Charles University in Prague

Faculty of Education

DISSERTATION THESIS

2024   **Talar Agopian**

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Teacher Education in Lebanon: A Comparison of Programs in American and French-Patterned Universities

Vzdělávání učitelů v Libanonu: Srovnání programů na univerzitách amerického a francouzského modelu

Talar Agopian

Supervisor: Prof. PhDr. Eliška Walterová, CSc.

Consultant: PhDr. Vít Šťastný, Ph.D.

Study Program: Education

Field of Study: Education

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DECLARATION OF ORIGINALITY

I declare that this thesis is my original work carried out during my Ph.D. studies at the Faculty of Education, Charles University (CZ) and has not been presented in any other learning institution for academic certification.

I also declare that, in accordance with the academic rules and ethical conduct, I have fully cited and referenced all material and results not original to this work using APA 7th edition.

Name: Talar Agopian

Date: 16/06/2024

Signature:

Talar A.

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DEDICATION

I dedicate this dissertation thesis to my beloved cousin, Sevan Chirishian, whom I lost in the beginning of 2024. Sevan loved me genuinely and was proud of my accomplishments. She always encouraged me with her empowering words. You are forever loved and missed, Sevan.

ABSTRACT

Lebanese higher education is diversified, and universities are classified based on the higher education model they follow, such as the American and French models. This dissertation thesis followed the intranational comparative approach to make a comparison of teacher education programs in American and French-patterned universities in Lebanon. Six universities were selected, three of each model. The aims were to describe the structure and content of the programs, to examine the perceived effectiveness of the programs based on the input of graduates, and to compare the programs on the indicators of practical experience, reflective practice, and acquisition of knowledge bases. The comparison was done by using well-established theories as benchmarks: Feiman-Nemser's typology of conceptual orientations in teacher education programs, Lee Shulman's theory of prospective teachers' acquisition of knowledge bases, and Fred Korthagen's theory of incorporating reflective practice in teacher education. The document analysis method was used to explore program structure and content, and semi-structured interviews were conducted with twenty graduates from the six selected American and French-patterned universities to examine perceived effectiveness of the programs in preparing students to teach. Results showed similarities and differences between the American and French-patterned universities, such as a need for increasing teacher preparation in using technology and in working with diverse students. The most notable difference was a longer duration of practicum and a more diverse practicum experience in the French-patterned universities. The main contribution of this dissertation thesis lies in the suggestions of reforms to the teacher education programs made by the graduates of the six universities.

ABSTRAKT

Vysokoškolské vzdělávání v Libanonu je rozmanité a univerzity se dělí podle uplatněného modelu vzdělávání, jako například americký či francouzský. Tato disertační práce se držela vnitronárodního srovnávacího přístupu, aby porovnala programy vzdělávání učitelů na vysokých školách amerického a francouzského modelu v Libanonu. Bylo vybráno šest univerzit, tři z každého modelu. Cílem bylo popsat strukturu a obsah programů, prozkoumat vnímanou efektivitu programů na základě informací od absolventů a porovnat programy v indikátorech praktických zkušeností, reflektivní praxe a získávání základů znalostí. Srovnání bylo provedeno s využitím zavedených teorií jako měřítek: Feiman-Nemserova typologie koncepčních orientací v programech vzdělávání učitelů, teorie Lee Shulmana o získávání znalostních základů budoucími učiteli a teorie Freda Korthagena o začlenění reflektivní praxe do vzdělávání učitelů. K prozkoumání struktury a obsahu programů byla použita metoda analýzy dokumentů a byly provedeny polostrukturované rozhovory s dvaceti absolventy šesti vybraných univerzit amerického a francouzského vzoru s cílem zjistit vnímanou efektivitu programů při přípravě studentů na učitelství. Výsledky ukázaly podobnosti a rozdíly mezi univerzitami amerického a francouzského modelu, například potřebu zvýšení přípravy učitelů v oblastech využívání technologií a práce se studenty se speciálními potřebami. Nejvýraznějším rozdílem byla delší doba trvání praxe a rozmanitější zkušenosti s praxí na univerzitách s francouzským modelem. Hlavní přínos této disertační práce spočívá v návrzích reforem programů vzdělávání učitelů, které předložili absolventi šesti univerzit.

KLÍČOVÁ SLOVA

vzdělávací programy pro učitele, kurzy praxe, reflektivní praxe, získávání znalostní báze, technologie ve výuce.

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Introduction

General Introduction of the Topic and Literature Gap

Lebanon is a socially and religiously diverse country, hence, Lebanese Higher Education (HE) is also diversified (Abouchedid & BouZeid, 2017). Universities are classified based on the HE model they follow, such as the American and French models (BouJaoude, 2000; El-Amine, 1997; Ghaith, 2012). The differences in academic models can be ascribed to the philosophy of education that each model follows (Nauffal, 2009), and the program of each model is developed complementarily to the system the model follows (Freiha, 1997).

The American-patterned universities offer undergraduate programs like those offered in the United States of America (USA) (Freiha, 1997; Loo & Magaziner, 2017), while the French-patterned universities follow the French HE system (BouJaoude, 2000). Teacher Education (TE) is offered by fifteen universities in Lebanon (El-Mouhayar & BouJaoude, 2012). Teachers are required to receive three years of undergraduate education at the education department of any university to receive a Bachelor of Arts degree in Education (Loo & Magaziner, 2017).

A review of the literature on HE in Lebanon shows differences in academic models between American-patterned and French-patterned universities (BouJaoude, 2000; El-Amine, 1997; Freiha, 1997; Loo & Magaziner, 2017; Nauffal, 2009). While literature informs us of general differences in HE between American-patterned and French-patterned universities in Lebanon, this dissertation thesis has used this review of literature as a theoretical assumption to do a comparison in TE between American-patterned and French-patterned universities in Lebanon, with the aim to fill the research gap and shed insight on the differences in TE in particular.

Personal Motivation

My personal motivation for selecting this topic stems from my undergraduate studies in TE and my 17-year teaching career. Having obtained a Bachelor of Arts in Education and a Teaching Diploma (TD), I started my career as a schoolteacher. With my growing interest in Education, I pursued a Master of Arts in Education as well. For the past seventeen years, I have

been in the teaching profession: first as a schoolteacher, and then as an instructor of Education at a private university in Lebanon.

Being an instructor in the Education Department and the TD Program at a private university in Lebanon for several years, I have worked closely with TE students in their courses, senior projects, and practicum experience. As part of my job, I supervised Education students as they were doing their practicums at schools. My students faced several issues during their studies, such as not having sufficient time to do practice teaching in schools and going to their practicums just to fulfill the requirement of their program, without fully benefiting from the experience.

In addition to Education students, novice teachers also report difficulties they face in their first few years of teaching, claiming that the theories they learned at university were insufficient to prepare them for the real world of teaching. I could relate to the abovementioned issues, having been an education student and a novice teacher once myself. Hence, I aimed to look deeply into TE programs. My interest in Education as well as my concern about the effectiveness of TE programs in Lebanon have motivated me to pursue a Ph.D. in TE and to look deeper into the current state of TE in Lebanon. To add more depth to my research, I performed a comparative analysis of TE programs in American-patterned and French-patterned universities in Lebanon.

A Definition of the Most Important Terms and the Relationship Between Them

The main purpose of this dissertation thesis is to gain an understanding of American-patterned and French-patterned education systems in Lebanese universities and compare them to each other. The focus is on TE programs. **<u>Teacher education</u>** is the initial preparation of teachers. It is the first step in the process of developing professional teachers, and it takes on a different form in every country. Initial TE takes place in universities or colleges or specialized institutions. The content of TE study programs encompasses subject matter, pedagogy, student development, and practice teaching (Villegas-Reimers, 2003). It is of ultimate importance that universities provide efficient TE due to the decisive role of teachers in student achievement. To define a **<u>teacher</u>**, it is necessary to determine a teacher's role. Different educational thinkers and writers emphasize different roles, such as subject experts, inspirers of motivation, curriculum deliverers, facilitators of learning, and others. The teacher's role is culturally determined, with

different cultures focusing on different aspects, such as collaboration, expertise, and responsibility. The definitions of the teacher's role influence the shaping of initial TE programs (Calderhead & Shorrock, 1997).

This dissertation will be done using the comparative approach. **<u>Comparative education</u>** (CE) is when policy makers examine education systems in other countries, focusing on methodological issues, to copy educational models and to inform future decisions in their countries. According to Bray et al. (2007), the following categories of people also undertake comparative studies of education: parents, for the practical purpose of choosing the institution that is best for their children; practitioners, such as principals and teachers, for the goal of improving the functions of their own institution; international agencies, such as United Nations International Children's Emergency Fund, the World Bank, and Organization for Economic Cooperation and Development (OECD), to compare education systems in different countries to be able to advise governments well; and academics, with the practical aim of better understanding the forces which shape education systems.

Study **<u>program</u>** denotes the collection of courses that constitute a learning experience (Manaher, n.d.). The core, required, and elective courses that lead to a degree or certificate make up academic programs (Learn.org, n.d.). Curriculum is a broader term than program and encompasses broader aspects.

What should TE programs equip their students with? Various research conducted on TE study programs shows that for these programs to be successful, they must incorporate different kinds of **<u>knowledge bases</u>** in addition to subject-specific knowledge. Research by Shulman (1986) differentiates between teachers' **<u>content knowledge</u>** (CK), **<u>pedagogical knowledge</u>** (PK), and **<u>pedagogical content knowledge</u>** (PCK). CK is subject-specific; it can be defined as a thorough comprehension of the content that is going to be taught (Baumert et al., 2010). However, it takes more than just knowledge and understanding of content to be able to teach a subject. To teach a subject, teachers must have PK, which means knowledge about teaching strategies such as instructional techniques, student assessment, and classroom management. PK encompasses pedagogical and psychological components related to the classroom (Voss et al., 2011). It is the type of knowledge which would facilitate the formation and enhancement of a classroom environment conducive to teaching and learning (Kunter et al., 2013). To make the

content accessible to students, teachers must be able to convert the knowledge they have into teachable knowledge that students can learn (Duit et al., 2012, as cited in in Liepertz & Borowski, 2018). This special combination of content and pedagogy is what Shulman (1987) called PCK. PCK is considered a merging of content and pedagogy; the outcome of this merging is an awareness and ability to organize and adapt subjects to suit the various student interests and abilities found in the classroom (Shulman, 1987). In 2006, Mishra & Koehler built on Shulman's theory of PCK and introduced the concept of **technological pedagogical content knowledge** (TPACK) to the field of education to describe the integration of technology into teaching (Schmidt et al., 2009).

According to literature, the nature of initial TE programs may be shaped by various theories and models. **Conceptual orientations** are values and beliefs about teaching and TE, and they have played a significant role in shaping TE programs and reforms in the USA. Feiman-Nemser has identified five conceptual orientations: academic, practical, technological, personal, and critical/social orientations as contributing to forming and shaping TE programs and courses (Calderhead & Shorrock, 1997; Villegas-Reimers, 2003). The following represent the five conceptual orientations in teacher preparation:

1. The **academic orientation** stresses that the aim of teaching is to develop understanding and transmit knowledge. Therefore, teachers should have both knowledge of the material to be taught and knowledge of methods of delivery.

2. The **practical orientation** promotes factors such as skill, technique, and originality; new teachers learn best through practice and experience and by interacting with colleagues and mentors.

3. The **technological orientation** advocates for the search for a scientific basis for teaching. This orientation focuses on the knowledge and skills of teaching. During the preparation phase, teachers should acquire principles and practices from the scientific study of teaching since the future of the profession of teaching depends on advancements that will be made by the application of scientific knowledge (Berliner, 1985, as cited in in Feiman-Nemser, 1990).

4. The **personal orientation** emphasizes the important role that a teacher's personal development plays in teacher preparation. To learn how to teach, prospective teachers should understand, develop, and use themselves efficiently.

5. The **critical/social orientation** explains that teachers play an important role in social reform: therefore, TE is part of a larger strategy to create a more just and democratic society (Feiman-Nemser, 1990).

In addition to TE study programs providing relevant knowledge bases and being shaped by pertinent orientations, Korthagen (2001) emphasizes the principle of **reflection** by explaining that reflecting on their behavior and action in the classroom is an important step for prospective teachers to bridge the gap between theory and practice. He identifies the major attributes of reflective teachers as: being capable of structuring situations and problems consciously, using certain standard questions when structuring experiences, answering questions concerning their learning goals easily, describing and analyzing their own functioning in interpersonal relationships with others. Starting from concrete practical concerns experienced by prospective teachers in real contexts, promoting systematic reflection, building on the personal interaction between the teacher educators and their students, and integrating theory and practice are among the basic assumptions of the "Realistic Teacher Education" approach (Korthagen, 2001).

Perceived effectiveness is the subjective evaluation of how effective or ineffective a program, policy, or product is perceived to accomplish its aims (McLaughlin et al., 2021).

This dissertation thesis is on **comparative education**. Its focus is evaluating the **perceived effectiveness** of **teacher education programs** in American-patterned and French-patterned universities in Lebanon. I will examine the **knowledge bases** that the TE programs provide their students with. I will also benchmark the contents of the programs against the **conceptual orientations** of Feiman-Nemser's typology. This framework has been used previously in comparing TE programs in Lebanon. Moreover, it is frequently quoted in the publications of key Lebanese authors on the topic. Through interviews with graduates from TE programs, I will explore the practice of **reflection** throughout their preservice preparation. Finally, I will compare the programs and analyze their perceived effectiveness in preparing **teachers** for their teaching career. The comparison will be made with the purpose of seeing what different programs can learn from each other and what are the best practices of each program that can inform the other program.

Statement of the Problem

TE programs in American-patterned and French-patterned universities in Lebanon do not make the kind of contribution to adequate teacher preparation that is required to prepare prospective teachers for teaching in a real classroom (Freiha, 1997; Ghaith, 2012). The content of the TE programs does not contribute to the effective preparation of teachers who should start their teaching career armed with both CK and PK and sufficient practice (El-Mouhayar & BouJaoude, 2012).

One of the main issues related to TE in Lebanon is the lack of sufficient practical courses in TE programs (Freiha, 1997, as cited in BouJaoude & El-Mouhayar, 2010). The programs in Lebanese universities, both American and French models, stress mainly on theoretical courses, with little emphasis given to practical courses (Farah-Sarkis, 1997, as cited in BouJaoude, 2000; Freiha, 1997; Ghaith, 2012). Moreover, in TE programs, practical field work comprises less than 25% of the whole program (Farah-Sarkis, 1997, as cited in El-Mouhayar & BouJaoude, 2012). In universities in Lebanon, the main issue in TE programs is that they do not emphasize on field work (BouJaoude, 2000, as cited in El-Mouhayar & BouJaoude, 2012). Another critical issue is the insufficient acquisition of classroom skills by prospective teachers. According to El-Mouhayar and BouJaoude (2012), TE programs in Lebanon do not provide prospective teachers with the knowledge and skills necessary to cater for the needs of all kinds of students in their classrooms.

Significance of the Study

Research shows that graduates from TE programs in the world are not efficiently prepared for the real-world experience of teaching (Korthagen, 2016), and that novice teachers experience many struggles in the classroom (Veenman, 1984, as cited in Korthagen & Nuijten, 2022). Literature on TE in Lebanon reveals that prospective teachers do not receive effective preparation (El-Mouhayar & BouJaoude, 2012). Therefore, it is of substantial importance to detect the challenges in TE in Lebanon and to propose reforms. This dissertation thesis is a comparative study between TE programs in American-patterned and French-patterned universities in Lebanon. It explores the perceived effectiveness of TE programs in universities of both models in equipping prospective teachers with the necessary knowledge bases, skills, and practice to have a smooth start of the teaching profession.

The purpose of this dissertation thesis is to compare TE programs in American-patterned and French-patterned universities in Lebanon. The indicators of comparison are the structural content of the programs, the conceptual orientations in the programs, the duration and quality of the practicum course, the knowledge bases acquired, integration of technology, and reflective practice. The aim of this comparison is to understand the challenges to effective TE in both university models and to identify the reforms needed.

This dissertation thesis provides important information about TE in Lebanon by conducting an analysis of TE program structure and content. TE programs of selected universities in Lebanon were surveyed through university websites and course catalogues and benchmarked against Feiman-Nemser's five conceptual orientations: academic, practical, technological, personal, and critical/social orientations. Moreover, the content of programs was examined to determine the knowledge bases they equip graduates with, by using Lee Shulman's theory as a framework. In addition, by using the qualitative method of conducting interviews with teachers who have graduated from universities in Lebanon, this dissertation thesis examines the attitudes and perspectives of the teachers regarding their TE preparation. A comparative element is also added. By performing TE program analysis and conducting interviews, evidence is obtained concurring with or contradicting previous research on Lebanese university TE programs. As outputs of this dissertation thesis, best practices in TE programs were identified, and reforms were proposed by participants who have experienced the phenomenon firsthand.

Brief Introduction of the Design of the Study

The aims of this dissertation thesis are to identify the structural components of TE programs of selected American-patterned and French-patterned universities in Lebanon, to identify the proportion of practical courses, and to analyze the TE programs by benchmarking them against the conceptual orientations of the theoretical framework of Feiman-Nemser. For these purposes, the websites of six selected universities in Lebanon were surveyed: three American-patterned universities: Modern University for Business and Sciences (MUBS), Haigazian University (HU), and American University of Beirut (AUB), and three French-Patterned universities: Université Libanaise (UL), Université Saint Joseph (USJ), and Université Sainte Famille (USF). Surveying publicly available online information about TE programs on

university websites provides documentation of program content, length, and structure, practical experiences, and the balance between theory and practice (Mayer et al., 2015).

In addition, this dissertation thesis aims to explore the perceived effectiveness of TE programs in the six selected universities by conducting semi-structured interviews with graduates from these universities. For this purpose, this dissertation thesis adopts the qualitative approach. Qualitative research attempts to understand the meaning individuals construct about their experiences (Merriam & Grenier, 2019) and results in data about the experiences and perspectives of participants (Wray & Barrett, 2022). Through interview questions and the resulting discussions, researchers can gain an understanding of the experiences of participants (Husband, 2020). This study will follow the interpretive design, in which the research questions relate to a particular setting and time (Schwartz-Shea & Yanow, 2013), and the methods of data collection are interviews, observations, and document analysis (Merriam & Grenier, 2019). Researchers should select participants who are likely to have had the experiences that the questions are asking about (Magnusson & Marecek, 2015). Therefore, in this dissertation thesis, semi-structured interviews were conducted with twenty schoolteachers who have graduated from the six universities. These teachers have obtained their teaching degrees within the past three years.

Dissertation Aims

Based on the relevant literature review and the theoretical frameworks guiding this work, the aims of this dissertation thesis are:

1. to describe the structure and content of TE programs in selected American-patterned and French-patterned universities in Lebanon

2. to examine the perceived effectiveness of TE programs in selected American-patterned and French-patterned universities in Lebanon based on the input of graduates

3. to compare TE programs in selected American-patterned and French-patterned universities in Lebanon and see similarities and differences in practical experience, reflective practice, and acquisition of knowledge bases

Chapter 1: Literature Review: Teacher Education and Theoretical Context

1.1 Teacher Education

TE is the initial preparation of teachers. It is the first step in the process of developing professional teachers, and it takes on a different form in every country. Initial TE takes place in universities or colleges or specialized institutions. The content of TE study programs encompasses subject matter, pedagogy, student development, and practice teaching (Villegas-Reimers, 2003). Regarding the field of TE, in 1684, Saint John-Baptiste de la Salle established the first teacher's educational school in France, and hence educating teachers started to become a formal movement. In the early 1700s, teacher-educating schools spread across Europe (Graham, 2008). In the USA, the first formal teacher preparation began in the 1820s when "normal schools" were founded. Afterwards, in the 21st century, 4-year college programs began to administer TE programs (State University, n.d.). According to the report of the "American Educational Research Association Panel on Research and Teacher Education," TE research is a relatively new field which was developed more in the last half of the twentieth century (Cochran-Smith & Zeichner, 2005).

The United Nations Educational, Scientific and Cultural Organization (UNESCO) and the OECD are international organizations that make contributions to the fields of CE and TE by publishing about topics such as economic and social role of education, education policy, interaction of education and society, and other related topics. The World Council of Comparative Education Societies also does publications in CE as well as TE, with the aim of monitoring education in the World.

1.1.1 Practices of Teacher Education in Countries with High Performing Education Systems

As mentioned above, TE takes on a different form in every country (Villegas-Reimers, 2003). High performing and improving school systems recognize the importance of good teacher preparation (Barber & Mourshed, 2007). In addition to being recognized as the top performing education systems in reading, science, and math, Finland, Japan, and Singapore have also been recognized as models for best practices in teacher recruitment and preparation (Steiner-Khamsi, 2015). In such high performing education systems, an extensive amount of time is given to practicums. For example, in Singapore, prospective teachers spend 22 weeks (about 5 months) in a school throughout their 4 years of study (Jensen et al., 2012, as cited in Shewbridge et al.,

2016). In Japan, prospective teachers who are in their first year of study spend 2 days a week in one-on-one coaching in a school classroom (Roberts-Hull et al., 2015, as cited in Shewbridge et al., 2016).

Finland is known for its high-quality teacher preparation; all prospective teachers are required to complete a master's degree before they start to teach. Canada, Australia, and the United States offer a combination of undergraduate and graduate level programs. While in Singapore, the only institution that offers TE is the National Institute of Education at Nanyang University, which offers both undergraduate and graduate programs. The abovementioned countries have high-quality programs and offer TE in innovative ways. In almost all these countries, reforms focus on increasing the connection between theory and practice, and on helping teachers acquire capabilities to teach the various types of students that will be in their classrooms (Darling-Hammond, 2017).

The top-performing school systems acknowledge that the only way to improve outcomes is to improve instruction. Therefore, teacher professional development is of the utmost importance. Top performing school systems recognize the importance of teacher training programs and focus their reforms on providing their teachers with training, which will lead to improving classroom instruction. Singapore, for example, through its National Institute of Education, delivers high-quality professional development to its teaching staff (Barber & Mourshed, 2007).

1.1.2 Challenges to Teacher Education in the World

Commonly, traditional TE programs encompass a collection of isolated courses; in these courses, theories are presented but connection to practice is lacking (Barone et al., 1996, as cited in Korthagen, 2016). Therefore, one of the main issues of TE is the difficulty in moving from studying and understanding theories to the actual performance in the classroom (Darling-Hammond & Snyder, 2000, as cited in Korthagen, 2016).

Research shows that in the USA, TE programs are not very effective because of the weak connection between the type of practicum that prospective teachers do during their years of university studies and real classroom teaching (Barber & Mourshed, 2007). In his study which included the perceptions of school principals, education school faculty, deans, and schoolteachers on TE, Levine (2006) found that the highest priority of reform was placed on

creating a better balance between subject matter preparation and field experience. New teachers reported that the student teaching experience is the most valuable aspect of a TE program, yet most programs give students limited opportunities to clinical or field work experience. Moreover, prospective teachers are not exposed to a variety of settings and to teachers with diverse teaching styles.

According to Shuayb (2015), the quality of education in most Arab countries remains poor despite the attempts at education reforms. One reason for this is the deficient teacher preparation and development. Many teachers in the Arab world are underprepared. Some do not have a university degree in teaching, and others are not trained in teaching skills and pedagogy. Many Arab countries do not offer professional development opportunities to their teachers, depriving them of the chance of improving their teaching skills (Faour, 2012). Moreover, in the TE programs of Arab countries, the practicum course is left till the last year of studies. A principal limitation of TE is not enough time that preservice teachers spend observing actual classrooms, doing practice teaching, reflecting upon their observations and practice, and designing lessons and activities (Taha, 2017). For example, the practice teaching component has faced various challenges in the United Arab Emirates (UAE). One such challenge has been the difficulty of being placed in state schools (Sowa & Vega, 2009, as cited in Gallagher, 2019), while another challenge has been the inability of state schools to provide mentoring to prospective teachers because of having teachers with low qualifications (Gallagher, 2007, as cited in Gallagher, 2019). In addition, since teachers in state schools followed the teacher-centered approach, they would misunderstand prospective teachers who would apply student-centered techniques (Gardiner Hyland, 2014, as cited in Gallagher, 2019).

Another issue in TE programs is the absence of mentoring. In the Arab countries, teachers who start teaching do not get a sufficient duration of induction programs that would help them have an efficient start; these teachers are also not provided with adequate mentoring (Taha, 2017). This is an issue because mentoring provides fresh graduates with a connection between university studies and the reality of classroom teaching, something that would improve the quality of instruction (Levine, 2006). School-university partnerships help establish links between the practical and theoretical aspects of teaching; such partnerships make connections between teachers at schools who act as mentors and guide prospective teachers, and instructors at universities who teach the theoretical part (Martin et al., 2011, as cited in Korthagen, 2016).

1.2 The Status of the Teaching Profession

The teaching profession has been categorized as a semi-profession by different scholars since it does not satisfy the criteria of full professions stated in literature (David, 2000, as cited in Demirkasımoğlu, 2010). The traditional sociological approach considers law and medicine professions of high status and pay (Webb et al., 2004, as cited in Demirkasımoğlu, 2010). The status of the teaching profession is perceived as lower than the status of other professions, such as engineering, medicine, and law (Ingersoll & Merill, 2011, as cited in Guerriero & Deligiannidi, 2017), and this poses challenges in the recruitment of teachers and the retaining of good teachers in the profession. For many historians, semi-professions such as teachers, healthcare workers, and social workers have often been called minor (Nottingham, 2007).

1.2.1 Full Professions and the Teaching Profession

Established professions, or full professions, differ from insecure professions, or semi-professions, in factors such as the standards of conduct being unified and the discipline being self-regulated, in addition to the issue of control of entry to the profession (Nottingham, 2007).

To differentiate between professions and professionals and other kinds of work and workers, researchers in sociology have devised organizational and occupational attributes that define professions (Etzioni, 1969; as cited in Ingersoll & Collins, 2018). The teaching profession is placed among the semi-professions since many dimensions that characterize a full profession are not evident in teaching (Guerriero & Deligiannidi, 2017).

1.2.2 The Profession of Teaching Benchmarked Against the Attributes of a Full Profession

Three important dimensions that constitute the core of a full profession are: a scientific and profession-specific body of knowledge, a long period of HE and continuous professional development, and autonomy of decision making in practice and in governance of the profession, and these core dimensions are not evident in teaching (Guerriero & Deligiannidi, 2017). Firstly, the body of knowledge acquired in TE is not considered profoundly arcane since almost everyone in society appears to know about how teaching is done (Gore & Morrison, 2001). Secondly, regarding PK and the teaching profession, compared to other more prestigious professions, teaching is perceived to be of lower status because it can be learned simply by observation, in contrast to the full professions for which long periods of specialized training and

professional development are required to gain the necessary knowledge, skills, and expertise (Hoyle, 1995, as cited in Guerriero & Deligiannidi, 2017). This lack of a profession-specific knowledge base and absence of specialized pedagogical training have led to the perception of teaching as having low prestige and being a semi-profession (Guerriero & Deligiannidi, 2017). Thirdly, the autonomy of the teaching profession is under organizational control and being monitored by administrators, and this constrains the autonomy of teachers (Leiter, 1978, as cited in Demirkasımoğlu, 2010). Professional autonomy is achieved through governance and self-regulation; hence, a profession with low control over itself is considered to be of a lower status (Guerriero & Deligiannidi, 2017). Regarding the autonomy and prestige of the teaching profession, they are not on the same level as those found in the full professions (Gore & Morrison, 2001).

Other factors that determine the status of the teaching profession and differentiate it from full professions are salary, ease of access to the profession, and working conditions. In most countries that are part of the OECD, teacher salaries are lower than the salaries of other professions which require the same level of education. This discrepancy in salary is considered a main reason in perceiving a profession in a lower status (OECD, 2016, as cited in Guerriero & Deligiannidi, 2017). Several initiatives have been made to ease admittance into the teaching profession for the purpose of attracting talented candidates into teaching. Examples of such initiatives are certification programs that serve as alternatives to actual university education. Such programs allow the attainment of teaching certificates in shorter durations and facilitate entry into the teaching profession. Unfortunately, following this route leads to a decrease in the professional status of teaching (Ingersoll & Collins, 2018). Regarding working conditions, large class size, long working hours, excessive workload, poor job security, lack of instructional resources, and little access to professional development are among the factors that negatively impact the status of the teaching profession (Leithwood, 2006, as cited in Guerriero & Deligiannidi, 2017).

1.2.3 Teacher Professionalism

In literature, teacher professionalism is frequently discussed sociologically, educationally, and ideologically. However, this concept has been debatable among scholars (Demirkasımoğlu, 2010). Since teaching has an important effect on student learning and

achievement, and since highly competent teachers contribute to excellent education systems, the teaching profession has been on the policy agenda of most OECD countries in recent years (Guerriero & Deligiannidi, 2017). Due to political and social changes, the definition and status of the teaching profession have evolved over the years. Hence, the definition can be described as dynamic, with no final agreement on the conceptualization of the term. How, then, can teacher professionalism be defined? Focusing on teachers' professional qualifications may be one way to attain this definition. The degree to which teachers overcome difficulties and use their experience and skills to achieve excellence can also serve as a measure to define teacher professionalism (Baggini, 2005, as cited in Demirkasımoğlu, 2010).

The contribution of TE programs to teacher professionalism manifests in establishing standards and criteria for developing, implementing, and monitoring the curriculum, teaching faculty, approaches to teaching and learning, and field experience. TE graduates should possess professional attributes and should acquire competence in content and curriculum studies, relationship with students, behavior management, technology, assessment and evaluation, and working with others (Australian Council of Deans of Education, 1998). Prospective teachers' acquisition of knowledge bases in content and pedagogy has been emphasized by Lee Shulman's TE theory.

1.3 Lee Shulman's Theory: Teacher Knowledge Bases

It is valuable to analyze TE programs in terms of the knowledge bases that preservice teachers acquire (Ghaith, 2012). Hence, Lee Shulman's TE theory about knowledge base acquisition is one of the theories that will guide this dissertation thesis and influence the approach to answering the research questions. An international comparative perspective reveals differences in TE programs. Some education systems give great importance to PK, while other education systems view TE as a generalist degree (Steiner-Khamsi, 2015). Various research conducted on TE study programs shows that for these programs to be successful, they must incorporate different kinds of knowledge bases in addition to subject-specific knowledge. Research by Shulman (1986) differentiates between teachers' CK, PK, and PCK.

1.3.1 Content Knowledge, Pedagogical Knowledge, and Pedagogical Content Knowledge

Researchers over the years have attempted to understand and explain the professional knowledge of teachers after Shulman's (1987) classification of teachers' knowledge bases. There

is an agreement that teachers must have CK, known as subject matter knowledge (Liepertz & Borowski, 2018). CK is subject-specific; it can be defined as a thorough comprehension of the content that is going to be taught (Baumert et al., 2010). According to Kind and Chan (2019), knowledge of facts, concepts, and information to be taught makes up CK. Prospective teachers acquire CK in formal learning environments. This type of knowledge, which is shared among a community of specialists, is considered highly specialized knowledge (Shulman, 1987). Previously, it was thought that specific content was what a teacher needed to know to teach. However, CK alone is not enough to characterize a good teacher (Kind, 2009, as cited in Fernandez, 2014). CK is knowing "what to teach."

PK is the type of knowledge which would facilitate the formation and enhancement of a classroom environment conducive to teaching and learning (Voss et al., 2011). Both discipline-related material and instructional strategies should be included in a TE program (Maphosa & Mashau, 2014). One of the factors that has the biggest influence on the quality of instruction and the learning and achievement of students is the teacher's ability to create and shape the learning environment (Cochran-Smith & Zeichner, 2005, as cited in Voss et al., 2011). PK provides teachers with an understanding of the cognitive, social, and developmental theories of learning. Hence, it prepares teachers for multiple aspects of student learning, such as lesson plan development, techniques of instruction, classroom management, student assessment, and knowledge of student qualities and learning processes (Liepertz & Borowski, 2018; Mishra & Koehler, 2006; Voss et al., 2011). The following skills and abilities are necessary to be considered to have the knowledge base of PK. Firstly, teachers need to be skilled in classroom management to be able to keep their students focused and on topic. Also, teachers must have knowledge about various methods of teaching because classrooms encompass a diverse range of students, and not all students learn in the same way; therefore, teachers need to cater to the learning styles of all the students. Teachers also need to know how to create and implement lesson plans. In addition to classroom instruction and management, teachers also must possess knowledge of classroom assessment; this will allow them to evaluate students' work, monitor students' progress, and adjust their teaching methods to fit the students' styles and preferences (Voss et al., 2011). Through TE programs, prospective teachers should acquire understanding of learners and learning and knowledge of child and adolescent development and learning (Feiman-Nemser, 2001). PK is knowing "how to teach."

Finally, PCK can be conceptualized as the knowledge required by teachers to be able to transfer the content to their students (Kleickmann et al., 2012). PCK is considered a merging of content and pedagogy; the outcome of this merging is an awareness and ability to organize and adapt subjects to suit the various student interests and abilities found in the classroom. Thus, PCK is what differentiates a pedagogue from an expert in content (Shulman, 1987). In addition to having a complete understanding and knowledge of the subject being taught, teachers also need to be knowledgeable about the ways students learn and think about the material. They should identify students' strategies in studying the subject and recognize student misconceptions (Coe et al., 2014). Teachers should acquire PK that prepares them to provide alternative explanations when their students find the material confusing. This type of knowledge enables teachers to understand how the core concepts of their field relate to everyday life (Wilson et al., 1987, as cited in Feiman-Nemser, 2001). PCK is knowing "how to teach the what."

1.4 Fred Korthagen's Theory: Realistic Teacher Education and Reflection

Fred Korthagen has made valuable contributions to the field of TE. This dissertation thesis uses Korthagen's realistic TE approach as a framework. This approach emphasizes the importance of linking theory and practice in TE and calls for a learning process that includes reflective practice to bridge the gap between theoretical knowledge and practical application.

1.4.1 Realistic Teacher Education

Korthagen (2001) talks about the gap between theory and practice apparent in the traditional approach to TE. According to Kessels and Korthagen (1996), in dealing with the problems of teaching, there is a dominance of episteme, or theory, over practice in teacher thinking. Episteme knowledge includes principles, ideas, frameworks, and concepts about educational practice; hence, it refers to theoretical knowledge. Teachers who possess episteme knowledge are equipped to critically assess and interpret educational challenges. Although episteme knowledge as a theoretical basis guides teachers' instructional methods and pedagogical approaches, it is important to merge it with phronesis to deal with the issues of teaching more effectively. Phronesis refers to practical wisdom and practical knowledge. This type of knowledge gives teachers the ability to apply their theoretical knowledge in real-world teaching. Using both theoretical understanding and practical experience helps teachers make wise decisions in their teaching experience.

The realistic TE approach is named realistic because it is based on real practical experiences. Reflection on practice is an important component of this approach (Korthagen & Nuijten, 2022). The starting point of reflection is not theory, but the real experiences and concerns of prospective teachers (Tigchelaar & Korthagen, 2004, as cited in Korthagen & Nuijten, 2022). There is an alternation between theory and practice, with both complementing each other. This way, the gap between theory and practice can be bridged by having prospective teachers reflect on their experiences and learn relevant theories, instead of learning only theories. Teacher educators should build the discussion upon the prospective teachers' practical teaching experiences gained during the practicum course. This can then lead to a discussion about beneficial practices (Korthagen & Nuijten, 2022). To achieve a proper transfer of theory learned during TE to practice, the realistic TE approach calls for an interchange between practical experience and theoretical elements in TE studies (Brouwer & Korthagen, 2005, as cited in Korthagen & Nuijten, 2022). Starting from concrete practical concerns experienced by prospective teachers in real contexts, promoting systematic reflection, building on the personal interaction between the teacher educators and their students, and integrating theory and practice are among the basic assumptions of the realistic TE approach (Korthagen, 2001).

In Korthagen's realistic approach, the role of teacher educators is different from their traditional role: they must provide support that is attuned to the particular problems that prospective teachers are having. Moreover, teacher educators are required to have competencies such as creating suitable learning experiences for their students, encouraging students to reflect on their experiences, presenting theoretical concepts from empirical research, and training their students to act in a productive manner (Korthagen & Kessels, 1999).

1.4.2 Reflection

One of the first writers to write about the importance of reflection was John Dewey in 1933 because the teaching profession was too technical. Reflection for him meant drawing links between different facets of an experience. (Korthagen & Nuijten, 2022). In his research and writings, Korthagen addresses the discrepancy between theory and practice in TE and identifies reflection as the missing link between theory and practice (Korthagen, 1985). Reflecting on their behavior and action in the classroom is an important step for prospective teachers to bridge the gap between theory and practice (Korthagen, 2001).

1.4.2.1 The Benefits of Reflection. According to Korthagen and Nuijten (2022) reflection is important for teachers due to its many practical benefits. First, reflection gives teachers a better understanding of situations and hence allows them to make more informed decisions and have more effective behavior. This understanding promotes teachers' competence and self-efficacy. Reflection also deepens the learning process by helping to create a connection between practice, theory, and the person (see Figure 1). Additionally, reflection enhances cultural sensitivity by helping teachers be aware of their unconscious beliefs and biases.

Figure 1

Reflection Connects Practice, Theory, and Person

Note. From *Linking practice and theory: The pedagogy of realistic teacher education,* by F. A. Korthagen, 2001, Lawrence Erlbaum Associates Publishers.

Research indicates that exposing prospective teachers to reflective practice enables them to make better decisions, equips them with a wide range of teaching strategies (Yuan & Lee, 2014, as cited in Asregid et al., 2023), increases their self-awareness, and equips them with confidence in dealing with the problems of real-world teaching (Slade et al., 2019, as cited in Asregid et al., 2023). Therefore, teacher educators should engage their students in reflective practice.

In his writing, Korthagen (2001) identifies the major attributes of reflective teachers as: being capable of structuring situations and problems consciously, using certain standard questions when structuring experiences, answering questions concerning their learning goals easily, and describing and analyzing their own functioning in interpersonal relationships with others.

1.4.2.2 Core Reflection. In describing reflective practice, Korthagen (2014) distinguishes between surface-level reflection and deep reflection. He stresses that TE programs should incorporate core reflection, which enables prospective teachers to go beyond surface-level reflection and explore their inner beliefs, attitudes, and feelings that affect their teaching practice. Core reflection is detailed and integrates the various aspects of the person of the teacher, such as thinking, feeling, wanting, and acting.

Reflection should be deep since research shows that teachers' practices and students' behaviors are not only guided by cognitive thinking, but also influenced by feelings and emotions (Sutton & Wheatley, 2003, as cited in Korthagen, 2014). Hence, core reflection finds it crucial to consider the person of the teacher and to acknowledge the personal frames of reference, feelings, and needs that shape teachers' actions (Korthagen, 2014).

1.4.2.3 Forms of Reflection. Reflection can be done by following reflection models. It can also be done in phases, and as self-reflection or peer reflection. One of the efficient models introduced by Korthagen is the ALACT model.

The process of experiential learning is an alternation between action and reflection. Korthagen identified the ALACT model for reflection, with the name of the model standing for the first letter of the five phases, which are: Action, Looking back on the action, Awareness of the essential aspects, Creating alternative methods of action, Trial (see Figure 2). In each phase, there are open ended questions that the prospective teachers should answer. The fifth phase is a new action, and hence a new cycle begins (Korthagen, 1985). The ALACT model promotes meaning-oriented reflection (Korthagen & Nuijten, 2022).

Figure 2

The ALACT Model for Reflection
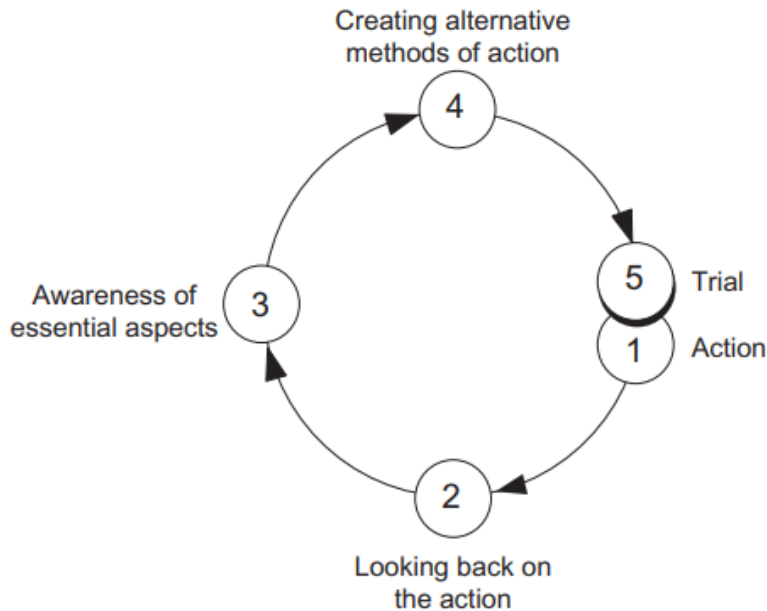
Note. From "Reflective teaching and preservice teacher education in the Netherlands," by F. A. Korthagen, 1985, *Journal of Teacher Education, 36*(5), p. 13.

Reflection can be done through phases. Performing reflection after doing an action is not the only way to reflect. The phases of reflection include reflection-in-action, which involves thinking while acting, reflection-on-action, which involves thinking back on completed acts, and reflection-for-action, which involves thinking ahead to future activities (Killion & Todnem, 1991, as cited in Asregid et al., 2023).

Feedback from teacher educators and peers plays an important role in the reflection process. Feedback is a bidirectional process done between the teacher educator and the prospective teacher. Equally important to feedback given by the teacher educator is the prospective teacher interpreting it. Thus, it is beneficial for preservice teachers to engage in self-reflection in addition to the reflection on their work that they receive from their instructors (Lichtenberger-Majzikne & Fischer, 2017, in Asregid et al., 2023).

One successful approach is guiding prospective teachers to engage in reflective practice consistently with a partner or with a small group of peers since this type of interaction allows for

a deeper understanding of various perspectives and viewpoints (Burrows, 1995, as cited in Sellars, 2014). In the process of peer reflection, the group supports learning from experiences through engaging in reflective practice. In such a group setting, some students may learn some things better from each other than from the teacher educator (Korthagen & Nuijten, 2022). Participating in reflection exercises with peers helps prospective teachers respectfully challenge their own and others' assumptions, which in turn nurtures the habit of engaging in the reflective process (Burrows, 1995, as cited in Sellars, 2014). Prospective teachers widen their knowledge base, develop skills of identifying the focus of reflection, and gain awareness of the importance of critical reflection through engagement with peers (Sellars, 2014).

1.5 Online Education

During the years of conducting the research for this dissertation thesis, the Covid-19 pandemic necessitated online teaching and learning With each and every regular problem of Lebanon intensifying in 2020 and 2021, the country had to also deal with the Covid-19 pandemic and all its consequences, from death to losing jobs to the closing of schools and universities and shifting to online learning. Teachers in Lebanon had to adapt not only to teaching online, but also to teaching online amidst an economic crisis, political instability, and power outages.

1.5.1 Teaching and Learning Online

Since the 1980s, efforts have been made to initiate distance education possibilities in Higher Education Institution (HEI) in the Arab World. While many universities established distance learning using different methods, researchers and critics in the 1990s stated that distance education programs utilize audio and video cassettes, printed materials, and other traditional methods. Moreover, many universities were setting learning objectives that are relevant nationally and hence limited in scope for students from other countries. A report by UNESCO in 2002 considered distance education in Arab countries to be of a lower quality than that in developed countries (Mohamed, 2005).

In the year 2020, due to the Covid-19, the whole world had to quickly shift to online education. The pandemic brought about major changes in the lives of people. Shops and restaurants had to close, curfews were applied, and face masks became mandatory to halt the spread of the virus. Among these changes was the shift from face-to-face classroom instruction to synchronous and asynchronous online instruction. Synchronous online instruction refers to

teachers and students being online at the same time and engaging in real-time communication, whereas asynchronous online instruction refers to students logging in to an e-learning environment at different times and engaging with the materials provided by the teacher at their own pace (Hrastinski, 2008).

The transition to online instruction brought about challenges for teachers and students. The change was abrupt; hence, many teachers assumed the challenge of instantly setting up online learning systems and preparing online learning materials (Hermanto & Srimulyani, 2021). Another challenge was developing new interactive learning strategies suitable for online instruction (Yusuf & Jihan, 2020). Lack of teacher experience in conducting lessons using technology was yet another challenge (Zhang et al., 2020). In the online classroom format, face-to-face interaction was lost, and students faced the challenge of making an extra effort to maintain their attention, participation, and intention to learn (Pandit & Agrawal, 2022). Another issue was the inability of some families to afford sufficient internet quota and to provide electronic devices for each child in the household (Simamora, 2020). Unstable internet connection, power outages, and noisy households were yet other challenges that prevented the students from having an optimal online learning experience (Lapitan et al., 2021). Such challenges called for the implementation of new and relevant strategies that would facilitate the adaptation to online instruction and make it a beneficial learning experience.

Also, unlike face-to-face instruction, there was a higher probability for students to skip classes in the online mode due to instructors having less control over attendance (Bao, 2020). According to Sun and Chen (2016), one essential aspect of online education is student-centered learning; therefore, teachers should create an environment that facilitates student collaboration and helps them learn from one another. The pandemic called for devising strategies that would create an online community of learners. In online learning communities, students share information and construct knowledge through technology (Yuan & Kim, 2014).

The experience of the sudden shift from the physical classroom to synchronous and asynchronous online instruction due to the Covid-19 pandemic, along with the challenges that accompanied it, raised awareness about reforms that can be implemented in initial teacher preparation. TE programs should encompass Technology Knowledge (TK), which incorporates knowledge about various technologies such as computers, the Internet, digital video, and

software applications (Koehler & Mishra, 2008, as cited in Öz, 2015). According to Abucayon et al. (2016), teachers need to obtain the knowledge and skills that help them integrate technology into their programs. The transition to online teaching due to the pandemic highlighted the need for prospective teachers to be trained on using various technological tools during their years of study in order to design and implement lessons through technology, such as videoconferencing software and online learning platforms.

The shift to online instruction taught teachers important lessons that will stay with them in coming years. Even when the pandemic is over, the practices and the skills acquired through the experience of online teaching will help teachers improve their overall instruction.

1.5.2 Technological Knowledge Base

The Covid-19 pandemic necessitated the transition from in-person to online teaching, and this change called for the use of Information and Communications Technologies as an important instructional tool. TK, which encompasses knowledge about various technologies such as computers, the Internet, digital video, and software applications (Koehler & Mishra, 2008, as cited in Öz, 2015), became essential to make the transition to online teaching successful. According to Jamieson-Proctor et al. (2010), TE programs should provide prospective teachers with TK to enable them to integrate Information and Communication Technology (ICT) into their classes when they become teachers.

However, just as CK alone is not enough for effective classroom teaching, TK alone is not enough for effective online teaching. Knowledge of how to implement ICT in teaching is essential. In 2006, Mishra & Koehler built on Shulman's theory of PCK and introduced the concept of technological pedagogical content knowledge (TPCK) to the field of education to describe the integration of technology into teaching. The acronym TPACK replaced TPCK to make it easier to remember (Schmidt et al., 2009). According to Mishra & Koehler (2006), competence in technology is necessary for teachers to be able to integrate technology into their teaching. The TPACK model introduced an integrated conceptual framework for a new knowledge base that teachers must have. This type of knowledge allows teachers to teach a subject effectively using technology. The use of technology in TE is becoming more and more important as technology changes our society, our education system, and our personal life (Feiman-Nemser, 2017).

A systematic review of literature done on online initial TE revealed research focal areas in the field, such as technological pedagogical innovations, student experiences of studying TE online, and teacher educator experiences of teaching online (Dyment & Downing, 2020). In response to the shift to online education due to Covid-19, this dissertation thesis added the dimensions of technology and the TPACK knowledge base.

1.6 Teacher Education Program Evaluation

There is a connection between teacher qualifications and student achievement. Successful teaching, effective student learning, and the attainment of learning outcomes depend on the TE program's quality (Darling-Hammond, 2000). Similarly, according to Feuer et al. (2013), student learning is greatly influenced by classroom instruction, the success of which depends on the preparation that prospective teachers receive during their training years. Hence, evaluating TE programs serves to provide policy makers with the necessary information to bring about developments in both policy and practice.

To be able to identify the reforms needed, it is important to survey TE programs. An examination of such programs provides an understanding of the program structure, content, distribution of courses, and the practical experience prospective teachers receive (Mayer et al., 2015). TE program evaluations can be achieved by examining different forms of evidence used to measure TE attributes. Several aspects are considered, such as the quality and substance of instruction, faculty qualifications, effectiveness in teacher preparation, and success in preparing high-quality teachers. For example, to evaluate the quality of instruction, course syllabi, textbooks, course offerings, required hours, and the number of required content courses may be reviewed; to assess the quality of student teaching experiences, practicum hours and qualifications of mentors may be considered (Feuer et al., 2013). Surveying publicly available online information about TE programs on university websites provides documentation of program content, length, and structure, opportunity for and duration of practical experiences, and the balance between theory and practice (Mayer et al., 2015).

Examining the effectiveness of TE programs may provide insight into how well graduates are prepared and equipped to satisfy the requirements of their workplace (Mayer et al., 2015). Exploring the course offerings, the required hours, practicum policies and hours, and the number of required content courses provides the possibility to make comparisons across different

programs. Such types of information are usually accessible on institution websites and catalogs, and hence a researcher who is not an insider may access them and examine them (Feuer et al., 2013).

It is beneficial to use multiple methods to analyze the impact and effectiveness of TE programs to get a thorough comprehension of such programs (Ludlow et al., 2010, as cited in Mayer et al., 2015). TE program evaluations alone are not enough to introduce reforms in prospective teacher preparation and teaching quality (Feuer et al., 2013). For a deeper understanding, graduates who have started teaching already can be interviewed. These interviews complement the information obtained from surveying TE programs, and hence characteristics most effective in preparing teachers for the real classroom experience may be identified (Mayer et al., 2015).

The teacher's role as a facilitator is to create a learning environment. This requires a good knowledge of their students' needs, interests, and abilities to be able to set the objectives, plan the learning tasks, and select the materials (Feiman-Nemser, 1990). Teacher preparation determines the effectiveness of classroom instruction, which influences student learning quality (National Research Council, 2010, as cited in Feuer et al., 2013).

Evaluating TE programs offers the advantage of introducing reforms in these programs. According to Feiman-Nemser (1989), teacher preparation programs can be analyzed through structural and conceptual models. In the next section, the typology of Feiman-Nemser will be introduced.

1.7 Sharon Feiman-Nemser's Conceptual Orientations

The Feiman-Nemser typology of TE programs has been used as a framework in research on the Lebanese context. In this dissertation thesis, it will be used as a theoretical foundation. According to Feiman-Nemser (1989), teacher preparation programs can be analyzed through structural and conceptual models. Structural models include specific forms of teacher preparation that focus on the general organization of programs such as the number of years to complete a program, the number of required credit hours of education and content, the duration of field-based experience, and alternative certification methods. Conceptual models, on the other hand, reflect different insights about teacher preparation and accentuate the importance of orientations derived from the different views of teaching and theories of learning to teach. A set of ideas that

guides the practical activities in TE programs is known as an "orientation." Such practical activities can be identified as developing courses, teaching, supervising, assessing, and planning programs. An orientation would identify the goals of TE and the ways of realizing these goals. Conceptual orientations about teacher preparation have shaped the nature of TE programs (Calderhead & Shorrock, 1997). The following represent the five conceptual orientations in teacher preparation:

1. The academic orientation stresses the importance of teachers' expertise in subject matter (Feiman-Nemser, 1990, as cited in Calderhead & Shorrock, 1997). Teachers play the role of scholars, intellectual leaders, and subject matter specialists (Feiman-Nemser, 1990). To be able to teach an academic subject, teachers must first have good knowledge and understanding of it (Ball & McDiarmid, 1990, as cited in Feiman-Nemser, 2001). Subject matter knowledge should be complemented by PCK, a type of knowledge that provides an understanding of how to teach academic topics to students of different ages and backgrounds (Shulman, 1986, as cited in Feiman-Nemser, 1990).

2. The practical orientation views practical experience in the classroom as a key factor in TE and emphasizes the fieldwork model of prospective teacher preparation (Feiman-Nemser, 1990, as cited in Calderhead & Shorrock, 1997). The university-based components of TE should not only offer theoretical knowledge about teaching but also provide situations in which prospective teachers can practice the principles and theories they learn (Loughran et al., 2006). It is crucial for prospective teachers to gain a lot of experience with whole-class teaching before they embark on their teaching career (Feiman-Nemser, 2001).

3. The technological orientation has as its main goal the preparation of teachers who can perform the duties of teaching adeptly (Feiman-Nemser, 1990). The 21st century world presents contemporary challenges; therefore, updating the pedagogies used by teachers to encompass student-centered learning, culturally relevant pedagogy, and technology literacy can provide students with skills that prepare them to face modern-day challenges (OECD, 2018). Learning to teach involves the knowledge and application of research-based principles of teaching (Feiman-Nemser, 1990).

4. The personal orientation derives its guiding principles from developmental, humanistic, and perceptual psychology (Feiman-Nemser, 1990). In recent years, the acquisition of "21st century

skills" has become crucial for the development of higher-level personal and social competence and for improved personal management and interpersonal interaction (Pellegrino & Hilton, 2012, as cited in Peterson et al., 2018). Consequently, while learning to teach, prospective teachers should also learn to develop themselves efficiently (Feiman-Nemser, 1990).

5. The critical/social orientation believes that education can help shape a new social order (Feiman-Nemser, 1990). Schools have a role in enhancing democratic values and minimizing social inequalities; hence, schooling is seen as a process of social reform (Calderhead & Shorrock, 1997). Schooling should be linked with students' experiences in the community by guiding students to develop their identity and by endorsing democratic values. The teacher's role is being a political activist in addition to being an educator. (Feiman-Nemser, 1990). Therefore, TE programs must prepare prospective teachers to become agents of social change by developing critical and reflective practices (Calderhead & Shorrock, 1997).

Chapter 2: Literature Review: Comparative Education and the Lebanese Context

2.1 Comparative Education

In the field of CE, J.A. Comenius (1592-1670), the Czech philosopher, is considered the predecessor of international education. In the history of CE, Marc-Antoine Jullien de Paris (1775-1848) is commonly referred to as the "father of Comparative Education" (NOTAE, 1981). The beginnings of CE as a field of study can be traced to Horace Mann, Calvin Stowe and Henry Barnard in the United States, Victor Cousin in France, and Matthew Arnold in England (Kaloyannaki & Kazamias, 2009). César-Auguste Basset (1780–1828), a French professor, pushed the university to send a researcher to other countries in 1808 to observe, compare, and identify facts about their educational systems and teaching methodologies (Brickman, 2010, as cited in Steiner-Khamsi, 2021).

The work of Marc-Antoine Jullien de Paris (1775–1848) is widely regarded as the first attempt to compare systems and to identify appropriate indicators for measuring outcomes of education systems. He influenced the comparative approach of cross-national research and explained the need for comparison by referring to practices such as policy borrowing, lesson-drawing, and learning from best practices and international standards (Cardoso & Steiner-Khamsi, 2017).

The contributions of Marc-Antoine Jullien de Paris have served as a foundation for CE as an academic topic of study and research. International comparison has become a standard practice two hundred years later. Today, international organizations such as the World Bank and the UNESCO define standards for education and achievement and monitor and assess national progress toward those standards and benchmarks established with their member states (Cardoso & Steiner-Khamsi, 2017). Currently, the field of CE is informed by international studies and assessments such as the Program for International Student Assessment (PISA) and the Teaching and Learning International Studies (TALIS). The study of CE contributes to the knowledge base for educational policy, leads to changes and reforms, and provides multilevel comparisons.

Literature in the past two centuries stresses the importance of comparative studies of education systems (Cardoso & Steiner-Khamsi, 2017). Comparative and international education

is closely associated with learning from the experiences of other education systems and taking new ideas from international data banks that aggregate, review, or promote "best practices" (Steiner-Khamsi, 2021).

Sociological systems theory explains externalization and discusses how borrowed policies are then modified to fit the system. Hence, a systems-theoretical approach to the study of policy-borrowing is represented by the focus on receptiveness, which means systems opening to receive from foreign systems, and translation, which means systems adapting the borrowed policies and practices (Steiner-Khamsi, 2021). For example, PISA provides data and analysis to guide education policy decisions (Schleicher, 2017, as cited in Steiner-Khamsi, 2021).

In the 21st century, there has been a growth in studies done on CE. One prominent aspect of comparative studies is learning from experiences in other countries. The study of policy borrowing in education has contributed to the validation and legitimacy of CE as a field. Learning from comparison, however, does not imply that policies and practices should be transferred (Steiner-Khamsi, 2014).

One example of CE is when less developed countries tend to look at more developed ones to copy educational models. In addition to cross-national comparisons, such as federal systems in which states and provinces have different structures and content of education, intranational comparisons can also inform policy makers (Bray et al., 2007). Intranational comparisons, also known as within country or subnational comparisons, can help develop ideas describing the dynamic relationships between the various levels and areas within one country. Intranational units within the same country are usually easier to match than national units due to their similarity in culture, history, ecology, and socioeconomics (Snyder, 2001).

Moreover, comparisons can be made over time, such as when policy makers make comparisons with their predecessors' work and learn important lessons (Bray et al., 2007). In Arab countries, there is the phenomenon of adopting best practices of education from the Western world, such as the integration of technology and professionalization of teachers in Lebanon (Akkary & Rizk, 2014). According to Bray et al. (2007), the forms of curriculum inquiry can be categorized into three perspectives to perform comparisons: the evaluative perspective, to seek evidence to make informed decision about the curriculum; the interpretative perspective, to analyze and explain phenomena, such as pedagogical approaches; and the critical

perspective, to bring out features of curricula that are present either by design or by accident and that may be desirable or undesirable. Distinct elements of comparison are the ideologies or societal cultures that influence the curriculum, the processes and products of curriculum development, curriculum implementation such as modes of delivery, and the experiences of the learners.

This dissertation thesis conducted within-country comparison, or intranational comparison of TE programs, by comparing the TE programs of American and French-patterned universities in Lebanon.

2.2 Education in the Arab World

In upcoming sections, HE in Lebanon will be introduced, and the American and French-patterned university models will be discussed. Before going into specific explanations about HE in Lebanon, reforms and issues of education in the Arab World will be mentioned.

2.2.1 Reforms to Education in the Arab World

In the last half century, there have been great changes in the Education Policy in the Arab world in the areas of increasing student enrollment and creating greater access to education (Shuayb, 2015). For example, in 2001, the leadership of the State of Qatar asked the Research and Development (RAND) Corporation to assess the nation's education system and propose a strategy for reform (Zellman et al., 2011). Therefore, a comprehensive education reform called Education for a New Era was introduced, which encouraged the Independent School Model; this model followed a decentralized system in which schools had autonomy and freedom to choose their educational philosophy and operational plan, as long as the Supreme Education Council approved (Cherif & Alkhatib, 2019). From 2005 through 2007, RAND conducted a case study analysis of independent schools and Ministry schools to examine the positive effects that the reform had produced. The findings of the case study showed the following: teachers in Independent schools participated in professional development training programs more often than did Ministry teachers; Independent schools changed from relying on the Ministry's curriculum to a standards-based curriculum; teachers in Independent schools were encouraged to promote higher-order thinking in their students; students in Independent schools showed higher academic achievement than students in Ministry schools (Zellman et al., 2011). As a result of the reforms implemented in Qatar, TE and training programs have been undergoing improvements in

program structure, course design, and instructional practices. For example, Qatar University (QU), the national university, implements high quality and student-centered education (Cherif & Alkhatib, 2019). The UAE has advanced significantly in many areas, one such area being school education (Clarke & Otaky, 2006). For example, under the auspices of Abu Dhabi Educational Council, comprehensive educational reforms were introduced in 2006. An important part of the reforms was the designing of a new curriculum which moved away from the traditional practice of rote learning into the modern practice of critical thinking (Davidson, 2010, as cited in Dickson & Kadbey, 2014).

In the Arab countries, governments and ministries of education assume the responsibility of educational reforms. Hence, the role of planning reforms is played by politicians, sometimes with the aid of education consultants such as university professors. University or school practitioners do not play a central role in planning reforms. For example, in Lebanon, the Ministry of Education and Higher Education (MEHE) asked experts from the World Bank to create a reform plan and design its implementation (Akkary & Rizk, 2014). Over the past decade, with the aim of ensuring pedagogy that focuses on higher order thinking skills, several emirates of the UAE have established a system of inspection of private schools. Inspections are performed annually, and schools receive ratings on aspects such as classroom environment, curriculum delivery, inclusion of special needs students, content area achievement, and others (Tsimpera Maluch & Taha, 2021).

2.2.2 Issues in Education in the Arab World

Despite the abovementioned improvements, the report published in 2008 by the Education Reforms in the Middle East and North Africa (MENA) emphasized the need for educational development in the region, and highlighted the role of HEIs to equip students will the knowledge and skills that are necessary in the modern world of globalization and technology (Haidar, 2018). The richer Arab nations have committed billions of dollars to educational reform. In the early 2000s, the Gulf States invested over 22 billion dollars to offer top-notch HE. Despite this, according to Mahmoud (2008), most Arab public universities are unable to satisfy the demands of the people in terms of enrollment or educational quality. The reasons are that public universities are overcrowded, typically run at a loss, and are unable to accept students who want to enroll in popular disciplines like computer science and business administration (Nasser et al.,

2009). Private universities have therefore emerged in reaction to the public education system's inability to satisfy the demand for HE. In Jordan, 40% of students are enrolled in private universities. Similar occurrences have been seen in Oman, Bahrain, Kuwait, Lebanon, and Morocco (Mahmoud, 2008). Private universities have minimal intervention from the government or other public authorities, are in charge of their own internal administration and their finances (Nasser et al., 2009).

Akkary (2014) presents the findings of the World Bank MENA development report of 2008, the Arab Knowledge Report of 2009, the United Nations Development Program Arab Human Development Report of 2002, and the Arab World's Education Report Card of 2012, which reveal unsatisfactory results: the quality of educational services in the Arab world is inadequate in preparing students for the 21st century world. Therefore, the region needs a new model of education reforms.

2.3 Education in Lebanon

2.3.1 The Education System in Lebanon

The Lebanese education system is divided into two sectors: public and private (State University, 2019). Private schools are affiliated with national non-profit and for-profit associations and international religious and non-religious organizations. Public schools are almost tuition-free (El-Mouhayar & BouJaoude, 2012). In the 1800-s, different missionary associations established private schools and HEIs in Lebanon. In 1951, the only Lebanese national university was founded (Abouchedid & BouZeid, 2017).

While public schools accept children who are five years old, private schools accept children as young as three years old. The Lebanese MEHE controls the education system: it provides licensing to private schools, requires students to pass the government baccalaureate examination at the end of the secondary cycle of school, and it sets the syllabi. However, schools have the freedom of choosing their own textbooks. The duration of schooling in Lebanon is twelve years: the primary cycle takes six years, and the intermediate and secondary cycles take three years each. Education is obligatory up to twelve years of age (State University, 2019). Similar to schools, private universities and colleges in Lebanon have affiliations with international and national religious, independent non-profit and for-profit organizations (BouJaoude & El-Mouhayar, 2010).

Lebanon's HE system is the oldest in the Arab region (Abouchedid & BouZeid, 2017). It is organized in three cycles, known as bachelor's level, master's level, and doctoral level (Nuffic, 2016). HE in Lebanon does not follow one standard model. There are differences among universities in factors such as language of instruction, type of courses, duration of study periods, and others (Nauffal, 2009). MEHE created an Equivalence Committee in 1962 to rationalize these multiple systems. This committee is considered the only official reference for recognition of certificates and the equivalency for education levels in different domains. Moreover, the Equivalence Committee provides general curriculum guidelines to universities, which develop their curricula based on the guidelines and later submit them to the committee for approval (Loo & Magaziner, 2017).

2.3.2 Education Reforms in Lebanon

In 1926, article 10 of the Lebanese constitution introduced the foundations of freedom of education (Abouchedid & BouZeid, 2017; BouJaoude & Ghaith, 2006). In the 1970s, the Lebanese public education system had achieved great improvements. However, the 15-year civil war caused the education system to collapse. The "Taif Agreement" provided a basis for ending the civil war in Lebanon in 1990 (Shuayb, 2015). As a result of this agreement, modifications were done to the Lebanese constitution (BouJaoude & El-Mouhayar, 2010), and reforms were introduced into the Lebanese education system (Abouchedid & BouZeid, 2017). The "Taif Agreement" identified these objectives: providing free compulsory education at the primary level (grades 1-6), emphasizing on the freedom of education according to public law, protecting private schooling, reforming public and vocational education, strengthening the national university, and revising programs (Abouchedid & BouZeid, 2017; BouJaoude & El-Mouhayar, 2010). The "Taif Agreement" highlighted the need for a new curriculum that promotes citizenship and national unity. In response, the Center for Educational Research and Development (CERD) started the Plan for Educational Reform in 1994 (BouJaoude & Ghaith, 2006; Shuayb, 2015).

A comprehensive plan entitled "A Plan for Educational Reform in Lebanon" was prepared by the CERD and approved by the Council of Ministers. The plan included reforms to be made in the Education sector. In the framework of the Educational policy, one of the points to be reformed was to reconsider TE programs of various specializations and providing training

programs to teachers of both public and private schools. Regarding TE programs, a plan was proposed to reform the educational legislations concerning TE, to formulate new programs and courses, and to provide continuous teacher training (The National Center for Educational Research and Development, 1994). Shuayb (2015) describes how the CERD created a committee responsible for developing new textbooks and a new curriculum, implemented in 1997. She also talks about the most recent education reform which started in 2006 and ended in the development of a new education strategy in 2010.

2.4 Teacher Education in Lebanon

2.4.1 The Preparation of Teachers

In Lebanon, teacher preparation programs are offered by fifteen universities. Some of these programs are at the undergraduate level; students get their bachelor's degree at the end. Other programs are at the post-bachelor's level and are known as TD programs (BouJaoude & Baddour, 2022; El-Mouhayar & BouJaoude, 2012). The only public university in Lebanon is UL, which has branches in different parts of Lebanon. The UL has been offering TE since 1951 (Naccache, 2021). It provides TE for secondary school teachers for public schools; it also offers programs for teachers of private schools (BouJaoude & El-Mouhayar, 2010). The standards of TE programs are more rigorous in private universities than in the public university. Private universities also offer TE. Some of the most important private universities that offer TE are mentioned next. The AUB offers primary and secondary teacher preparation programs. The Lebanese American University (LAU) has a long history of providing early childhood education, and it also offers undergraduate and graduate studies in education. Université Saint-Esprit de Kaslik (USEK) is the first university established by Lebanese people, and it offers TE for different levels and a Doctorate degree in education in collaboration with France. HU offers undergraduate and graduate studies in education, in addition to a TD. The Lebanese International University offers undergraduate and graduate studies in education with an emphasis on research and practice. Notre Dame University follows the American education system despite being a Maronite Catholic University. It offers undergraduate and graduate studies in education and a Doctorate in education with a university in the USA (Naccache, 2021).

Regarding teaching, primary school teachers are required to receive three years of undergraduate education at the education department of any university to receive a Bachelor of

Arts degree in Education or in Elementary Education. Furthermore, students holding a bachelor's degree in any other field who want to become schoolteachers can receive a TD by completing an additional year of study (Loo & Magaziner, 2017). In addition to an undergraduate degree in Education, some universities offer this one-year teacher preparation degree. It provides students with the knowledge and skills required to be efficient teachers (Naccache, 2021). While in the teaching profession, in-service teachers are required to attend ongoing professional development programs either during the summer or throughout the school year (TIMSS 2015 Encyclopedia, n.d.).

In the period after the independence of Lebanon in 1943, there has not been much emphasis on preparing teachers for effective teaching (Naccache, 2021). The MEHE supervises primary, secondary, and HE. Within the ministry are the Directorate General of Education, the Directorate General of HE, and the Directorate General of Technical and Vocational Education. The MEHE also oversees the National CERD, which is responsible for developing and issuing textbooks related to the national curriculum (Loo & Magaziner, 2017; Naccache, 2021). In addition to working on textbooks, CERD works under the Lebanese Government on teacher preparation of public schoolteachers. According to the Lebanese law, primary and intermediate schoolteachers' preparation is the responsibility of CERD, while secondary school teachers' preparation is the responsibility of the College of Education of the UL (BouJaoude & El-Mouhayar, 2010).

2.4.2 Issues in Teacher Education in Lebanon

Ahmad Jammal, the director general of HE in Lebanon, presented Education reforms done in Lebanese HEIs at the HE Reform Experts annual conference in Spain in 2016. He discussed reforms that have been achieved successfully, such as: the state (Parliament, Council of Ministers) being engaged in reforms, the HEIs being committed to the reforms, the cooperation between public and private sectors, and receiving support from the European Union and the international community. In his speech, Dr. Jammal presented challenges, such as the quality of HE in Lebanon, and the relevance of university education in terms of employability. He then inquired about the necessary actions and processes needed to be done to improve the HE sector (Jammal, 2016).

One of the main issues related to TE in Lebanon is the lack of sufficient practical courses in TE programs (Freiha, 1997, as cited in BouJaoude & El-Mouhayar, 2010) and the meager emphasis on field work (BouJaoude, 2000, as cited in El-Mouhayar & BouJaoude, 2012). The programs in Lebanese universities, both American and French models, stress mainly on theoretical courses, with little emphasis given to practical courses (Farah-Sarkis, 1997, as cited in BouJaoude, 2000; Freiha, 1997; Ghaith, 2012). Moreover, in TE programs, practical field work comprises less than 25% of the whole program (Farah-Sarkis, 1997, as cited in El-Mouhayar & BouJaoude, 2012). In private universities that follow the American system, students do practice teaching for six months, whereas in universities that follow the French system, students should do practice teaching for a minimum of one year (Naccache, 2021). According to BouJaoude (2000), the main issue in TE programs is that they do not emphasize field work. Research shows that TE programs are most effective when they include a supervised practicum course. That is why it is crucial to increase the time that preservice teachers spend in practice teaching (Villegas-Reimers, 2003).

Another issue is the lack of research to guide education reforms. According to Shuayb (2015), previous plans in education reforms have lacked research recommendations to overcome challenges. Therefore, it is of the utmost need for policy makers in Lebanon to develop reforms based on empirical research. This need calls for research centers and universities to play a role in conducting empirical studies and in contributing in shaping reform policies by informing both policy makers and the public of their research. In terms of the implementation of reforms, Akkary (2014) suggests that policy makers need to particularly focus on implementation and on building capacity for change at the individual and school levels. She suggests education reforms and strategies grounded in empirical research can lead to positive changes and effective implementation of policies. As a specific pedagogical strategy to improve the effectiveness of TE, Korthagen (2016) suggests teacher research, which means the collection of data by prospective teachers on their own teaching. This type of research, called practitioner research, generates practical knowledge and results in teacher development by fostering a relationship between knowledge and action.

A critical issue is the insufficient acquisition of classroom skills by prospective teachers. According to El-Mouhayar & BouJaoude (2012), TE programs in Lebanon do not provide prospective teachers with the knowledge and skills necessary to cater for the needs of all kinds of

students in their classrooms. This issue is in line with Levine's (2006) report on TE in the USA, in which he discusses that prospective teachers are not being adequately prepared to teach in schools. In particular, he states that students complete their studies at colleges of education without having acquired important skills such as classroom management, the ability to cater to the needs of students with special needs or students from different cultures, the capacity to establish and maintain discipline in class, the skill to incorporate technology into their teaching, and the proficiency in using performance assessment techniques.

In conclusion, linking theory and practice is a common challenge for teacher preparation. Therefore, it would be beneficial to study TE literature and theories that provide an analysis and strategies for improving the situation. The TE theory of Fred Korthagen is one effective theory to consider.

2.5 Higher Education in Lebanon

2.5.1 Prestigious Status

Lebanon's HEIs are among the oldest in the Middle East (El-Amine, 1997). Tertiary education in Lebanon has been founded a long time ago (Majali, 1976, as cited in Kirk, 2008), and Lebanon has been in the lead in the Arab world's educational modernization (Abou Al-Shamat, 2009), and in both regional and national HE (Freiha, 2003). Lebanon was also an important center of educational activities (Abou Al-Shamat, 2009). For example, Beirut served as a major intellectual hub and drew many students from throughout the region when the Gulf countries had not yet developed any HEIs (Nahas, 2009).

Prior to the civil war (1975–1990), the Lebanese HE system was among the best in the Middle East (Bachour, 1997). Prestigious universities have long been in Lebanon. Before the civil war in 1975, students from many countries were drawn to Lebanon because it had one of the greatest HE systems in the region (Gaillard, 2010).

2.5.2 Public and Private Higher Education Institutions

Since Lebanon is a socially and religiously diverse country, HE in Lebanon is also diversified: HEIs are differentiated in several domains. Regarding sector, there are public and private institutions (Haidar, 2018), and regarding statuses, there are universities, colleges, and institutes (Abouchedid & BouZeid, 2017).

The HE sector in Lebanon is primarily private, and it has expanded significantly during the 21st century (Nauffal & Skulte-Ouaiss, 2018). The only public university is the UL (El-Amine, 2000; Kaissi et al., 2009). Private universities follow the main law published in 1961 by a council for HEIs (Haidar, 2018). Currently, there are 48 private institutions that offer HE, 36 of which are officially recognized as universities and the remaining twelve as colleges (Nauffal & Skulte-Ouaiss, 2018).

The mission of HE in Lebanon is to prepare graduates for the labor market based on the belief that an increase in educated people contributes to economic progress (Nasser & Abouchedid, 2003). Universities in Lebanon have their main campuses located in the capital city of Beirut. Due to a high number of student enrollment, some universities have also established branches in other areas in Lebanon (Haidar, 2018). The different branches are always connected to the main campus in the capital city (Saleh, 2008).

2.5.3 Religious Influence

The history of contemporary HE in Lebanon dates to the latter part of the 1800s and is associated with various religious organizations attempting to spread their religious beliefs to the people (Gaillard, 2010), and with the establishment of foreign schools by missionaries to control HE systems (Bachour, 1997). Christian missionaries and foreign states were doing important work in spreading education in Lebanon as early as the seventeenth century (Abou Al-Shamat, 2009). During that time, missionaries who came to Lebanon with the intention of promoting education established the foundations of the country's modern educational system (Freiha, 2003).

During the seventeenth century, religious communities were tasked with educating the youth that belonged to their communities. Therefore, in numerous communities, religious education programs were carried out (Abou Al-Shamat, 2009). As a result, the confessional structure of HEIs became important and has remained so until this day (Nahas, 2009). Regarding private universities in Lebanon, most of them have a confessional origin, and many of them are an expansion of a foreign model outside of Lebanon (Gaillard, 2010).

2.5.4 History of Establishment of Universities by External Religious Entities

In the late nineteenth century, while Lebanon was still part of the Ottoman Empire, Protestant and Jesuit missionaries established the first western-style institutions. The AUB, USJ,

and LAU were among those founded. These universities incorporated ways of thinking, values, and management styles that served as the foundation for the country's HE in the future (Nauffal & Nader, 2022).

The first American-patterned university in Lebanon was the AUB. Previously known as the Syrian Protestant College, it was founded in 1866 by American protestant missionaries in Lebanon and Syria (Gaillard, 2010). In 1920, it changes its name to AUB. The American liberal arts model of HE serves as the foundation for AUB's educational philosophy, standards, and practices (American University of Beirut, n.d.).

The first French-patterned university in Lebanon was the USJ. It was founded in Beirut in 1875 shortly after the founding of AUB, and it acted as a rival to AUB (Gaillard, 2010). The USJ was established by Catholic Jesuits. It was the first university in the region to adopt the French HE system, which is structured into three levels (Licence (Bachelor); Maîtrise (Master); and Doctorat (Doctorate) degrees) (Université Saint Joseph, n.d.) Upon its establishment, it started up a Faculty of Theology as the successor to the Ghazir School of Theology, which was located in the city's north and provided training for the catholic clergy, mostly Maronite priests (Gaillard, 2010). Both AUB and USJ were founded by religious organizations, which provides insight into Lebanese universities being influenced by religious entities.

Up until the 1950s, AUB and USJ dominated HE in Lebanon, despite the establishment of two new universities: Université La Sagesse in 1875 and the LAU in 1924 (Gaillard, 2010). LAU was established by the same American Protestant Mission that established AUB. LAU was formerly known as the American School for Girls (Lebanese American University, n.d.).

From the 1930s to 1975, Western education was widely adopted. Lebanon gained its independence from the French Mandate during this period. Moreover, a national education system developed, modeled after the French system. The UL, the country's first and only public HEI, was formed (Nauffal & Nader, 2022).

The UL is Lebanon's first and only public university. Upon its establishment in 1951, it quickly drew students from the middle and lower ranks of Lebanese society (Gaillard, 2010). The UL follows the French model (Loo & Magaziner, 2017) with respect to educational methods and academic organization, while adopting the American credit system in just a few of its branches, and it has French and Arabic as the languages of instruction (Nauffal, 2009).

In the beginning, UL offered programs mostly in the social sciences. UL now consists of three institutions and fifteen faculties divided across forty-seven regions that span the entire country. This university enrollment data shows that almost half of all students in HE in Lebanon attend this university (Gaillard, 2010).

In addition to the UL, private universities such as Beirut Arab University (BAU), USEK, and HU were also established during the period between 1930s and 1975. The fifteen years that followed 1975 were defined by turmoil and unrest due to the Lebanese civil war (Nauffal & Nader, 2022).

2.5.5 External Influence – Education Models and Accreditation

Regarding organizational pattern, universities in Lebanon can be classified based on the HE model they follow. Lebanon's education system is complex due to the two nations that contributed to its. Thus, HEIs can be identified as following the French or American designs. A few universities have blended both models into their operations (BouJaoude, 2000; El-Amine, 1997; Ghaith, 2012; Loo & Magaziner, 2017; Nauffal, 2009). A few universities have adapted to other international systems, namely the university models from Germany, Canada, or Egypt (Loo & Magaziner, 2017). The BAU, for example, follows the Egyptian model (Nauffal & Skulte-Ouaiss, 2018).

HEI management in Lebanon often adheres to their own set of quality standards (Saleh 2008). In 1962, the MEHE set up an Equivalence Committee, with the purpose of recognizing and hence granting equivalence to the degrees of Lebanese HEIs. This is accomplished by evaluating the study programs. The committee takes into account the accreditation decisions from internationally recognized accreditation bodies (Kaissi et al., 2009; Loo & Magaziner, 2017).

However, because Lebanese HEIs operate in a highly competitive market, they have attempted to establish their reputation for excellence by securing international accreditation from reputable organizations outside (Nauffal & Skulte-Ouaiss, 2018). Many universities have received accreditation by external educational organizations from the United States and France (Saleh, 2008). For example, USJ in Beirut chose the international accreditation route and received accreditation from the European Evaluation and Research Agency for Higher Education in 2009 (Katerji & Baraki, 2009). Similarly, since 2004, the AUB has been accredited as an

institution by the Commission on Higher Education of the Middle States Association of Colleges and Schools – USA (American University of Beirut, n.d.).

2.5.6 Differences between American and French-Patterned Universities

Since HE in Lebanon is influenced mainly by the French and American education systems, HEIs offer education following one of these systems (Nuffic, 2016). Universities following the American model are the highest in number. The differences in academic models between each university can be ascribed to the philosophy of education that each model follows (Nauffal, 2009). The programs of each model of university are developed in a way complementary to the system they follow, and the names of the degrees are the same as the names in the original models that these institutions follow (Freiha, 1997).

The American-patterned universities offer undergraduate programs similar to the ones offered in the USA. The characteristics of the American model are having a credit-point course system, focusing on general education and elective courses (Freiha, 1997; Loo & Magaziner, 2017), conducting assessment frequently, and having English as the language of instruction (Nauffal, 2009).

The American model is organized by courses rather than by years like the French model (BouJaoude, 2000). The French-patterned universities use coefficients instead of credits and offer three- or four-year Diplôme de Licence degrees typical of the French-patterned Licence-Master-Doctorat. These programs put less focus on general education requirements (Loo & Magaziner, 2017).

In contrast to the American model, universities that adopt the French model provide early specialization. However, they lack a liberal arts core and elective courses (BouJaoude, 2000). The characteristics of the French model are having mandatory year-long required courses, assessing students with end-of-year exams, and having French as the principal language of instruction, with some courses offered in English (Nauffal, 2009).

Regarding teaching and learning, research that has examined student perceptions has shown that students in American-patterned universities thought that the universities have set higher academic standards than the French-patterned university. Also, American-patterned university students thought the teaching style was interesting and used modernized technology.

In terms of quality, students at American-patterned universities were more content with the university's quality than those at the French-patterned universities. Furthermore, American-patterned institutions fostered the teaching of democratic ideas through open and free discussion of political, social, and religious concerns more than the French-patterned universities (Nauffal & Nasser, 2007).

The American model is more flexible and provides the students with more choices than the French model (BouJaoude, 2000). In addition, in American-patterned universities, learning outcomes are clearly stated, modern methods of teaching are applied, use of technology is evident, flexibility of course work choice is encouraged, and courses are designed in ways that allow for student participation in projects and research. Moreover, democratic practices are followed more than in French patterned universities in the area of open religious, political, and social discussions (Nauffal, 2009).

Regarding non-academic services, American-patterned universities outperformed French-patterned universities in most areas, including extracurricular activities, recreational services, and student services such as accommodation, food, and health care. For example, in 2004, the President of AUB stated that the university takes part in the total mental and physical development of the students, and this is a characteristic that distinguishes them from other universities (Nauffal & Nasser, 2007).

A difference from the American model is that whereas students at American-patterned universities have additional possibilities for instruction outside of the classroom, both with the lecturer and with their peers (Nauffal & Nasser, 2007), in the French model, the teaching and learning process is limited to the classroom since there are minimal options for students to meet with instructors for supplementary assistance beyond regular class hours (Nauffal, 2009).

A unique feature of the American-patterned universities is the academic and student affairs bodies. Since their establishment, American-patterned universities have had a strong heritage of fostering social and secular progressive ideals of human life, and they work hard to keep this culture alive on campus (Nauffal & Nasser, 2007).

There are certain aspects that seem to be better at French-patterned universities. Research that has examined student perceptions has shown that regarding resources, students at French-patterned universities appeared to be happier with library resources than those at American-

patterned universities. Regarding class size, American-patterned universities were at the disadvantage of having a bigger class size (Nauffal & Nasser, 2007). Moreover, tuition at French-patterned universities is lower than at American-style universities due to the fact that American-patterned universities seem to attract a larger student body, and hence they charge higher tuition (Nasser et al., 2009).

Concerning university management, American-patterned universities have a President whose role lies in executive functions, vice-presidents, and a Board of Trustees that plays a legislative role. At the top of the organizational structure is the President, followed by the Deans of each department, followed by the department chairpersons. The policy of French-patterned universities is set under the auspices of a religious order. The president is nominated by the religious order, and there is a general secretary (El-Amine, 1997).

A main difference regarding research is that in universities that follow the American model, being actively involved in research is not only an essential aspect of the job descriptions of faculty members, but it is a requirement for promotion. Whereas in the French model, excellence in teaching is the most important element in the job descriptions of faculty members is, an element that is sufficient for achieving promotion. Nevertheless, faculty being involved in research is appreciated (Nauffal, 2009).

In comparing American-patterned and French-patterned universities in Lebanon, there were no differences between institutional types in terms of how much students participated in institutional decision-making at the academic and non-academic levels. Also, there were no differences in student satisfaction with academic services such as electronic resources, labs, and equipment (Nauffal & Nasser, 2007) (see Table 1).

Regarding TE in particular, the programs in Lebanese universities, both American and French models, stress mainly on theoretical courses, with little emphasis given to practical courses (Farah-Sarkis, 1997, as cited in BouJaoude, 2000; Freiha, 1997; Ghaith, 2012). Moreover, in TE programs, practical field work comprises less than 25% of the whole program (Farah-Sarkis, 1997, as cited in El-Mouhayar & BouJaoude, 2012). In private universities that follow the American system, students do practice teaching for six months, whereas in universities that follow the French system, students should do practice teaching for a minimum of one year (Naccache, 2021).

Table 1

Differences Between American and French-Patterned Universities in Lebanon

American-patterned universities	French-patterned universities
having English as the language of instruction	having French as the language of instruction
using credit-point course system	using coefficients instead of credits
focusing on general education and elective courses	less focus on general education requirements; lacking a liberal arts core and elective courses
conducting assessment frequently	assessing students with end-of-year exams
organized by courses	organized by years
president at the top of the organizational structure; executive role	president nominated by a religious order
board of trustees: legislative role	policies set by a religious order
better at student services and activities	better at library resources
bigger class size	smaller class size
higher tuition fees	lower tuition fees
other characteristics: clearly stated learning outcomes, modern methods of teaching, use of technology, flexibility of course work choice, student affairs bodies	other characteristics: early specialization, teaching and learning process is limited to the classroom

2.6 Lebanon's Multiple Crises

The data collection for this dissertation thesis was done in the year 2023, after a series of difficult events in Lebanon. On August 4, 2020, a huge explosion rocked Lebanon's port and destroyed half the capital city. The horrific blast, caused by the detonation of nearly 3000 tons of ammonium nitrate improperly stored at the port, killed 220 people, left thousands injured and hundreds of thousands homeless (Cheaito & Al-Hajj, 2020), caused terror and panic, and added

trauma to the already traumatized people of Lebanon. This explosion was not a solo tragic event. In 2020, the Lebanese currency lost 80% of its value which caused a threefold increase in the prices of basic goods, such as baby formula and fuel (The Daily Star, 2021). Simultaneously, in 2020, the Covid-19 pandemic necessitated the abrupt transition to online instruction. According to Simamora (2020), online learning created challenges for students. In some families, not all siblings could afford to own electronic devices, and therefore some of them could not attend the online sessions. This issue was real for many Lebanese households since in 2021, there was a shortage of all kinds of items, even food and medicine, due to the rising prices (UNICEF, 2021). Moreover, in 2021, power cuts increased up to 22 hours a day (Azar, 2021).

Unfortunately, the abovementioned calamities are not new for Lebanon. The country has been through a 15-year violent civil war (1975-1990), followed by political unrest, car bombs to assassinate politicians, and deadly fights among people of different religious sects (Chr. Michelsen Institute, 2008). The electricity crisis dates decades back; since the end of the civil war, almost all Lebanese areas have had daily power cuts lasting several hours, a phenomenon that has given rise to the spread of backup generators providing electricity during regular power outages (Bouri & El Assad, 2016). Hence, most families in Lebanon pay two electricity bills each month. In 2021, the hours of regular power cuts witnessed a huge increment, and due to the fuel crisis, private generator owners started rationing the number of hours of generator power, leaving most of the country in total darkness for several hours daily (Chehayeb, 2021).

Many of the participants in this dissertation thesis were pursuing their TE studies in the years of 2020-2023 during which a series of unfortunate events occurred. As the results section will show, some of the participants discussed the challenges they faced especially in the practicum courses due to the Covid-19 lockdowns. They had to do their observation and their practice teaching online, and this was not ideal especially in Lebanon where the electricity is unstable and cuts often, and hence the Wi-Fi quality is not optimal for long online classes with camera and microphone.

2.7 Formulation and Justification of the Research Questions

Based on the theoretical frameworks and a review of relevant literature, the following research questions have been identified:

RQ1- Which orientations of the Feiman-Nemser typology are implemented in the TE programs in American and French-patterned universities in Lebanon?

Justification – the Feiman-Nemser typology about the framework of TE programs will be used as a benchmark. It identifies what elements good TE programs should have, and it has been discussed in other studies by Lebanese authors. Since the aims of my dissertation are to analyze the TE programs of selected universities, to compare them with each other, and to explore the effects of those programs on successful teaching, I need indicators and benchmarks for analysis and comparison. That is why I have built my question around the conceptual framework of Feiman-Nemser.

According to Feiman-Nemser (1989), teacher preparation programs can be analyzed through structural and conceptual models. Structural models include specific forms of teacher preparation that focus on the general organization of programs such as the number of years to complete a program, the number of required credit hours of education and content, the duration of field-based experience, and alternative certification methods. Conceptual models, on the other hand, reflect different insights about teacher preparation and accentuate the importance of orientations derived from the different views of teaching and theories of learning to teach. Feiman-Nemser has identified five conceptual orientations: academic, practical, technological, personal, and critical/social orientations.

Research on TE programs in Lebanon shows that they mainly emphasize the academic and technological orientations from the conceptual orientations in Feiman-Nemser's theory (Ghaith, 2012).

RQ2- Which knowledge bases of Lee Shulman's TE theory do students acquire from the TE programs in American and French-patterned universities in Lebanon?

Justification – The theory of Lee Shulman and the model by Koehler and Mishra will be used as a reference point. Shulman's theory is a key theory in TE preparation. It encompasses the important domains that teachers should acquire knowledge in such as CK, PK, and PCK

(Shulman, 1986). That is why I chose this theory and formulated one of my questions about it. I want to explore the acquisition of different knowledge bases in the Lebanese context. At the time of conducting my research, the Covid-19 pandemic necessitated the transition from in-person to online teaching. Mishra & Koehler (2006) built on Shulman's theory of PCK and introduced the concept of TPACK to the field of education to describe the integration of technology into teaching. That is why I want to add the TPACK knowledge base to this question.

RQ3- What is the attitude of schoolteachers who have graduated from both systems about the proportion of theoretical and practical courses in their TE programs?

Justification – Literature shows that the balance between theoretical and practical courses in TE programs is not satisfactory. Commonly, traditional TE programs encompass a collection of isolated courses; in these courses, theories are presented but connection to practice is lacking (Barone et al., 1996, as cited in Korthagen, 2016). For this question, the answers of the participants will support the case analysis done on the TE programs' structural frameworks; their answers will be added to my observations and analysis from RQ1. Here it is important to not only rely on websites, but also get the experience of people who were part of the TE programs, and are now working as teachers, to understand how well they were prepared. One of the main issues of TE is the difficulty in moving from studying and understanding theories to the actual performance in the classroom (Darling-Hammond & Snyder, 2000, as cited in Korthagen, 2016).

RQ4- How do schoolteachers in both systems evaluate their practicum experience, with respect to duration and quality?

Justification – In studies about TE programs, one main factor discussed is the practicum experience. Literature shows that it is usually insufficient and inefficient. A principal limitation of TE is not enough time that preservice teachers spend observing actual classrooms, doing practice teaching, reflecting upon their observations and practice, and designing lessons and activities (Taha, 2017). In general, field experience is considered by teachers as the most beneficial aspect of their undergraduate studies. Hence, researchers have been examining different aspects of the practicum experience that can impact the efficacy of teachers. Particular attention has been paid to the placement school, the preparation of mentors, the quality of

guidance, and the type of school where graduates plan to teach (Rondfelt, 2010, as cited in Feiman-Nemser, 2017).

RQ5- In what ways is reflective practice incorporated in the TE programs of both systems?

Justification – In Fred Korthagen's realistic TE approach, the principle of reflection is emphasized by explaining that reflecting on their behavior and action in the classroom is an important step for prospective teachers to bridge the gap between theory and practice (Korthagen, 2001). Since this dissertation thesis looks at theory and practice in TE programs, Korthagen's principle of reflection will be used as a framework and as one of the indicators of comparison between the two systems. I want to add this factor because it is something that can be under the control of the students. Regardless of whether TE programs provide practical and efficient knowledge and skills or not, individual and group reflections can be beneficial.

RQ6- Which knowledge bases of Lee Shulman's theory do schoolteachers find the most beneficial?

Justification – Lee Shulman's theory states the importance of prospective teachers acquiring CK, PK, and PCK. Research done in Lebanon shows that TE programs highlight students' acquisition of knowledge and skills of teaching, as well as CK and PCK (Ghaith, 2012). During the time of this study, the Covid-19 pandemic caused schools and universities to resort to online teaching. Mishra & Koehler (2006) built on Shulman's theory of PCK and introduced the concept of TPACK to the field of education to describe the integration of technology into teaching. Hence, I had an added interest in examining how schoolteachers evaluate their acquisition of knowledge bases.

Chapter 3: Methodology

3.1 Qualitative Method

The aim of qualitative researchers is to discover the worldview of participants (Magnusson & Marecek, 2015) and to gain insight into how people see the world (Cropley, 2022). Unlike quantitative research, where factors are identified ahead of time, qualitative research explores how people experience and understand the world in a particular context and how they make sense of their lives and experiences (Merriam & Grenier, 2019). In this dissertation thesis, the purpose was to hear from the participants, since they are people who experienced the topic of the research firsthand. With the aim of gaining insight into schoolteachers' perspectives about their TE programs, this dissertation thesis adopted the qualitative approach.

The qualitative approach involves methods such as observation of people in real-life settings, interviews (Cropley, 2022), and document analysis (Kyaw, 2022). Regarding sequence, first there is a recording of the method, such as the observation, or the answers of the participants in an interview, or the collection of documents (Cropley, 2022). Next there is organizing and presenting gathered data to generate findings (Weaver-Hightower, 2018). Then there is interpreting: using theories or models to understand what was observed, recorded, or gathered. And then there is generalizing the interpretations and reaching conclusions (Cropley, 2022).

3.1.1 Constructivist Approach

The approach that this dissertation adopted was the qualitative constructivist approach due to the premise that individuals construct their own view of the world based on their experiences and interactions with people and the external world. Reality is viewed as subjective, and people's views are considered personal (Cropley, 2022), and by doing research we can access these views.

Unlike quantitative research, in qualitative research the researcher, serving as a human instrument in the data collection process, can make changes at the moment of collecting the data, such as adapting questions, adjusting settings, and allowing participants to elaborate on and explain the initial response (Merriam & Grenier, 2019). In qualitative research, both the researcher and the participant engage together in the construction of knowledge (Cropley, 2022).

Qualitative research attempts to understand the meaning individuals construct about their experiences (Merriam & Grenier, 2019). Qualitative methods, such as interviews and focus groups, result in detailed data about the experiences and perspectives of participants about a certain topic (Wray & Barrett, 2022). In the qualitative approach, the worldviews that researchers are interested in are formulated by the participants themselves (Magnusson & Marecek, 2015). Through interview questions and the resulting discussions, researchers can gain an understanding of the experiences of participants (Husband, 2020).

3.1.2 Interpretive Design

There are a variety of qualitative research designs. In the interpretive design, the researcher aims to discover and understand a phenomenon and the perspectives and worldviews of the people involved in that phenomenon. The methods of data collection may be interviews, observations, and documents. The data analysis follows the inductive method. The researcher attempts to identify common patterns and themes, and the output is descriptive. Discussion of the data is done by citing literature that was used as a framework for the study (Merriam & Grenier, 2019). People are reflective beings who try to interpret and make sense of the experiences they have had. The interpretive design involves examining people's experiences and the interpretations people make of those experiences (Clarke & Braun, 2013). In the interpretive design, interviews may be conducted to determine how the participants experienced the phenomenon being studied. It is likely that different participants might give different accounts of the phenomenon, and that provides perspective to the researchers on what is significant to each participant and indicates the different ways each participant experienced the phenomenon (Schwartz-Shea & Yanow, 2013).

In the phenomenological design, the inquiry is about the inner experiences of the participants, and the focus is on the essence of those experiences. This type of design examines topics related to emotions and feelings, such as anxiety, loneliness, and spirituality. In the ethnography research design, the focus is on studying human society and culture, and the interpretation of data is sociocultural. Such studies focus on a particular group's shared culture, whether the culture under study is an exotic culture, or an aspect of contemporary society, such as the culture of intercultural marriages. In the grounded theory design, a theory, or a theoretical interpretation of the studied phenomenon, is derived from the data. The focus is on discovery

rather than on description. Data is analyzed using the comparative method, by comparing one unit of the data with another. In the narrative inquiry, the data are in the form of stories. The researcher uses stories told by the participants and performs a biographical analysis, which is analyzing the participants' stories by considering the influence of gender, race, and society, or a psychological analysis, which is done by considering participants' internal thoughts (Merriam & Grenier, 2019). Since the aim of this dissertation thesis was to examine and understand the phenomenon of TE programs and the viewpoints of people involved in that phenomenon, it adopted the interpretive design.

In the interpretive design, the research questions relate to a particular setting and a particular period (Schwartz-Shea & Yanow, 2013). To collect participant accounts, semi-structured face-to-face in-depth interviews are considered the ideal method. Other methods are surveys, diaries, focus groups (Clarke & Braun, 2013), observations, and documents (Merriam & Grenier, 2019). For this dissertation thesis, semi-structured interviews were conducted with schoolteachers who have graduated from the TE programs of American and French-patterned universities in Lebanon. These teachers were asked about their TE studies in their university within a particular period.

3.2 Research Objects and Participants

According to Feuer et al. (2013), student learning is greatly influenced by classroom instruction, the success of which depends on the preparation that prospective teachers receive during their training years. Hence, examining TE programs serves to provide policy makers with the necessary information to bring about developments in both policy and practice. It is beneficial to use multiple methods to analyze the impact and effectiveness of TE programs to get a thorough comprehension of such programs (Ludlow et al., 2010, as cited in Mayer et al., 2015). TE program evaluations alone are not enough to introduce reforms in prospective teacher preparation and teaching quality (Feuer et al., 2013). For a deeper understanding, graduates who have started teaching already can be interviewed. These interviews complement the information obtained from surveying TE programs, and hence characteristics most effective in preparing teachers for the real classroom experience may be identified (Mayer et al., 2015). Therefore, the data collection methods selected for this dissertation thesis were document analysis and semi-

structured interviews. The selection of research objects and participants was based on the data collection methods.

3.2.1 Selection of the Document Analysis Method

To be able to identify the reforms needed, it is important to survey TE programs. An examination of such programs provides an understanding of the program structure, content, distribution of courses, and the practical experience prospective teachers receive (Mayer et al., 2015). TE program evaluations can be achieved by examining different forms of evidence used to measure TE attributes. For example, to evaluate the quality of instruction, course syllabi, textbooks, course offerings, required hours, and the number of required content courses may be reviewed; to assess the quality of student teaching experiences, practicum hours and qualifications of mentors may be considered (Feuer et al., 2013). Surveying publicly available online information about TE programs on university websites provides documentation of program content, length, and structure, opportunity for and duration of practical experiences, and the balance between theory and practice (Mayer et al., 2015).

For this dissertation thesis, a survey was done of the websites and documents of three American-patterned universities in Lebanon: MUBS, HU, and AUB, and three French-Patterned universities: UL, USJ, and USF. The main selection criterion for these universities was that program and course descriptions are available on their websites. Moreover, I know instructors who teach in three of these universities, and they could help put me in contact with participants for the interviews. I particularly chose AUB and USJ because AUB is the first American-patterned university in Lebanon and USJ is the first French-patterned university in Lebanon (Gaillard, 2010).

3.2.2 Selection of the Interview Participants

The researchable questions are the foundation on which to base the selection of participants. The questions are formulated having specific contexts and experiences in mind and thus serve as a base to identify the categories of people who have been in those contexts and had those experiences, this making them relevant for the study. Researchers select participants who are likely to have had the experiences that the questions are asking about (Magnusson & Marecek, 2015). Therefore, for this dissertation thesis, schoolteachers who have graduated from American and French-patterned universities in Lebanon were selected.

If the study is comparative in nature and is comparing the experiences of different groups, there should be similarities of relevant dimensions among the groups. Also, to ensure representativeness of the sample to the larger group, the participants should include people who have had all varieties of experiences of the phenomenon under study (Magnusson & Marecek, 2015). Homogeneity of participants can be defined in several forms, ranging from obvious sociodemographic characteristics like age and sex to characteristics linked to important aspects of the experience (Clarke & Braun, 2013).

In the sample of participants for this dissertation thesis, the similar dimensions were having done an undergraduate degree in TE, having graduated between the years of 2020 and 2023, and already working as schoolteachers. The narrow time frame of three years was chosen by considering the changes to programs that might happen over time and trying to keep them as minimum as possible. Moreover, the group size of both models was almost the same, with eleven graduates form American-patterned universities and nine graduates from French-patterned universities. The interview participants were graduates of one of these six universities selected for this dissertation thesis.

Husband (2018) conducted a research study comparing two initial TE programs and their effects on continual professional learning, and he interviewed ten graduates from each university involved, resulting in twenty participants. In this dissertation thesis, the total number of participants was twenty. Selecting the number of participants is not a simple process. A factor to consider in addition to the number of participants is the depth and detail each interview provides. If participants are interviewed more than once, if the interviews are in-depth, and if the analyses are detailed, then a large number of participants is not needed (Magnusson & Marecek, 2015). In this dissertation thesis, in-depth interviews were conducted and detailed analyses were performed; hence, twenty participants were sufficient.

3.2.3 Participants' Demographic Information

To be included in this dissertation thesis, participants had to fulfil the following conditions:

1. Graduated from one of the six universities that are part of this dissertation thesis
2. Earned a Bachelor of Education in the primary level
3. Graduated between the years of 2020 and 2023
4. Are currently teaching at a school

The participants in this dissertation thesis were twenty Lebanese female schoolteachers, with an age range of 22-28. All the participants had undergraduate degrees in TE in the primary level, which they earned between the years of 2020 and 2023. At the time of data collection for this dissertation thesis, all the participants were teaching at schools in Lebanon. Their teaching experience ranged from one to four years. Their gender, university model, the degree they earned, the grades they were teaching, and the subjects they were teaching are shown in Table 2.

Table 2

Participants' Degrees and Teaching Information

Participants	Gender	University Model	Degree Emphasis	Grades	Subjects
Participant 1	F	American	English and Social Studies	7,8	English
Participant 2	F	American	English and Social Studies	4,5	English
Participant 3	F	American	English and Social Studies	4	English, Math, Science, Social Studies
Participant 4	F	American	Math and Science	1,2	English, Math, Science, Social Studies
Participant 5	F	American	English	3,4,5	English, Math
Participant 6	F	American	English	1	English
Participant 7	F	American	Math and Science	5,6	Math, Science
Participant 8	F	American	Math and Science	1,3	Science
Participant 9	F	American	Math and Science	1	All subjects

Participant 10	F	American	Math and Science	1,2	Math, Science
Participant 11	F	American	Arabic and Social Studies	KG3,3	Arabic
Participant 12	F	French	Math	3,4	Math, Science
Participant 13	F	French	Science	1,2,3	Science
Participant 14	F	French	Arabic and Social Studies	3,4,5	Arabic
Participant 15	F	French	French, Math, and Science	1	French
Participant 16	F	French	French, Math, and Science	1,2,3	Science
Participant 17	F	French	French, Math, and Science	1,3	Math, Science
Participant 18	F	French	General Pedagogy	KG3,1	Arabic
Participant 19	F	French	General Pedagogy	4,5	Arabic
Participant 20	F	French	General Pedagogy	2,3	French

Note. KG3 refers to the last year of kindergarten, which is before the primary school years. Students in KG3 are 5-years old. The primary school years start with Grade 1, from the age of 6-years old.

3.3 Materials

In quantitative research, data is collected using instruments, such as surveys, and the data type is numerical. Data collection happens by collecting narratives, either in the form of already existing data, such as diaries or documents, or gathering new data, such as interviews. The data type is descriptive, and the aim of analyzing the data is to find meaning (Cropley, 2022). In the qualitative study of the research engagement of teacher educators in Myanmar, Kyaw (2022) used document analysis and semi-structured interviews as data collection methods. Documents such as policy reforms, invitations to conferences and publications, and reports of action research contests were analyzed, and two TE authorities were interviewed. Data analysis was performed using inductive content analysis, which is a method of analysis relevant to the interpretive approach in qualitative research. Like different research studies I read, such as Kyaw's study, this dissertation thesis used document analysis and semi-structured interviews as data collection and content analysis.

3.3.1 University Websites

One aim of my dissertation was to examine the structure of TE programs and the conceptual orientations that TE programs include. Therefore, one of the data collection methods was document analysis: exploring the course offerings, the required hours, practicum policies and hours, and the number of required content courses in TE programs of American and French-patterned universities in Lebanon. This provided the possibility to make comparisons across different programs. Such types of information are usually accessible on institution websites and catalogs, and hence a researcher who is not an insider may access them and examine them (Feuer et al., 2013). The TE programs from the websites of three American-patterned universities and three French-Patterned universities in Lebanon were accessed to gather the required data.

3.3.2 Semi-Structured Interview Questions

One aim of my dissertation was to examine the perceived effectiveness of TE programs to gain insight into how well graduates are prepared and equipped to satisfy the requirements of their workplace. Therefore, one of the data collection methods was semi-structured interviews with TE graduates. Due to the Covid-19 pandemic, having face to face interviews became impossible, hence online communication became the only method of collecting data. Telephone-based data collection and video-mediated communication have become methods very much used

recently. Having interviews via telephone provides a verbal-only mode, hence non-verbal communication cannot be considered. The video-mediated communication method presents challenges, such as the quality of the audio and the internet connection. Such challenges should be taken into consideration by the researcher (Wray & Barrett, 2022). The method of interview in this dissertation thesis was video-mediated communication since it allows for interviews with people who are in a different country and for non-verbal cues to be observed.

To secure research quality, special considerations were made in developing the questions. Questions were formulated by having specific contexts and experiences in mind. When composing questions, it is important to guard against using words that might give wrong connotations (Magnusson & Marecek, 2015). I was careful not to use words that might let the participants expect the type of answer they are supposed to give and hence respond accordingly. For example, I was cautious not to tell the participants that during the interview they will criticize the TE program they graduated from.

The data in this dissertation thesis were analyzed using the MAX Qualitative Data Analysis (MAXQDA) software. Figure 3 is a concept map I created using the visual tools called MAXMaps in MAXQDA, and it shows how the interview questions were constructed with the aim of answering the research questions. Moreover, the interview questions are based on the theoretical framework of this dissertation thesis: Sharon Feiman-Nemser's structural models and conceptual orientations, Lee Shulman's knowledge bases for teachers, and Fred Korthagen's reflective practice. The first two interview questions were general to get the honest perspective of participating schoolteachers, without hinting at the themes that will come up in later questions. They also had the aim of reminding participants of their TE studies before going deeper into the remaining questions.

1. What aspects of your bachelor in TE studies were the most beneficial to you in your teaching career?

2. What reforms do you suggest for improving the program of your bachelor in TE studies?

Question 3 asked:

3. What is your perspective on the share of theoretical and practical courses? Give examples of each type of course.

It was constructed to answer the third research question:

RQ3: What is the attitude of schoolteachers who have graduated from both systems about the proportion of theoretical and practical courses in their TE programs?

Questions 4 and 5 asked:

4. What are some things about real world teaching that you learned during your practicum course?

5. How do you evaluate the duration and effectiveness of your practicum course in helping you acquire real world teaching skills?

They were constructed to answer the fourth research question:

RQ4: How do schoolteachers in both systems evaluate their practicum experience, with respect to duration and quality?

Question 6 asked:

6. Describe the reflective practices you performed during your years of study and discuss their benefits.

It was constructed to answer the fifth research question:

RQ5: In what ways is reflective practice incorporated in the TE programs of both systems?

Questions 7, 8, and 9 asked:

7. Throughout your course of study, which kind of knowledge did you acquire from most to least? (CK, PK, PCK, TPACK)

8. Which knowledge base was the most beneficial in your first years of teaching?

9. Evaluate the integration of technology in your TE program.

They were constructed to answer the sixth research question:

RQ6- Which knowledge bases of Lee Shulman's theory do schoolteachers find the most beneficial?

The purpose of question 10 was to obtain from the participants particular reforms on the main themes and indicators of comparison of this dissertation thesis.

10. Please suggest specific reforms to TE programs in the aspects of practical courses, the practicum experience, reflective practice, and acquisition of knowledge bases.

It is worthwhile to note that there are overlapping themes in the Shulman theory and the Feiman-Nemser typology. CK in Shulman's theory emphasizes the importance of subject knowledge for teacher, which is similar to Feiman-Nemser's academic orientation.

Figure 3

A Concept Map of the Interview Questions Derived From the Research Questions
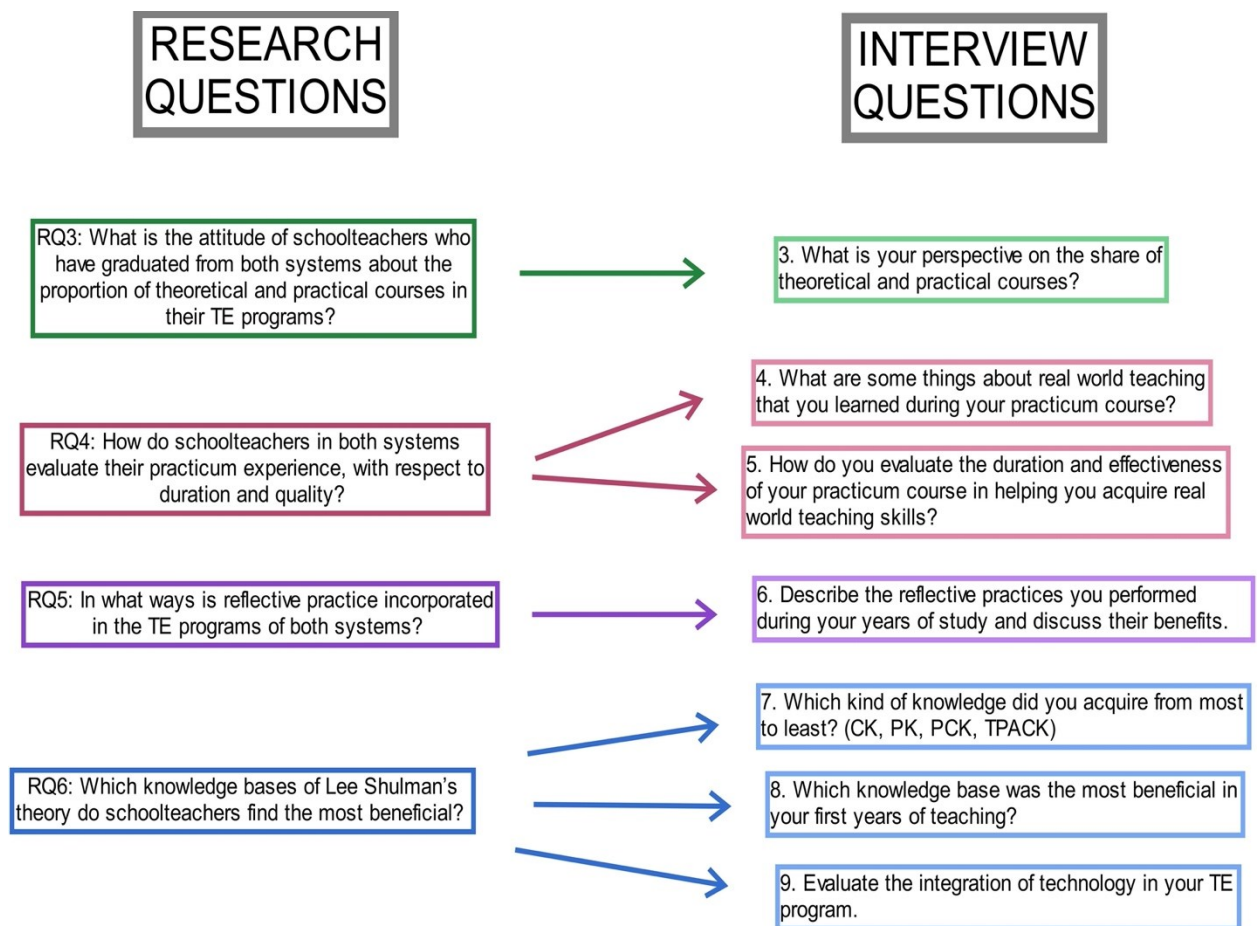
3.4 Data Collection Procedures

In a research study about comparing two initial TE programs and their effects on continual professional learning, the methodology involved case analysis of university handbooks, programs, and quality assurance documents, and interviews with graduates from each university involved (Husband, 2018). Similarly, this dissertation thesis compared the TE programs of three American-patterned and three French-patterned universities in Lebanon by conducting an analysis of program structure and content and by describing the viewpoints of graduates from those programs through semi-structured interviews.

3.4.1 Document Analysis Procedure

In this dissertation thesis, data such as the number of content courses, course offerings and required hours, total credits, and practicum hours were gathered to help in describing the structure and content of TE programs. These data were gathered from the websites of the six selected universities. The categories of focus were program structure and program content. For the structural frameworks, the number and credits of courses were demonstrated, with a particular focus on the practicum courses to gain insight into the share of theoretical and practical courses in each university's program. For the conceptual frameworks, the content of each program was examined and benchmarked against the conceptual orientations of the Feiman-Nemser TE typology. By reading the names of courses and their descriptions, they were classified in academic, practical, technological, personal, and critical/social orientations.

In addition to Feiman-Nemser's TE typology, there was an exploration done of whether there is an acquisition of the different knowledge bases introduced by Lee Shulman: CK, PK, and PCK. Finally, there was an examination to see whether these programs equip students with TPACK. These were followed by discussion and analysis sections.

Below are examples of courses in each of Feiman-Nemser's conceptual orientations:

- Academic orientation: Elementary Science Curriculum
- Practical orientation: Practice Teaching
- Technological orientation: Methods of Teaching
- Personal orientation: Sustainable Employability Skills in Education
- Critical/social orientation: Citizenship Education

Below are examples of courses promoting to the acquisition of Lee Shulman's knowledge bases:

- CK course: Animal and Plant Physiology
- PK course: Classroom Management
- PCK course: Teaching Math in Elementary School
- TK course: Fundamentals of Computer Systems & Applications
- TPACK course: The Use of Computer Applications in Education

3.4.2 Semi-structured Interviews Procedure

In addition to document analysis, semi-structured interviews were conducted with schoolteachers who have graduated from the six selected American and French-patterned universities in Lebanon. These were teachers who have obtained their teaching degrees between the years of 2020 and 2023; they served as a dual group: recent students who have been in the TE programs of concern, and current teachers who started their teaching career with the preparation they got from their university's TE program and can therefore provide their perspective of the effectiveness of the program. One type of conclusion in the qualitative approach is a description of a certain setting or a group of people (Cropley, 2022).

Reaching out to participants may be done in several ways. Advertising is one way, where researchers post announcements that invite participants to take part in the study. The advertising technique, if targeted to a wide segment of the population, can yield a heterogeneous group. However, it is important to screen the applying participants and select only those who fit the criteria of your research (Magnusson & Marecek, 2015) Another way is through chain referral, or snowball sampling, where researchers ask their participants to suggest names of others who could be potential participants (Creswell & Guetterman, 2021). With the chain referral technique, there is the risk of having a group of participants who are like each other in characteristics, as participants are likely to nominate their friends. Targeted nominations is another way, where researchers ask people who are not part of the study to nominate people that are suitable to be participants (Magnusson & Marecek, 2015). Considering the advantages and disadvantages of each method of reaching out to participants, this dissertation thesis adopted a hybrid approach: advertisements were posted in social media groups of teachers in Lebanon. After obtaining some participants, the chain referral method, or snowball sampling, was used, and participants were asked to suggest names of others from their university cohort. Also, the

method of targeted nominations was used by asking university instructors who are not part of the study to suggest names of graduates from the TE programs. For the final sample, a screening process was done to ensure that the list of applicants satisfies the selection criteria.

In response to the posted announcements, different candidates approached me, and I performed a screening process of selecting those who fulfill my criteria: schoolteachers, graduates of one of the six universities that are part of my study, and graduated with a bachelor's degree in TE within the years of 2020-2023. The exclusion criteria were having graduated with a bachelor's degree in TE before the year 2020, having a bachelor's degree in fields other than TE, and not working as a teacher.

For two of the American-patterned universities, I sent emails to the Chairpersons of the Education Departments, who sent me the contact information of graduates that fit my criteria. For the third American-patterned university, I made announcements about looking for interview participants and posted them on social media in groups of Lebanese teachers. One participant reached out to me in response to my post, and I interviewed her. She then gave me the contact information of another graduate, whom I interviewed, too, and from whom I received the contact information of other graduates.

For one of the French-patterned universities, I established contact with the Dean of the Faculty of Education via email, and she put me in contact with the faculty advisor. The faculty advisor sent me the contact information of graduates that fit my criteria. For the other French-patterned university, I contacted an assistant professor at the Faculty of Pedagogy. She sent me the contact information of graduates that fit my criteria. For the third French-patterned university, I made announcements about looking for interview participants and posted them on social media in groups of Lebanese teachers. One participant reached out to me in response to my post, and I interviewed her. She then gave me the contact information of other graduates.

Before the interviews, the participants received an email including the informed consent document to be signed (See Appendix A). During the interviews, demographic information was obtained from the participants, such as their age, gender, nationality, name of university, degree and specialization, number of years of studying, duration of practicum in months, year of graduation, number of years of teaching, grade level of teaching, and subject of teaching. Afterwards, the ten interview questions were asked (See Appendix B). The interviews were

recorded on Zoom, which is a cloud-based video conferencing platform. The recordings were then transcribed, and the data were coded, as the next section explains.

3.5 Data Analysis Procedure

Data gathered from qualitative research, such as fieldnotes, artifacts, and interviews, can be organized using different methods. The method of organizing data, which I followed in my dissertation, is organization by themes.

3.5.1 Coding Data from Interview Transcripts

The data in this dissertation thesis were analyzed using the MAXQDA software and following the thematic analysis method. First, the interviews were transcribed, and data pertinent to the research questions were selected. Then the coding process followed. In the MAXQDA software, different ways can be used to code the transcribed interviews. In the beginning, the researcher goes over the interview transcriptions line by line and part by part and assigns codes to segments. Segments pertaining to the research questions are identified and categorized appropriately. Then the researcher determines how to code segments that are not categorized yet; these segments can either be coded as "other" or a new category can be created. Additionally, a new natural category may be created, which is called "in vivo code" in the MAXQDA software and is used in Grounded Theory research. In this type of coding, the category name is derived from the participant's vocabulary. Participant answers that provide an especially noteworthy or exemplary description of a subject can be placed in the "quotable text passages" category (Rädiker & Kuckartz, 2020). Codes can be identified in a top-down approach, known as deductive coding, where the researcher uses the data to explore theoretical ideas. Another approach is the bottom-up way, or the inductive coding, where the researcher identifies the themes based on what is in the data (Clarke & Braun, 2013). For inductive coding, the in-vivo coding tool is appropriate (MAXQDA, 2024). While deductive coding uses preset code categories and structure, inductive coding is data-driven and creative (Gizzi & Rädiker, 2021). In this dissertation thesis, both the deductive and the inductive approaches were employed. The research questions served as a guide to compile a list of codes, and then, while going over the interview transcripts, the inductive coding process was used to create more codes based on ideas coming from the participants.

Categories are a crucial tool when analyzing qualitative data. Using categories helps a researcher to classify, index, describe, and explain the data (Kelle, 2010, as cited in Rädiker & Kuckartz, 2020). A category system's categories can be arranged in a network-like structure or linearly into an extensive list. In the MAXQDA software, they are often grouped in a category tree in a hierarchical fashion. This implies that subcategories of categories may exist, and that subcategories may be further divided into subcategories of their own (Rädiker & Kuckartz, 2020).

3.5.2 Thematic Analysis

There are several ways to organize data gathered from interviews. According to Weaver-Hightower (2018), themes depict commonalities across a group of participants. When data are structured by themes, a separate section is devoted to each theme, headed by the theme's name as the title. The section can then be divided into paragraphs by subthemes. Another way to organize data is by typologies which depict types or categories of a given phenomenon. This dissertation thesis did not use typologies because the purpose of gathering data was not to categorize participants into different kinds. Chronological organization is another method, where the writer presents data as a series of events. Another method is describing steps in a process. A common method is structuring data by case studies. Each case can be presented separately, and at the end, similarities and differences among cases can be discussed. The components of a theoretical framework, such as major elements of a theory or model, may help in structuring data. In this dissertation thesis, data was structured by themes.

Thematic analysis is a methodical procedure for finding, examining, and summarizing patterns, or themes, in a dataset (Clarke & Braun, 2013). Gerald Holton, a physicist and historian of science, developed the methodology known as thematic analysis in the 1970s (Merton, 1975, as cited in Clarke & Braun, 2013). Later it was acknowledged as a unique approach with a well-defined set of processes for the social sciences (Braun & Clarke, 2006, as cited in Clarke & Braun, 2013). In thematic analysis, after coding the data comes the process of developing themes, which is an active process as the researcher looks over the codes and coded data and begins to identify possible patterns. To recognize themes, the researcher should review the codes and examine the data related to each code and thus find overlap and similarity (Clarke & Braun, 2013).

In a study on TE students, the researcher wanted to examine preservice teachers' definition of culture. Data was collected through a survey, and the researcher used qualitative content analysis and followed the method of coding. Eight main descriptors and 38 sub-descriptors were identified, which were used to guide the discussion of results (Silva, 2022). In thematic analysis, relationships between themes can be lateral or hierarchical. Three levels make up the hierarchical relationship between themes: overarching themes, themes, and subthemes. Overarching themes serve to organize and structure the analysis. They do not contain codes or data, but they encompass main ideas that are apparent in many themes. Subthemes elaborate on and highlight noteworthy aspects of a single theme (Clarke & Braun, 2013). Similar to Silva's study, themes and subthemes were identified in this dissertation thesis.

How can themes be ordered when they are not chronological or steps in a process? Weaver-Hightower (2018) suggests including the most powerful theme at the end since people tend to remember what they heard last the most. If a researcher has different data types, that may serve as a method to structure data: documents first, then interviews, then observations. Data may be ordered from least to most important, or from what was said most or least commonly. One need not stick with a particular method of organization: combining approaches is a possibility.

One interesting and helpful technique is to avoid exceeding the bounds of one's data. A strategy to achieve this is by adding qualifiers, such as "often", "some", and "most", or numbers relevant to the data "five out of ten participants" to prevent the readers from faulty generalizations and assuming these phenomena always happen in this way. This is a technique I followed in my dissertation (Weaver-Hightower, 2018).

3.6 Ethical Considerations

It is crucial to consider possible ethical issues that might arise during data collection for my dissertation or when publishing the results of my research. To start with, I considered the issues of anonymity and confidentiality. Since in qualitative research it is almost impossible to achieve anonymity, my aim was to use anonymized data, which means to keep the people whom the data describe anonymous, to protect the privacy of my participants. I planned to store the data without the participants' names, as it is fundamental to abide by General Data Protection Regulation legislations for data protection.

One aspect of ethical considerations is that participants give informed consent at the beginning of the interview. It is each participant's right to be informed about the purpose of the study, the nature of the interview, and the participants' rights such as the right to confidentiality and anonymity. This is usually done with a document that is given to the participants to read and sign before the interview begins (Magnusson & Marecek, 2015). While having telephone or video interviews, informed consent can be sent beforehand to the participants via email, and it can be discussed before beginning the interview (Wray & Barrett, 2022). Gaining informed consent from participants is a good method to ensure they are well informed about the study's purposes, the methodology used, and the dissemination of results. Participants should be notified of the value of their participation and their right to withdraw from it. Also, they should be reassured that their participation is anonymous, and that data collected from them will remain confidential (Husband, 2020). In this dissertation thesis, I made sure to inform participants about the purpose of my study, their right to withdraw from participation, the time commitment, and the guarantee of confidentiality. I also got their permission to record them. The recordings do not include the participants' names or their universities' names. Moreover, participants were asked to turn their cameras off before the recording started.

Figure 4 is a graphic scheme that shows the relationship between the methods and instruments of this dissertation thesis.

Figure 4

Research Design: Methods and Instrumentation of Data Collection and Analysis
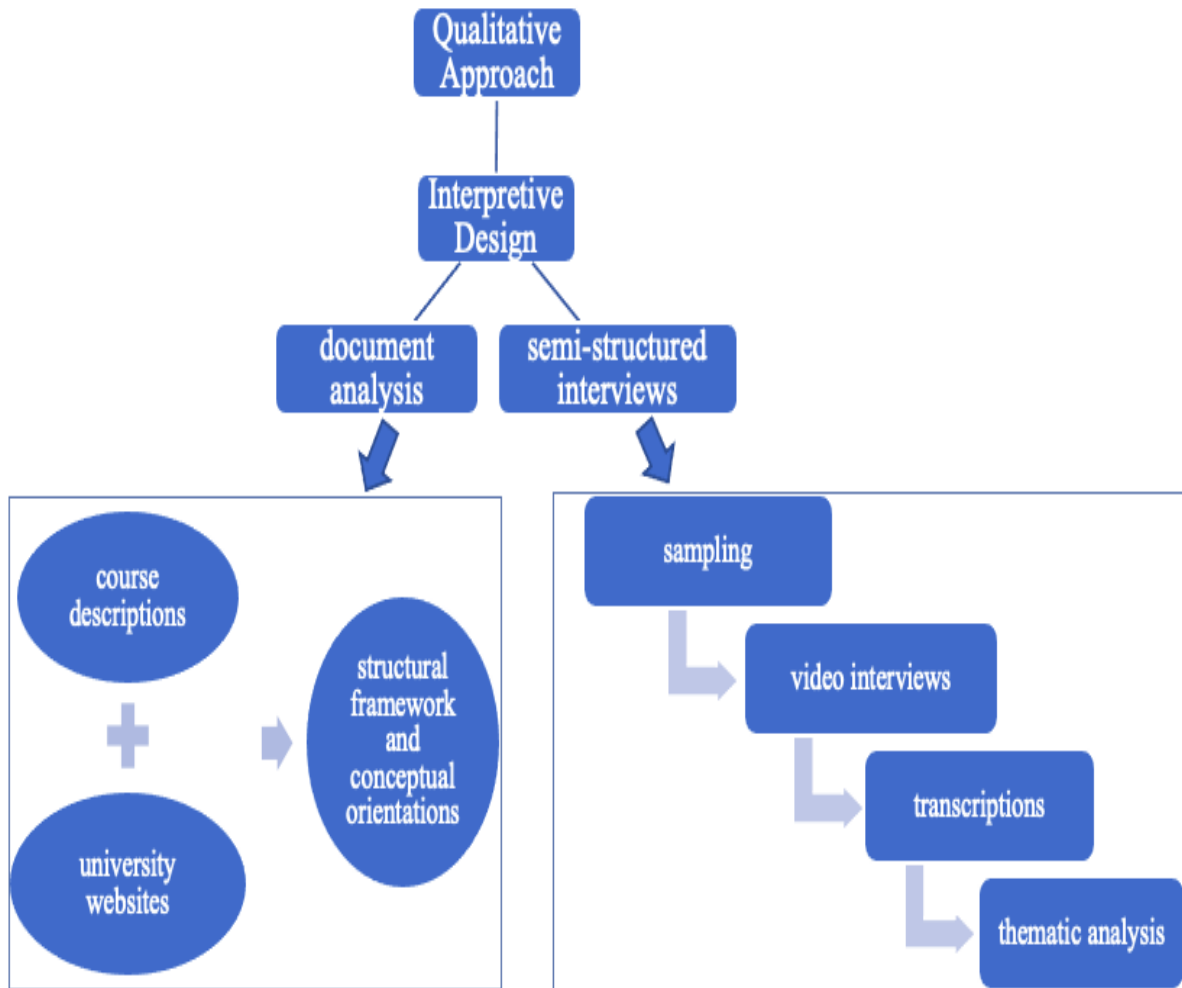
Chapter 4: Results from the Document Analysis

One of the aims of this dissertation thesis is to describe the structure and content of TE programs in selected American-patterned and French-patterned universities in Lebanon. In this chapter, secondary data collected from the websites of universities will be presented, and the first and second research questions will be answered.

RQ1- Which orientations of the Feiman-Nemser typology are implemented in the TE programs in American and French-patterned universities in Lebanon?

RQ2- Which knowledge bases of Lee Shulman's TE theory do students acquire from the TE programs in American and French-patterned universities in Lebanon?

To answer the first two research questions, a survey was done of the websites of three American-patterned universities in Lebanon: MUBS, HU, and AUB, in addition to three French-Patterned universities: UL, USJ, and USF. The main selection criterion for these universities was that the TE program descriptions, list of courses, program structure, program content, and course categories are available on their websites. Moreover, knowing instructors who teach in some of these universities helped in getting in contact with participants for the interviews.

In the next section, data gathered from the websites of the six universities will be presented. The categories focused on are program structure and content. For the structural frameworks, there will be a demonstration of the courses in each category (such as the categories of general requirements, major emphasis, specializations, electives, etc.). Moreover, there will be a demonstration of the proportion of the programs devoted to practical experience to gain insight into the share of theoretical and practical courses in each university's program. The courses that contribute to practical experience are the practicum courses, which include the obervation courses and the practice teaching courses.

For the conceptual frameworks, the content of the TE programs of the six universities will be examined. The titles of the courses found in each category of the program will be presented. To analyze the content of the programs, the conceptual orientations of the Feiman-Nemser TE typology will be used as a benchmark. Based on the titles and descriptions of courses, there will be insight into the incorporation of academic, practical, technological, personal, and critical/social orientations in the TE programs.

Additional analysis will be done using the TE theory of knowledge base acquisition by Lee Shulman. This theory identifies the knowledge bases of teachers' CK, PK, and PCK. As an update to the theory, a technological knowledge base has been added. Based on the titles and descriptions of courses, there will be an identification of the knowledge bases that each TE program develops.

Most of the universities in Lebanon that offer TE have Bachelor of Education degrees that prepare students to teach in the primary school level. According to BouJaoude and Baddour (2022), there is an absence of programs that prepare middle school teachers. Therefore, to keep the analysis standardized, this dissertation thesis looked at Bachelor of Education degrees that prepare prospective teachers to teach in primary school levels.

4.1 Programs of the American-Patterned Universities

4.1.1 Modern University for Business and Sciences (MUBS)

The following information was obtained from the website of MUBS, https://www.mubs.edu.lb/, one of the American-patterned universities in this dissertation thesis. The Bachelor of Education program structure and content are publicly available on the university's website.

Program Structure

The program comprises 33 courses, three credits each, and one 1-credit course, adding up to 97 credit hours in total. The undergraduate years culminate in the students receiving a Bachelor of Arts in Education, with an emphasis in a particular academic content or area, as the following list shows:

1. BA of Education in Teaching Math and Sciences in Elementary School

2. BA of Education in Teaching Arabic and Social Studies in Elementary School

3. BA of Education in Teaching English as a Foreign Language in Elementary School

4. BA of Education in Early Childhood Education

5. BA of Education in Educational Management

The BA of Education degree takes six semesters to complete. The practicum courses are taken in the last two semesters. In the first semester of the last year, which lasts around four

months, TE students go for observation in schools, where they observe how teachers are teaching the subjects that the TE students are majoring in. In the second semester of the last year, which lasts around four months, the TE students get the chance to do practice teaching in the classroom or classrooms they were observing before. This means that the proportion of practical experience that TE students gain is two out of six semesters.

Program Content

The courses that TE students need to take are displayed on the website in a table divided into categories of courses. Appendix C shows the program content for the specialization of Teaching Math and Science at MUBS. The courses in the "General Education Requirements" category are taken by all undergraduate students, regardless of their major. This category includes general courses such as language and computer courses. The courses in the "Core Requirements" category are taken by all undergraduate Education students. This category includes courses more specific to Education major students, such as Educational Psychology, Classroom Management, Methods of Teaching, and similar courses.

The "Major Emphasis" category includes three courses that are taken by all students and five courses that are different for each specialization. For instance, students specializing in Teaching Math and Science would take courses such as Materials for Teaching Math and Science, Elementary Math Curriculum, and Teaching Science in Elementary School. Students specializing in Teaching Arabic and Social Studies would take courses such as Arabic Grammar for Elementary Schools, Arabic Literature Curriculum, and Teaching Social Studies in Elementary school. Whereas students specializing in Teaching English as a Foreign Language would take courses such as English Syntax for Teachers, Teaching Listening and Speaking, and Teaching Reading and Writing. Those specializing in Early Childhood Education would take courses such as Physical Education for K-3 Learner, Child Development and Education, Early Childhood Curriculum, and Arts & Crafts for Teachers. Finally, students specializing in Educational Management would take courses such as Educational Laws and Policies, Leadership and Strategic Management, and Management of Finance and External Relations.

Regarding the "Major Education Electives" category, students can choose six courses from the offerings of the different specializations in the Education Department, while in the

"General Electives" category they can choose three courses from the offerings of the different majors at the university.

4.1.2 Haigazian University (HU)

The following information was obtained from the website of HU, https://www.haigazian.edu.lb/, one of the American-patterned universities in this dissertation thesis. The Bachelor of Education program structure and content are publicly available on the university's website.

<u>Program Structure for Bachelor of Education, emphasis Elementary Education</u>

To qualify for a Bachelor of Education, the student must complete at least 97 credits of requirements. These credits include the general university requirements, the core department requirements, and the additional requirements pertaining to the level and field of his or her chosen subject area(s) of specialization, such as emphasis requirements, in addition to emphasis requirements for subject area. Each course has a 3-credit value, except for one course in the Education core department requirements which has a 1-credit value. HU offers the degree of Bachelor of Education with 4 different emphases:

1. Christian Education

2. Education – Elementary

3. Early Childhood Education

4. Special Education

The Bachelor of Education degree takes six semesters to complete. Like MUBS, at HU also practicum courses are taken in the last two semesters. In the first semester of the last year, which lasts around four months, TE students go for observation in schools, where they observe how teachers are teaching the subjects that the TE students are majoring in. In the second semester of the last year, which lasts around four months, the TE students get the chance to do practice teaching in the classroom or classrooms they were observing before. This means that the proportion of practical experience that TE students gain is two out of six semesters.

<u>Program Content</u>

The courses that TE students need to take are displayed on the website in a document divided into categories of courses. Appendix D shows the program content for the specialization of Bachelor of Education, emphasis Elementary Education. The courses in the "General Education Requirements" category are taken by all undergraduate students, regardless of their major. This category includes general courses such as language and world culture courses.

The courses in the "Core Requirements" category are taken by all undergraduate Education - emphasis Elementary Education students. This category includes courses more specific to Education major students, such as Fundamentals of Education, Evaluation and Testing, Special Education, and similar courses.

The "Emphasis Requirements" category includes four courses that are taken by all students majoring in Elementary Education. This category also includes a list of six method courses out of which each student can choose only one depending on their subject matter concentration: Art, Music, Social Studies, Language Arts, English, Math and Science.

Regarding the "Emphasis Requirements for Subject Area" category, it includes courses that students can select from one of the subject area groups below:

1. Arabic/Social Sciences

2. English/Social Sciences

3. Armenian/Social Sciences

4. Math/Science

5. Art/Music

The elective courses for the Bachelor of Education, emphasis Elementary Education major are embedded within the "Emphasis Requirements for Subject Area" category.

4.1.3 American University of Beirut (AUB)

The following information was obtained from the website of AUB, https://www.aub.edu.lb/, one of the American-patterned universities in this dissertation thesis. The name of the TE degree is Bachelor of Arts in Education/Elementary. The program structure and content are publicly available on the university's website.

<u>Program Structure</u>

The program structure comprises 32 courses, three credits each, adding up to 96 credit hours. The program prepares all students for subject matter teaching, with the concentrations of Language Arts/Social Studies, Mathematics/Science, or Art/Music being the student's choice.

The BA in Education/Elementary degree takes six semesters to complete. Like MUBS and HU, the practicum courses are taken in the last two semesters. In the first semester of the last year, which lasts around four months, TE students go for observation in schools, where they observe how teachers are teaching the subjects that the TE students are majoring in. In the second semester of the last year, which lasts around four months, the TE students get the chance to do practice teaching in the classroom or classrooms they were observing before. This means that the proportion of practical experience that TE students gain is two out of six semesters.

<u>Program Content</u>

The courses that TE students need to take are displayed on the website in a document divided into categories of courses. Appendix E shows the program content for the specialization of BA in Education/Elementary, Mathematics/Science concentration. The "University General Education Requirements" category includes courses in humanities, social sciences, natural science, quantitative thought, English, Arabic, and Civilization Studies Program (CVSP). Within this category, students get to choose:

- Two CVSP courses which encompass themes like Ancient Near East and Classical Civilizations and Medieval, Islamic, and Renaissance Civilizations
- Two humanities courses which include Fine Arts and Art History, History and Archaeology, Middle Eastern Studies, and Philosophy
- Three language courses
- Two social science courses such as Economics, Political Studies and Public Administration, and Social and Behavioral Sciences
- Two natural science courses such as Biology, Chemistry, Computer Science, Geology, Mathematics, and Physics
- One quantitative thought course such as Computer Science, Mathematics, and Statistics

The "Education Requirements" category includes core education courses, methods courses, practicum courses, and a seminar. The "Subject Matter Courses" category includes specialization courses and electives within subject matter. The "General Electives" category includes elective courses.

4.2 Programs of the French-Patterned Universities

4.2.1 Université Libanaise (UL)

The following information was obtained from the website of UL, https://www.ul.edu.lb/, one of the French-patterned universities in this dissertation thesis. The Bachelor of Education program structure and content are publicly available on the university's website.

Program Structure for Bachelor of Education - Science Education at the Primary Level

While the websites of MUBS, HU, and AUB display the courses as divided into categories, such as General Education, Common Core, and others, the website of UL displays the courses as divided into semesters (see Appendix F). Most courses have a value of four credits, while there are nine 2-credit courses and one 3-credit course.

To earn the Bachelor of Education degree, students must complete six semesters of studies, with a load of 30 credits per semester, hence 180 credits in total. This is different form the three American-patterned universities described above, where a total of 96-97 credits is needed to graduate. The Bachelor of Education degree at UL is divided into the following specialized tracks:

1. Teaching the Arabic Language at the Primary Level

2. Teaching the French Language at the Primary Level

3. Teaching English at the Primary Level

4. Mathematics Education at the Primary Level

5. Science Education at the Primary Level

6. Teaching Social Studies at the Primary Level

7. Early Childhood Education

8. Physical and Sports Education

9. Art Education

10. Music Education

The Bachelor of Education degree takes six semesters to complete. Unlike the three American-patterned universities described above, the practicum courses at UL are spread over four semesters: one observation course in the third semester and three practice teaching courses in the fourth, fifth, and sixth semesters. This means that the proportion of practical experience that TE students gain is four out of six semesters.

Program Content for Bachelor of Education - Science Education at the Primary Level

The courses for each of the six semesters are preset for all students pursuing a Bachelor of Education at UL. That means, students majoring in the different specializations mentioned above take the same general education and core courses during each of the six semesters, regardless of their specialization. For example, students majoring in "Science Education at the Primary Level" and students majoring in "Mathematics Education at the Primary Level" take the same general education courses each semester, courses such as Documentary Research and Basics of Informatics and Its Applications. Also, students in both specializations take the same core courses each semester, courses such as Development of Educational Thought and Developmental Psychology.

Each semester, however, there are different emphasis courses for the different specializations. For example, students majoring in "Science Education at the Primary Level" take the course called Animal and Plant Reproduction in their second semester, while students majoring in "Mathematics Education at the Primary Level" take the course called Abstract Algebra. The difference for each student within the same specializations lies in the elective courses that they can take during the third, fourth, fifth, and sixth semesters. The elective courses are a list of courses in the sub-specialization field related to the specialization track that each student is following, as Appendix G shows.

The program includes one observation course and three practice teaching courses. Students take the observation course in their third semester; they should do observations of classes in school for 40 hours. Then, in their fourth, fifth, and sixth semesters, students take the three practice teaching courses, one in each semester, and for each course they must do 60 hours

of practice teaching. UL has a list of schools compiled where students can go for practice teaching, and students can choose a school from that list. Students are also free to do their practice teaching in a school of their choice.

4.2.2 Université Saint Joseph (USJ)

The following information was obtained from the website of USJ, https://www.usj.edu.lb/, one of the French-patterned universities in this dissertation thesis. The name of the TE degree is Bachelor's Degree in Educational Sciences, and there are two options to choose from: Preschool and Primary Education or Orthopedagogy. The program structure and content are publicly available on the university's website.

Program Structure for Bachelor's Degree in Educational Sciences - Option: Preschool and Primary Education

The website of USJ, like UL, displays the courses as divided into semesters (see Appendix H). To qualify for a Bachelor's Degree in Educational Sciences, the student must complete 180 credits of requirements, like UL, and unlike MUBS, HU, and AUB. To earn a bachelor's degree, students must complete six semesters of studies, with courses for each semester specified in advance.

Unlike the three American-patterned universities described above, the practicum courses at USJ are spread over five semesters: one observation course in the first semester and four practice teaching courses in the third, fourth, fifth, and sixth semesters. This means that the proportion of practical experience that TE students gain is five out of six semesters.

Program Content for Bachelor's Degree in Educational Sciences - Option: Preschool and Primary Education

In the Preschool and Primary Education option, students can choose the specialization of Teaching in French or Teaching in Arabic. The Teaching in French specialization prepares prospective teachers to teach French, science, and math, while the Teaching in Arabic specialization prepares prospective teachers to teach Arabic and social sciences in the Arabic language (history, geography, civics).

The courses for each of the six semesters are preset for all students pursuing a bachelor's degree in TE. In the first year, in both semesters, all TE students take all the Arabic and French

courses. Starting the second year, students take only the courses that are part of their specialization. For example, students majoring in the Teaching in French specialization take both Improvement of Arabic and Improvement of French courses in their first year of studies. In their second year, however, they don't take Teaching Arabic in Primary; they take Teaching French because it is part of their specialization.

The program includes five Internship Seminar courses distributed over the first, third, fourth, fifth, and sixth semesters. The Internship Seminar 1 course is an observation course, and students take it during their first semester of studies. From the third to the sixth semesters, the students take the Internship 2, 3, 4, and 5/Education in Preschool and Primary (EPP) Seminars, during which students go to schools and do practice teaching. Students start their practice at the preschool level and then continue at the primary levels. The university helps students find schools where they can do their practicum. The program also includes elective courses, as Appendix I shows.

4.2.3 Université Sainte Famille (USF)

The following information was obtained from the website of USF, https://www.usf.edu.lb/, one of the French-patterned universities in this dissertation thesis. The undergraduate TE degree comprises two options: Bachelor of Education in Preschool and Primary Levels and Bachelor of Orthopedagogy. The program structure and content are publicly available on the university's website.

Program Structure for Bachelor of Education in Preschool and Primary Levels

Unlike the two previously described French-patterned universities, UL and USJ, and like the three American-patterned universities, the program structure on the website of USF is displayed in categories of courses, not in semesters (see Appendix J). Moreover, unlike UL and USJ where 180 credits are required, to earn a bachelor's degree at USF, students must complete 99 credits of requirements, like the total required in the three American-patterned universities. These credits are divided into the common core subjects, the specialization subjects, the general subjects, the faculty requirement subjects, and the elective subjects. Most courses have a 3-credit value, four courses have a 2-credit value, and ten courses have a 1-credit value.

In contrast to the three American-patterned universities described above, the practicum courses at USF are spread over all the six semesters of TE studies. This means that the proportion of practical experience that TE students gain is six out of six semesters.

Among the six universities that are part of this dissertation thesis, the TE program at USF includes the longest practicum. However, despite the higher number of semesters that include practicum courses at the French-patterned universities, the number of practicum courses is still low compared to the theoretical courses of the programs. Even at USF, which includes six practicum courses, the number is still low compared to the total number of theoretical courses in the TE program.

Program Content for Bachelor of Education in Preschool and Primary Levels

Unlike the five universities described above where TE students choose a concentration or an emphasis in their bachelor's degree, at USF, all TE students majoring in Bachelor of Education in Preschool and Primary Levels take courses and do practicum in all the subjects: Preschool, French, Arabic, Math, and Science.

The courses in the "Common Core Subjects" category are taken by all the TE students majoring in Bachelor of Education in Preschool and Primary Levels. This category includes courses such as General Pedagogy, Classroom Management, and Learning Theories.

The courses in the "Specialization Subjects" category are taken by all the TE students majoring in Bachelor of Education in Preschool and Primary Levels. This category includes courses about teaching the academic subjects, such as the French Teaching course, and the practicum courses, such as Practice Teaching of the French Language course.

The "General Subjects" category includes courses that are taken by all university students, regardless of their major. This category includes courses such as Ethics and Professionalism, Introduction to University Methodology, and Research Methodology.

Regarding the "Faculty Requirement Subjects" category, it includes courses such as Computers and Education and Information and Communication Technology for Education. All students majoring in Bachelor of Education should take the courses of this category.

Three elective courses are required to fulfill the "Elective Subjects" category. Students can choose from the many elective courses that the university offers each semester.

4.3. Comparison of Program Structure

The description of program structure of the six universities shows that they all have similar categories of courses in their TE programs: a general education category of courses required by all undergraduate students, a core category of courses required by all undergraduate students of education degree, an emphasis category of courses required by all undergraduate students of education who are majoring in teaching a specific academic subject, and an elective category of courses from which students get to select. A difference in program structure is that in the three American-patterned universities, MUBS, HU, and AUB, the courses are divided by categories, as appendices C, D, and E show. This means that the TE students can take the courses in a rather flexible order, of course by fulfilling the prerequisites. Once all the courses are completed, the student can graduate. Whereas in the two French-patterned universities, UL and USJ, the courses are divided by semesters. This means at UL and USJ, each semester's courses are preset, and TE students must follow the set order, as appendices F and H show. In contrast, USF, despite being a French-patterned university, displays the courses of the TE programs divided into categories.

The total program credit hours are similar at MUBS (97 credits), HU (97 credits), and AUB (96 credits). Differently, the total number of credit hours in the program of UL and USJ is 180 credits. This is because one U.S. (United States) credit point is equivalent to two ECTS (European Credit Transfer System) credit points. For instance, at American universities, a full course load often entails 15 credits every semester, which is identical to 30 ECTS credits at a university in Europe (Atack, 2022). The two French-patterned universities involved in this dissertation thesis, UL and USJ, have adopted the ECTS as their credit system, which is different from the credit system used in American-patterned universities. According to the European Commission, 60 ECTS credits need to be completed in a year of study. In American-patterned universities, a year of study required the completion of 30 credits. Thus, one U.S. credit was determined to be equivalent to two ECTS credits. In the ECTS system, students are required to finish 180 ECTS credits to obtain a bachelor's degree (BouJaoude & Baddour, 2022). This can explain why the total number of credits at UL and USJ is 180. Conversely, USF, despite being a French-patterned university, follows the U.S. credit point system; hence, 99 credits are required to complete the TE degree.

Moreover, in French-patterned universities that follow the European style, the course material is divided into modules that are smaller than a semester course in American-patterned universities (BouJaoude & Baddour, 2022). This can explain why the total number of required courses at the American-patterned universities is less than in the French-patterned universities; for example, MUBS requires 33 courses, while UL requires 50 courses to complete the TE degree.

The TE programs of all six universities include practicum courses as part of the requirements to graduate. In the TE programs of the three American-patterned universities, two practicum courses are offered in the last two semesters of studies. In contrast, the TE programs of the three French-patterned universities offer practicum courses for longer than just two semesters: at UL, practicum courses are spread over four semesters, at USJ over five semesters, and at USF over six semesters, which is the whole duration of the TE studies. Despite the longer practicum in the three French-patterned universities, the theoretical courses are still more than the practical courses.

Table 3 highlights the most important structural differences between the TE programs of the six universities: the total number of credits, the semesters of practicum, and the total hours of practicum.

Table 3

Comparison of Program Structure Between the Six Universities

Program Structure	Number of credits	Semesters of Practicum	Hours of Practicum
MUBS	97	2	120
HU	97	2	180
AUB	96	2	170
UL	180	4	220
USJ	180	5	466.5
USF	99	6	600

4.4 Comparison of Program Content using Feiman-Nemser's Typology

After providing a description of the TE program content of the six universities above, a comparison will be made by utilizing the five conceptual orientations of the TE typology of Feiman-Nemser as a reference point.

4.4.1 Academic Orientation

The academic orientation stresses that one of the central tasks of TE programs is to develop subject matter knowledge (Feiman-Nemser, 2001). All the six universities examined above include specializations of subject matter in their undergraduate Education programs; hence, the TE programs include courses that educate prospective teachers on subject matter. Moreover, all six universities offer courses that prepare prospective teachers to teach academic content. Subject matter knowledge should be accompanied by an understanding of how to teach academic topics to students of different ages and backgrounds (Shulman, 1986, as cited in Feiman-Nemser, 1990).

HU offers specialization courses that prepare prospective teachers in the different subject matter areas, such as Arabic and Social Sciences, English and Social Sciences, Armenian and Social Sciences, Math and Science, and Art and Music, based on the choice of concentration of each student. The TE programs at MUBS also include subject matter preparation, with courses that transmit academic content and courses that train prospective teachers to teach the academic content they are specializing in. AUB offers specialization courses in academic subjects in addition to methods courses of how to teach the academic content. The TE program of UL includes specialization courses in different academic subjects and courses about how to teach those academic subjects. USJ offers subject matter courses and courses about how to teach subject matter. USF also offers courses in academic subjects and courses about how to teach those academic subjects; however, contrary to the other five universities, at USF there are no specializations in the bachelor program. All TE students should take courses in all the academic subjects, and all TE students should take courses about how to teach all the academic subjects.

4.4.2 Practical Orientation

The practical orientation highlights the importance of practical experience as an effective method of learning how to teach (Feiman-Nemser, 1990). In the programs of all the six

universities examined above, practicum is included, and it comprises an observation part and a practice teaching part.

One difference among the universities is the subject of practicum, namely if the practicum is supposed to be in the subject area of the TE student's specialization. MUBS offers the Field Experience-Observation and Analysis course and the Student Teaching Practicum I in Teaching Area course. HU offers the Observation and Internship course and the Practicum in Elementary School course. AUB offers the Practicum in Elementary School course which includes observation and practice teaching, and TE students take either the Practicum in Elementary School (Language Arts/Social Studies) or Practicum in Elementary School (Mathematics/Science), depending on their concentration. UL offers the Classroom Observation course and the Practice Teaching 1, 2, and 3 courses, and TE students must observe and do practice teaching in their major concentrations.

While the four universities mentioned above require their TE students to do practicums in the subjects of their specializations, the two French-patterned universities, USJ and USF have different requirements which allow TE students to observe and teach in different grade levels, different schools, and different academic subjects. USJ offers the observation course called Internship Seminar and the practice teaching courses called Internship 2, 3, 4, and 5/Education in Preschool and Primary (EPP) Seminar. In the Internship 2 and 3 courses, TE students do their practicums in all the academic subjects, while in the Internship 4 and 5 courses, they observe and do practice teaching in their major concentrations. In contrast to the above, USF offers observation and practice teaching courses in all subjects: Preschool, French, Arabic, Math, and Science. All TE students majoring in Bachelor of Education in Preschool and Primary Levels at USF do observations and practice teaching in all academic subjects.

In addition to the subject of practicum, another difference is in the number of semesters devoted to practicum. At the three American-patterned universities, the practicum takes place during the last year of undergraduate studies: students take the observation course during their fifth semester, and they take the practice teaching course during their sixth semester. At the three French-patterned universities, the practicum takes place for a longer duration: at UL, observation takes place during the third semester of studies, and students take the practice teaching course during their fourth, fifth, and sixth; at USJ, observation takes place during the first semester of

studies, and students take the practice teaching course during their third, fourth, fifth, and sixth semesters; at USF, observation and practice teaching take place during all the six semesters of TE studies.

The duration of practicum is one major difference in the TE programs of the American and French-patterned universities. In all the three French-patterned universities that are a part of this dissertation thesis, TE students start going to schools for observation and for practice teaching in earlier semesters and they do longer practicums than students in the American-patterned universities do.

4.4.3 Technological Orientation

The technological orientation has as its main goal the preparation of teachers who can perform the duties of teaching adeptly. It focuses on empirically validated teaching strategies. To learn how to teach, prospective teachers should acquire knowledge, strategies, and practices derived from the scientific study of teaching and learning (Feiman-Nemser, 1990). The TE programs of the six universities include courses that teach prospective teachers research-based methods, strategies, theories, and principles. Examples of such courses are: Educational Psychology, Classroom Management, Methods of Teaching, Assessment and Evaluation, Psychology, and Special Education. The technological orientation is similarly integrated in all the six universities, regardless of the model they follow.

4.4.4 Personal Orientation

The personal orientation emphasizes the important role that a teacher's personal development plays in teacher preparation (Feiman-Nemser, 1990). The programs of five the six universities examined above include courses that contribute to the personal development of prospective teachers.

The program of MUBS includes the Sustainable Employability Skills in Education course, which offers the students the chance to explore a broad range of essential skills preparing them for the field of work. This course teaches concepts related to the workplace, such as goal setting, time and stress management, workplace etiquette, writing a resume, interview techniques, motivation, communication, and group dynamics at the workplace. MUBS also

offers the Public Speaking course, which sharpens students' skills to deliver lectures in front of an audience.

The program of HU includes the Work Ready Now course, which covers topics such as time and stress management, group dynamics, preparing for job interviews, writing a CV and a cover letter, leadership, and technology, with the purpose of preparing students to manage their lives and get ready for the world of work.

On the AUB website, in the TE program, there is no mention of courses that foster personal development. Upon asking one of the interview participants, I was told that they did not take such courses, but they had the option of going to the university's writing center to improve their expression skills. They could also attend the job fairs held at the university, where they learned about preparing for the workplace.

UL offers courses that relate to personal development, such as the Health Education course which teaches students how to take care of their health, the Environmental Education course which teaches them how to take care of the environment, and the Expression Techniques course which teaches students how to write a CV and a cover letter and how to apply to jobs.

The program of USJ includes the following courses that contribute to personal development: Critical Thinking Tool for Personal Development, which promotes self-knowledge, problem solving, decision-making, time management, and stress management through practical techniques of questioning and analysis; Music and Songs, a course that promotes awareness and appreciation of the world of music; Conflict Management and Resolution, a course that allows students to understand the different stages of conflict management and to consider them as opportunities to advance in their personal and professional lives.

Finally, USF also offers personal development courses, such as Health, Nutrition, First Aid, Hygiene and School Medicine, Ethics and Professionalism, and Mediation, which teaches prospective teachers how to resolve conflicts, how to communicate in situations of tension, and how to solve problems with other people at work.

In comparing the American and French-patterned universities of this dissertation thesis, it is evident that the personal orientation is more pronounced in the French-patterned universities,

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as they include a higher number of courses that foster the personal development of prospective teachers.

4.4.5 Critical/Social Orientation

In TE programs, the critical study of topics such as language, history, culture, and power is considered important (Giroux and McLaren, 1986, as cited in Feiman-Nemser, 1990). In the programs of all the six universities examined above, there are language courses in the General Education category: MUBS offers English and Arabic courses, HU offers English courses and students can choose between an Armenian or an Arabic course, AUB offers English and Arabic courses, UL and USJ offer English, Arabic, and French courses, and USF offers Arabic and French courses.

In addition to language courses, there are other courses that demonstrate critical/social orientation. HU also offers a Religion/Ethics course, and three courses in cultural studies: World Culture: 3000 BC – 1 Ad, World Culture: Christianity – Romantic Age, and World Culture: 20th Century. In the TE program of MUBS, the courses that target the critical-social dimension fall in the "General Electives" category, from which students majoring in TE can choose three. The courses are Introduction to Philosophy, Introduction to Psychology, Introduction to Sociology, Introduction to Political Science, Cultural Studies I, and Cultural Studies II. Therefore, MUBS offers the study of cultural and social topics. At AUB, TE students can choose two CVSP courses which encompass themes like Ancient Near East and Classical Civilizations and Medieval, Islamic, and Renaissance Civilizations, two humanities courses which include Fine Arts and Art History, History and Archaeology, Middle Eastern Studies, and Philosophy, and two social science courses such as Economics, Political Studies and Public Administration, and Social and Behavioral Sciences.

Regarding the French-patterned universities, the TE program of UL includes a Human Rights course and a Citizenship Education course. USJ offers General Culture, a course that includes areas of knowledge (art, philosophy, civilization, mythology) and a section on European and world news. USJ also offers Volunteer and Citizenship Action 1 and 2 courses, which aim to raise awareness of the importance of involvement in civic life by providing the opportunity to engage in various voluntary activities. Another course at USJ is Community Educational Intervention, which encourages all students to get involved in community and citizen action

through an educational intervention. The TE program at USF includes the course of Communication and General Culture and the course of General Law that foster the study of cultural and social topics.

In comparing the American and French-patterned universities of this dissertation thesis, it is noticeable that the critical/social orientation is more prominent in the American-patterned universities, with a higher number of courses that promote this orientation, especially in AUB.

To conclude this section, after an examination and a comparison of the TE program structure and content of the six universities, it is apparent that in both models the highest number of courses are related to the academic and technological orientations. A further comparison between these six universities shows that the critical/social orientation is more evident in the TE programs of the American-patterned universities, while the French-patterned universities include a higher number of courses in the practical and personal orientations.

4.5 Comparison of Program Content using Shulman's Theory

In this section, the content of the TE programs of the six universities will be compared by utilizing the knowledge bases of the TE theory of Shulman as a reference point. According to this theory, TE programs should equip prospective teachers not only with CK, but with different kinds of knowledge bases such as PK and PCK. Moreover, based on the model by Koehler and Mishra (2006), prospective teachers should also have TK and TPACK, which would prepare teachers to teach academic subjects effectively using technology.

CK is subject-specific knowledge. It provides prospective teachers with knowledge of the academic subject they will teach (Shulman, 1987). MUBS offers specializations that equip students with CK of the academic subjects they want to teach, such as math, science, English, and Arabic. Similarly, HU's and AUB's TE programs include courses that equip prospective teachers with CK, such as courses in languages, math, science, social sciences, music, and art. To further elaborate, I examined the Bachelor of Math and Science Education specialization and found that each of MUBS, HU, and AUB offer two courses of CK: one in math and one in science.

In contrast, USJ offers more CK courses that the three American-patterned universities. For example, the specialization of teaching French at USJ includes four CK courses. As for USF,

the acquisition of CK happens in an original way. Since TE students are required to observe all subjects, they take notes about the subjects while observing teachers teach. This is how they build a knowledge base of the subjects taught at school, by being in school classrooms and taking notes.

Comparing the six university TE programs in the acquisition of CK exhibits the high number of CK courses at UL, where the TE program includes more than nine CK courses spread across the six semesters of studies. There are nine CK courses in the core requirements and TE students can choose some of their electives from a list of courses that are CK in science. For example, the major of Bachelor of Education - Science Education offers courses in different topics of science every semester. The same is true for other specializations, such as mathematics education and language education. Moreover, while MUBS, HU, and AUB offer a Bachelor of Education in Math and Science together, and while USJ offers a bachelor of math, science, and French together, and while USF offers a general bachelor degree with all academic subjects (Arabic, French, math, science), UL offers a separate bachelor's degree for each subject: Bachelor of Education - Math Education and Bachelor of Education - Science Education.

An examination of CK acquisition at the six universities shows that UL has the highest number of CK courses and that French-patterned universities have a higher number of CK courses than American-patterned universities.

PK is the type of knowledge that prepares teachers to create a classroom environment that is conducive to learning (Shulman, 1987). The six universities surveyed above offer many courses that enhance this type of knowledge. All six universities have courses that teach PK topics such as classroom management, educational and developmental psychology, special education, methods of teaching, educational evaluation and assessment, research, and curriculum design. And in the TE programs of all six universities, regardless of the model they follow, the number of courses that disseminate PK is higher than the number of courses that disseminate the other knowledge bases.

PCK is the type of knowledge that prepares teachers to teach an academic subject effectively (Shulman, 1987). All six universities offer courses that contribute to the acquisition of PCK by prospective teachers. For example, at MUBS, the specialization of Teaching Math and Science includes three PCK courses: Teaching Math in Elementary School, Teaching

Science in Elementary School, and Materials for Teaching Math and Science. Similar courses exist for the other specializations. At HU, students majoring in Bachelor of Education can take one of the following PCK courses, depending on their specialization: The Teaching of Art, The Teaching of Music, Teaching Social Studies in Elementary Schools, Teaching Language Arts in Elementary Schools, Teaching of English as a Second or Foreign Language, and Teaching Math and Science in Elementary Schools. The TE program of AUB includes two PCK courses. For the concentration of mathematics/science, students take The Teaching of Mathematics in Elementary School and The Teaching of Science in Elementary School courses.

Regarding the French-patterned universities, at UL, students majoring in Bachelor of Education - Science Education take the two courses Science Education 1 and Science Education 2, which enhance PCK. USJ offers three PCK courses for the specialization of teaching French: Teaching Mathematics, Teaching French, and Teaching of Life and Earth Sciences in Primary. As for USF, since the TE program prepares students in all subjects, there are five PCK courses: Preschool Teaching, French Teaching, Arabic Teaching, Mathematics Teaching, and Science Teaching.

Comparing the TE programs of the six universities shows that all of them contribute to the acquisition of PCK in a similar number of courses, except for USF which has the highest number of PCK courses.

Regarding the knowledge bases involving technology, in the programs of five of the universities examined above, there is one TK course from the General Education category: MUBS offers the Fundamentals of Computer Systems & Applications course, HU offers the Introduction to Computing and Programming course, AUB offers the Computer Science course, UL offers the Basics of Informatics and Its Applications course, and USF offers the Robotics course. The TE program of USJ does not have a TK course.

Moreover, each of these six universities offers courses that equip the prospective teachers with TPACK, a type of knowledge that helps in using technology in teaching. MUBS offers the Technology in Education course, HU offers the Instructional Media and Techniques course, AUB offers the The Use of Computer Applications in Education course, UL offers the Educational Technology course, USJ offers the ICT for Education course, and USF offers two TPACK courses: Computers and Education and ICT for Education.

Thus, all six universities contribute to the acquisition of TK and TPACK; however, in most universities, there is only one TK course and one TPACK course.

In conclusion, the comparison of the TE programs of the six universities shows that they all offer CK, PK, PCK, TK, and TPACK courses. Among these knowledge bases, the one that has the highest number of courses aimed at its acquisition is the PK. This is a similarity in both the American and French models.

While the number of PK, PCK, TK, and TPACK courses are the same or similar in universities of both models, one main difference is that the number of CK courses is higher in the French-patterned universities.

Chapter 5: Results from the Semi-structured Interviews

This dissertation thesis sought to explore the perceived effectiveness of TE programs in American and French-patterned universities in Lebanon. To achieve this, semi-structured interviews were conducted with twenty schoolteachers who graduated from the TE programs of the six universities chosen to be a part of this study. Firstly, participants were asked to read and sign a consent form, and after having agreed to participate in the study, they were asked the demographic questions first and then the interview questions.

In this chapter, primary data collected from participants via semi-structured interviews will be presented. The interview results aim to answer the following research questions:

RQ3- What is the attitude of schoolteachers who have graduated from both systems about the proportion of theoretical and practical courses in their TE programs?

RQ4- How do schoolteachers in both systems evaluate their practicum experience, with respect to duration and quality?

RQ5- In what ways is reflective practice incorporated in the TE programs of both systems?

RQ6- Which knowledge bases of Lee Shulman's theory do schoolteachers find the most beneficial?

In qualitative research, the categories formed from the collected data are a crucial analytical tool for addressing research questions. The categories aid in organizing and analyzing the data. Hence, it is important for the categories to be related to the research questions (Clarke & Braun, 2013). When planning the categories, the most important criterion is to consider the research questions. In addition to categories derived from the research questions, the category system should also have special categories such as "other" and "quotable text passages" categories. In MAXQDA, the term "code," not "category," is used (Rädiker & Kuckartz, 2020).

In this dissertation thesis, the interviews were recorded on Zoom and then transcribed and coded using the MAXQDA software. An analysis of the codes gave rise to the themes. To show the variety and depth of patterns in the data, one or two themes are not enough. More themes are needed to present a comprehensive overview (Clarke & Braun, 2013). It is generally advisable to start the analysis with a small number of themes, such as with seven to twelve categories (Rädiker & Kuckartz, 2020). Hence, in this dissertation thesis, a thematic analysis of the

interviews revealed five overarching themes and many subthemes, each of which indicates the participants' perspectives, attitudes, and experiences. Below are the five overarching themes:

1. Theoretical and Practical Courses

2. Practicum Courses

3. Reflective Practice

4. Knowledge Bases

5. Suggested Reforms

In interview analysis, the primary objective is to identify answers to the research questions (Rädiker & Kuckartz, 2020). In this dissertation thesis, the deductive coding approach was employed, with the research questions as a guide, to identify the overarching themes. The concept map below is created using the visual tools called MAXMaps in MAXQDA, and it shows how four of the overarching themes are related to the research questions (see Figure 5). The fifth theme is a creative one as it is formed by the participants' answers to the tenth interview question, asking them to suggest reforms to aspects of the TE programs they graduated from; the aspects encompass the four overarching themes.

The themes have been structured according to the research questions guiding this dissertation thesis, and the findings have been organized so that each research question can be addressed and discussed. Themes are structured both laterally and hierarchically. The lateral organization of themes is derived from the research questions and includes five overarching themes: theoretical and practical courses, practicum course, reflective practice, knowledge bases, and suggested reforms. The hierarchical organization of themes includes the subthemes derived from participants' answers to the interview questions.

In the next section, interview results for each research question, organized by the overarching themes, will be discussed in the following format: discussing the overarching theme, then presenting the main subthemes, answers from American-patterned universities, answers from French-patterned universities, a juxtaposition of answers, and the principal reforms suggested by the participants for each overarching theme. At the end, additional suggested reforms that do not fall under the overarching themes will be presented.

Figure 5

A Concept Map of the Overarching Themes Derived From the Research Questions
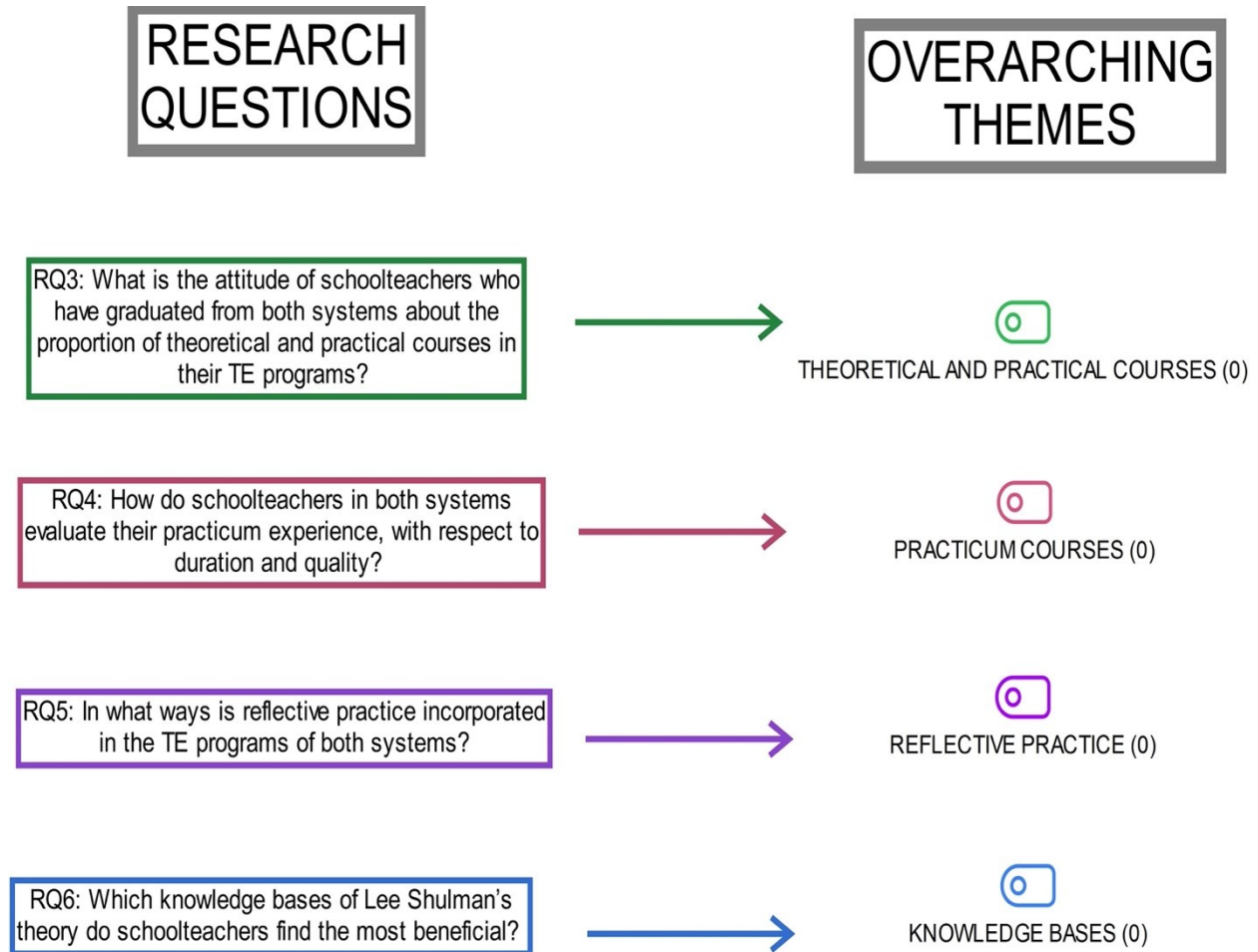
RQ3: What is the attitude of schoolteachers who have graduated from both systems about the proportion of theoretical and practical courses in their TE programs?

Overarching theme: Theoretical and Practical Courses

Having more theoretical courses in the TE programs emerged as a prominent subtheme. All twenty participants expressed similar concerns about having more theoretical than practical courses in their TE programs. Participants shared examples of theoretical courses, such as Methods of Teaching, Classroom Management, Educational Psychology, Developmental Psychology, and Educational Measurement and Assessment, and they explained that in such

courses, most of the time they were required to read the textbook and study definitions and theories, and then take paper-pencil exams testing their knowledge of the course material. As for practical courses, the examples are the observation courses and the practice teaching courses.

Despite much of the program including theoretical courses, certain methods of instruction may add practical aspects. Participant 5 said that some of their instructors used to share their personal teaching experiences and best teaching practices in class, and by doing this they gave theoretical courses a practical aspect. Participant 18 said that their university gave so much importance to practice. Even in theoretical courses, they had to apply everything they were learning, such as making models of things they were studying.

Eleven participants from both systems said that since the TE programs include more theoretical courses, it is important to add practical components to theoretical courses. Specific reforms were suggested by participants 1, 2, 3, 8, 9, and 11 from two of the American-patterned universities and participants 12, 14, 16, 17, and 19 from three of the French-patterned universities to incorporate practical aspects into theoretical courses. Below are the main reforms suggested by the participants from American-patterned universities:

- linking theoretical lessons to aspects that prospective teachers will encounter in real classroom teaching, such as discussing how to apply theories in the classroom. Participant 3 said, "They give us theories, and I feel like at least what could have been done was teaching us how these theories are implemented. So, for example, let's say, we're learning about Pavlov, or we're learning about Chomsky: how his or her theory could be implemented in our classroom. Make a theoretical course have a practical aspect."

- practicing the course topics inside the classroom; for example, doing role plays in the counseling course or the classroom management course instead of only studying the theories

- learning how to implement the theories inside the classroom; for example, in the assessment course, preparing an exam or a formative assessment

- preparing real lesson plans, activities, and exams instead of only learning about the steps to prepare them

- in the "Methods of Teaching" course, applying every learning model inside the classroom instead of only learning the definitions and characteristics

Below are the main reforms suggested by the participants from French-patterned universities:

- watching videos related to the real classroom in addition to studying from the textbooks

- reading and analyzing case studies about real classroom issues

- instructors giving real-life examples on the topics covered

- doing role-plays on real classroom issues

- doing projects, as participant 12 said, "The teachers should give us projects to do in all the theoretical courses. We should apply the subjects we are studying in real examples."

Figure 6 is an image from MAXQDA that shows the coding for the first overarching theme.

Figure 6

Coding of the Overarching Theme "Theoretical and Practical Courses" on MAXQDA

THEORETICAL AND PRACTICAL COURSES	0
there were more theoretical courses	20
add practical aspects to theoretical courses	11
practical application even in theoretical courses FR	1
instructors sharing experiences gave courses a practical aspect USA	1

RQ4: How do schoolteachers in both systems evaluate their practicum experience, with respect to duration and quality?

Overarching theme: Practicum Courses

The duration of the practicum courses was a main theme in this dissertation thesis. Insufficient duration of practicum is one principal challenge that all eleven teachers who have graduated from the American-patterned universities talked about (see Figure 7). In the TE programs of the six American-patterned universities that were a part of this dissertation thesis, the practicum courses are left to the last year of bachelor studies. In the first semester of the last year, which lasts around four months, TE students go for observation in schools, where they observe how teachers are teaching the subjects that the TE students are majoring in. In the second semester of the last year, which lasts around four months, the TE students get the chance

to do practice teaching in the classroom or classrooms they were observing before. As an evaluation of this course, the TE instructors go to the schools and observe the TE students teaching a real classroom.

In contrast to the answers coming from the graduates of the American-patterned universities, the nine graduates of the French-patterned universities expressed satisfaction in the duration of their practicum course. In all the three French-patterned universities, the observation and practicum courses lasted longer than two semesters only. In UL, TE students do observation and practice teaching for four semesters, in USJ for five semesters, and in USF for six semesters, which is the whole duration of their bachelor's degree. Participants 12, 15, and 16 from the French-patterned universities elaborated on the duration of the practicum by saying that one very helpful aspect was that the practicum courses were spread over many semesters, and this gave them the chance to learn theories at university and see them in application during the same semester, instead of waiting for the last year to see how the content they were studying applies in real classrooms.

In addition to duration, the fifth interview question asked the participants to evaluate the effectiveness of their practicum experience. For this question, the online format of practicum emerged as a recurrent subtheme as many of the participants had to do their practicum online due to the lockdowns for the Covid-19 pandemic. Eight participants from both American and French-patterned universities (participants 3, 6, 9, 10, 11, 16, 18, and 20) said that the online practicum was not effective. Participant 11 said, "We were not able to observe students and see their reaction. The teachers were really struggling. We felt lost like we were studying about classroom, but we didn't test the classroom, the real classroom, we tested like something visual only in our eyes." Participant 6 talked about the challenges of electricity cuts during online practicum. And participant 20 said that there was no chance of interaction with the students, and it was difficult not to see the students' reactions or to be able to monitor their work. It is worth nothing that participants who had done their practicum before or after the Covid-19 pandemic lockdowns described it as more effective than participants who had to do their practicum online.

In evaluating practicum effectiveness, another significant subtheme that emerged from the data pertained to the practice teaching being done with different age groups and in different schools. In this subtheme, the answers of participants from American-patterned universities were

completely different from those of French-patterned universities. Participants 13, 16, 19, and 20 said that it was effective to do observations and practice teaching in more than one school and in more than one grade level. They said they had the chance to get real experiences with kindergarten classes and primary school grades, and this was very helpful for them. Students from USF and USJ said that their universities provided them with a list of schools they can go to for practicum, and this facilitated the process for them. Participant 20 said, "The university used to give us a list of schools that we can go to. We did practicum in different schools and different classes, and we could see many ways of teaching."

In contrast to participants from French-patterned universities, participants 2, 4, 6, and 7 from two of the American-patterned universities said that the practicum was not so effective because it was not done with different age groups and in different schools. It was done in the same school and in one classroom. Participant 2 said, "When it comes to the practical experience, have a wider variety of schools and curricula. Exposure to different curricula, different approaches, different mentors is really also going to be beneficial for the practice. Even if you're just observing, it's going to be good exposure. You only must do your practicum with one school. You cannot change the school that you're going to. You're only allowed to be exposed to one type of curriculum. And then you are set with one mentor, so that you have to, you know, like you're exposed to one kind of teaching."

Regarding suggested reforms, participants 1, 5, 6, 8, and 10 from the three American-patterned universities said that they would have preferred to have a longer duration of practicum because doing observations for one semester and practice teaching for one semester was not enough. Participant 8 said, "The duration of the practicum course was not enough. The practical course is really effective, but I think it should be given every semester, not only once. So, every time a student finishes like two courses, three courses. Let him go to a school, or let him apply what he has learned, not only in practice, not only in methods of teaching. Maybe he should apply the psychology course in class. Try to let them deal with students with special needs, not only read about students with special needs. So, I think it should be given every semester. As I said so in this way the student teacher will improve their skills and will have more experience in future." Having longer practicums would allow students to practice each new thing they are learning in their TE studies.

Participants 2, 3, 7, and 8 from the three American-patterned universities elaborated on the aspect of duration and suggested to have practicum courses every semester and to start practicum from the first year of TE studies. Participant 7 said, "I think that it would have been more beneficial to be exposed to different types of settings throughout the years. Also, with every year I would have more knowledge about my background because I would see how I am progressing throughout the years." Participants 13 and 16 talked about the importance of guidance they received from the mentoring teacher during the practicum course. Participant 7 said her mentor was a significant aspect in her practicum experience's success.

To increase practicum effectiveness, participants 2, 4, 6, and 7 from two of the American-patterned universities suggested a diversity of schools and classrooms as this would give a more comprehensive understanding of real classroom dynamics. Participant 7 even suggested doing the practicum in schools and in a center for students with special needs. She said, "I compare myself to a student who has graduated from a different university, where they have this practicum every year and each year they are placed in a different school or center, and I think that would have been more beneficial." Doing the practicum in different schools and with different classes exposes TE students to multiple styles of teaching and multiple classroom environments. Moreover, TE students can see how students of different ages behave and learn.

Figure 7

Coding of the Overarching Theme "Practicum Courses" on MAXQDA

PRACTICUM COURSES	0
things learned in practicum	20
USA practicum duration not enough	11
USA longer practicum needed	5
FR good duration of practicum, many semesters	9
USA practicum not effective as not in different classes and age groups and seme...	4
USA practicum during every semester needed	4
FR effective practicum in different classes and schools	4
online practicum not effective USA & FR	9
practicum form: children coming to university for activities	1
practicum not effective; no chance to teach all the content	1
instructor's role in practicum: better questions, more observation	2
practicum in all subjects needed	1
mentoring teacher's role	2

RQ5: In what ways is reflective practice incorporated in the TE programs of both systems?

Overarching theme: Reflective Practice

Within this overarching theme, the discussions revolved around the following subthemes: forms of reflection, benefits of reflection, and reflection being done in the practicum course and in other courses. Participants also suggested reforms in reflective practice because they were asked to in the interviews (see Figure 8). The participants' answers showed that reflective practice is incorporated in the TE programs of all six universities; however, the forms of reflection are only self-reflection assignments after practice teaching and written reflection assignments on course topics.

The twenty participants shared the forms of reflection their TE instructors asked them to engage in. The most common form was writing a self-reflection assignment after doing practice teaching, a form of reflection that fifteen participants from the six universities said they engaged in. In such an assignment, TE students would write about the teaching methods they used, the mistakes they made, their strengths and weaknesses, and their areas for improvement. Participants 6, 13, and 15, added that they used to also write a reflection assignment based on their TE instructor's feedback after observing them in practice teaching.

Another method of self-reflection after practice teaching was filling in a checklist or a form or a rating scale given by the TE instructor about the TE students' performance. Participants 5, 15, 16, 17, 20 engaged in this form of reflective practice, which seems to be more common in the French-patterned universities. Participants 1, 4, 6, 7, 8, 9, and18 said that in addition to self-reflection, they also wrote reflection assignments on different topics they were studying and reading about. This form of reflection seems to be more common in the American-patterned universities.

The answers of the participants showed that doing reflection in the practicum course is a common practice in both university models, as all twenty participants said that they engaged in reflection in the practicum course. However, doing reflection in courses other than the practicum seems more common in American-patterned universities. Twelve participants said that they did reflection in courses other than the practicum, among which only two are from one of the French-patterned universities (participants 18 and 19), and the other ten are from the three American-patterned universities (participants 1, 2, 3, 4, 6, 7, 8, 9, 10, and 11).

Participants 12, 16, 18, and 19 from the three French-patterned universities and participants 7, 8, 10, and 11 from two of the American-patterned universities talked about the benefits of reflection. The subthemes were similar among participants from both models, stating the benefits of reflection as self-evaluation, self-awareness, the chance for self-improvement, identifying strengths and weaknesses, and improving their teaching strategies.

As in every overarching theme, in the reflective practice theme also, the participants were asked to suggest reforms to the reflective practices they engaged in during their TE studies. Participants 1, 4, 9, 12, 14, 16, and 20 from the six universities provided specific reforms:

- participants from both models suggested collaborative reflection, such as having a group discussion in class and talking all together about teaching and reflecting together on strengths and weaknesses

- a similar suggestion by participants from both models was doing peer-reflection by sharing experiences with classmates, seeing their challenges, and talking about ways to teach better

- participants from both models also suggested doing reflection in every course and in every year of TE studies

- participant 12 suggested doing model teaching inside the university classroom and having TE classmates do a reflection on each other's performance

- participant 9 provided a unique suggestion which was to engage in reflective practice by drawing pictures

Finally, a subtheme that emerged through inductive coding is about still doing reflection in their teaching career. Participants 2, 5, 11, and 20 said that they do reflection in their teaching careers. Participant 2 said, "So something that I still have with me right now is reflection whenever I am working. So, it's not a daily thing where I'm like writing down what I did wrong or right, But I reflect on my week. Last year I had tough behavior and cases. And then I would reflect on them at the end of the week. I was really angry. Maybe this is something I could have done better. Maybe this is a situation where I could have handled better, and then I would come up with like, an archive of things. I did this. It didn't work out. I would know, and I should be doing something different. So, this is basically something that I did learn from practicum, which is to reflect on, like the situation that I'm going through."

Figure 8

Coding of the Overarching Theme "Reflective Practice" on MAXQDA

REFLECTIVE PRACTICE	0
forms of reflection	20
reflection in practicum	20
reflection in courses other than practicum	12
benefits of reflection	8
suggested reforms in reflection	7
still do reflection in my teaching career	4

RQ6- Which knowledge bases of Lee Shulman's theory do schoolteachers find the most beneficial?

Overarching theme: Knowledge Bases

The participating teachers shared their perceptions of how the knowledge bases they acquired during their TE studies helped them in their first teaching experience. The teachers said that all types of knowledge, CK, PK, PCK, and TPACK, helped them in different ways in teaching. However, fourteen participants from both university models said that the knowledge and skills they gained from PK courses were the most valuable when it came to teaching in a real classroom for the first time, and hence PK being the most helpful knowledge base was a prominent subtheme. The participants said that throughout their TE studies, they took courses that disseminate PK, such as methods of instruction, classroom management, educational psychology, and educational measurement and assessment. From these courses they acquired knowledge and skills to prepare lesson plans, deliver lessons, conduct assessment, and manage student behavior. These courses also equipped them with communication strategies that helped them keep their students engaged and motivated. Participant 10 said, "When I started teaching the most important points that I just focused on how to be a good teacher, how to send the message in a way how to deliver the message. To do a student-centered classroom and how to create the best environment for the class."

While most participants said that PK was the knowledge base that helped them the most when they first started teaching, all twenty participants said that the knowledge base they

acquired most in their TE programs was PK. Hence, the subtheme of PK being the most acquired knowledge base was unanimously stated by everyone. Participant 5 said, "I think the most thing that I acquired is the PK: the pedagogical knowledge. I feel I'm confident in the PK side." Similarly, all participants said that TPACK was the least acquired knowledge base in their TE programs.

A third subtheme in this overarching theme is the suggestion for TE programs to prepare the students better in using technology. Eleven participants from all the six universities proposed this suggestion, four from American-patterned universities (participants 1, 6, 7, and 10) and seven from French-patterned universities (participants 12, 13, 14, 15, 16, 17, and 18). Participants 7, 12, 13, 15, and 16 specified that in addition to more technology, more TPACK should be integrated in the TE programs because nowadays it is very important to know how to use technology in teaching. Participant 15 said, "Especially after covid I realized how important TPACK is. At my university, they should have taught us technology is a deeper way."

A subtheme that is worth mentioning here is about a suggested reform to add more CK courses in the TE programs. Participants 2, 4, 5, and 8 made this suggestion, and all of them are from the three American-patterned universities. Participant 5 said that she had to learn the content on her own when she started teaching because the university did not equip her with enough CK (see Figure 9).

Figure 9

Coding of the Overarching Theme "Knowledge Bases" on MAXQDA

KNOWLEDGE BASES	0
PK most beneficial knowledge base	14
PK most acquired knowledge base	20
more technology needed	11
more CK needed	4
add PCK courses	3
TPACK most beneficial knowledge base	2
ALL knowledge bases helpful	2
CK+PK most beneficial	1
PCK most beneficial	1

Overarching theme: Suggested Reforms

In this part, specific reforms suggested by the participants will be mentioned, reforms that do not fit under the preceding four overarching themes. To answer the final research question, the twenty participants provided suggestions of reforms that should be implemented in TE programs. The answers of these teachers were not based only on theoretical knowledge but on their firsthand teaching experience (see Figure 10).

The most noteworthy subtheme to mention is the need for special education training. Participants 6, 12, 13, 15, 17, and 19 saw the need for TE programs to provide more training to prospective teachers about how to work with students who have learning disabilities and special needs. Participant 6 said, "More diversity and inclusion training. Because sometimes in every classroom you have more than two or three cases." Participants 12 and 17 suggested adding the requirement of doing practicum with students who have learning disabilities and special needs. Participant 17 said, "For the practicum course. I would like to suggest that students go and observe classes in which there are students with special needs, students with learning disabilities, learning difficulties. Because in the future, when we start teaching, we might have children with special needs in our classes."

Another interesting subtheme that emerged in this overarching theme is the suggestion to add courses that target personal and critical/social development. When asked about what reforms they would like to introduce to their TE programs, participants 3, 14, 15, and 20 wanted to add courses in social-emotional learning, communication skills, and confidence, and these are topics that target the personal development of prospective teachers. Participant 20 said, "I wish the university gave us cultural courses, courses in communication, politics, humanitarian issues, topics that lend themselves to conducting discussions in the classroom when I start teaching." These courses are part of the critical-social orientation of Feiman-Nemser's typology.

A subtheme that is worth mentioning despite only two participants suggesting it as a reform is that TE students should learn the content of Lebanese school textbooks. Participants 1 and 18 made this suggestion. They explained that it is not enough to learn general concepts in math, science, or languages at university. They said the CK courses in their TE programs should include the curricula of primary school textbooks they will use in their future teaching. This would give them a comprehensive knowledge of the lessons that they will teach their students.

Figure 10

Coding of the Overarching Theme "Suggested Reforms" on MAXQDA

SUGGESTED REFORMS	0
special education training and practicum needed	6
courses for personal and critical development	4
need to learn CK that we will teach later	2
learn to work in science labs	1
adding methods and class management courses	1
mentorship for novice teachers	1

Other Subthemes

It is worth mentioning other subthemes that emerged from the interviews. A subtheme that was identified by inductive coding is about reality shock, about how different teaching in a real classroom is compared to studying theories about teaching. Nine participants from all six universities talked about this idea (participants 1, 4, 5, 7, 8, 10, 13, 17, and 19). They explained that only in the practicum courses they had a real idea of what classroom teaching is like. They said that it was difficult to apply what they learned at university in school classrooms. They said that observing and teaching students in a classroom can teach you things that you did not learn about at university. Participant 10 said, "I took classroom management. I took how to make a lesson plan, but it was totally different from class. It was totally different from the career we are in."

While participants from American-patterned universities expressed the need to have longer practicums with the observation and practice teaching courses spread across several semesters, participant 8 elaborated further and said that the practicum is the only experience that shows how real-world teaching is. Hence, this subtheme identified by inductive coding illustrates that in TE programs, the practicum courses give the most realistic image of the teaching career. Participant 8 said that if she had done practicum earlier on in her studies, she would have changed her major. She said, "Practicum should be done every semester. The practicum course is the only experience that shows how true teaching really is. If I had my practicum earlier in my studies, I would have changed my major. The courses I took were good as theories, but when it came to practice, I realized this is not what I want to do."

There are more quotes from participants in Appendix K, and Appendix L shows one of the interview transcripts with a graduate from one of the American-patterned universities.

Chapter 6: Discussion of Results

TE programs play a fundamental role in preparing prospective teachers for their teaching career. During their years of undergraduate studies in Education, student teachers acquire knowledge of teaching theories and instructional methods, gain an understanding of human development, learn how to create a classroom environment that is conducive to learning, observe classroom instruction in real settings, and do supervised teaching in a school to gain practical experience. Preservice training contributes to future teachers' acquisition of several knowledge bases: knowledge about the nature of the academic subject that they will teach, knowledge about creating an effective teaching environment, knowledge that prepares them to teach the specific academic subject they specialized in (Shulman, 1987), and knowledge about integrating technology in teaching (Schmidt et al., 2009).

This chapter will analyze and interpret the results obtained from the semi-structured interviews, using these results to elaborate on and to complement the results from the document analysis, while keeping the intranational comparative perspective in mind. Overarching themes and subthemes have been obtained by conducting a thematic analysis of the answers of the participants. In what follows, the overarching themes, each relevant to the research questions, and subthemes derived from participants' answers will be analyzed by anchoring them in relevant literature. Moreover, the interview results will be discussed by integrating the results from the document analysis method.

RQ3- What is the attitude of schoolteachers who have graduated from both systems about the proportion of theoretical and practical courses in their TE programs?

Overarching theme: Theoretical and Practical Courses

A thematic analysis of the interview results revealed that for most of the participating teachers, the TE program they graduated from comprised more theoretical than practical courses. This finding is in line with literature that shows that the programs in Lebanese universities, both American and French models, stress mainly on theoretical courses, with little emphasis given to practical courses (Farah-Sarkis, 1997, as cited in BouJaoude, 2000; Freiha, 1997; Ghaith, 2012). Similarly, a study was done in the USA on 524 teacher educators and their teaching methods. The results showed the tensions between theory and practice in teacher education; more than half of these teacher educators used lecturing as their main method of instruction (Goubeaud & Yan,

2004, as cited in Korthagen, 2016). This finding also compliments the results from the document analysis which showed that in the TE programs of the six universities, the proportion of theoretical courses is higher compared to the practical courses: the observation and preactice teaching courses.

The knowledge, attitude, behaviors, and skills that prospective teachers need to carry out their duties in the classroom and at school should be provided to them in TE programs (Maphosa & Mashau, 2014). Many participants of this dissertation thesis stressed the importance of adding practical components to theoretical courses to find a balance. Kessels and Korthagen (1996) advocate for both episteme and phronesis in TE and practice. A balance between theoretical knowledge and practical wisdom is necessary for effective teaching. Hence, TE programs must develop phronesis in prospective teachers. This can be achieved not only by theories, books, and concepts, but also by real-world situations. Prospective teachers should be given opportunities of classroom teaching to gain firsthand experience of real-world teaching. Throughout such an experience, they need to reflect on actions and consequences and gain a deeper understanding of their practice, which is another way to achieve phronesis (Kessels & Korthagen, 1996).

Methods courses, curriculum courses, and field experiences can promote critical analysis and critical pedagogy by incorporating strategies such as ethnographic studies, journal writing, action research, and curriculum analysis and development (Zeichner, 1987, as cited in Feiman-Nemser, 1990). This resonates with ideas many of the participants shared about finding ways to make theoretical courses more practical. According to Maphosa and Mashau (2014), TE comprises teaching techniques, pedagogical theory, and professional skills. Hence, teacher educators should incorporate practical application activities even in theoretical courses.

RQ4: How do schoolteachers in both systems evaluate their practicum experience, with respect to duration and quality?

Overarching theme: Practicum Courses

One major difference between the American-patterned universities and the French-patterned universities in this dissertation thesis was the duration of practicum. Graduates from the American-patterned universities said the duration was insufficient, while graduates from the French-patterned universities were satisfied with the duration of practicum. This finding is consistent with literature on TE programs in Lebanese universities which shows that in private

universities that follow the American system, students do practice teaching for six months, whereas in universities that follow the French system, students should do practice teaching for a minimum of one year (Naccache, 2021). This result also confirms the results obtained from the document analysis which showed that French-patterned universities have longer practicums in their TE programs.

As the website of USF, one of the French-patterned universities says, through practical fieldwork, students can get acquainted with the real world of teaching. Hence, one main component of TE is completing 600 hours of practicum at schools and educational institutions centers. Moreover, to ensure the quality of the practical experience, the Faculty of Education assumes the responsibility of establishing and maintaining an updated list of schools and educational institutions where TE students can go for practicum. The practicum experience at USF is spread over the three years of TE studies, with the aim of creating an integration between the courses students are taking each semester and their practical activities (Université Sainte Famille, n.d.).

Most of the participants from the American-patterned universities proposed that TE students do practicum over all the years of their studies, not just in the last year. Doing practicum over many semesters provides the benefit of gaining more experience in a real classroom. Moreover, longer practicum offers the chance to practice theories that prospective teachers are learning while they are learning them and not only at the end of their studies.

Participants 7, 13, and 16 talked about the importance of guidance they received from the mentoring teacher during the practicum course. Participant 7 said her mentor was a significant aspect in her practicum experience's effectiveness. Literature review on TE in Lebanon indicates the need to give more significance to the practicum experience and to establish collaboration with schools in the preparation of prospective teachers (BouJaoude & Baddour, 2022). School-university partnerships help establish links between the practical and theoretical aspects of teaching; such partnerships make connections between teachers at schools who act as mentors and guide prospective teachers, and instructors at universities who teach the theoretical part (Martin et al., 2011, as cited in Korthagen, 2016).

Research on mentoring in Lebanon shows a lack of efficient cooperation between the student-teachers and the cooperating-teachers (Chaaban et al., 2021, as cited in BouJaoude &

Baddour, 2022). It is important to create constructive relationships between prospective teachers and mentors. It is also important to train novice teachers. Feiman-Nemser (2001) discusses continuity between pre-service and in-service teaching. A professional learning continuum from initial teacher preparation through the early years of the teaching career would be focused on the tasks and reforms in each of these stages: teacher preparation, new teacher induction, and professional development in the early years. To have a successful induction stage, the integration of teacher support, development, and assessment is required, accompanied with effective mentoring of novice teachers. According to Levine (2006), mentoring provides fresh graduates with a connection between university studies and the reality of classroom teaching, something that would improve the quality of instruction. Feiman-Nemser (2001) states that throughout their ongoing work with novice teachers, mentors should combine the knowledge and skills of a proficient classroom teacher together with the knowledge and skills of a teacher of teaching. The role of mentorship programs is to prepare mentors, support them, and provide them with adequate compensation.

RQ5: In what ways is reflective practice incorporated in the TE programs of both systems?

Overarching theme: Reflective Practice

Reflection is a skill that can be developed through practice (Korthagen & Nuijten, 2022). Hence, universities can incorporate activities that teach the skill of reflection to prospective teachers. There can be many forms of reflection that prospective teachers can practice and learn. Forms of reflection is one of the themes that was extracted from the interviews. Participants of both models mentioned that they engaged mainly in the written form of reflection and in completing checklists during their TE studies.

Literature shows different methods and forms to do reflection, and it would be beneficial to incorporate them in TE programs. Research by Gadsby (2022) demonstrates that journaling helped TE students become more self-confident and thoughtful practitioners over time. Over time, the students improved in their capacity to write reflectively. These results imply that when TE students are provided with a structure for reflective practice, they will have a better comprehension of reflection techniques, and these could help them in real-world teaching. Therefore, it is important for TE programs to promote individual and group reflection and design structured reflective practice for students throughout their studies.

Korthagen and Nuijten (2022) introduce different models of reflection in their book entitled "The power of reflection in teacher education and professional development: Strategies for in-depth teacher learning" and provide multiple strategies and forms that teacher educators can use to engage their students in reflective practice.

One of the forms is the WINGS model by Korthagen and Nuijten (2022), with each letter of the word representing a key word in the questions to be asked:

What was going on?

What was **I**mportant in this experience?

To what **N**ew intentions does this lead for future actions?

How do I want to **G**o on with this issue during the coming period?

What do I **S**trive for?

Another form is the ONION model, in which prospective teachers reflect on multiple aspects of themselves, resembling the multiple layers of an onion. The aspects are the core qualities of teachers, their mission, their professional identity, their beliefs, their competencies, their behavior, and the environment. The ONION model promotes deep and critical reflection and hence leads to teachers becoming aware of biases about gender, ethnicity, culture, and similar attributes (Korthagen & Nuijten, 2022). This type of awareness enhances the teacher's role in minimizing social inequalities, an important aspect in Feiman-Nemser's critical-social orientation.

It is not necessary to perform reflection only by writing; reflection can be performed by other forms. One form is using drawings to reflect. Prospective teachers can be asked to draw themselves in the classroom and then discuss in groups about concerns that the drawing portrays, such as classroom arrangement, teacher proximity to the students, and other aspects related to the classroom. They can share ideas and discuss similarities and differences (Korthagen & Nuijten, 2022). It is interesting that, like Korthagen and Nuijten's research shows, participant 9 in this dissertation thesis suggested doing reflection by drawing as a reform to improve TE programs.

Another form is using symbolic configurations to reflect. Prospective teachers may use objects such as papers, stationery, or other items, and have each of these objects resemble aspects of the classroom experience. Reflection can also be done by using metaphors. Prospective

teachers may be asked to think of an image or a metaphor that represents their teaching experience, and then they can discuss their metaphors in peer groups. An example of a metaphor may be a teacher as a gardener watering the students as flowers to bloom and grow. Watching recorded videos of teaching experiences may be a form of reflection. Prospective teachers may record their practice teaching experiences and then play portions of them in class. This can be followed by peer reflection activities (Korthagen & Nuijten, 2022).

Another subtheme to discuss is the reflection phases. Through the interviews, many participants said that they engaged in reflective practice not only in the practicum course, but also in other courses. According to Asregid et al. (2023), teachers reflect strategically at different points in time, both during the planning and execution of their lesson and after it is over. Therefore, it is important to teach prospective teachers to reflect on the different phases of the teaching process.

Self-reflection was another subtheme that emerged, where some of the participants said that during their TE studies, they engaged in self-reflection. According to Korthagen and Nuijten (2022), through self-reflection, teachers realize they can improve professionally by reflecting on their own practice. Moreover, self-reflection helps teachers be accountable for their own actions and to know what they are doing and why.

A suggestion of reform provided by some participants was engaging in peer reflection. Reflective dialogues with other teachers are also important; they allow teachers to share insights and best practices with each other (Korthagen & Nuijten, 2022).

Another subtheme was the benefits of reflection. Participants talked about the benefits of reflection, such as self-evaluation, self-awareness, the chance for self-improvement, identifying strengths and weaknesses, and improving their teaching strategies. Engaging in reflective practice allows prospective teachers to gain a better understanding of themselves and hence improve their practice (Korthagen, 2014). This resonates with Feiman-Nemser's personal orientation, which highlights the importance of shaping the person of the teacher.

RQ6- Which knowledge bases of Lee Shulman's theory do schoolteachers find the most beneficial?

Overarching theme: Knowledge Bases

When asked to rate the acquisition of knowledge bases from the most to the least, all twenty participants said that PK is the knowledge base they acquired the most. This corresponds with previous research done in Lebanon which shows that TE programs highlight students' acquisition of knowledge and skills of teaching (Ghaith, 2012). However, it is widely accepted that PK and CK are equally important for teaching (Darling-Hammond & Bransford, 2005, as cited in Voss et al., 2011). Some participants from the American-patterned universities suggested adding more CK in their TE programs. This suggestion, coming only from students of the American model, can explain the results obtained from the document analysis which showed that French-patterned universities offer a higher number of CK courses.

In addition to a knowledge of facts, concepts, and theories within a field, teachers must also acquire an understanding of the nature of knowledge and inquiry in different fields, a skill that would help them in setting tasks, asking questions, and reinforcing ideas (Ball & McDiarmid, 1990, as cited in Feiman-Nemser, 2001). Kind (2017) places emphasis on CK quality, pointing out that inadequate CK lowers students' learning opportunities. She states that teachers need to be knowledgeable about the ideas and subjects they teach. The goals of the academic orientation emphasize training TE students into different ways of thinking and teaching, such as the didactic approach and the inquiry method, teaching them the structures of the disciplines, and cultivating a meaningful understanding of academic content (Feiman-Nemser, 1990).

The best teachers are those deeply knowledgeable in the subject areas they teach. When a teacher's CK is poor, it seriously hinders student learning (Coe et al., 2014). In addition to the important role of teachers' CK on student learning, research shows that when teachers have a solid, established PK, manifested in knowing their students well and using successful assessment strategies, student learning is positively influenced (Kind, 2017). For example, in the subject of science, CK would comprise a knowledge of science in general, and an understanding of the nature, history, philosophy, and epistemology of science (Liepertz & Borowski, 2018). One specific and practical suggestion of reform that came from two participants was that CK courses

should not be only general but also include the curricula of primary school textbooks that teachers will teach from in the schools in Lebanon.

When asked about which knowledge base was the most beneficial to them when they first began teaching, most participants said it was PK. According to Guerriero (2014), PK encompasses elements required to create an effective teaching environment, such as knowledge of classroom management, teaching methods, assessment, learning processes, and student heterogeneity. Similarly, the interview results showed that these elements helped the participating teachers conduct their classes efficiently when they first started teaching.

The transition to online teaching due to the Covid-19 pandemic highlighted the importance of teachers having the skills and knowledge to deliver classroom instruction in an online format. In the academic year 2020-2021, due to the Covid-19 pandemic, teachers everywhere in the world had to adapt to teaching using online videoconferencing platforms and software. The transition to online instruction posed challenges to many teachers (Simamora, 2020). Technology must be included in TE programs, and prospective teachers should learn how to use technology tools and how to integrate technology in their classrooms (Caverly et al., as cited in Villegas-Reimers, 2003). This was a prominent subtheme in the interviews as all the participants classified TPACK as the knowledge base that was least incorporated in their TE programs. These results complement the document analysis findings which showed that the TE programs of the six universities have the least number of courses in TK and TPACK, as compared to the other knowledge bases of PK, CK, and PCK.

Consequently, one important suggestion provided by many participants was to increase TK and TPACK courses in their TE programs. According to Mishra and Koehler (2006), TK alone is not enough to achieve the best results in classroom and online teaching. The suggestions of reforms provided by the participants shed light on the importance of TPACK in TE programs. Competent teaching requires an understanding of the relationships between content, pedagogy, and technology. This kind of understanding would allow teachers to be able to present academic content efficiently using technology. Deeper training in educational technology equips prospective teachers with TPACK in the classroom and TPACK for fully online teaching, such as the covid times. Therefore, TE programs should increase courses that disseminate TK and TPACK.

Overarching theme: Suggested Reforms

The way we conceptualize teachers' jobs affects how we think about their initial preparation, and consequently defines recommendations for how to make TE even better (Calderhead & Shorrock, 1997). In this dissertation thesis, data from the interviews were gathered and analyzed to provide insightful results and recommendations.

Several of the participants emphasized the importance of learning about different student cases during their TE studies. Since teachers deal with many uncertainties and unique situations in their work, they need to acquire techniques and skills to deal with common pedagogical problems (Feiman-Nemser, 1990). Students in a classroom are different from each other in many aspects. Certain psychological factors are crucial to consider, including students' previous knowledge, their motivational and emotional traits, and their general cognitive capacities. Differences in these factors create a heterogenous group of students. Other factors contributing to the variability of students are traits like giftedness or impairments. Teachers must be able to detect learning disabilities and special needs and to handle student heterogeneity in a way that enhances student learning (Woolfolk Hoy et al., 2006, as cited in Voss et al., 2011). The teacher's role as a facilitator is to create a conducive learning environment. This requires a good knowledge of their students' needs, interests, and abilities to be able to set the objectives, plan the learning tasks, and select the materials (Feiman-Nemser, 1990).

Some participants suggested adding courses that promote personal development, such as communication skills courses. Prospective teachers should receive a well-rounded, holistic education to prepare them for their career (Calderhead & Shorrock, 1997). The prospective teacher is at the center of the educational process and learning to teach is seen as a process of development and becoming (Feiman-Nemser, 1990). TE programs should prepare prospective teachers to discover their own personal strengths and be mindful of the importance of interpersonal relationships in the classroom (Calderhead & Shorrock, 1997).

Other participants suggested adding courses that enhance critical/social development, such as cultural courses. Teachers should reflect on how their thinking, feeling, wanting, and behavior are considerate of student diversity and how they can promote social justice (Korthagen & Nuijten, 2022). This concept enhances Feiman-Nemser's critical/social orientation.

It is noteworthy to mention here that the document analysis yielded the conclusion that in both university models, the highest number of courses are related to academic and technological orientations. This is in line with previous research on TE programs in Lebanon which shows that they mainly emphasize the academic and technological orientations from Feiman-Nemser's conceptual orientations (Ghaith, 2012). The document analysis also showed that the critical/social orientation is more evident in the TE programs of the American-patterned universities, while the French-patterned universities include a higher number of courses in the practical and personal orientations.

Other Subthemes

The realistic TE approach was developed at Utrecht University after research from the 1980s revealed the "reality shock" phenomenon (Voss & Kunter, 2020, as cited in Korthagen & Nuijten, 2022). Likewise, some of the participants said that when they started teaching, and even in their practicum experience, they realized that what they learned in textbooks in their courses does not show the full picture of how real teaching in a classroom is like.

Current research outlines the three modern issues that teacher educators face: diversity and inclusion, multiculturalism, and technology (Feiman-Nemser, 2017). The issue of diversity and inclusion and the issue of technology are themes that came up in the interviews. In discussing the overarching theme of knowledge bases, participants expressed the need for TE programs to incorporate more technology courses. Furthermore, within the overarching theme of suggested reforms, the reform proposed by the highest number of participants was to equip prospective teachers with the knowledge and skills to be able to efficiently manage diversity and inclusion in the classroom. Ultimately, these modern issues must be tackled by universities in preparation of prospective teachers.

Conclusion

This dissertation thesis examined the undergraduate TE programs of six universities in Lebanon: three American-patterned and three French-patterned universities. To provide a description of the TE programs, the websites of the six selected universities were surveyed: MUBS, HU, and AUB as American-patterned universities, and UL, USJ, and USF as French-patterned universities. Information found on the university websites and course descriptions allowed for an acquaintance with the TE program structure and content. Each program's structural framework was explored to describe the courses included and to examine the proportion of practical courses. Analysis of the program content was done using the TE theories of Feiman-Nemser and Lee Shulman. The thematic areas covered by each program were examined to investigate their contribution to the acquisition of knowledge bases.

One aim of this dissertation thesis was to explore TE graduates' perceived effectiveness of the TE programs they graduated from. Using the theories of Lee Shulman, Fred Korthagen, and Sharon Feiman-Nemser as conceptual frameworks, this research sought to understand the perceptions and experiences of graduates who completed a degree in TE and are now teaching. Therefore, in addition to document analysis, this dissertation thesis employed qualitative methodology and used semi-structured interviews for data collection. Posts about the need for interview participants were made on social media groups of teachers in Lebanon. Twenty participants who fulfilled the selection criteria were included and participated in the semi-structured interviews: eleven graduates from the three American-patterned universities and nine graduates from the three French-patterned universities. The interview questions were created based on the research questions. They investigated the perception of graduates from the TE programs of the six selected universities regarding the program's effectiveness in preparing prospective teachers for real-world teaching. The participants' answers helped shed light on the issues and challenges in the TE programs and highlighted the areas of reform needed.

There is a global urge to optimize teacher effectiveness due to the strong perceived association between teaching and student outcomes (Steiner-Khamsi, 2015). A critically oriented TE program should tackle issues and topics that foster critical analysis and action. On the class level, teachers create a learning community which, through group problem solving, endorses democratic values and practices. On the level of the school, teachers take part in curriculum

development and policymaking. On the level of the community, teachers contribute to bettering school conditions and educational opportunities. (Feiman-Nemser, 1990).

The results revealed that the TE programs of the six universities include courses that target the conceptual orientations of Feiman-Nesmer's TE typology: academic, practical, technological, personal, and critical-social orientation. Moreover, throughout the TE programs, prospective teachers acquire the knowledge bases that Lee Shulman's theory explains: CK, PK, PCK, and as an addition to the theory, the TPACK. In addition, the TE programs of all six universities incorporate reflective practice as part of different courses and most importantly as part of the practicum course. Evaluating TE programs offers the advantage of introducing reforms in these programs. As part of the interview, the participants were asked to suggest reforms to their TE programs.

Contribution

This dissertation thesis contributes to the body of knowledge of TE programs in American-patterned and French-patterned universities in Lebanon firstly by describing the current situation of the programs in both models, secondly by highlighting the issues that cause the programs to not be completely effective in preparing new teachers, thirdly by identifying the structural components of the TE programs in both models, fourthly by identifying the conceptual orientations of each program by analyzing the data of the programs gathered from the universities using the theoretical framework provided by Feiman-Nemser (1990), fifthly by identifying the knowledge bases gained by the prospective teachers, sixthly by presenting the perceptions of schoolteachers on essential reforms to be implemented in TE programs, and finally by recommending practical reforms that can be applied in TE programs.

The biggest contribution of this dissertation thesis lies in the suggestions of reforms to TE programs provided by the participants. These suggestions of reforms to TE programs are so valuable because they come from the relevant, real-life experiences of these teachers who completed the TE programs and started teaching. Many important reforms were suggested by the participants who are graduates of the TE programs. These reforms shed light on real needs as they are proposed by people who studied the program and are now teaching, and hence they have had a firsthand experience of the preparation their programs provide them with and the outcomes of that preparation.

The most important suggested reforms are increasing the duration which prospective teachers spend in schools doing their practicums, making practicum a requirement for each semester of studies, sending prospective teachers to different schools and different grades to provide them with a more comprehensive practical experience, and providing further training and practice in technology and in TPACK. This dissertation thesis serves as a theoretical guide to provide a literature review about TE programs in universities in Lebanon, and as a practical guide to suggest recommendations to improve TE programs.

Limitations

Surveying university websites and conducting semi-structured interviews with teachers who have graduated from those universities provided important information about TE programs and valuable insights into the participants' experiences and perspectives. However, it is important to recognize limitations in this dissertation thesis. One limitation is sampling bias, whereby the sample of teachers whom I interviewed may not be representative, hence the results may not generalize well to the broader population of teachers in Lebanon. Another limitation is social desirability bias: my participants may have felt the need to provide socially desirable responses or withhold sensitive information during interviews, especially if their responses would reflect negatively on them or their university. A third limitation in this dissertation thesis is that the selection of half of the participants was done online, and hence only those who read the social media announcements and reached out to the researcher were selected. Also, a few of the participants were selected by nominations by participant friends, a process that limits the pool of interviewees to friends of participants.

Finally, conducting the interviews online was a challenge; in Lebanon, the quality of internet connection is not good, and there is the risk of power cuts often. For many of the interviews, we had internet connection problems. The participant's voice would suddenly disappear, or was broadcast through a strange echo, or repetition of certain words or sounds. Some of the participants suddenly disappeared from the meeting due to power outages, others had to turn off their video due to unstable Internet connection, and others had to reschedule the meeting several times due to irregular hours of power cuts. With one of the participants, the internet connection was breaking often; she got disconnected and left the meeting 3 times during the interview. In the end, she switched from Wi-Fi to mobile data to be able to continue. With

some participants, we had to agree on a particular time that they were sure they would have electricity at home. One participant had to cancel the scheduled interview because they had an unexpected power cut, and without electricity she is unable to use Wi-Fi, and she cannot have a whole interview using her limited mobile data. There were some challenges I faced with some potential participants. Some apologized after agreeing to do the interview and said there are circumstances that do not allow them to participate. Some disappeared even after scheduling the interview and never replied to my messages. Some said they forgot, and we had to reschedule.

There were some limitations regarding the document analysis methodology. Unlike primary data collection methods, such as interviews or surveys, document analysis relies on the accuracy and integrity of the information available on university websites. Without the ability to verify the information through direct communication with university staff or students, there may be uncertainties or inaccuracies in the data. In this dissertation thesis, information about program structure and content came from what is available on the university websites, which depends on what the university wants to make public, and the information on the websites may not be always the most updated information. Moreover, each university decides how much information they want to be made publicly available. For example, one of the universities in this study had only general information about the TE program; hence, I had to ask one of the participants to elaborate during the interview. Another university had missing information, such as writing not determined in one of the course categories, instead of clarifying that students may select courses from other categories. Again, I had to clarify this with one of the participants. Also, one of the universities did not have the TE program on the website; I was able to have access to the program through one of the participants, who sent me a link that includes the TE programs and courses. Another university did not have the language courses mentioned in the TE program tables; I inquired about it with a participant and could get the necessary information.

Obtaining the information missing on the websites from the interview participants was helpful; however, it can be considered a limitation that a website cannot show detailed information, such teaching methods, assessment criteria, teaching philosophy, instructor expertise, or learning outcomes of the specific courses. Although talking to the participants provided some insight into the method many of the courses were taught, and although most of the websites provided course descriptions, the analysis of the courses through the lenses of the selected theories was mainly the judgment of the researcher.

Recommendations for Future Research

After conducting research for this dissertation thesis, some recommendations for future research are suggested. First, interviewing a larger number of participants could provide deeper insight into the research questions. Second, interviewing academic representatives, such as deans of the education departments, or instructors who teach in TE programs could lead to an understanding of the rationale of program structure, course offerings, and instructional methods. Another recommendation would be selecting participants who have graduated from the TE programs only one year ago to get better insight into their perceived effectiveness of the TE program and the transition to real classroom teaching. Conducting a longitudinal study is another recommendation for future research on this topic; the same teachers can be interviewed after one year of graduating, and then after three years and five years, to gain insight into how their university's TE program influences their teaching methods over time.

This dissertation thesis was a comparative study between TE programs in American-patterned and French-patterned universities in Lebanon. A recommendation for future research may be comparing TE programs in Lebanon with TE programs in another country, whether of a similar cultural and socio-political context, or of a completely different context. Such a comparison could shed light on universal challenges in TE programs and common reforms needs. Finally, adding a quantitative component can be recommended. Surveys or standardized assessments could complement the qualitative data by providing broader insights.

An international comparative perspective shows differences in TE programs of different systems. Differentiating within a system also shows differences: generally, TE programs for secondary grades are typically less pedagogical and more subject-specific than TE programs for primary grades (Steiner-Khamsi, 2015). A recommendation for future research may be comparing TE programs that prepare prospective teachers for teaching secondary grades with TE programs that prepare prospective teachers for teaching primary grades.

Initial TE is only the first step in a series of subsequent steps in the professional development of teachers. Continuous development is important because during initial TE and the first years of teaching in an actual classroom, most teachers experience challenges (Calderhead and Shorrock, 1997, as cited in Villegas-Reimers, 2003).

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List of Acronyms

AUB – American University of Beirut
BAU – Beirut Arab University
CE – Comparative Education
CERD – Center for Educational Research and Development
CK – Content Knowledge
ECTS – European Credit Transfer System
HE – Higher Education
HEI – Higher Education Institution
HU – Haigazian University
ICT – Information and Communication Technology
KG – kindergarten
LAU – Lebanese American University
MAXQDA – MAX Qualitative Data Analysis
MEHE – Ministry of Education and Higher Education
MENA – Middle East and North Africa
MUBS – Modern University for Business and Sciences
OECD – Organization for Economic Cooperation and Development
PCK – Pedagogical Content Knowledge
PISA – Program for International Student Assessment
PK – Pedagogical Knowledge
RAND – Research and Development
TD – Teaching Diploma
TE – Teacher Education
TK – Technology knowledge
TPACK – Technological Pedagogical Content Knowledge
UAE – United Arab Emirates
UL – Université Libanaise
UNESCO – United Nations Educational, Scientific and Cultural Organization
U.S. – United States
USA – United States of America
USEK – Université Saint-Esprit de Kaslik
USF – Université Sainte Famille
USJ – Université Saint Joseph

Appendices

Appendix A

Informed Consent Form

1. Summary:

This dissertation will explore the perceived effectiveness of teacher education programs in American and French patterned universities in Lebanon in equipping prospective teachers with the necessary knowledge bases, skills, and practice to have a smooth start of the teaching profession.

2. Your right to withdraw/discontinue:

You are free to ask questions or to discontinue your participation at any time without penalty. You may also skip any survey questions or study procedures that make you feel uncomfortable.

3. Benefits:

Participation in this research study does not guarantee any benefits to you. However, possible benefits include the fact that you may learn something about how research studies are conducted, and you may learn something about the area of teacher education research.

4. Additional Information:

You will be given additional information about the study after your participation is complete.

5. Time Commitment:

If you agree to participate in the study, you will participate in a semi-structured interview. The interview will last around 30-60 minutes. Interviews will be recorded.

6. Guarantee of Confidentiality:

All data from this study will be kept from inappropriate disclosure and will be accessible only to the researcher.

7. Risks:

The present research is designed to reduce the possibility of negative experiences from participation. Risks to participants are kept to a minimum. However, if your participation in this study causes you any concerns, anxiety, or distress, please contact the researcher to assist you with finding appropriate support.

8. Researcher Contact Information:

This research study is being conducted by Talar Agopian as a Ph.D. dissertation at Charles University in Prague. If you have questions or concerns about your participation in this study, you may contact the researcher at agopiantalar4@gmail.com

9. Results of the Study:

You may obtain information about the results of this study by contacting the researcher listed above.

10. Verification of Adult Age: By circling "I Agree" below, you attest that you are 18 years old or older.

I agree

11. Verification of Informed Consent: By circling "I Agree" below, you are indicating that you have freely consented to participate in this research study.

I agree

Name: _____

Signature: _____

Date: _____

Appendix B

Interview Questions

<u>Demographic Variables</u>

Age
Gender
Nationality
University name
University model (American or French)
Degree/emphasis
Years of study
Duration of practicum
Year of graduation
Years of teaching
Grades you teach
Subjects you teach

<u>Interview Questions</u>

1. What aspects of your bachelor in TE studies were the most beneficial to you in your teaching career?

2. What reforms do you suggest for improving the program of your bachelor in TE studies?

3. What is your perspective on the share of theoretical and practical courses? Give examples of each type of course.

4. What are some things about real world teaching that you learned during your practicum course?

5. How do you evaluate the duration and effectiveness of your practicum course in helping you acquire real world teaching skills?

6. Describe the reflective practices you performed during your years of study and discuss their benefits.

7. Throughout your course of study, which kind of knowledge did you acquire from most to least? (CK, PK, PCK, TPACK)

8. Which knowledge base was the most beneficial in your first years of teaching?

9. Evaluate the integration of technology in your TE program.

10. Please suggest specific reforms to TE programs in the aspects of practical courses, the practicum experience, reflective practice, and acquisition of knowledge bases.

Appendix C

Program Content for the Specialization of Teaching Math and Science at MUBS

General Education Requirements	- English Language and Composition - Public Speaking - Appreciation of Arabic Language and Literature - Fundamentals of Computer Systems & Applications
Core Requirements	- Fundamentals of Education - Introduction to Educational Psychology - Introduction to Classroom Management - Technology in Education - Methods of Teaching - Reading Across the Curriculum - Introduction to Counseling and Guidance - Introduction to Special Education - Introduction to Research Methodology in Education - Educational Measurement, Assessment, & Evaluation - Field Experience-Observation and Analysis - Seminar
Major Emphasis	Courses common for all specializations: - Sustainable Employability Skills in Education - Student Teaching Practicum I in Teaching Area - Senior Project Specialized courses: - Materials for Teaching Math and Science - Elementary Math Curriculum - Elementary Science Curriculum - Teaching Math in Elementary School - Teaching Science in Elementary School
Major Education Electives	6 courses: students can choose courses from the different specializations in the Education Department
General Electives	3 courses: students can choose from the general course offerings of the whole university

Appendix D

Program Content for Bachelor of Education, Emphasis Elementary Education at HU

General Education Requirements	- Introduction to Computing and Programming - Advanced English Communication Skills 1 - Advanced English Communication Skills 2 - World Culture: 3000 BC – 1 Ad - World Culture: Christianity – Romantic Age - World Culture: 20th Century - Work Ready Now - Armenian Language/Arabic Language - Religion/Ethics - Science Course (Biology/Chemistry/Physics)
Core Requirements	- Fundamentals of Education - Action Research in Education and Social Work - Research Literacy - Children's Literature - Observation and Internship - Classroom Dynamics - Evaluation and Testing - Principles of School Counseling - Special Education - Instructional Media and Techniques - Education Senior Study - General Psychology - Psychology of the Child
Emphasis Requirements	Courses common for all specializations: - Teaching Reading in Elementary Schools - Practicum in Elementary School - Introduction to Educational Administration - The School and the Social Order Specialized courses (students choose only 1) - The Teaching of Art - The Teaching of Music - Teaching Social Studies in Elementary Schools - Teaching Language Arts in Elementary Schools - Teaching of English as a Second or Foreign Language - Teaching Math and Science in Elementary Schools
Emphasis Requirements for Subject Area	5 courses: students can choose the courses from one of the subject area groups: - Arabic/Social Sciences - English/Social Sciences - Armenian/Social Sciences - Math/Science - Art/Music

Appendix E

Program Content for the BA in Education/Elementary, Mathematics/Science Concentration at AUB

University General Education Requirements	- CVSP 1 - CVSP 2 - Humanities 1 - Humanities 2 - Academic English - Advanced Academic English - Arabic Communication Skills - Social sciences 1 - Social sciences 2 - Natural sciences 1 - Natural sciences 2 - Quantitative Thought
Education Requirements	Core Education Courses: - The School and the Social Order or Philosophy of Education - Learning and Human Development - Measurement and Evaluation for Classroom Teachers - The Use of Computer Applications in Education - Introduction to Special Education - Introduction to Guidance and Counseling or Child and Adolescent Development - Reading Instruction in the Elementary School - Classroom Management in the Elementary School Methods Courses: - Methods of Homeroom Teaching Then, students choose one of the following pairs: - The Teaching of Art in Elementary School and The Teaching of Music in Elementary School - The Teaching of Language Arts (English or Arabic) in Elementary School and The Teaching of Social Studies in Elementary School - The Teaching of Mathematics in Elementary School and The Teaching of Science in Elementary School Seminar and Practicum courses: - Senior Seminar (Issues in Elementary Education) - Practicum in Elementary School (Homeroom Teaching) 1 - Practicum in Elementary School (Homeroom Teaching) 2 - Practicum in Elementary School (Language Arts/Social Studies) or Practicum in Elementary School (Mathematics/Science)

Subject Matter Courses	Common course for all specializations: - Children's Literature
	Specialization courses for the Mathematics/Science concentration: - Problem Solving in Arithmetic and Algebra or Problem Solving in Probability, Statistics and Geometry - Science for Elementary Teachers 1 or Science for Elementary Teachers 2
	- Subject Matter Elective
General Electives	- General Elective Course

Appendix F

Program Content for the Specialization of Bachelor of Education - Science Education at the Primary Level at UL

Semester 1	- Development of Educational Thought - Documentary Research - Developmental Psychology - Basics of Informatics and Its Applications - Descriptive Statistics - Electricity and Magnetism - Structure of Matter and Its States - Taxonomy, Cytology and Histology
Semester 2	- Programs - Learning Psychology - Language of Education - Artistic Workshop - History and Nature of Science - Mechanics and Heat - Compounds and Chemical Reactions - Animal and Plant Physiology - Human Rights
Semester 3	- Learning Assessment - Classroom Observation - Expression Techniques - Energy and Waves - Animal and Plant Reproduction - Science Education 1 - Elective Course 1 - Elective Course 2
Semester 4	- Class Management - Practice Teaching 1 - Educational Technology - Science Education 2 - Elective Course 3 - Elective Course 4 - Elective Course 5 - Environmental Education
Semester 5	- Sociology of Education - Science Curriculum and Evaluation - Health Education - Earth and Space Sciences - Modern Trends in Science Education - Practice Teaching 2 - Elective Course 6 - Elective Course 7

	▪ Action Research 1
Semester 6	▪ Education System in Lebanon ▪ Citizenship Education ▪ Educating People with Special Needs ▪ Practice Teaching 3 ▪ Action Research 2 ▪ Elective Course 8 ▪ Elective Course 9 ▪ Free Elective 1 ▪ Free Elective 2

Appendix G

The Elective Courses in the Specialization of Science Education at the Primary Level at UL

Semesters	Elective Courses
Semester 3 and semester 5	- Electricity and Magnetism - Structure of Matter and Its States - Taxonomy, Cytology and Histology - Energy and Waves - Animal and Plant Reproduction - Earth and Space Sciences - Science Education 1 - Science Curriculum and Evaluation - Modern Trends in Science Education
Semester 4 and semester 6	- Mechanics and Heat - Compounds and Chemical Reactions - Animal and Plant Physiology - History and Nature of Science - Science Education 2 - Education Practice 1

Appendix H

Program Content for the Bachelor's Degree in Educational Sciences - Option: Preschool and Primary Education, Specialization: Teaching in French/Teaching in Arabic at USJ

Semester 1	- Educational Currents 1 - Physical Development and Hygiene of the Child - Sensory Education - Improvement of Arabic 1 - Improvement of French - Improvement of French Linguistics 1 - Psychomotor Skills and Education - Internship Seminar 1
Semester 2	- Educational Currents 2 - Teaching Arabic - Introduction to Research Methodology - Mathematics 1 for Primary Education - Teaching Methodology in Preschool and Primary School - Improvement of French Linguistics 2 - Theories of Emotional and Social Development in Young Children - Information and Communication Technology for Education
Semester 3	- Physical and Emotional Conditions of Learning - Teaching Mathematics - Teaching French - Internship 2/EPP Seminar - Theories of Intellectual Development in Young Children
Semester 4	- Cognitive Conditions of Learning - Genres and Types of Texts/Arabic - Learning to Speak and Write - Children's Literature - Improvement of Arabic 2 - Internship 3/EPP Seminar
Semester 5	- English - School Difficulties of the Child - Teaching Arabic in Primary - Teaching of Life and Earth Sciences (SVT) in Primary - Genres and Types of Texts/French - Internship 4/EPP Seminar
Semester 6	- Educational Animation - Educational Evaluation - Children's Literature - Internship Seminar 5/EPP - Specific Learning Disorders

Appendix I

The Elective Courses in the Bachelor's Degree in Educational Sciences at USJ

- General Culture
- Introduction to Disabilities and Maladjustments 1
- Introduction to Disabilities and Maladjustments 2
- Pedagogy Through Art
- Painting And Drawing
- Philosophy in Primary School
- Volunteer and Citizenship Action 1
- Volunteer and Citizenship Action 2
- Workshop: Creative Space
- Exhibition and Manual Work
- Teaching And Creativity
- Study of Arabic Language Textbooks
- Conflict Management and Resolution
- Community Educational Intervention
- Critical Thinking Tool for Personal Development
- Music and Songs

Appendix J

Program Content for the Bachelor of Education in Preschool and Primary Levels at USF

Common Core Subjects	- Psychomotor Education - Music and Singing - Plastic Arts - Theater - Puppets - General Didactics and Teaching Strategies - Sensory Education - General Pedagogy - Classroom Management - Learning Theories - Psychology - Academic Difficulties and Remediation
Specialization Subjects	- Preschool Teaching - French Teaching - Arabic Teaching - Mathematics Teaching - Science Teaching - Children's Literature - The Specific Project in Preschool and Cycle 1 Pedagogy - Practice Teaching in a School in the Preschool Cycle or in Cycle 1 - Practice Teaching in a Daycare - Practice Teaching of the French Language - Practice Teaching of the Arabic Language - Practice Math/Science Teaching - Optional Practice Teaching
General Subjects	- Communication and General Culture - General Law - Ethics and Professionalism - Mediation - Introduction to University Methodology - Research Methodology
Faculty Requirement Subjects	- Introduction to Arabic Didactics - Phonetics and Phonology - Health, Nutrition, First Aid, Hygiene and School Medicine - Statistics - Computers and Education - Information and Communication Technology for Education - Robotics
Elective Subjects	- Elective 1 - Elective 2 - Elective 3

Appendix K

Quotes from Participants

Participants	University Model	Overarching Themes	Quotes
Participant 9	American	Theoretical and Practical Courses	"I need to deal with the preparing lesson plans and preparing the activities and preparing the exam. Teachers will benefit more if you could have the chance to practice such things before entering the teaching life."
Participant 4	American	Practicum Courses	"Duration was not enough; it would have been more effective if I could go to different classrooms of different age groups of students."
Participant 12	French	Reflective Practice	"In reflection, we should do model teaching in our university classes, and then we should do a reflection on each other's teaching. When our classmates watch us teach, they might see things that we could not see, and this will be helpful to us."
Participant 16	French	Knowledge Bases	"PK helped me the most to know how to deal with the students and how to prepare the lesson plans and the tests."
Participant 15	French	Suggested Reforms	"I suggest they add courses on how to deal with students with different cases. The course of psychology is not enough. In class, we face situations that we never learned about. For example, courses about orthophony, psychomotor therapy, special cases, we had to know more about such courses instead of learning about pioneers in Education."

Participant 7	American	Other Subthemes	"When it comes to practicing it, you might find yourself in front of situations. And you're like, okay. This is not what I learned in the books. and that's where the importance of practical courses comes in."

Appendix L

Interview Transcript

1. What aspects of your bachelor studies were the most beneficial to you in your teaching career?

I remember the most beneficial ones were classroom management and educational psychology. Curriculum planning and lesson planning. Because of them I was able to be confident and to start my teaching profession.

2. What reforms do you suggest for improving the program of your bachelor's in education?

Actually for me, because of Coronavirus, we were obliged to have our practicum course online. So it was very hard. It was very challenging. Also, after my experience of the teaching profession in life, it is not theories, but practical courses, anything that is beneficial for the teacher should be practical, should be on the spot, should be with students, should be observing in schools.

2. a. If you think of the courses that you took at the university, is there something you would like to improve?

We had a course counseling. We might have tried a good one or a real one, counseling session, maybe between each other, between the doctor and us, or maybe about the about the classroom management. Maybe we have to get a real life experience into the class. Not only read about the cases and discuss about the cases, like all of them, was just theories, really was like, okay, the kid did this and that. What the teacher should do, how we could improve the situation. Every struggle that the teacher faced in the classroom. How could she deal with it?

3. How do you evaluate the share of theoretical and practical courses? Were there more theoretical courses? Were there more practical courses?

I think it was more theoretical. We took a course like it's an introduction to disabilities or how to deal with them. A psychology course on how to deal with these special cases and different backgrounds. The most important course was classroom management. Also we had to do many things about the Lebanese curriculum and the other curriculums. But mainly theories.

4. What are some things about the real world teaching that you learned during the practicum?

It was very hard: we used to have observation on zoom with the school. Most of the schools didn't agree. So me and my friends were just like asking the principals, please, would you allow us to observe the classes online. Just they shared with us the zoom links, and we were able to see what's going on zoom between the teacher and students. We had science. I remember science classes or math classes.

5. a. How about the duration of practicum?

It's not enough. Of course it's not enough. It should be like 8 months, maybe even more.

5. b. efficiency of practicum?

We were not able to observe students and see their reaction. The teachers were really struggling. We felt lost like we were studying about classroom. But we didn't test the classroom, the real classroom we tested like something visual only in our eyes. My point is that everything we studied was good, but it wasn't enough, really.

6. Did you do any reflective practice?

I remember the first time that I did a lesson plan. I wrote down a lot of objectives, materials, and activities. When I presented it, my instructor asked how I am going to do all these in 1 session. So I really got to reflect on everything that I did, and that helped me. I learned that I need to have a plan B, to evaluate all the time in the session, to be simple, to be specific.

6. a. And was there reflection in the practicum?

Yes, we wrote down our reflection. We had a portfolio of what we did and what we observed.

7. Throughout your course of study, which kind of knowledge did you acquire from most to least? (CK, PK, PCK, TPACK)

PCK: We had the PCK, we had methods to teach. And we enjoyed it a lot. We had a clear image of what to do. how we should explain the methods. It's very beneficial. And because of this course, I had the confidence to prepare.

PK: there was more PK, I think like educational psychology, classroom management and such.

CK: I took Arabic one course.

TK: we took courses, technology courses and E-Learning, how can we teach students online? We went through the Microsoft word document, PowerPoint.

8. Which one of them helped you the most when you first started teaching?

Of course, not the CK because you have all the other sources you can refer you. You have Youtube, you have Google, you have books. Knowledge is easy. You can get knowledge anywhere, anytime. But the pedagogy. No. You cannot just open the Internet and go. You need teachers, you need books, you need curriculum. You need good content, good understanding. So pedagogy for us was very important.

9. Evaluate the integration of technology in your TE program.

It wasn't enough.

10. Please suggest specific reforms to TE programs in the aspects of practical courses, the practicum experience, reflective practice, and acquisition of knowledge bases.

A: less Theory courses. the first year we only memorized. What does that philosopher say about this thing? I forgot them all.

B: Practicum should be like: students that may come to our university, or we, we should have like in the educational department, like a playground or a room, or anything prepared for students. We can have students from different schools with the acceptance of their principals. They can come. We can plan, maybe, for trips.

The practicum was online and wasn't easy. Wasn't nice. It wasn't enjoyable. We didn't enjoy it.

C: We need to do reflection. We can't live without reflection of anything about anything. So since I was student. And now, as I teach always, I do reflection, even if in the same second that I say something. I got the reaction of my students. I said No, like I should do this and that.

D: the PK was helpful, and the PCK was helpful. We took an Arabic course but it was full of knowledge. We didn't have any methods, no techniques. Just knowledge. It was very bad.