan	**Topic:** Individual Education Plans Planning for a Child an IEP **Assessment tools:** - Planning for a child**,** Description: Scenario/ IEP/Adapting the Curriculum for a specific child, including the use of assistive technology.
4. Instructional modification/ accommodation strategies	Design and implement modifications and adaptations for students with specialized needs	**Topic:** Adapting the Curriculum **Assessment tools:** Unit Plan and impact on student learning. Description: Planning that includes differentiation for learners with specialized needs. Analysis of the teacher candidate's impact on the learning of all the students in the practicum class.

Table 26. Key inclusion topics or competencies for general educators in the course titled "Inclusive classroom-EDC 465" (EDC 2015c, pp. 2-4). Competencies were adapted from Cooper et al. (2008, p. 160).

Modules	Inclusive classroom-EDC 465	
Key Inclusion topics	**Course Learning Outcomes**	**Course Content Overview, Teaching Methods and Assessment**
5. Responding to student behaviour		**Topic:** - Behaviour difficulties ADD/ADHD: Teaching and Learning
6. Instructional methods for students with disabilities	- Implement specific teaching strategies for students with specialized needs	**Topic:** Learning disabilities: Teaching and learning Physical and intellectual difficulties: Teaching and learning Autism Spectrum Disorder: Teaching and learning Gifted and talented learners: Teaching and learning Sensory disabilities: Teaching and learning Communication Disorders and Social learning
7. Instructional resources and assistive [technologies]	-Identify different types of assistive and adaptive technology	**Topic:** Assistive technology
8. Collaborating with parents and professionals		**Topic:** Partnerships Clinical practice

Table 26. Key inclusion topics or competencies for general educators in the course titled " Inclusive classroom-EDC 465" (EDC 2015c, pp. 2-4). Competencies were adapted from Cooper et al. (2008, p. 160).

		Semester 2	Credits
Year 2	EDC 350	Education Studies I: The Learner	3
	EDC 350A	Practicum I: The Learner	1
	EDC 324	Inclusion of People with Special Needs	3
	EDC 350AL	Education Studies I: The Learner. Arabic Lab	2
	EDC 316	Parents as Educators	3
	EWS 222	English for the Professions I	3
	EDC 314	Early Childhood Program Models	3
		Total	18

Table 27. The Early childhood Programme degree requirements in Year 2 that show the co-requisite courses with Inclusion of People with Special Needs course, Case (B) (adapted from ZU 2015, p. 83).

		Semester 1	Credits		Semester 2	Credits
		Blocked				
Year 4	EDC 450	Education Studies III: Curriculum Design	3	EDC 490	Student Teaching (Internship)	12
	EDC 450A	Practicum III: Curriculum Design	2			
	EDC 321	Classroom Management	3			
	EDC 460	Learning Technologies in the Classroom	3			
	EDC 465	The Inclusive Classroom	3			
	EDC 353	Assessment in the Content Areas	3			
		Total	17		Total	12

Table 28.The Early childhood Programme degree requirements in Year 4 that show the blocked/or co-requisite courses with the Inclusive Classroom course, Case (B) (adapted from ZU 2015, p. 83).

The assessment that is included in the syllabus of the course Inclusion of People with Special Need-EDC 324 showed different approaches and activities to promote collaboration and inclusivity in pre-service teachers' assessment. Two types of assessments were allocated for group work (Appendix 15d). Descriptions of these two assessments follow.

First: Writing a report by a group: A group of 3-5 pre-service teachers are assigned a report on a scientific article/ book chapter (the information was expected to be used later for the case study assignment). Guidelines were given in order to complete the assignment, such as selecting a scientific article/ book chapter of any special need or disability category by the group, and studying and reporting what they learned. Finally, each group present and discuss their report in the form of a Power Point presentation (EDC 2016e, p. 90).

Second: Case study research project: The same group (from the previous assignment) continues in the second stage by conducting a case study research "on a person with disability residing in the UAE; describing their disability and as many aspects of their life as possible" (EDC 2016e, p. 93). Guidelines included selecting a case of a child with a disability who matches the case in the previous assignment's report. Then under the supervision of the course instructor, the pre- service teachers will be trained on writing a consent letter, interview questions and a questionnaire for the parents and finally writing and submitting a report about their case study (EDC 2016e).

Darling-Hammond and Snyder (2000, p. 523) argue that responding to the complexity of teaching because of curriculum expectations for the diverse learners in today's schools, in addition to "the desire to succeed at much more ambitious learning goals with a much more diverse student population" has created new challenges for teacher preparation programmes. Therefore, teachers need to develop teaching responses that can be effective under different circumstances. They further suggested authentic assessments in order to overcome such challenges. After examining the previous group work assignments, the researcher identified and connected them with what Darling-Hammond and Snyder have referred to as "authentic assessment" because both the case study and the report assignments comprised the same characteristics of authentic assessment which include:

> Opportunities for developing and examining teachers' thinking and actions in situations that are experience based and problem oriented and that include or simulate actual acts of teaching. Such acts of teaching include plans for and reflections on teaching and learning, as well as activities featuring direct interaction with students. (Darling-Hammond & Snyder 2000, p. 524).

4.7.2 Linking theory with practice: Methodology sequence & Assessment course roles in supporting inclusive education

In this section, the contribution of Educational Studies courses teachers with other courses (e.g. Principles of Assessment; Inclusive Classroom) in preparing pre-service teachers for inclusive classrooms.

4.7.2.1 Four levels of field experiences:

a. Educational Studies courses:

These include three sequenced courses which start with Educational Studies I , The Learner-EDC 350 in year 2 , followed by Educational Studies II, The Teacher/ or Instructional Strategies -EDC 351 in year 3. And in year four in the first semester, comes Educational

Studies III, Curriculum Design -EDC 450. Each course is divided into a theoretical part and a practicum part as presented below in section (c). The three courses are compulsory courses for all teaching majors in the COE. Figure (14) shows a summarized description of the Educational Studies and the Student Teaching Courses sequence.

Educational Studies I	• The two courses (EDC 350/350A) focus on how children learn and remember. Pre-service teachers will review learning theories, principles of learning and introduced to the ideas of individual difference. This course is a laboratory class and the Practicum will allow students to formally observe.
Educational Studies II	•The two courses (EDC 351/351A) focus on teaching in relation to learners and professional responsibilities, such as planning and assessment.This class is a laboratory class and requires students to engage in practice in schools.
Educational Studies III	•The two courses (EDC 450/450A) examine curriculum planning, implementation, and evaluation through the elementary grades including issues of scope sequence. On-campus course time is combined with extensive off-campus supervised experiences in schools.
Student Teaching	• Student Teaching Internship (EDC 490) is the fourth and final field experience Educational Studies sequence. The student teacher must attend and participate in all seminars, as well as successfully completing the field experience by assuming full responsibility for classroom teaching.

Figure 14. Summarised descriptions of the Educational Studies and the Student Teaching Courses sequence (EDC 2016b, EDC 2016c, EDC 2016d & EDC 2016G).

b. Practicum courses:

Field experiences courses are divided into four levels, all of which are the applied component of the Educational Studies sequence or methodology courses provided in the COE. "The experiences in the school setting increase in intensity and responsibility throughout the programme, culminating in a full-time Internship in school in the final semester" (EDC 2015a, p. 8).

Practicum and Internship Framework:

The Practicum and Internship Framework was based on Collins's (2006) and Collins, Brown, and Newman's (1989) Cognitive Apprenticeship framework. The term apprenticeship according to this model:

> Emphasized that cognitive apprenticeship was aimed primarily at teaching processes that experts use to handle complex tasks, [...] knowledge must be used in solving real-world problems. Conceptual knowledge and factual knowledge are learned by being used in a variety of contexts, encouraging both a deeper understanding of the meaning of the concepts and facts themselves, and a rich web of memorable associations between them and the problem solving contexts. (Collins 2006, p. 48).

And 'cognitive' "emphasizes that the focus is on cognitive skills and processes, rather than physical ones" (Collins 2006, p. 48). Moreover, Collins, Brown, and Newman (1987, 23) argue that the Cognitive Apprenticeship framework "provides a critical lens for evaluating the strengths and weaknesses of different learning environments and teaching methods. The COE follows the six teachings from this framework which includes:

1. Model: Learners observe expert
2. Coach: Learners receive expert guidance
3. Scaffold: Learners perform with support
4. Articulate: Learners explicate their knowledge
5. Reflect: Learners analyze their own performance
6. Explore: learners own and extend knowledge. (EDC 2017c).

Practicum and Internship framework was guided also by the work of Linda Darling Hammond's (2006) work and Charlotte Danielson's (2011) 22 components of professional practice (EDC 2017c).

4.7.2.2 Integrating assessment course content with other courses learning experiences:
> Principles of Assessment course:

This course is blocked with Education Studies III: The Curriculum EDC 450/450A, Classroom Management- EDC 321, Learning Technologies - EDC 460, and Inclusion Classroom EDC- 465 (Table 28). The pre-service teachers according to this plan engage in integrated assessments and embedded practice in a partner school classroom that allows them to integrate plans for assessment into the planning for learning, and implementation of learning experiences to develop confidence in working in the complex environment of the school and in managing a range of issues represented in these courses during teaching.

4.7.2.3 Alignment of the content of the Educational studies and other courses with the study's framework:

The following sections present the alignment of the content of the above types of courses with the main elements of the study's framework (Rodríguez 2012). It is worth noting that I will describe some chosen elements from Rodríguez (2012) that are most highlighted in the content. A comprehensive courses analysis is available in Appendices (15a-c).

4.7.2.4 Content on quality, equality and equity concepts:

Quality content was identified when the courses' syllabi was analysed. In this study one aspect of quality was related to how the pre-service teachers were prepared to help their students to encounter barriers to learning, the quality of the recourses (input) they use in classrooms, and what type of mentoring and supervision the teacher is guided by (UNESCO 2004, p. 36). The researcher's belief is that the following three learning outcomes from the course Student Teaching-EDC 490 manifest learning experiences for students characterized by quality. Below are the learning outcomes that the pre-service teachers will be able to achieve:

- Create and maintain a learning environment that supports all students learning.

- Demonstrate knowledge of subject matter and its relationship to student learning.

Courses	Learning outcomes	Content	Assessment
	Quality content		
	Learning outcomes	Content	Assessment
Educational Studies III	e.g. - Analyze issues related to standards, curriculum, and instruction trends in the UAE. - Analyze the philosophical beliefs held about curriculum, and the relationship of curriculum to the teaching/learning process. p.3	This course examines curriculum planning, implementation, and evaluation through the elementary grades including issues of scope sequence, and articulation. The main topics include the fundamentals of curriculum design in relation to decision-making processes involved in teaching, effective instructional planning and the characteristics of an effective teacher. p.1	e.g. Case Study: The purpose of this case study is to provide you with a broad profile of the learners and their classroom in the wider school context. Source: EDC (2016b)
	Equity & Equality content		
	Learning outcomes	Content	Assessment
Educational Studies I	- Name and discuss the major components of classroom planning, including management and instruction and how these may be modified to address individual differences and discuss the theories that underpin the strategies used by teachers. - Exhibit a rich knowledge of pedagogy, technology and information resources to provide relevant and meaningful learning experiences for all learners.	e.g. Week 12 (content) - Motivational and engagement strategies - Individual learner features, individual differences, diversity in learning styles and interest. - Miscellaneous learning theories and multiple intelligence, Gardner, 21st century skills. Visit 8 (practicum): Classroom management.	- Assessment of student learning: Micro-Teaching Assignment: group work/Team teaching Description: Students will prepare a brief lesson based on learning theories, and principles and present it to the class. Source: EDC (2016c)

Table 29. Examples on quality, equity & equality elements content from the Educational Studies courses in Programme (B).

- Use technology to support teaching, learning and classroom management (EDC 2016g, p.3). Another example is presented in Table (29).

On the other hand, equity and equality concepts were infused in several content areas in the courses of Educational Studies. Training pre-service teachers to provide equal learning opportunities to all students (to be fair), and at the same time, each student receives his or her specific educational need. For example, in Educational Studies II-EDC 351 course, there were two important outcomes pre-service teachers were expected to achieve in order to promote fairness; it states: Candidates will be able to:
-"Facilitate students' cooperation with each other in classroom activities.
- Compare and contrast instructional strategies and their application in an inclusive, learner-centred environment" (EDC 2016d, p. 128). Other examples are included in Table (29).

All of the courses in this category included content and more than one learning outcome that were related to quality and equity (see appendices 16a-b). These goals from the researcher's point of view can have profound impact on raising the pre-service teachers' awareness about diversity in the classroom and become more responsive to it (Valentín 2006). Darling -Hammond (2008, p. 11) considers critical elements such as " the quality of teachers and teaching, especially teachers' abilities to teach content to diverse students in ways that carefully attend to the learning process" are what is needed to build a 21st century education system and what makes a difference in students achievements.

4.7.2.5 Content on collaborative work:
The first aspect that shows collaboration work exists in the periods of field experience. In these periods different faculty members and mentor teachers collaborate closely with the pre-service teachers to scaffold their development in the management of the complex activities of the classroom and other functions. The pre-service during these periods are assigned different tasks such as "planning [...] assessment of student needs, data driven decision making, and reflection on the improvement of practice to support student learning and well-being" (EDC 2017a, p. 8).

Second aspect of collaboration content was found in various goals or outcomes and assessment in the courses syllabi; following are some examples that show this element. Different outcomes were assigned for collaboration work. The first example is from the course Principles of Assessment- EDC 353. As mentioned in the previous introductory parts, in the Assessment course, assessment strategies were integrated into planning for learning

and the pre-service teachers had the opportunity to practice managing different issues from different courses in the complex environment of the school during Practicum III- EDC 450A (EDC 2016f). In the Principles of Assessment course, two outcomes aligned with content and assessment tools that train pre-service teachers to practice collaboration; the outcomes read:

> - Analyze the nature, context and the agent implementing assessment in the classroom and in the school system.
> - Construct and evaluate assessment instruments, which take into account the range of abilities with teaching strategies and objectives in subject areas. (EDC 2016f, pp.3-4).

The assessment consisted of a "collaborative inquiry project" that requires each group of colleagues to collaborate with each other to "design a whole-class behaviour management intervention to improve student learning in one content area" (EDC 2016f, p. 15). This inquiry is considered an action research project that expected to guide the pre-service teachers when designing an intervention in their future practice. Such practices that link theoretical knowledge with practical and research work have tremendous impact on pre-service future work. For example, Hine (2013, p. 151) argues that "undertaking a unit in action research methodology provides those professionals working in the education system with a systematic, reflective approach to address areas of need within their respective domains".

4.7.2.6 Content on cross-categorical/multi-tiered formation:

This element implies the presence of global and common vision on diversity, values, knowledge (e.g. learning theories; inclusive education) that support systems and legal framework (Rodríguez 2012). The Early Childhood Programme has a global and common vision about multicultural education (Nieto 2010) and Theory of Change (Fullan 2007). Although it is an inclusive vision, its inclusivity is not about children with disabilities. However, diversity was highlighted in many courses and accommodating children with SEN was present in many outcomes and assessment plans. And therefore, pre-service teachers were expected to receive multi-tiered content from their preparation programme to work in inclusive contexts.

For example, from one perspective, two courses were related to teaching students with special needs or inclusive education. In which "people with special needs are studied within the context of inclusiveness in family, community, workforce and schooling, Islamic and the other cultures" (EDC 2016e, p. 79). Moreover, in these courses pre-service teachers explore the range of learning needs found in their practicum experiences and work "[...] with mentor

teachers and faculty supervisors to [...] support students who require special instructional support" (EDC 2015c, p.1).

Another perspective was from the Education studies which contributed with several outcomes that supported the common vision of the programme. For example, the Educational Studies I content included knowledge about a range of learning theories from research on learning, how the brain works, the interface of teaching, learning, observation and design on a classroom environment, in addition to the inclusion of "major components of classroom planning, including management and instruction and how these may be modified to address individual differences" (EDC 2016c, p. 101- 2).

4.7.2.7 Contextual professional practice & counselling and mentoring elements:

In this section I chose to put the contextual practice, counselling and mentoring elements of Rodríguez (2012) Model together because the findings in the syllabi documents that indicated these elements were associated with one another. Therefore, I found separating them might influence the concluded results. According to Rodríguez (2012, p.107-9), the contextual preparation consists of three main steps:
(1) Re-signification: Personal scholarship experience.
(2) Approaching the schools by conducting diverse activities, observations and practices guided in different educational contexts.
(3) Internship under the tutelage of a mentor: Professional practice in real environments.

The example presented here is from the course Educational Studies III, the Curriculum- EDC 450/A. This course "examines curriculum planning, implementation, and evaluation". Pre-service teacher tasks included exploring the characteristics of an effective teacher, investigating selected international curricula in comparison with curricular design in the UAE (EDC 2016b, p 1). The assessment and practicum III in this course capture the three steps of contextual professional practice & counselling and mentoring elements; Table (30) illustrates this.

4.7.3 Specialisation & general courses support for inclusive education

4.7.3.1 Specialisation courses:
The researcher obtained one syllabus of the specialisation courses, namely, the Early Childhood Mathematics and Science- EDC 352 course. The analysis of this course's content resulted in two findings: content on quality concept, and content on collaborative work.

Following is an example about content on quality; other example is available in Appendix (16e).

Content on quality:

This course aimed "to build on candidate's knowledge of child cognitive development in the area of mathematics and science instruction" (EDC 2016a, p. 1). Some outcomes indicated preparing pre-service teachers on quality content. For example, these outcomes state that pre-service teachers will be able to:

Aspects	Example from Educational Studies III course	Steps of the contextual preparation
Assessment	Case study: The purpose of this case study is to provide you with a broad profile of the learners and their classroom in the wider school context. Pre-service gather information and evidence about the learners in the classroom and school environment including their different achievements, needs, interests, backgrounds and school culture. This will assist students in better understanding how to plan, teach/support and assess suitable learning experiences. Portfolio: Professional File-Electronic Copies of all forms are required: Disposition Assessment, Formal Observation Records,& Summative Assessment Form. Thematic Unit Plan: Develop lesson plans, which should be linked by unit learning objectives and a unit of study (EDC 2016b, pp. 12-3).	(1) re-signification: personal scholarship experience. 2) Approaching the schools by doing diverse activities: Observations and practices guided in different educational context
Practicum	Practicum III: Is a minimum of 7 weeks or 280hours. Practicum III continues a programme of supervised observation and interaction in a school setting and provides opportunities for students to take increasing responsibility in the classroom through observation of mentors, children, and school communities, and engage in planning, teaching, and assessment in small group and whole class contexts. Students will also critically reflect on their teaching practice.(p. 1) Examples of some tasks: - Complete the first written teaching observations forms for teacher candidates after each formal lesson observation. - Conference with the teacher candidates to give oral feedback on each lesson observed. -Provide timely written feedback by email. (EDC 2016b, p.8)	(3) Internship under the tutelage of a mentor: Professional practice in real environment. Rodríguez (2012, p.107-9)

Table 30. An example on the element of contextual preparation for the pre-service teachers in Programme (B).

- Demonstrate knowledge of math and science content required at preschool through elementary,
- Identify and evaluate benchmark skills in numeracy, products and process skills associated with the science and math curricula
-Identify techniques for engaging children with numeracy and discovery. (EDC 2016a, pp. 2-3).

These outcomes were aligned with different content such as integrating technological tools and resources, and "exploration of content standards in the UAE and other countries from preschool to kindergarten", in addition to the development of learning materials for teaching science and math at the elementary level (EDC 2016a, pp. 3-4).

The UNESCO (2004b, 36) report argues that "goals and standards, curricula and teacher policies set the enabling conditions within which educational practice occurs. These contextual circumstances have an important potential influence upon education quality". Moreover, teaching and learning quality is strongly influenced by the resources (input) available for the learner (see Appendix 10).

4.7.3.2 General courses:

The content of general courses in the Early Childhood Programme was not available to the researcher, and most of them were from other colleges or programmes. However, summarized information about these courses was available in the university's catalogue. Following are some examples:

The first example is the Emirates Studies course. This course is with high social and community content. It:

> Aims at fostering citizenship and the appreciation of the national achievement of U.A.E through introducing the [teachers] to the major social aspects of U.A.E. society, as well as its values and heritage (ZU 2015, p.173).

The course offers studies on a variety of topics such as U.A.E history, internal and external political aspects, social development and services provided by the government, and women empowerment and their role in community. A second example is Parents as Educators- EDC 316 course which "explores developmental issues and parenting practices of families in the UAE, and around the world. [And] the role of parents as first educators of their children" (ZU 2015, p.175).

The final example is a course with content that supports the quality of teaching. This course is titled Classroom Management-EDC321, which focuses "on issues of proactive, responsive, and supportive methods of behaviour management in the classroom. Pre-service teachers were expected to "develop effective rules and procedures to minimize student misbehaviour and learn to reinforce positive behaviours" (ZU 2015, p. 175).

4.8 Faculty opinions of the programme contribution to inclusive education- Case (B)

Three faculty members were interviewed in Programme (B). Pseudonyms were used to refer to them. The first interview was with the Head of the Early Childhood department (Pre K-grade 3), Dr. Jane. The second interview was with Dr.Wafa, an instructor specialised in special education. The third instructor was Dr. Farah from leadership specialisation. One important note was that all of those and other instructors in the COE exchanged the roles in teaching the core modules, especially methodology courses (e.g. Education Studies courses I, II, & III and practicum) which were compulsory for all the students in the college.

The analysis for the interviews resulted in several themes under the aspect of 'Faculty opinions'. Table (31) shows the findings and discussion organized by themes:

Aspect	Themes	Subthemes

Faculty opinions- Case (B)	Conception of inclusion	• Values guiding the programme & inclusive thinking:
		  • Global awareness.
		  • Cultural responsiveness.
		  • Ethics.
		  • Logical reasoning.
		  • Fair claims about students' needs.
		• Commitment to the values of equality and equity in teaching & learning:
		  • Fairness for students' benefit.
		  • Being equitable.
		  • All students have an opportunity to learn
		  • To consider the needs of all students and not just some students.
		  • Included in learning process and not physically only.
		  • Supporting students with range of abilities.

	How the programme was preparing pre-service teachers for inclusive education	• Uniqueness of the programme:
		  • The content of the curriculum
		  • Instructors' personal contribution in teaching.
		  • Diverse faculty with diverse expertise.
		• Theory and practice interconnected.

	Position of faculty regarding inclusion	• Shared vision of inclusive education. • Inclusion is about 'how to include all'. • Special education needs do not mean looking for deficits. • Special education and inclusive education are for all students. • Inclusive education is based on the value of fairness.

Table 31. Themes and sub-themes (the Index) of the faculty views in Case (B).

4.8.1 Conception of inclusion

4.8.1.1 Values guiding the programme & inclusive thinking:

The comments of the faculty members who were interviewed showed a strong commitment toward the principles of equity and equality in education. Global awareness and culture responsiveness were also some of the values that the faculty worked to infuse in their courses. For example, Dr. Jane, the Head of Programme (B), when asked about the courses that she was teaching at the time of the study gave this answer:

> Before I speak we do have a global awareness ZULOs [The University Learning Outcomes] which we measure with the programme assessment to see how the students are improving in their global awareness. That can be many topics of diverse global awareness. Also, as a college, cultural responsiveness is one of our MALOs [Major Learning Outcomes] the learning outcomes we expect in general through the college. (Appendix 16a, lines: 28-34)

She mentioned also two main values of ethics and logical reasoning, and worked to incorporate these in her teachings in order to promote inclusive thinking, and she encouraged her students (the pre-service teachers) to use them. The first value was "to make fair claims", and the second was supporting the courses content with "examining cases, a variety of cases". She explained:

> So if I'm going to make a fair claim about anything I can't speak in it, about it in such an absolute way; I have to leave room to learn. For example, this student, if we want to make any assumptions about their needs, we can say they *may* need this, it *could* help them, in many cases it has been proven to be *more* helpful than this. So we speak in a scientific way of making fair claims rather than overgeneralizations like labelling students, for example we're over generalizing that this student is "autistic child" rather than "child with autism and many other characteristics", you know. So I think making fair claims is very critical and that can be done in any class and I'm definitely sensitive to it in all of my courses.[...] . Also, in every class, they're examining cases, a variety of cases perhaps, through their practical experience in the practicum, or a case I give them in class, they're going to have discussions before they just say "I know what the problem is here," we always have to consider many factors that could be influencing the life of this child. (Appendix 16a, lines: 37-55).

4.8.1.2 Commitment to the values of equality and equity/fairness in teaching & learning:

Further, Dr. Jane gave a clear understanding of the meaning of inclusive education to her. She states:

> Inclusive education is not excluding others based on limited criteria. Inclusive education in my opinion is being equitable, not always equal, not always treating students according to a quality, ideas of a quality, because that might mean every student gets the same in that, but that might not be fair because … And then the exciting thing now is that we have this term "equity" that talks about when someone is getting what they need but it is beyond equality, you know, equality is just equal parts but some children don't need- what is equal won't work them, they need more of something or less of something else you know. [...] Yeah so that's when we talk about equity you know, fairness for their benefit considering each child's needs. (Appendix 16a, lines: 119-33).

Dr. Farah, gave her conceptualisation of inclusive education from two perspectives. Dr. Farah was teaching Educational Studies III course at the time of the study, and taught Principles of Assessment course the semester before that. The first perspective was general understanding; she said:

> In general my understanding about inclusive education is that inclusive education means that all students have an opportunity to learn. All students are, regardless of their talent, their challenges, their gifts, their abilities, are included in the classroom and they are included in the learning process. (Appendix 16c, lines: 26-30).

She explained also how to see inclusive education from the perspective of an educator, emphasizing the following meanings:

> Inclusive education to me means that you are supporting students that have a range of abilities when it comes to learning, when it comes to cognition, and this means that we identify the gifts, the strengths, the weaknesses, the abilities, and the capabilities of our students. This is what inclusive education means to me. It means also that we support our students who are learning at a mixed- learning at different levels, that are in mixed abilities and that we consider the needs of all students and not just some students. This is inclusive education. (Appendix 16c, lines: 31-9).

The views of the faculty in this programme are captured in different international frameworks such as Dakar framework (UNESC 2000), and literature in inclusive education. For example, Murungi (2015, p. 3166) argues that "as a matter of principle education must neither exclude nor discriminate". This opinion is also asserted by other authors such as Mel Ainscow who finds that inclusive education aims to "eliminate social exclusion that is a consequence of attitudes and responses to diversity in race, social class, ethnicity, religion, gender and ability" (Ainscow 2005, p. 109).

The researcher believes that such opinions and considerations by faculty members have inevitable empowering impact on the way those instructors prepare their pre-service teachers to work in inclusive contexts and the dispositions regarding inclusion that they may include in their teachings, and the consequent impact on the contribution of the programme to preparing pre-service teachers for inclusion.

4.8.2 Contribution of the Early Childhood Programme in supporting inclusive education

4.8.2.1 Uniqueness of the programme:

The three faculty members attributed the uniqueness of their programme in its content and organization of field experiences courses to the way pre-service teachers were prepared for diversity in the classrooms (details in Appendices 16a-c). The contribution of the programme

in preparing the pre-service teachers can be referred to two sources from the researcher's point of view, and according to what was concluded from faculty statements. The first source was the content of the curriculum and the second was the instructors' personal contribution through their teaching methods.

The instructors showed through their comments the uniqueness of their programme compared with other programmes around the world. Not only did they describe the courses' content, but also explained how it contributed to their pre-service preparation for diverse learners. The first example comes from the Head of Early Childhood department. When she was asked about how the pre-service teachers were trained during the practicum courses, she gave me detailed information, to some extent, about Practicum courses in general and Practicum III. During the explanation of the courses content she mentioned also some of the teaching strategies they applied to instruct the pre-service teachers, I will return to this point later in this section. She ended her answer by describing how they teach their pre-service teachers by showing them the strategy and then training them to do it. I am presenting the dialogue between me and her in Table (32). At the same time I represent also this dialogue in a diagram (Figure15) that shows the process of preparing teachers for diverse classroom as was described by her.

One of the collaboration and teaching strategies mentioned by Dr. Jane, the Head of the Early Childhood department, was the collective efforts between faculty members in supporting the teacher preparation process. They invested in their diverse background expertise to help their pre- service teachers to gain rich teaching experiences from different perspectives and views. When asked about the way courses were designed and taught, Dr. Jane commented:

> [...] we have enough faculty that have this expertise that help us keep on track. For example, if another program is, someone is teaching special needs, [...] but I have a strategy for early childhood, that they might be just teaching the strategy for the older children, and I think "oh please tell the students this can be modified this way for early childhood", so by having a very diverse faculty with diverse expertise, we're benefitting each other. [...]. Some universities there might be one faculty member with background in special needs, but here, just in this hallway we already have two and there's more in Abu Dhabi, so, and when we get together as a group it's really helpful to have their feedback. (Appendix 16a, lines: 565-79).

Dr. J: [...] I **can tell you a little bit about the program in general**, for example, they have three practicum experiences as you've seen, this gives them an idea about many schools, so they get to observe small snippets in many schools for the first time, then they come to practicum two and they get to try some instructional strategies but it's still limited experience, it's not too in-depth because they're just starting so there are many teaching experiences, maybe reading a book aloud to the children, these small experiences … R: And they are going for how many times? Dr. J: For this class [practicum I], it is- I'm not sure if it's 4 weeks…actually it might be 6 weeks, 2 days a week, but I'd have to double check, I've never taught this class R: Yes. I want some information about the practicum and what experiences they are dealing with. Dr. J: I **can tell you a lot about this one**. This is for 24 days… R: Please tell the name of the … Dr. J: OK sure, so for EDC450A and 450 they go out in the classroom for 24 days, so 6 weeks times 4 days per week or 5 weeks times all days per week, depends on what the school availability looks like.	**Theory & practice**
[Dr. J. continues] They complete the 24 days out in the school, at the same time they're receiving **support from all of these faculty professors.** R: In year 4? Dr. J: Yeah. R: In year 4 courses? Dr. J: Yeah. So we've given them the course in the whole beginning of the semester, then they go to practicum while they're in the school, like this morning I was just in Al-Ittihad [school], I saw two lessons, **so since I teach classroom management and assessment in the content areas, I am also seeing them in the school, giving** them advice about assessing, giving them advice about classroom management. R: Yeah. This is very important. How they assess the students at schools, each one depending on his or her ability.	**Teaching Strategies**
Dr. J: Yeah, so they need to know the principles of assessment, how to move through the whole assessment cycle, collecting, finding what they are assessing, collecting data in some way, using an instrument or some technique, then analysing that data and finally making a decision or forming a final evaluation for a plan to move forward. So I run them, I teach them the assessment cycle, then we go through many different instruments [continues till line: 325] Dr. J: Yeah, it does, all these topics cross over because you have teaching students with special needs	**Apprenticeship Model**

Table 32. An excerpt from the interview with the Head of the Early Childhood department regarding the contribution of the programme in preparing pre-service teachers for diversity in the classroom (Appendix 16a, lines: 273- 326).
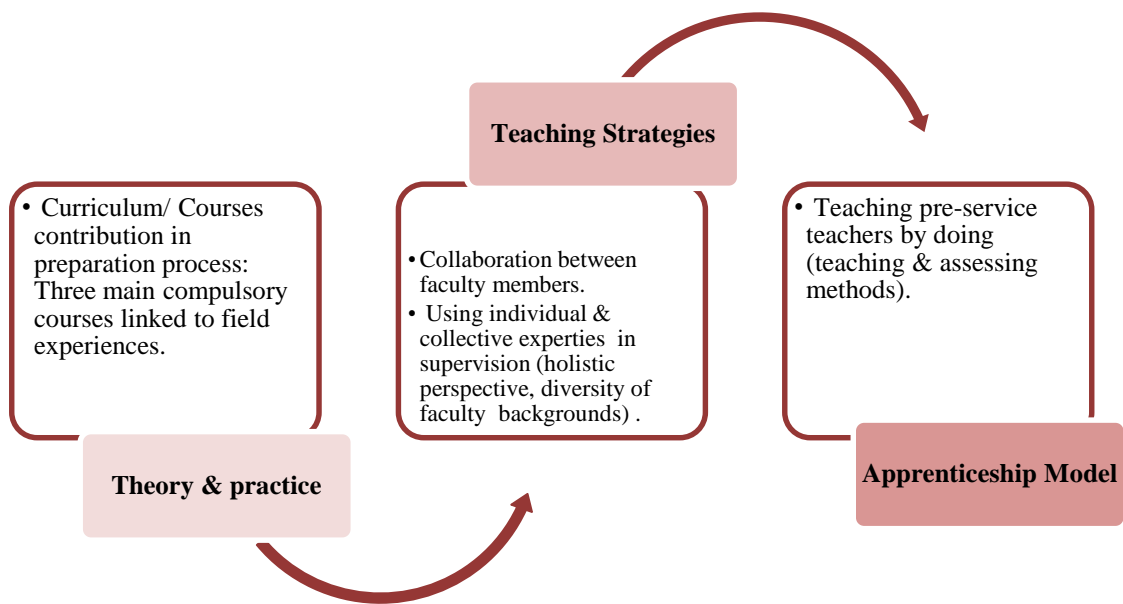
Figure 15. The process of the contribution of the Early Childhood (PreK-grade3) Programme to the preparation of pre-service teachers for diversity in the classroom.

4.8.2.2 Theory and practice interconnected:

The second example on the programme's contribution on preparing pre-service teachers for inclusive classrooms was the opinion of Dr. Wafa from the special education specialisation. Dr. Wafa was teaching three courses at the time of this research; the first one was the Inclusion of People with Special Needs- EDC 324 course and the second one was Educational Studies I- The learner EDC 350, practicum I -350A, and the internship or Student Teaching-EDC (this course was shared with other faculty). In the following paragraph she was giving her opinion about how practicum courses were contributing in preparing teachers for inclusion. She said:

> Dr. W: The Courses that I'm teaching at the moment: The first one is called EDC324 which is inclusion of people with special needs. [...] It is an elective course but our students have to take it, and it prepares them for understanding concepts and ideas and knowledge. And also it's a kind of introduction of the teaching. (Appendix 16b, lines: 10-27).

In another part she added this comment about the practicum courses:

> Dr. W: The courses [are] giving them the foundation of teaching. I think a::a I believe it is strong [the contribution] especially that it is divided in four semesters. I was working in another university before I came here, we were giving them, we only give practicum in last semester. (Appendix 16b, lines: 237-43)

Through her description of the content of the course Educational Studies- The learner- EDC 350A, which she was teaching, one can draw some conclusions about the contribution of this programme in the preparation process. She described the course by saying:

> In [..] the first semester they start their practicum which called practicum (I). They will take three hours of lessons, lectures which is EDC 350, and practicum (I) EDC 350A is counted as one credit hour, but they go to school visits for about three to four hours. In practicum (I) students only observe, we have observation tasks and they can conduct some teaching activities and micro-teaching at the end of the semester. (Appendix 16b, lines: 36-42).

Further she added:

> So, what's I'm doing with my students now is: The first four weeks we don't start school visits or any observation, it's all about theories. So we have lots inputs in various theories, learning theories, it is important that they know about the learner how the brain works and how students could learn and how memory works etc. And then we start going to the field for visits, there is tailored task, observation tasks. So every week we are looking for something for instance last week we went to a school of special needs, rehabilitation centre. (Appendix 16b, lines: 52-60).

The third view was presented by Dr. Farah, from the leadership specialisation. She described one of her recent experiences with her pre-service teachers in the field. These real life experiences were expected to enrich teacher candidates and contribute in giving them real life scenarios to overcome challenges regarding teaching in inclusive classroom. She gave a profound answer to an inquiry about the pre-service teachers, if they were working collaboratively or individually in the practicum, showing the programme and her personal contribution in preparing the pre-service teachers. Her answer is included in Box (5).

One standing conclusion can be derived from what is cited above from the interviews. This conclusion is that the theory and practice were connected through different courses. As Dr. Wafa said, the course (Educational Studies I) included studying theories followed by school visits. The pre-service teachers were expected to apply what was learnt to observations and micro-teaching tasks. Connecting theoretical content with practice continues throughout the programme in most courses. In addition, all of what was described by these two instructors that show how their teacher candidates were prepared was in line with the international literature about training general teachers for inclusion. For example, Hollenweger, Pantić and Florian (2015, p.18) stressed on the importance of "positive attitudes and beliefs, necessary skills, knowledge and competences" in preparing teachers for inclusion, and further added: "However, even more important is how they play out in practice".

> [...]
> Dr. F: With support, with scaffolding…
> R: With the instructor?
> Dr. F: Yeah, and the thing about it is like for example in practicum two and practicum three, students have the opportunity to meet the SENCO [special education needs coordinator], they have an opportunity to meet and work with SEN teachers and LSA [!] support specialists. Right now, in practicum three, we just got through doing some work with identifying some students that have special education needs. So some of the students that were identified were gifted, some of them had other needs that needed to be met as well, some of the students—the idea here is that we don't go to a school and we look at deficits, we go to look at abilities of our students. And so this is I think is the big piece that is really missing we tend to go into special education with these glasses if I can use an analogy a metaphor we go with these tinted glasses that don't allow us to see the real, the full picture, the big picture, and we go in with the mindset that special education means that a child has deficits, but that's not the truth of the matter. The truth of the matter is that special education is looking at educating children with needs, and we know that children have different needs, and we know that children don't all learn the same. So when you think about inclusive education you have to also not wear those glasses those tinted glasses, you have to be willing to look and see and expand your mind and look at how our meeting the needs of all children, so that no child is left behind, every child has an opportunity to excel, to expand, to grow, to develop, to learn, and this is ultimately what inclusive education is about. (Appendix 16c, lines: 126-52).

Box 5. An excerpt from Dr. Farah interview showing some learning experiences that programme (B) contributed in the teacher preparation process for inclusion.

4.8.3 Position of faculty regarding inclusion

As has been shown in the comments of the three faculty members, a clear and an agreed vision and understanding of inclusive education was present strongly. The faculty believed in the rights of including students with disabilities in general classroom and inclusive education was seen as a responsibility of all of the stakeholders. For example, Dr. Farah, who is specialized in leadership studies, commented on her way of seeing inclusion by stating:

> I would say that unfortunately I think that people have a misconception about inclusive education. When they think about inclusive education they only think about special education and when they think about special education they only think about students with disabilities. But special education and inclusive education includes all students. There are students who have special educational needs that are gifted and talented but their needs have not been identified correctly. And when we think about the inclusive classroom we don't necessarily think about the idea of including all. When I think about inclusive I think how can I include all. This is the idea of inclusive. If we don't have inclusive, we have exclusive and exclusive means you have inequity in the class. (Appendix 16c, lines: 47-59).

She expanded also in her view, as we read in Box (5), by confirming that special education needs do not mean going to classroom with the limited mindset of looking for deficits. But on the contrary, teachers must go to their classrooms with open mind of looking to the way to meet the needs of all children so no one left behind.

Dr. Jane gave also her understanding of inclusive education as we discussed in section (4.8.1.2). Her understanding was based on the value of fairness and the consideration of the child's benefit at the first place. And this may seem the child did not get equal part as the others, but some children don't need- what is equal won't work them, they need more of something or less of something else, she commented (Appendix 16a).

To conclude, the researcher through this rich description triangulated all the faculty statements which affirmed each other. And triangulated also these statements with the information from the syllabi documents and were matching each other. Faculty had a shared vision about inclusive education and collaborated to prepare the pre-service teachers on the values of fairness, equality and global awareness. Another important point the instructor's description of how they train their teachers by showing them how strategies play in real life experience and then pre-service teachers try these methods for themselves. This finding confirmed that the Apprenticeship Model was used in training their candidates for the teaching profession as described in the programme documents (EDC 2017c). From the researcher point of view, the views of faculty members about their shared position regarding inclusion and teaching students with disabilities in general classrooms are expected to result in an alignment of all curriculum components with this unanimous vision. According to the European Agency for Special Needs and Inclusive Education report (2015, p. 49) "an agreed vision and, importantly, underpinning values are the key to ensuring the alignment of policies that impact on the organisation of provision, curriculum, assessment and pedagogy and systems of accountability".

4.9 Pre-service teachers' opinions & experiences about inclusive education- Case (B)

The six pre-service teachers who participated in the focus group were during their first semester in the fourth year (7th semester), and in the third practicum course EDC 450A. Practicum III enables them to teach in a general school for a minimum of 7 weeks or 280 hours. It is also worth noting that four field experiences (practicum) were included in this programme as it was presented above in the courses content analysis section. This means that at the time this focus group was held, the pre-service teachers had finished the first and the second courses of practicum (EDC 350A: Practicum I- EDC 351A: Practicum II) with 100 hours of field experience.

Different themes emerged from the analysis of the focus group interview with the six pre-service teachers about the programme's contribution and impact on their preparation to work in inclusive classrooms. Themes and under-themes (or the Index) resulted from the analysis of the focus group are presented in Table (33).

Aspect	Themes	Subthemes
Pre-service teachers opinions & experiences About inclusive education- Case (B)	• Pre-service understanding of inclusive education	• Enhance students with SEN opportunities of learning to enhance their inclusion in the society. • Schools with mixed students (with & without disabilities), • School includes all students. • To provide student needs in the classroom. • Preparedness to cater for students with SEN

	• Pre-service experiences about teaching students with disabilities	• The diversity in general classrooms
		  • All schools were including students with disabilities:
		  • General classrooms include diverse students.
		  • Pre-service teachers teaching students with different disabilities
		
		• Accommodations for students with disabilities
		  • Collaboration with mentor teachers to modify content in order to initiate communication and learning.
		  • The use of an extra activity/interactive tools
		  • Use repetition.
		  • Extended time.
		
		• Challenges faced in inclusive classrooms:
		  • Negative school culture toward students with disabilities.

	• Opinions about the impact of the teacher programme on their preparation for inclusion	• Knowledge gains, • Enhancing teaching strategies and classroom management. • Contact with students with disabilities. • promoting positive values: • like empathy, equality in learning opportunities, connecting the values with Islam

Table 33. Themes & sub-themes (the Index) resulted from the analysis of the focus group with the Early Childhood pre-service teachers in Case (B).

The following sections present and discuss these findings:

4.9.1 Pre-service understanding of inclusive education

Pre-service teachers presented an understanding of inclusive education in which they added to each other's statement (Appendix 17, lines: 22-51). For example, Teacher 5 explained her understanding by stating:

I think it's a programme that include students with special needs featuring best teaching practices to enhance their level of learning and to give them a chance to be included in our society.

A second teacher pointed out that:

Teacher 3: Students with special needs mixed with students who don't have disabilities. Students with special needs, in this time where schools became mixed and include all students those with and without. They all are studying together in public and private schools.

On the other hand, Teacher 4 said:

It's important to provide all that the student needs in the classroom, if they include him/or her in this class and he has a special need they have to take into consideration that, and specific things should be there

Teacher 2 stated a profound understanding by stressing on the importance of communication between all students to give the opportunity to understand each other, she said:

It's also provide the other students a chance to understand how to deal with students with special needs, as it is a mixed experience between [students with] special needs and the other students.

At the end teacher 6 added to her colleagues that inclusive also meant to her the preparedness of teachers by receiving special training to cater for students with SEN.

The pre-service group's conceptions of inclusive education tended to view it more as a membership of all students to the general classroom, where educational support is available for all in the classroom (Kurth & Foley 2014). The researcher noticed that their conceptions of inclusive education were complementing each other and not contradicting. Moreover, pre-service teachers pointed out to a number of important elements in inclusive education that help in embodying the values of equity, respect, community (Ainscow et al. 2006), "addressing and responding to the diversity of needs of all learners" (UNESCO 2005, p. 13). For example, they mentioned that inclusive education requires trained teachers, mixed classrooms of all students who should be provided with all they need, in order to improve their learning and therefore give them a chance to be included in our society (Box 6).

Teacher 2: It's also provide the other students a chance to understand how to deal with students with special needs, as it is a mixed experience between special needs and the other students.

Teacher 3: Students with special needs mixed with students who don't have disabilities. Students with special needs in this time where schools became mixed and include all students those with and without. They all are studying together in public and private schools.

teacher 4: It's important to provide all that the student needs in the classroom, if they include him/or her in this class and he has a special need they have to take into consideration that, and specific things should be there.

Teacher 5: I think it's a programme that include students with special needs featuring best teaching practices to enhance their level of learning and to give them a chance to be included in our society.

Teacher 6: it is basically the same idea we have shared, also by providing special teacher, give teachers special training so that she can know how to deal with special need student.

Box 6. Pre-service teachers in Programme (B) conceptions of inclusive education.

4.9.2 Pre-service experiences about teaching students with disabilities

4.9.2.1 The diversity in general classrooms:

Through their field experiences in three practicum courses working in inclusive classrooms, pre-service teachers reported working with students with different abilities and needs. For example, when she was asked if she taught students with SEN, Teacher 3 stated that she was teaching students with Down Syndrome and intellectual disability. A second pre-service teacher pointed out that she had a student with hearing impairment, and another student with autism in her classroom. Diverse needs also were mentioned by the pre-service teachers such as physical disability, hyperactivity disorder (ADHD), giftedness and other needs (Appendix 17, lines: 80-104). This confirms what was found in Case (A) and other studies in the UAE educational context; namely, that the schools are becoming more diverse and the new policies has encouraged inclusion in mainstream schools (Anati 2012; Bradshaw 2009; Dukmak 2013; Gaad 2015; Gaad & Khan 2007; Saqr & Tennant 2016).

4.9.2.2 Pre-service teachers' accommodations for students with disabilities:

The pre-service teachers used different modification strategies to cater for their students' educational needs. They applied some creative strategies to involve their students who struggled in learning, and collaborated with mentor teachers to modify content in order to initiate communication and learning. Teacher 1 mentioned using several modified activities, following is one example:

> Teacher 1: a:::a I have a student as I said who doesn't speak [...] So the mentor teacher told me to involve this child in my activities and lesson plan. So I was thinking how can I involve this

student because he doesn't even reply, if I ask him he can't speak.[...] they told us he is shy and he doesn't want to speak even.
Researcher: In the house, does he speak?
Teacher 1: Yes, but the problem [is] in the school only. So I had a lesson last week we have like an activity, they were measuring (..) one of the students lays down and they have to measure [him] with cubes. So I involved this student to put the cubes and count them, then he cannot speak so write the numbers on the white board. [...] He participated and mentor teacher gave me a good like a::a::note that the student started to raise his hand. (Appendix 17, lines: 161-80).

A second example shows a significant experience of a pre-service teacher who taught different students with exceptionalities in her classroom. She uses different strategies to accommodate her students, and at the same time acknowledged her challenges, in Box (7) an excerpt of a dialogue between this teacher, the researcher and another pre-service teacher in the group.

This passage from the interview showed how the pre-service modified her instruction. The teacher indicated that she used different strategies to accommodate a gifted student. For example, she used an extra activity and employed the use of an interactive tool like an educational website. Also, she used a repetitive instruction for another student (or drilled the student in lesson activities) who needed more time to achieve the intended outcome. It is worth noting that the pre-service teachers at the time of the study were in the first semester of their fourth year, and still studying a number of courses that were essential to develop their teaching studies. These courses are Curriculum Design-EDC 450), the Inclusive Classroom - EDC 465, Classroom Management - EDC 321 and Principles of Assessment -EDC 353 (See Table 23). It is expected that these courses have the potential to refine their experiences more and to support the pre-service teachers with valuable tools such as behaviour management and assessment strategies to accommodate diverse learners.

The increasing diversity that was witnessed in the classrooms by the pre-service teachers during the field experiences made it imperative for them to overcome the challenges of meeting the learners' needs by making the suitable accommodations (Hutchinson & Martin 1999). The two examples that were presented indicated that the pre-service teachers used what they learnt about inclusive teaching in their courses (e.g. differentiation and collaboration with other teachers) in the classrooms during the practicum. Their experiences showed also how they developed alternative approaches when they were faced with challenging situation when teaching students with SEN. At the same time these findings were a general indication on applying the knowledge, but we cannot ascertain to what extent

they carried out their knowledge about inclusive strategies into practice without further investigation.

> R: Okay, what type of special needs you saw and dealt with?
> Teacher 5: I have to deal with ADHD student and [a] gifted student, and recently I'm dealing with student who is [a] slower learner, and the most thing I'm doing is repeating everything.
> R: Yes, you mean [the kind of] differentiation or modification that you are using with him is 'repeating'
> Teacher 5: Repeating everything
> R: And for students with other disabilities, what modifications you did in the classroom environment, in lesson plan can you give examples?
> Teacher 5: For the student with ADHD I couldn't deal with her, because amm::amm I couldn't really control her or like like implement my instruction on her, so
> R: Yes, why?
> Teacher 5: I don't, I feel afraid if I did something maybe she will reject or maybe she will react like.. negatively in the classroom
> R: You don't have mentors in the class
> Teacher 5: We have mentor, but like they give us chance to deal with them. But I hesitated I don't know why?
> R: Yeah , yeah
> Teacher 5: And also the same classroom I had [a] gifted student, she was masha Allah very great student. I tried to..like.. apply some strategy with her but she finished everything quickly
> R: What strategies? I want detailed examples!
> Teacher 5: I gave her for example they had like to complete a worksheet, she finished quickly then I gave her a challenge question and she finished. Then I told her play with the a::a website called 'starfall' she finished the game and she is like sit.. like..[saying] what next?
> R: What do you think that she..when you face next time a gifted student what should [didn't complete]
> Teacher 5: I put more than one plan for the gifted student. It's not like plan A or B I have to but more activities, more challenge questions
> Teacher 3 : More challenge questions, yah
> R: What do you see that she needs more?
> Teacher 3: I think she needs really challenge questions, so as a teacher I should search more in the websites with specific lesson how I can challenge her. Because really gifted student they are.. they are feel bored quickly. (Appendix 19, lines: 102-42).

Box7. An excerpt of the dialogue between the researcher and the pre-service teachers in the Case (B) focus group about strategies used by them in the classroom to accommodate all students.

4.9.2.3 Challenges faced in inclusive classrooms:

The main challenge mentioned more than once was the school culture that can have a negative impact on them and the students. One teacher mentioned how the classroom teacher, whom she worked with, instilled segregated learning environment in her classroom, and did not encourage all students to communicate and work with each other, especially the students with disabilities. She said:

> Even my class now practicum 3, the teacher... a::a there is a student with autism, he is not included in the classroom. He is included only in the circle time like in the morning [...].he has separate corner.[...] He is in KG2 student. So the teacher a::a the mentor teacher ..she is

giving the other students the idea that he is different. But it is okay to be different [she was speaking about her feelings about the mentor's attitude]. (Appendix 17, lines: 292-303).

Other findings derived also from the pre-service teachers' comments indicated the pre-service teachers' commitments to serve their community by supporting all students. A second finding was that the pre-service teachers were accompanied with mentor teachers through their field experiences. Rodríguez (2012, p. 105-6) believes that all of these elements of society service and collaboration "allow full awareness to all as a community and thus ensure successful experiences in inclusion". Furthermore, he stressed on the importance of promoting collaboration between educators in teacher programmes' in order to facilitate inclusion.

4.9.3 The contribution of the courses on their preparedness to teach in inclusive schools:

The pre-service teachers stated different contributions of their programme in preparing them to teach in inclusive schools. Their comments described how the programme added to their knowledge, teaching strategies and classroom management. In addition, some values and attitudes were also derived from the pre-service comments when asked about the programme's contribution to their preparation.

Some of the pre-service teachers pointed to the knowledge they gained regarding teaching students with SEN, and at the same time acknowledged the aspects they believed still need more preparation. Following is an example of such views:

> Teacher 3: Really we have a good background about special needs so we are not afraid to deal with them. Just we need training; we should practice because even if I am in a school and I have a good knowledge, I think the training will be helpful. As well as go and search more about it, I mean by that it should keep improving and go and research. Even we took these courses it's not enough
> Teacher 2: I think the knowledge we have like [a] resource we can go back to but actually have to have this experience. We have to be exposed to the special needs. (Appendix 17, lines: 350- 59)

Both of the pre-service teachers pointed the knowledge that was gained about SEN from the programme and the exposure to real teaching experiences in inclusive classrooms. However, the comments about the need for more training can be referred to the reason that the pre-service teachers did not start yet the Student Teaching course (EDC 490) at the time of conducting the focus group.

Another contribution of the programme that was derived from pre-service teachers comments was promoting positive values like empathy towards the students with disabilities, and the equality of learning opportunities for all students. And at the same time they connected these

positive values with the values of Islam. One pre-service teacher stated: "Teacher 6: [...] and schools should make those students feel that they are not different because we are all the same.[...] And Islam taught us this" (Appendix 19, lines: 289-90). From another perspective, one pre-service teacher felt compassionate toward including students with SEN. She said: "Teacher 5: I definitely agree with inclusive education. [...] First of all I want to say we want to include them in the society and in the education system". Then she added her opinion about segregating students with disabilities from general schools, she said:

> Teacher 5:[...] I heard a lot about a::a:: for example autistic centres, why we want to pack them in one area as long we can include them in the classes? And also I believe we should include [students with] special needs in our classes but with special polices and we want the teachers to be aware of that. (Appendix 17, lines 324-28).

4.10 Concluding remarks from the findings of Case (A) and Case (B)

Some findings that arose from the two cases of teacher programmes for inclusion in the UAE were in alignment with the international findings of teacher education programmes for inclusion in many aspects. Others were more intriguing and strongly call for further verification and research. The findings should also be taken with caution because the numbers of pre-service teachers in Elementary and Early Childhood were not available to me, despite my many attempts to get the statistics. Other reason for caution is that the analysis was done mainly for courses content, some of them (especially in case A) were not up to date, and what is written in the documents not necessarily reflects what really happen in classes. Following is summary of prominent findings:

First, in the two cases (A & B) of this study, the Elementary and the Early Childhood programmes, had one or two stand-alone courses for teaching students with disability or inclusive education. In this action the UAE government universities are following the international trends in responding to the movement toward inclusive education, which was impacted also by the UN conventions of the rights of the people with disabilities. For example, in Case (A) the course content consisted of many topics such as the foundation for educating students with special needs, assessing students' needs, and special education procedures and services. It also provided knowledge of different characteristics of learners with special needs and their educational implications, professional partnerships, instructional Adaptation, and responding to students' behavior (COE 2016b). This content is similar to the

content of programmes from different counties which I reviewed previously, and easily identified from the examples mentioned in Table (5).

The content regarding inclusive education in the two programmes reviewed in this study showed also its alignment with the literature in this respect. The international literature has been showing increase focus on inclusive education in the past few decades and adopted by education systems around the world. As a response, teacher programmes include content on teaching students with disabilities to prepare their teachers to be able to meet the needs of all students in general classrooms. Many of these programmes offer one or two courses, as it was presented in the literature review chapter (Allday, Neilsen-Gatti & Hudson 2013; Amr 2011; Bradshaw & Mundia 2006; Burton & Pace 2009; Gehrke & Cocchiarella 2013; Koay 2014; Lartec et al. 2015; McCrimmon 2015; Sharma & Sokal 2015).

Second, one of the most intriguing results follows what was discussed in the previous point is that the two programmes in the UAE (the focus of this study) do not differ from other programmes in countries considered pioneers in the movement of inclusive education liked the USA. For example, in the study Allday, Neilsen-Gatti & Hudson (2013) that reviewed 119 elementary teacher programmes across the U.S. regarding "the number of course hours devoted to inclusion, instruction, and management of students with disabilities". His findings indicated that many of these programmes allocated less than 7 credit hours of work for "issues related to disabilities and may not be adequately preparing their graduates for entry into today's inclusive schools (Allday, Neilsen-Gatti & Hudson (2013, p. 306).

Third, in this study, the content of the two Elementary and Early childhood programmes consisted of principles, essential knowledge and skills required to prepare teachers for inclusive education. This content is aligned closely with and similar to research-based international literature in the area of teacher education for inclusion (e.g. Loreman 2010; Mitchell 2008). This can indicate that courses' design in both programmes was up-to date, and situated within the relevant literature about teacher programmes for inclusion. For example in Case (A), the COE conceptual framework that underpinned and influenced the courses content in the Elementary programme consisted nine elements such as "reflection and professional growth, diversity and individual differences, planning for teaching and learning, technology, community and ethics and authentic assessment" (COE n.d., p.3). Moreover, the professional requirement courses in programme (A) had a broad variety of courses such as Education of Exceptional Children, Teaching Methods, Principles of Curriculum &

Instruction and others (see Table 13). All of them had knowledge content and learning outcomes on differentiation, modification and adaption for curriculum and instruction. Also, the content includes principles that educate teachers to be able to facilitate inclusion, such as collaboration, formal and informal assessment, and reflective experiences. In a study by Loreman (2010) that examined essential inclusive education skills, knowledge and attributes that pre-service teachers in Alberta/Canada need to develop during their programmes in order to work effectively in inclusive classroom. He identified knowledge, skills and attributes he found from a large scale search of literature in inclusive education, and then aligned these skills with education policies in Alberta, and interviews with experts in teacher programmes for inclusion. He reached seven essential areas of skills and attribute such as collaboration with stakeholders and engaging in meaningful assessment (refer to Table 3 for more details). In the following Table (34) I show how the learning outcomes in the two programmes (A & B) of this study were situated with the learning outcomes that suggested by Loreman (2010).

Fourth, triangulation for the three sources of data revealed some contradictions between courses content and faculty statements regarding preparing teachers for inclusive education in case (A). While the COE framework consisted of nine themes that the teacher programmes were expected to apply and achieve, one of them was "diversity and individual differences".

This theme highlights the following outcomes:

> - COE graduates have knowledge, skills and dispositions to respond effectively to students to students' differences, and
> - be able to provide learning experiences that are tailored to individuals' strengths, interests and needs in order to ensure that all learners can learn. (COE n.d. , p. 3).

On the other hand, faculty members who were interviewed in this case showed contradictory views towards the education of children with disabilities in general schools. They saw inclusive education as part of special education. They were with the view of segregating or integrating students with SEN, and not the view of adapting the school for them to meet their educational needs.

Fifth: Although the research sample was small, and pre-service teachers' opinions should be taken with precaution and cannot be generalized, but they have given a snapshot of the

Loreman (2010) Essential Skills, Knowledge, and Attributes for Inclusive Teachers	Programme (A) Course/outcome	Programme (B) Course/outcome or content
An understanding of inclusion and respect for diversity	**Gifted and Talented**: "Students will develop knowledge and understanding of the influence of the social, cultural, political and economic environment on the field of gifted education" (COE 2011, p. 1).	**Education Studies I** (EDC 350/350A) Focus on how children learn and remember. Pre-service teachers will review learning theories, principles of learning and introduced to the ideas of individual difference. This course is a laboratory class and the Practicum will allow students to formally observe (EDC 2016b).
Engaging in inclusive instructional planning	**Education of Exceptional Children- SPED 101:** Teacher is expected to "differentiate instruction to meet the educational and behavioural needs of individuals with exceptional learning needs" (COE 2016a, p. 2). It was translated to the following content: -Planning Instruction by analyzing classroom &students' needs: - Inclusion and accommodation for students with special needs. - Organizing inclusive classroom. - Grouping students in inclusive classrooms. - Evaluating instructional materials for inclusive classrooms. - Analyzing instructional methods in relation to students' needs (COE 2016a).	**Inclusive classroom-EDC 465:** -Design and implement modifications and adaptations for students with specialized needs. - Implement specific teaching strategies for students with specialized needs. Identify and plan the components of an Individual Education Plan. (EDC 2015c).
Engaging in meaningful assessment	Classroom Assessment in Elementary Education- CURR 310: It states that the teacher should be able to: Analyze assessment data; demonstrate skill in accurately and ethically communicating academic progress to students and parents (COE 2013a, p. 1).	Principles of Assessment- EDC 353" - Analyze the nature, context and the agent implementing assessment in the classroom and in the school system. - Construct and evaluate assessment instruments, which take into account the range of abilities with teaching strategies and objectives in subject areas. (EDC 2016f).

Table 34. Learning outcomes in some courses in the two programmes (A & B) aligned with the skills recommended by Loreman (2010) to prepare pre-service teachers for inclusion.

current classroom reality in the UAE government schools, and how the inclusion of students with disabilities process manifesting in our public school system; especially that the two samples were from two different Emirates. Pre-service teachers' conceptualisation of inclusive education and the differentiation strategies they were employing in the classrooms showed the impact of the courses with content supporting inclusive education. Another part of the scene was the positive responses about including students with disabilities in schools, and at the same time their acknowledgment of the challenges they were facing to accommodate all students.

We can compare our national pre-teachers' experiences and attitudes toward teaching students with pre-service teachers on the international level and learn from others experiences. Pre-service teachers in this study faced similar challenges that were identified in international literature such as feeling not well prepared, negative school culture about inclusion and shortage of assistive services and learning technology (Forlin 2012; Kirillova & Ibragimov 2016; Vorapanya & Dunlap 2014).

Sixth, Pre-service teachers expressed challenges in teaching students with disabilities. Some challenges included that they were not prepared enough to teach students with SEN and the scarce of supportive services in classroom (Case A), and negative school culture regarding inclusion (Case B). These challenges were well documented in the international literature.

Seventh, what was a unique finding in my opinion, the issue of the quality of teachers especially in the Vision 2021 was related to the teachers within schools (unified inspection system), new teachers and/or the graduates of teacher programmes (licensure system) and not the pre-service teachers? I could not find any information about the higher education institutions response to Vision 2021 except in increasing the enrolment of local students to the foundation year in universities.

Eighth, since the independence and the creation of this country, the government has been investing in improving education and teachers' quality. All the government universities that were established in the past four decades include teachers' programmes. One of the reforms for higher education was the quality assurance accreditation conducted by international commissions (mostly from the USA) such as the National Council for Accreditation of Teacher Education (NCATE). Recently, the National Qualifications Authority (NQA) was established as a key initiative to cope with the dramatic changes that the UAE is witnessing at

all levels, including changes within the economic, education and training sectors, some of its main objectives are to:

- Design plans and policies, and develop a comprehensive and unified national strategy for qualifications.
- Establish and continuously maintain standards and regulations for qualifications of higher education, general education and technical, vocational and professional education and training to keep pace with scientific and technological progress, and to meet the requirements of economic and social development. (NQA 2017).

This accreditation matter raises two issues. From one perspective, these accreditation associations "have outlined sets of standards and procedures used to accredit teacher education programmes. These guidelines catalyse the reform efforts at institutions, particularly during accreditation reviews" (Rennert-Ariev, Frederrick & Valli 2005, p. 12). From another perspective, teacher education reform relies mainly on the responsible parties for education and not on the foreign accreditation associations. The government regulates public universities and colleges and should have legitimate role to play in teacher education. And because inclusivity is one of the aims of our country, the government represented by education authorities (MoE, KHDA & ADEC) has the responsibility to regulate the quality of teachers and teacher programmes in the undergraduate level. In addition, these authorities must direct the education programmes to prepare competent teachers both in subject matters and in inclusive education.

Ninth, the programmes showed lack of attention to the issues of diversity especially students with disabilities in most courses syllabus, except for the intensive information on this issue in the two courses of teaching students with SEN and inclusive education that were offered from special education departments. And although modifying instruction and differentiation were mentioned also in the syllabi of most the Elementary/or Early Childhood courses' outcomes, there was no evidence that differentiation strategies were delivered to the pre-service as a main component to educating diverse learners. Teacher programmes must reflect classrooms diversity/or students' needs, through reforming curriculum documents, and preparing teachers not only for subject matter discipline but also for inclusive education (Rennert-Ariev, Frederrick & Valli 2005).

Summary of the Chapter

Following is a summary of the key findings emerged from both programmes regarding the preparation of pre-service teachers for inclusive classrooms.

The analysis from the courses content section regarding the current status of content used in teacher preparation in the area of inclusion, and faculty views provided an overview of what was on offer for Elementary and Early Childhood pre-service teacher to meet the needs of diverse students in the general classrooms. program practices, and instructional needs

First: Several areas of competence to work in inclusive context were identified in both cases:
        A. Courses content
The two programmes had some similarities in the area of courses content for preparing pre-service teachers for inclusion. One similarity was offering one or two compulsory courses of inclusive education or special education to support pre-service in future work in inclusive contexts. Another similarity was in the content of other programmes' requirement courses. These courses included outcomes that focus on modifying instruction, differentiation and other skills to work with all students with diverse needs. Both programmes included compulsory courses with content that support teachers to work diverse learners and the two programmes such as: Instructional strategies or content & pedagogy development// learning or educational technologies// curriculum design //school & family or parents as educator.

        B. Field experiences
In Case (A) and Case (B), the field experiences offered for pre-service teachers in schools that included student with disabilities in general classrooms. However, in Programme (A) one course at the last semester was allocated for field experiences with 9 credit hours. This meant pre-service teachers were required to teach 9 hours weekly during one semester. On the other hand, pre-service teachers in Programme (B) were required to take four practicum courses, the fourth one in the last semester. The total hours required for pre-service teachers for field experiences reached

Second: Areas regarding the quality of the process of preparing teachers for inclusion emerged from the findings:
There were substantial differences between the two cases in the quality of learning experiences regarding inclusive education that were offered to the pre-service teachers through the teachers programmes. Differences found in the number of the courses that

support inclusive education and in the way programmes' courses delivered to pre-service teachers to serve their work with students with disabilities. Also, in some teaching and learning practice such as: Quality of assessment, the use of technologies as educational resources in courses content, linking theory to practice and collaboration between faculty members from different disciplines especially in field experiences.

1. Number of courses supporting inclusive education

Courses with direct focus in inclusive education: In Programme (A) there was one compulsory course related to teaching students with SEN, while in Programme (B). In Case (A) no evidence showed linking this course with other supportive courses for inclusion such as ethics, instructional methods or managing behaviour. There two courses in Programme (B) with direct focus on inclusive teacher and teaching students with SEN. Not only that but also they were linked with curriculum and instructional methods, learning technologies and assessment.

Courses of field experiences:

Programme (A) with one practicum course (internship) and with professional requirement courses delivered with no clear connections (co-requisites) between them, which might affect the quality of preparing teachers for inclusion. The one and the only contact period between pre-service teachers with student with disabilities was during the internship period in the last semester. While in Programme (B) pre-service teachers worked in the field experiences through four practicum courses as follows: Practicum I (1 credit hour); practicum II (2 credit hours); Practicum III (2 credit hours), and Student Teaching/Internship (12 hours). And two of these two practicum courses (I & III) were co-requisite (or blocked) with inclusive education courses (EDC 324 & EDC 465). Many studies indicated that the extended time of contact with students with disabilities in field work reduce the level of discomfort and are more likely to have positive attitudes towards inclusion Brownlee & Carrington 2000; Carroll, Forlin, & Jobling 2003; Hemmings & Woodcock 2011; Sharma, Ee & Desai 2003)

2. Programmes educational practices

Quality of assessment especially those of inclusive education or teaching students

In the two programmes authentic assignments were included; however the difference was in linking theory with practice. In programme (A), and according to the syllabi that was available to me, theoretical case studies and lesson plans were assigned to the pre-service teachers. While in Programme (B) the same type of case studies and planning was done by gathering data during field experiences.

Effectiveness of educational technologies and resources:

These resources were employed effectively with courses content in Programme (B) (Appendix 19), while little was known about these resources from syllabi documents or faculty members in Programme (A).

Collaboration between faculty members: The data showed that in programme (B) pre-service preparation for inclusive classroom was a team work especially in field courses. In Programme (A), inclusive education was considered part of special education and not for all disciplines.

Third: Faculty positions from inclusive education:

The faculty in Programme (B) showed strong belief in the rights of including students with disabilities in general classroom, and was seen as a responsibility of all of the stakeholders. Not only that but also commitment to equity and equality in providing learning opportunities to all children.

This study adds to and supports the literature in the area of programmes development for inclusive education in literature. The findings offered information about areas of promising practices and potential opportunities for growth concerning collaboration across teacher-education majors and co-teaching, especially in Programme (B), that need sharing with other institutions and academia to bridge the gap in literature regarding teacher education for inclusion (Harvey et al. 2010).

CHAPTER 5

Conclusion and Recommendations

Education in the UAE is currently undergoing a period of remarkable reforms to improve the quality of education in the country (Warner & Burton 2017). The UAE government has pursued important legislative steps to promote the rights of people with disabilities. The constitution and the Federal Law No. 29 of 2006 are important legal instruments that guarantee basic rights such as education, work, and health care for people with disabilities (WAM 2015).

The purpose of this study is to explore elementary teacher programmes in two government universities regarding preparing pre-service teachers to work in inclusive classrooms. Qualitative multi-case studies methodology that utilised different data collecting methods to gather the data needed to answer the research questions is used. This multi-case studies research looked at how elementary pre-service teachers were prepared to work in inclusive classrooms in two government teacher programmes. The first case or Case (A) represented the preparation of pre-service teachers for inclusive classrooms in an Elementary Programme, and the second case or Case (B) represented the preparation of pre-service teachers in an Early Childhood (K-grade 3) Programme.

The data collecting methods included the collection of documents of the curriculum courses' content (e.g. outcomes & assessment) that served and supported inclusive education. The second method was the interviews conducted with some faculty members in the COE and the Elementary Programmes. The third method was the information obtained from the two focus groups of pre-service teachers in the two Elementary and Early Childhood (K-grade 3) teacher programmes.

In order to gain a holistic understanding of the studied phenomenon, which was preparing elementary pre-service teachers for inclusion, the findings regarding the courses' content were linked to the elements of the theoretical framework. As it is known, the theoretical framework includes the principles of the Disability Social Model, Rodríguez's (2012) Model for preparing teachers for inclusion, and other related literature about teacher programmes for inclusive education, especially Cooper et al.'s Model. The main principles and values underpinning this framework are concepts of equity, equality and quality in education for all

students, in addition to the strategies that eliminate barriers for educating students with disabilities.

Insights were gained from examining the courses' content or curriculum in two Elementary/or Early Childhood (Pre K-grade 3). Curriculum was given a significant role in this study to explore how two government universities were preparing pre-service teachers in Elementary programmes for inclusion. The reason for that stemmed from its pivotal importance in reflecting the connection between society, politics and schools (Kaplan & Lewis 2013a). Curriculum in its simplest definitions is "a way of organizing and sequencing learning experiences with the aim of achieving specified learning outcomes". In other words, a curriculum "guides what will be learned, and why, and how this learning is facilitated" (Kaplan & Lewis 2013a, p.1). In addition to the examination of courses' content, learning outcomes that were expected from the pre-service teachers to demonstrate during and at the end of the Elementary Programme, assessment, teaching methods used to support them and the learning materials were also examined. Finally, interviews with a number of faculty and focus groups for pre-service teachers were another way to explore views about the contribution of these programmes to prepare Elementary teachers for inclusive schools.

 In depth examinations of teacher education programmes cases to prepare general teachers for inclusive schools is believed to benefit different stake holders in the higher education sector in the UAE, including teacher educators to develop these programmes. Not only that, but also more research is needed to explore such programmes in different settings in order to understand the "factors that influence teacher candidates' learning and to develop effective [..] teacher education programmes that prepare successful teachers of diverse learners and meet the needs of local school communities" (Lee &herner-Patnode 2010, p. 224). Moreover, it is hoped that the better understanding of the two programmes' challenges and strengths will inform concerned stakeholders (e.g. policy makers, universities boards, faculty) to redesign the programmes to better prepare general teachers for inclusion.

Below is a reiteration of the main research questions this study posed and sought to answer:

- Main Question:
- How are current pre-service teacher programmes in two government universities preparing primary teachers for inclusive classrooms?
- Sub-questions:

a - What coursework outcomes and content (e.g. assessment, resources) related to inclusion and diversity of learners were provided to elementary pre-service teachers during their teacher preparation programme?

b. How are some elements and concepts of inclusive education were integrated and addressed in the Elementary teacher education curriculum/syllabi across the two government universities?

c- What are faculty opinions about the contribution of coursework and field experiences to the teachers' ability to meet the educational needs of all students?

b- What are the pre-service teachers' experiences and opinions about the contribution of coursework and field experiences to the teachers' ability to meet the needs of all students?

The following sections present the conclusions and answer to the research questions, and the interpretations by the researcher of the findings on how Elementary/Early childhood (K-grade3) pre-service teachers were prepared for inclusion. The other sections include recommendations for the improvement of teacher education programmes for inclusion, personal gains and final thoughts off the researcher. The researcher reaffirms that this study is an exploratory one and no aims of evaluation nor comparison were intended between the two teacher programmes.

5.1. Conclusion

5.1.1 General conclusions

The first conclusion about the two programmes regarding preparing pre-service teachers for inclusion in both cases was that there were no clear philosophies of inclusion of students with disabilities that guided both programmes' frameworks (Rodríguez's 2012), and although inclusivity was mentioned in programme B's philosophy, it was in the context of multiculturalism and not disability. The shortage of this philosophy was met from another perspectives in both programmes cases. The framework of each programme consisted of visions, goals or objectives and outcomes that supported responsiveness to students' diverse needs. And these visions and goals were translated into content, teaching methods, assessment, collaboration with other professionals, and professional practices in real environments.

Both programmes in these two government universities have developed significant and productive collaborative relationships with public and private school systems in the

educational context of the UAE. This systematic collaboration is argued "to ensure a cohesive transition from undergraduate teacher preparation to becoming a competent and effectively trained inclusive teacher" (Forlin& Chambers 2011, p.30).

The two education programmes main purpose was to "prepare graduates who are highly skilled and proficient in their areas of specialisation", with leadership, research and collaborative work skills (Appendix 6-case (A); COE 2017a; EDC 2017), while Programme (B) had a distinctive central goal of "prepar[ing] reflective and culturally sensitive professionals" (Appendix 14, Case (B); EDC 2017).

Varying quantity and quality of content was found in the two programmes' coursework (e.g. course syllabi, field experiences /practicum) regarding inclusive practices. There were distinctive differences in the way each programme facilitated the process of preparing general elementary teachers for inclusive schools. From the researcher's point of view, the way of delivering this content as shown in the syllabi documents of programme (A) calls for reviewing the content regarding inclusive education.

5.1.2 Coursework outcomes and content (e.g. assessment, resources) related to inclusion and diversity of learners provided to elementary pre-service teachers during their teacher preparation programmes.

Both programmes included at least one course for inclusive education or special educational needs, learning outcomes, content and field teaching experiences dedicated to serve the preparation process for inclusion. All of the outcomes of these courses served the purpose of teaching students with disabilities.

In case (A), the Elementary Programme offered one compulsory course titled Education of Exceptional Children-SPED 101, and one elective course titled Gifted and Talented -SPED 321. The pre-service teachers' statements though pointed out that elementary pre-service teachers seldom take the elective course. The compulsory course mainly covered units such as: The foundation for educating students with special needs, assessing students' needs, special education procedures (e.g. IEPs), professional partnerships, and various students' needs (COE 2016a, pp. 1-5; Appendix 8a & 9e). Although the course content was comprehensive, the researcher was not able to learn more about it from the course's instructor to assess its quality from other perspectives.

From another aspect, no connection was found by the researcher between this course and other courses in the Elementary Programme including the field experience course. It is worth noting that the Education of Exceptional Children course was from another department (Special Education) than the department of the Elementary Programme (Curriculum & Instruction). And as far as the researcher understood from the interviews there was no evidence of collaboration regarding training pre-service teachers for inclusion between the two departments. Treating inclusive education courses "as a separate component rather than as an integral part of the core teacher education curriculum" (Kaplan & Lewis 2013a, p. 2) is one of the challenges that should be addressed to promote inclusive teacher education programmes. This conclusion leads also to raising concerns and questions about to what extent the courses share a collective vision and complement each other.

One important observation was also the limited educational resources including educational technologies utilized in these courses, as witnessed in syllabi documents, to help pre-service teachers to achieve the desired goals (Appendix 18). It is argued that "the inclusion of assistive technology with instructional technology in pre- service teacher education programs will lead to enhanced academic, social, and employment opportunities for individuals with disabilities" (Marino, Sameshima & Beecher 2009, pp. 187-88).

A final note is about the course of Education of Exceptional Children assignments and teaching materials used to support the content. The assignments served very important purposes that the general teacher needs to be familiar with and be skilled at to use in the classroom such as preparing an IEP, writing reports and planning a modified lesson (COE 2016a, pp. 9-17). What was of concern in this finding was that all of these assignments were theoretical assignments. As it was explained in the syllabus document, the instructor assigns candidates a case vignette about a student with disability and the candidates are required to prepare an IEP and a report according to the case. The same is done for the modified lessons, in which the "candidates will be given a case of a specific type of a disability and are required to differentiate"(COE 2016a. p.9). This indicated that the pre-service teachers were deprived from opportunities to apply the rich and important knowledge gained from the course content in real life experience in the classroom. Peebles and Mendaglio (2014, p. 248) pointed to the importance of changing the current approaches of preparing teachers for inclusion by "adding authentic practical experiences to the existing courses in inclusion" . They concluded that adding this practical experience is critical and necessary to ensure "a better match between teacher preparation and the realities of inclusive classrooms". Not only that, but this also will

benefit pre-service by adding "a sense of preparedness to their positive attitudes toward teaching in inclusive classrooms" (Peebles and Mendaglio 2014, p. 248).

In Case (B), the Early Childhood programme (K-grade 3) offered two compulsory courses which were Inclusion of People with Special Needs and The Inclusive Classroom. It is worth noting that in Case (B), the COE does not have a special education specialisation at the undergraduate level. The first course included topics about the characteristics of people with disabilities or SEN, while the second course examined the role of differentiation in teaching all children, including those with special needs in inclusive classrooms. It included various topics, one of which was learner diversity, inclusive education and teaching and learning for students with learning disabilities, ADD/ADHD, physical and intellectual difficulties, autism spectrum disorder, behaviour difficulties and the gifted and talented learners. Other topics also included assessment, partnerships, planning Individual Education Plans for a child, adapting the curriculum and identifying the different types of assistive and adaptive technology (EDC 2015c, pp. 1-3; EDC 2016e).

Educational resources in the two courses that focused on inclusive education were aligned with topics and outcomes. The resources included a wealth of academic articles, newspaper articles and educational and scientific websites and links for information, and YouTube videos about disabilities and teaching methods (Appendix 19). The researcher argues that such educational resources will create expanded learning opportunities for the pre-service teachers that will better prepare them for inclusive contexts.

The courses were connected from different aspects with other courses in the programme. Pre-service teachers experienced comprehensive training that connected courses' content in a way that created meaningful experiences. One example is the blocked (requisite) courses modality, where several courses are assigned to be taken together. Forinstance, in Programme (B), in the fourth year, The Inclusive Classroom course was blocked with four other courses which included: Education Studies III, Practicum III, Learning Technologies in the Classroom, Classroom Management, and Principles of Assessment. Pre-service can gain a comprehensive and holistic perspective when learning about principles of inclusive education with learning technologies for example, and applying this knowledge during the field work (practicum), where theory can be joint with practice.

<u>The main conclusion was that each college prepared their pre-service teachers in different ways, which in turn would produce differences in the teachers' knowledge</u> regarding teaching students with disabilities.

Both programmes included at least one course on inclusive education or teaching students with SEN as mentioned in the previous section. All the courses that were analysed in both cases indicated outcomes or a content area that is intended for differentiation or accommodation strategies. However, variations were highlighted in three areas in the two programmes curricula. These included the number of courses allocated for field experiences and the connection between theory and practice regarding the content of teaching students with SEN and the content related to resources and assistive technologies that supported the training process.

In both cases the pre-service teachers were provided with various opportunities to work in inclusive classrooms and interact with students with disabilities. In Case (A) pre-service teachers had one practicum course (Student Teaching or internship) in which training took place in inclusive schools. On the other hand, Case (B) used field experiences sequence (Practicum I, II , III & Student Teaching) that gradually increased pre-service teaching responsibilities through their programme to a full teaching experience. Not only that but also the practicum courses (especially practicum I & III) were blocked with various courses including those with content on inclusive education. This content and organization of the courses provided pre-service teachers with extended professional experiences and extended periods of time in contact with student with disabilities in learning contexts. Additionally, the course Learning Technologies was included as a requisite course with practicum III. As a result, the pre-service were expected to be more knowledgeable about disability issues, and opportunities to undertake extended professional experiences in inclusive schools were expected to increase. In a study by Forlin et al. (1999), they concluded that:

> Increased knowledge about inclusion is associated with stronger beliefs that teachers can influence students during inclusion, there seems little doubt that increased contact with people with disabilities also helps pre-service teachers to overcome feelings of discomfort when interacting with them.

Moreover, assistive technologies in present times play critical roles in the lives of people with disabilities in general and students with disabilities in particular. According to Alper and Raharinirina (2006, p. 52) assistive technologies are vital because it is "particularly important that students be able to maintain and generalize skills while still in school because services are fragmented and difficult to access."

Finally, although the findings indicated that the practicum model in Case (B) specifically included four practicum courses, that does not necessarily suggest that the field experiences that pre-service teachers had were of high quality; the researcher did not specifically measure the quality of these practicum courses. Therefore, future research must be done to determine the impact of these field experiences on pre-service teachers (Sokal, Woloshyn& Funk-Unrau 2013). This study mainly uses documents to examine these courses, and for this reason a fair and rigorous measure that relies on evidence collected from different sources is needed such as surveys, observations and competency measures. Also, one important matter to be taken into consideration is the context for data collection which depends on factors such as organization cultures, policies and changes that happen over time (Gallagher, Rabinowitz & Yeagley 2011).

5.1.3 Faculty opinions about the contribution of coursework and field experiences to the teachers' ability to meet the educational needs of all students.

Although the faculty members' opinions supported inclusive education in general, commitment to inclusive education varied between the faculty members in Case (A) and Case (B). Faculty members held opposing views on how inclusion should be applied in schools and this in turn impacted their views about the contribution of the programmes to prepare teachers for inclusion.

In Case (A), the faculty members' opinions were vague and not precise in the contribution of the course work to the pre-service preparation for inclusive schools. The opinions of the of the faculty members (most of which were heads of departments) in the Elementary Programme in Case (A)were of concern as the instructors inclined to consider mainstreaming for students with disabilities rather than full membership to be educated in general classrooms. Mainstreaming trend involves that students with disabilities or SEN visit the general classroom for only some activities or classes (e.g. art, physical education, social activities) within the school day. Moreover, the general consensus among them was to consider inclusive education as only related to the special education specialisation. From the researcher's point of view, this is a very limited view to inclusive education, especially that our country has supported inclusiveness in the UAE society. But what was more concerning for me is that the curriculum included rich content and dispositions that serve inclusive education which contrasted the faculty opinions. It may be argued that the views of the

faculty members who were interviewed are also witnessed on the international level. Kurth & Foley (2014, p. 286) pointed out to similar findings, explaining: "The trend toward educating students with disabilities in general education settings has not been matched in teacher preparation programs, which continue to primarily prepare teachers for work in self-contained settings". Further, Kurth and Foley (2014) warned from such limited ways of preparing teacher candidates by faculty members for inclusive classrooms by confining the preparation process to the positive dispositions toward inclusive education, rather than the commitment to the vision of equity in education. And they suggested "a critical understanding of exclusion united with instructional knowledge and skills for inclusive education" as a requirement in order to reframe teacher preparation for inclusive schools (Kurth & Foley 2014, p. 286).

Another conclusion drawn related to how the programme's contribution was noticing that although the pre-service teachers were expected to collaborate with other educators and the professionals of supportive services (e.g. special education teacher, sign language instructors), lack of collaboration between faculty from Elementary and Special Education departments may affect the training process. It is worth noting that I assumed there were no collaboration between faculty because no signs from the faculty members statements indicated collaboration to support pre-service teachers in their field experiences in inclusive schools. According to Wilcoxen (2016, p. 102), "collaborative frameworks support the development of a common language" on clinical practice in teacher education. Further, she elaborated that "developing a common language and clarifying the roles of those involved in clinical experiences is one way to bridge the gap between teacher-training programs and schools".

In Case (B), the comments of the faculty members who were interviewed showed a strong commitment toward the principles of equity and equality in education. In addition to the values of global awareness and culture responsiveness, they also showed their dedication to work to infuse these values in their teachings.

The contribution of Programme (B) to prepare pre-service teachers for diversity can be referred to two sources as concluded from the faculty statements. The first was the faculty's personal attributes and contribution to the preparation process. Their statements described in detail how their pre-service teachers were trained by showing them how strategies play in real life experience and then having the pre-service teachers try these methods for themselves.

They also confirmed their collaboration (from different specialisations including special education) through the practicum course to support the teachers. Not only that but they also invested their diverse background expertise to help their pre-service teachers gain rich teaching experiences from different perspectives and views.

The second source that contributed to the preparation process for inclusive education was referred to the courses content according to the faculty opinions. They confirmed the uniqueness of their programme that was evidenced in the connection between theoretical content with practice throughout the programme in most courses. It was concluded from faculty members that real life experiences have been infused through the curricula and were expected to enrich the teacher candidates and contribute in giving them real life scenarios to overcome challenges regarding teaching in inclusive classroom.

5.1.4 The pre-service teachers' opinions about the contribution of coursework and field experiences to the teachers' ability to meet the needs of all students.

In both cases, pre-service teachers showed their commitments to serve their community and support all students. They acknowledged also the positive impact of the programmes and stated that they made significant gains from their preparation for inclusion. They referred to the courses of inclusive education and the opportunities to be trained in inclusive schools as the main contributions in their training process. Pre-service teachers' comments in both cases showed also their understanding of inclusive education principles and shared empathy towards all of their students. But significant differences were noticed between the field experiences in terms of its quantity and quality as mentioned in previous sections. This is in line with other studies such as a study conducted by Sharma, Shaukat and Furlonger (2015, p. 97) on the impact of training on topics related to teaching students with SEN where the pre-service teachers "reported higher levels of self-efficacy towards teaching within inclusive settings".

 The pre-service also identified some challenges they faced during field experiences, especially in Case A. They mentioned the lack of inclusive education courses, the shortage of assistants, supportive services for inclusion and training on assistive technologies tools as the main challenges. The negative schools' culture that resists inclusion of students with disabilities was a concern for the pre-service teachers, especially in Case (B).

5.2 Recommendations

In this study important aspects of preparing general teachers for inclusion emerged and were left out for sound theoretical reasons (e.g. out of the study's scope; need different methodologies). The researcher tries to focus on the aspects that can offer a greater chance to broaden and deepen our knowledge of the phenomenon of preparing general teachers for inclusion (Fischer et al. 2008). The recommendations are outlined below.

First: Findings of the present study call for all the stakeholders in the higher education sector to develop general pre- service teacher education programmes to teach children with disabilities in inclusive classrooms. An inter-disciplinary approach when teaching inclusive education should be encouraged by not considering special education in a vacuum but as an integral part of general education. The developments in educational policies regarding the inclusion of students with disabilities in general schools means it is timely to change the teacher programmes offerings in preparing teachers to meet the needs of all learners. It is now important to provide rich knowledge, content and field experiences for prospective teachers to support students' with disabilities learning. Only by doing this will we have teachers who are able to appropriately accommodate all students and collaborate with families and their communities.

Second: Building on the previous point and the observations from the current study, "The challenge today [was] not the lack of knowledge or standards, but putting it into practice in diverse contexts and cultures" (Hollenweger, Pantić & Florian 2015, p. 11). According to those authors, although a lot was invested in theoretical matters what matters at the end is what teachers "do or do not do every day in the classroom". The Colleges of Education must link theory with practice when preparing teachers for inclusion.

Third: Partnership and collaboration between the colleges of education, the Ministry of Education (MoE) and Educational Districts must be strengthened, developed and must keep up with the new policies for people with disabilities.

Fourth: Feedback to teacher candidates about their performance in public schools by subjects' supervisors from the educational authority bodies (the MoE , ADEC & KHDA) must be established. Pre-service teachers need monitoring and following-up for their lessons plans and the IEPs for students with disabilities. As it was mentioned by some faculty, the supervisors' role is very important because they have direct contact with decision makers in

the Ministry of Education and other authority bodies. It is worth noting that the supervisory job title was cancelled from the MoE several years ago. This decision must be revised by the leadership in the MoE for the common benefit of the teachers and the students.

Fifth: Programmes' curriculum must include The detailed guidance for general pre-service teachers on differentiation instructions is a vital component in the preparation of subject teachers to be able to cater for students with disabilities in general classrooms. The syllabi documents and pre-service teachers encouraged this recommendation.

Sixth: The study found that there is serious lack of research on teacher preparation programmes for inclusion, or any ground -level data that informs institutions, policy makers and researchers on this issue. Hence, practical steps must be undertaken from universities that have teacher programmes and the MoE to encourage research on the curriculum of teacher programmes that focus on preparing general pre-service teachers for inclusive classrooms.

Further research

Several themes emerged from the findings that need following up and future research. Following are some of these themes.

First: The concerns of the pre-service teachers in programme (A) of including students with disabilities in general classrooms without appropriate preparation for such challenging responsibilities need further follow-up.
Second: Using other methodologies such as quantitative or mixed methods to explore pre-service opinions in their education programme regarding preparedness to teach in inclusive classrooms can offer rich information that can be used to improve teacher programmes. Also, researching faculty attitudes about preparing elementary and general teachers to work inclusive school to learn about their challenges or recommendation for this topic will be greatly useful.
Third: Findings about the few number of students who enrolled in the colleges of education in the UAE raises concerns and questions that urge to research the reasons for this phenomenon in the context of the UAE .

Personal gains

As an educator and a researcher exploring and observing the context of teacher programmes, this specific area of research was new territory for me that I have not researched before. It

was a valuable gain especially that my previous research was mostly with in- service teachers, specificallyduring my graduate studies (AlYateem 2010), and some other career projects. I had explored the preparation process for teachers for inclusive schools from the schools and in-service teachers' perspectives only, and not from the higher education perspective represented by teacher programmes. The knowledge gained about exploring the teacher programmes and specifically the case of the preparation process for inclusion in two of the main feeders of national teachers was significant. It added to my understanding as to what was on offer for general teachers about inclusive education, and created for me an opportunity for a new journey to further explore the progress in these programmes in near future regarding inclusion.

Personally, I was filled with hope and gratitude to see dedicated professionals of faculty members and prospective teachers who believed in the positive impact of the inclusive education practices on all learners. I believe that the existence of such honoured examples of educators is an usher of bright future for all of our children in our country the UAE, where they can learn, live and build their country together.

Final summary: The value of this study

The value of the current study rises from of its pioneering role in exploring general (Elementary) teacher programmes contribution in preparing pre-service teachers for inclusive classrooms. The study not only achieved its aim of revealing the content concerned with inclusive education, but also indicated to other areas that need further study. It added to the literature authentic information about how two programmes in two main government universities preparing their teachers through course work and field experiences. The value comes also from being conducted by Emarati researcher, in Emarati universities with the aim of serving the United Arab Emirates in the development of our education system, in order to achieve the ambitious national visions of making the UAE "an inclusive, barrier-free, rights-based society that promotes, protects, and ensures the success of all groups of students" (KHDA 2016, p. 13).

The valuable contributions of this study are represented in the following key results:

First, it added to the current scarce literature new information about two teacher education programmes that have not been researched before in the area of inclusive education in the UAE.

Second, information included the content of these two programmes that support teaching students with disabilities in general classrooms. This content exists in two specialised courses for inclusive education or education children with SEN, in addition of learning outcomes on teaching strategies, differentiation and content in general education courses to accommodate students with SEN in general classrooms.

Third, vast differences were found between the two programmes in linking theory into practice regarding inclusive education content. These differences were evident in the number of practicum courses, and in linking theory presented in specialization required courses with practicum courses. Other differences were evident in faculty members' acceptance and support of inclusion.

Fourth: The two programmes vary also in responding to the national education policies regarding supporting teachers to be prepared for inclusive classrooms.

Fifth: Faculty and instructors in colleges of education negative beliefs about educating students with disabilities in general schools considered a serious barrier to prepare teachers for inclusive schools.

Finally: Some findings have pointed to important topics were not in the focus of this study; however, have great impact on teacher preparation for inclusion and needs further research. These topics include faculty and pre-service concerns and attitudes towards the inclusion of students with disabilities in general classrooms, and the collaboration between schools authorities in different Emirates and higher education institutions regarding preparing teachers for diversity in the classrooms.

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