Structural and Conceptual Foundations of Teacher Education Programs in Selected Universities in Lebanon

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Abstract

The purpose of this paper was to explore teacher education programs across Lebanese private and public universities. Data sources included: a) documents describing the programs furnished by the UNESCO Regional Office for Education in the Arab States in Beirut, b) institutional websites, catalogues, and/ or brochures describing teacher preparation programs in those institutions, and (c) phone interviews with university and program administrators. Analysis of the programs showed that the universities in Lebanon emphasize an orientation which has characteristics of the academic and technological approaches to teacher preparation. The analysis of the programs also showed that there is a relative lack of emphasis on fieldwork. Finally, results also showed that there is absence of university level programs for the preparation of intermediate level teachers (Cycle 3) and that post-graduate programs that prepare secondary teachers require significant amount of content background.

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I. Introduction

Lebanon has a private pre-college education system that is diverse and competitive and that serves almost 60% of K-12 students in Lebanon. It is diverse in terms of the languages taught in schools (which include Arabic as the first language and English and French as the second and third languages) and affiliations with national non-profit and for-profit associations as well as international religious and non-religious organizations. In addition, Lebanon has a public school system that provides almost tuition-free education to 40% of the population.

Private colleges and universities are similar to schools in that they are affiliated with international and national religious, independent non-profit, and independent for-profit organizations and in the variety of languages they use. Presently, there are 41 universities, colleges, and institutes in Lebanon (Center for Educational Research and Development [CERD], 2009-2010), 15 of which offer teacher preparation programs either at the undergraduate level leading to a Bachelor's degree or to a "Licence" and at the post-bachelor's level in the form of teaching diploma programs. Likewise, the Lebanese government is involved in teacher preparation at the tertiary level through the Lebanese University, the only public university in Lebanon with branches in different parts of the country.

Colleges and universities in Lebanon can be categorized into four types based on the higher education model they follow: Arab, American, French, or Lebanese. The only university following an Arab model of higher education (The Arab University) does not offer full fledged teacher education programs as of yet. The universities that follow an American model or a French model have programs patterned after similar ones in universities in the US or in France (Freiha, 1997). For example, the American university of Beirut, the Lebanese American University, and Notre Dame University follow the American model of higher education with one major difference: Students following the Lebanese curriculum who complete Grade 12 are admitted to these universities at the sophomore level, and thus complete their Bachelor's degree in three years while students in the USA are admitted to the freshmen class and typically complete their Bachelor's degrees in four years.

The major Lebanese universities that follow the French model of higher education - Saint Joseph University and the Lebanese University - whose programs were initially organized by years rather than by courses, have recently adopted the European Higher Education model. This is a model that uses the "Licence - Master – Doctorat (LMD)"[3], (i.e. Bachelor's - Master's - Doctorate) model where the "Licence" typically takes three years to complete, the Master takes two additional years to complete and the Doctorat takes three additional years beyond the Master to complete. This is why the system is sometimes referred to as the 3-5-8 model of higher education. In addition, these universities have adopted the European credit transfer and accumulation system (ECTS) which is different from the American credit system in a number of ways[4]. One characteristic of the European model is that its credits are not necessarily defined the same way as American credit system and 1 credit in the American system is equivalent 1.66 ECTS. Table 1 presents the names of Lebanese colleges and universities that offer education programs along with the degrees they offer.

[3] Refer to http://www.enseignementsup-recherche.gouv.fr/cid20190/organisation-licence-master-doctorat-l.m.d.html

[4] What is ECTS? (excerpt from http://www.allhallows.ie/programmes/undergrad/european-credit-transfer-system.html). The European Credit Transfer and Accumulation System is a student-centered system based on the student workload required to achieve the objectives of a program, objectives preferably specified in terms of learning outcomes and competencies to be acquired. ECTS is based on the convention that 60 credits measure the workload of a full-time student during one academic year. The student workload of a full-time study program in Europe amounts in most cases to 36/40 weeks per year and in those cases one credit stands for 24 to 30 working hours. Workload refers to the notional time an average learner might expect to complete the required learning outcomes. Credit is also a way of quantifying the outcomes of learning. Learning outcomes are sets of competences, expressing what the student will know, understand or be able to do after completion of a process of learning, short or long. Credits in ECTS can only be obtained after completion of the work required and appropriate assessment of the learning outcomes achieved. The allocation of ECTS credits is based on the official length of a study program cycle. The total workload necessary to obtain a first cycle degree lasting officially three or four years is expressed as 180 or 240 credits. Student workload in ECTS includes the time spent in attending lectures, seminars, independent study, preparation for, and taking of, examinations, etc. Credits are allocated to all educational components of a study program (such as modules, courses, placements, dissertation work, etc.) and reflect the quantity of work each component requires in relation to the total quantity of work necessary to complete a full year of study in the program considered.

Table 1: Lebanese Universities that Prepare Teachers and the Degrees they Offer

University	BA	Masters	PhD	Teaching Diploma	Other
Al Kafaat University	√				
American University of Beirut	√	√		√	√[1]
American University of Science and Technology				√	
Global University	√			√	
Haigazian University	√	√		√	
Lebanese American University	√	√		√	
Lebanese German University	√				
Lebanese International University	√	√		√	
Lebanese University	√	√	√		
Middle East University	√	√		√	
Modern University for Business and Science	√				
Notre Dame University	√[5]	√	√	√	√[2]
Saint Joseph University	√	√	√	√	√[3]
University of Balamand	√	√	√	√	
Holy Spirit University of Kaslik	√	√	√	√	√[2] – √[4]

[1] Diploma in Special Education

[2] Teaching Certificate in Elementary and Basic Education

[3] CAPES in all subjects that are taught in the Lebanese Baccaluareate: Diplôme universitaire: Pédagogie universitaire: Démarches pédagogiques innovantes; Diplôme universitaire: Maître de stage; Diplôme universitaire: Encadrement pédagogique

[4] Diplôme universitaire en sciences de l'éducation and Formation continue en Sciences de l'éducation

[5] Specializations in early childhood, learning disabilities, and education of the gifted.

II. Review of Related Literature

Few published studies have investigated teacher preparation programs in Arab countries in general and in Lebanon more specifically. For example, two papers that reviewed science education research in Lebanon (BouJaoude & Abd-El-Khalick, 2004; BouJaoude, Abd-El-Khalick, & El-Hage, 2009) have identified five studies only related to science teacher education conducted between 1992 and 2002 and no studies conducted between 2003 and 2008. Moreover, only two studies (Farah-Sarkis, 1997; Freiha, 1997) addressed issues related to teacher education in general in Lebanon while another study (BouJaoude, 2000) investigated issues related to science teacher education in Lebanon. Freiha showed that teacher education programs did not include enough practical field courses and did not provide prospective teachers with general education and cultural courses such as arts and sociology courses. In her turn, Farah-Sarkis showed that the percentage of time dedicated to field work is less than 25%.

Results of the studies by BouJaoude (2000) and BouJaoude and El Mouhayar (2010) showed that teacher preparation programs in Lebanon were either post-graduate programs that prepare secondary teachers with significant amounts of content background or three and four-year programs that prepare elementary classroom teachers. Moreover, BouJaoude found that there were no university level programs for the preparation of intermediate school teachers. More importantly, he identified a relative lack of emphasis on field work in the programs and suggested that these programs adopt an academic/technological orientation to teacher preparation.

In another study, BouJaoude (2006) identified similar trends to those found in Lebanon when he investigated science teacher preparation in a number of Arab states. For example, most science teacher preparation programs in Arab States subscribe to an academic/technological orientation model of teacher preparation as evidenced by the descriptions of the programs and courses available from a number of these universities.

Recently, there were two significant studies that addressed teacher education in the USA (Levine, 2006) and in the Gulf States (Barber,

Mourshed, &Whelan, 2007- McKenzie Report). Levine conducted a five year study of education colleges in the USA based on surveys of deans, alumni, and faculty, as well as public school principals. This study showed that almost three-quarters of the programs that prepare future teachers have inadequate curricula, low admission and graduation standards, faculty disconnected from the K-12 schools, and insufficient quality control (Levine, 2006). Specifically, Levine found that USA teachers seem to graduate from colleges of education without having developed the skills that are required to address the needs of students with disabilities or from diverse cultural backgrounds, maintain order in class, integrate technology into their teaching, and use student performance assessment techniques. Levine (2006) provided a number of recommendations to reform teacher education in the USA. These included transforming education schools into professional schools focused on classroom practice, expanding quality programs, and creating incentive programs to attract the best students to teaching. The recommendations encouraged states and school districts to make student achievement the primary measure of the success of teacher education programs. For this purpose, the report urged states to create data systems that monitor student progress from the start of school through graduation and provide universities and states with data that will help them to associate student achievement with their teacher preparatory programs and thereby judge the effectiveness of education schools.

Moreover, the report advised all stakeholders in education to make five-year teacher education programs the norm rather than the exception and to require every future teacher to complete a traditional arts and sciences baccalaureate degree followed by a master's degree in subject-specific pedagogy. Finally, the report recommended shifting training of a significant percentage of new teachers from master's degree granting-institutions to research universities and strengthening quality control by establishing outcomes-based requirements for certification and licensure.

The McKinsey Report entitled "Improving Education in the Gulf" (Barber, Mourshed, & Whelan, 2007) focused on the status of education in the Gulf States (Bahrain, Kuwait, Oman, United Arab Emirates, Qatar, and Saudi Arabia) with major emphasis on the quality of teachers because

of the central role they play in curriculum implementation and because the "quality of teaching in one of the most important determinants of the way students perform" (p. 41). The McKinsey report argued that improving the quality of teachers is a necessary condition for improving education; therefore, it recommended enhancing the quality rather than the number of teachers, attracting quality candidates, and improving education and training of prospective teachers. Furthermore, it recommended that independent third parties inspect schools and develop examinations for students to help ensure that educational institutions perform well against clear standards and that low-performing institutions improve.

III. Theoretical Framework

Two compelling theoretical frameworks that can be used to analyze teacher preparation programs are those of Kennedy (1990) and Feiman-Nemser (1990). According to Kennedy (1990) teacher preparation programs can be classified as either emphasizing teaching students a large body of knowledge or preparing them to think and use problem solving strategies to analyze and learn from new situations. These two perspectives are useful frameworks that can be used to study teacher preparation programs. Likewise, Feiman-Nemser (1990) suggests that educators who discuss teacher preparation have focused on either structural or conceptual issues, both of which can be used to understand and characterize teacher preparation programs (Feiman-Nemser, 1990; Zeichner, 1993). 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. However, concentrating on structural matters deprives the investigator from the opportunity to look closely at the program to determine how the time is spent in the program and specifically inside the classroom and during field work, in short determining the quality of programs. In this respect Feiman-Nemser (1990) asserts that "to some extent, the impression of sameness among four-year programs may be an artifact of survey research that focuses on surface features and ignores institutional variation" (p. 20).

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. Conceptual orientations can be academic, practical, technological, personal, and critical/social, with reflective teaching being a professional stance that can be emphasized in any of these orientations (Feiman-Nemser, 1990). The following paragraphs describe these five orientations.

1. Academic Orientation

The academic orientation points out that "teaching is primarily concerned with the transmission of knowledge and the development of understanding" (Feiman-Nemser, 1990, p. 24). Hence, teachers should not only have a deep understanding of subject matter but also to have a solid pedagogical content knowledge and more importantly have pedagogical content knowledge (Shulman, 1986) which includes "useful ways to conceptualize and represent commonly taught topics in a given subject plus an understanding of what makes learning those topics difficult or easy for students of different ages and backgrounds" (Shulman, & Rickert, 1986, cited by Feiman-Nemser, 1990, p. 24).

2. Practical Orientation

The practical orientation fosters components such as craft, technique and artistry that usually appear during field work. It promotes experience as "a source of knowledge about teaching and a means of learning to teach" (Feiman-Nemser, 1990, p. 26). Novices will learn best through experience, interacting with peers and mentors, and analyzing multiple ways of possible behaviors in specific situations.

3. Technological Orientation

The technological orientation highlights the knowledge and skills of teaching in performance. Teaching effectiveness can be taught to novices through "generic teacher behaviors and strategies associated with student achievement gains" (Feiman-Nemser, 1990, p. 29). Principles of effective practice are strengthened in this orientation.

4. Personal Orientation

The personal orientation emphasizes that a teacher should be a learner, seek development, and use oneself efficiently: "The teacher's own personal development is a central part of teacher preparation" (Feiman-Nemser, 1990, p. 32). Primacy is given to field experiences where novices can acquire what they need to know and later try by themselves to bypass professional difficulties. Educators, according to this orientation, play the role of facilitators creating situations for prospective teachers to investigate problems and various events.

5. Critical/Social Orientation

The critical orientation reveals the teachers' mission towards helping in building democratic society. The teacher, beside the role of an educator, plays the role of a political activist. According to Feiman-Nemser (1990), the teacher promotes democratic values and practices attempts in a learning community through group problem solving. Moreover, the teacher participates in curriculum development and policymaking and works to improve schools through community involvement and political activity. Focus in this orientation is on helping novices develop their identity and to associate their experience in the society with the school.

IV. Purpose

Research reviewed above indicates that teachers play a pivotal role in the success or demise of education for all students and that, in many situations, teacher preparation programs are not preparing teachers who have the knowledge and skills to cater for the needs of all students. In Lebanon, attempts continue to be made to reform the educational system starting with the curriculum, textbooks, teaching methods, assessment policies and approaches, and recently teacher education[5] among other components of the educational system. However, there is a need to understand the current status of teacher preparation if this component of the educational system is to be enhanced. Consequently, the purpose of this study was to answer

[5] A proposed law for the reform of the structure and requirements of teacher education was recently (2010) submitted to the Lebanese council of ministers for discussion.

the following questions: a) What are the theoretical perspectives driving teacher preparation programs in Lebanon, b) What are the requirements of Lebanese teacher preparation programs? And c) What are the similarities and differences among the variety of teacher preparation programs offered in Lebanon?

V. Method

Data sources for the study included: a) documents describing the programs furnished by the UNESCO Regional Office for Education in the Arab States in Beirut, b) institutional websites, catalogues, or brochures describing teacher preparation programs in the institutions whose program descriptions were available from the UNESCO Regional Office, and c) phone interviews with university and program administrators to clarify a number points. Data from each of the institutions were analyzed to identify the structural components as well as the conceptual orientations of teacher preparation in each institution using the framework provided by Feiman-Nemser (1990). The general organization of the programs such as the number of years to complete a program, the number of required credit hours of education and content, and the duration of field-based experience were compared. Likewise, the programs were analyzed in terms of their conceptual orientations that can be academic, practical, technological, personal, or critical/social (Feiman-Nemser, 1990). Decisions regarding program orientations were based on an analysis of the characteristics of each of the programs, as revealed in the documents and the interviews, and a comparison of the characteristics to those identified by Feiman-Nemser. Results of the analysis of each institution were compared to identify patterns across institutions. The analysis was conducted by the two authors to insure the validity and reliability of the results.

VI. Results

Results are presented in two major sections. In the first section we describe the programs offered by the Lebanese University, which is the only public university in Lebanon, and which is charged with preparing secondary school teachers for public schools, in addition to offering programs for

teachers who intend to teach in private schools. In the second section we describe programs offered at private universities that prepare teachers for private schools.

1. Programs Offered at the College of Education, Lebanese University

The College of Education of the Lebanese University is responsible for preparing secondary school teachers for public schools. However, it is entitled to offer other programs for teachers of private schools. Presently, the College offers programs that prepare secondary school teachers for both public and private schools and elementary programs that prepare teachers for elementary schools. These programs are described below.

a. Elementary school teachers

Before the academic year 2008-2009, the duration of programs offered at the College of Education of the Lebanese University, was four years. These programs focused on two cycles at the elementary level. For example, teachers at the Grades 1-3 level were prepared as classroom teachers, while those at the Grades 4-6 level specialized in different areas. Presently, the College of Education of the Lebanese University is implementing the Licence - Master – Doctorat (LMD) European model of higher education which started with the cohort of student teachers who were admitted during the Academic year 2008-2009. As mentioned above, the first degree in the LMD system, the Licence, takes three years to complete.

All programs leading to an Education Licence in elementary education require students to take 68 common credit hours in languages, general pedagogy, technology, and general culture. Students majoring in science or mathematics or language take 70 more credits of specialized pedagogy (including methods courses, content matter, and field work). In addition, students take 36 more credits of specialized pedagogy (including methods courses, subject area, and field work) in another major. Students also take 6 more credits considered as elective courses. The 180 ECTS required for the Education Licence in Elementary Education are distributed over three years with the number of courses in specialized pedagogy and field work increasing as students advance in

their studies (Table 2). The stated purpose of the program is to prepare teachers who are capable of helping their students develop physically, psychologically, academically, and socially. This preparation requires that teachers acquire the knowledge, skills, and attitudes necessary to develop personally and academically (College of Education, Lebanese University, 2002).

b. Secondary school teachers

The College of Education offers the Certificat d'Aptitude Pédagogique à l'Enseignement Secondaire (CAPES) (Certificate of Qualification in Education for Secondary School Teaching) that is required for employment in public secondary schools. To be admitted to the CAPES program, presently, students are required to hold a four-year degree in a subject area taught at the secondary school level and to pass an entrance examination. It is to note that admission requirements to CAPES have not changed yet to account for the adoption of the L-M-D program described above.

This entrance examination is administered by the Council of Civil Service, a department of the Lebanese Government in charge of employment in the civil service, including public school teachers. However, those who do not plan to teach in public schools take an entrance examination administered by the College of Education. Obtaining CAPES requires 30 credits distributed as follows: Methods courses (9 credits), Practicum (4.5 credits), content (6 credits) and general education courses (10.5 credits). The general goals of the education programs offered at the College of Education include providing prospective teachers with the theoretical and practical information needed for good teaching and helping them to develop the skills necessary to live in harmony and work with others. It is worth noting that the CAPES program for public school teachers is not offered regularly but rather based on demand for teachers in public schools. However, the same program is offered regularly for students who plan to teach in private schools. Table 2 (College of Education, Lebanese University, 2002) outlines the programs offered at the college of Education.

Table 2: Programs Offered at the College of Education, Lebanese University

A. Licence en Sciences de L'Education (Education Licence) and the Number of Credits in Each Component of the Program

	Level	General Pedagogy	Methods	Field work	Subject Matter	General Education	Total number of credits
Grades 1-6	Mathematics, Science, Language, Music, theater, sports	34	36	14	56	34+6 elective courses	180
	Percentage	18.9%	20.0%	7.8%	31.1%	22.2%	

B. Certificat d'Aptitude Pédagogique à l'Enseignement Secondary (CAPES) (Certificate of Qualification in Education for Secondary School Teaching) and the Number of Credits in Each Component of the Program

General Pedagogy	Methods	Field work	Subject Matter	Total
10.5	9	4.5	6*	30
35%	30%	15%	20%	

* Students should have a BA/BS in economics; social studies; philosophy; French; Arabic; English; geography; history; biology; mathematics physics and chemistry.

2. Programs Offered at Private Universities

The private universities whose program descriptions were available from UNESCO Regional Office offer Bachelor's and Teaching Diploma programs. The Teaching Diploma programs are post-bachelor degree programs that typically require an undergraduate degree in a subject area. Below is a description of the programs that offer a Bachelor's degree followed by those that offer Teaching Diploma programs.

a. Bachelor's Degree Programs

Table 3 presents the private universities that offer Bachelor's degree programs. All programs have a similar structure that includes courses in general pedagogy, methods of teaching, field work, subject matter courses, and general education courses. A number of the programs (American University of Beirut, University of Balamand, Lebanese American University, Modern University for Business and Science, and Saint Joseph University) provide students with opportunities to take elective courses.

b. Teaching Diploma programs

The private universities that offer Teaching Diploma programs in subjects such as economics, sociology, philosophy, French, Arabic, English, geography, history, biology, mathematics, physics, and chemistry; subjects that are taught at the grade 7-12 level are presented in Table 4. The Teaching Diploma requires between 21 and 30 credits depending on the university at which it is offered. Moreover, students are required to have completed a Bachelor's of Science (B.Sc.) or a Bachelor's of Art (BA) before starting the Teaching Diploma Program (TD) or by the time they graduate from the program. In case students do not have bachelor's degrees in a subject area, they are required to complete a number of credits in the subject area. For example, if students do not have a bachelor's degree in a subject taught in school at the secondary level, the American University of Beirut requires them to complete 24 credits in a subject area before they are granted a Teaching Diploma.

Table 3: BA Programs Offered at Private Lebanese Universities and the Number of Credits in each Component of the Programs

Name of University	Level/ Major	General Pedagogy	Methods	Field work	Subject Matter	General Education	Total # of credits
Al Kafaat University	Pre-elementary and elementary	31 (33.7%)	12 (13%)	6 (6.5%)	23 (25%)	20 (21.7%)	92
American University of Beirut	Elementary	27 (30%)	6 (6.7%)	6 (6.7%)	18 (20%)	27 (30%)	90
Global University	Elementary	30 (31.6%)	3 (3.2%)	9 (9.5%)	24 (25.3%)	21 (22.1%) + (0-6 major electives; 6-9 free electives)	95
Haigazian University	Pre-school & Elementary	46 (47.4%)	6 (6.2%)	3 (3.1%)	12 (12.4%)	30 (30.9%)	97
Lebanese American University	Pre-school & Elementary	24 (25.3%)	6 (6.3%)	12 (12.6%)	12 (12.6%)	34 (35.4%)	95
	All levels – BSc in mathematics education	9 (9.7%)	3 (3.1%)	9 (9.7%)	30 (32.6)	41 (44.6)	92
Middle East University	Elementary	30 (27.0%)	6 (5.4%)	6 (5.4%)	12 (10.8%)	39 (35.1%)	111
	Secondary	33 (29.7%)	3 (2.7%)	6 (5.4%)	21 (18.9%)	39 (35.1%)	111
Modern University for Business and Science	Elementary	31 (33%)	12 (12.8%)	6 (6.4%)	9 (9.6%)	27 (28.7%)	94
	Teaching English as foreign language	31 (33%)	9 (9.6%)	6 (6.4%)	12 (12.8%)	27 (28.7%)	94

Notre Dame University	Elementary Education*	36 (34.3%)	12 (11.4%)	6 (5.7%)	6 (5.7%)	39 + 6 free electives (42.9%)	105
Saint Joseph University	Elementary: mathematics & science	81 (45%)	14 (7.8%)	30 (16.7%)	28 (15.6%)	18 (10%)	180
	Elementary: French	81 (45%)	17 (9.4%)	30 (16.7%)	16 (8.9%)	27 (15%)	180
	Elementary: Arabic	81 (45%)	17 (9.4%)	30 (16.7%)	19 (10.6%)	24 (13.3%)	180
University of Balamand	BA in educational Sciences	33 (35.9%)	16 (17.4%)	4 (4.3%)	Integrate in other courses	24+15 elective (42.4%)	92
Holy Spirit University of Kaslik	Licence de l'éducation: teaching of French	30 (31.3%)	15 (15.6%)	6 (6.3%)	18 (18.8%)	27 (28.1%)	96
	Licence de l'éducation: teaching of Arabic	30 (31.3%)	12 (12.5%)	6 (6.3%)	24 (25%)	24 (25%)	96

A Bachelor of Science or a Bachelor of Arts plus a Teaching Diploma is recognized by the Government of Lebanon as equivalent to the Licence d'Enseignement if the total number of credits is at least 111 starting with the sophomore class. The Licence d'Enseignement is required if students plan to teach in public schools.

Table 4: Teaching Diploma programs offered at Lebanese Universities and the Number of Credits in Each Component of the Programs

Name of University	Level	General Pedagogy	Methods	Field work	Subject Matter	Total
American University of Beirut	Elementary	12 (57.1%)	6 (28.6%)	3 (14.3%)	BA/ BSc.	21
	Secondary	12 (57.1%)	6 (28.6%)	3 (14.3%)	BA/ BSc	21
Global University	Elementary	15 (71.4%)	3 (14.3%)	3 (14.3%)	BA/BSc.	21
	Secondary	15 (71.4%)	3 (14.3%)	3 (14.3%)	BA/BSc.	21
Haigazian University	Elementary (Normal Diploma Program)	15 (71.4%)	3 (14.3%)	3 (14.3)	BA/BSc.	21
	Secondary (Normal Diploma Program)	15 (71.4%)	3 (14.3%)	3 (14.3)	BA/BSc.	21
Lebanese American University	Elementary	12 (57.1%)	3	6	BA/BSc.	21
	Secondary	12 (57.1%)	3 (14.3%)	6 (28.6%)	BA/BSc.	21
Lebanese International University	Education	15	3	6	BA	24
	TD Program	0(0%)	12 (50%)	12 (50%)	BA/ BSc	24
Lebanese University	Intermediate and Secondary [1]	10.5 (35%)	9 (30%)	4.5 (15%)	6(20%)+ BA/ BSc	30
Middle East University	Elementary	12 (57.1%)	6 (28.6%)	3 (14.3%)	BA/ BSc	21
	Secondary	15 (71.4%)	3 (14.3%)	3 (14.3%)	BA/ BSc	21
Notre Dame University	Elementary	15 (83.3%)		3 (16.7%)	BA/BSc.	18

Saint Joseph University	Elementary: Mathematics & Science	12	6		3+BA/ BSc	30[2]
	Elementary: French	12	9		BA/BSc	30
	Elementary: Arabic	12	6		3+BA/BSc	30
University of Balamand	Education Sciences	15 (55.5%)	3 (11.1%)	6 (22.2%)	BA/ BSc +3 (11.1%)	27
	Intermediate or secondary	18 (66.7%)	3 (11.1%)	6 (22.2%)	BA/ BSc	27

[1] Economics; sociology; philosophy; French; Arabic; English; geography; history; biology; mathematics, physics and chemistry.
[2] Nine of the required credits were listed as elective. Thus the percentages could not be calculated.

VII. Trends and Conclusions

Based on the descriptions above, teacher preparation programs in Lebanon can be characterized by the following:

1. Adoption of an orientation which has characteristics of the academic and technological approaches to teacher preparation, without totally neglecting constructivism, reflective practice, thinking, and inquiry. Scrutiny of the content of the teacher preparation programs offered in the public and private universities shows that they emphasize the technological and academic orientations as evidenced in the types and content of courses, especially methods courses, offered at almost all of them. According to Feiman-Nemser the technological orientation "focuses attention on the knowledge and skills of teaching. The primary goal is to prepare teachers who can carry out the task of teaching with proficiency. Learning to teach involves the acquisition of principles derived from the scientific study of teaching" (Feiman-Nemser, 1990, p. 223). Examples of the courses offered in universities that satisfy this definition include courses A to D in Table 5 below. Likewise, the academic orientation is concerned

mainly with transmitting knowledge and developing understanding. Examples of the courses that satisfy this definition are the courses E to H in Table 5 below.

2. Post-graduate programs that prepare secondary teachers with significant amount of content background. Tables 2 and 4 show that all teaching diploma programs require the completion of a BA, B.Sc., or a degree in a content area, especially those programs offered at the Lebanese University.
3. Three- and four-year programs that prepare classroom teachers or subject teachers for all elementary grades, except the programs offered at the Lebanese University. The College of Education of the Lebanese University is different from other colleges in that it offers two types of Bachelor's programs at the elementary level: one for Grades 1-3 and another for Grades 4-6. This structure is a direct response to the new Lebanese Educational Ladder, which has two stages at the elementary level. Consequently, because the second stage (Grades 4-6) requires a significant amount of subject matter teaching, the Lebanese University has adopted a program that meets the needs of teachers at this level.

Table 5: Course Descriptions Selected from a Number of Universities

Course Title	Description
Courses that include principles derived from the scientific study of teaching	
A. The Teaching of English as a Foreign Language	A study of the methods and principles of teaching English as a foreign language based on the findings of modern linguistics. The course deals with all aspects of English teaching: Basic language skills, sub skills, literature and cultural orientation.
B. The Teaching of Science	The nature of science and its implication in teaching; critical study of various science teaching techniques; survey and practice in the utilization of instructional materials.
C. Methods of Teaching (in teaching Area)	The course surveys teaching theory and its applications in teaching practice. Focus will be on effective teaching in teaching area.

D. Methods of teaching	The Course will focus on current theories of teaching. Focus will be also on preparation and evaluation of teaching materials and current Math & Physics textbooks.
Courses that transmit knowledge and develop understanding	
E. Science for Elementary Teachers	An in-depth study of science concepts and skills in pre-secondary science curricula.
F. Learning and Human Development	An introduction to instructional theory, the nature of intelligence, child development, learning and behavior management, with an emphasis on the basic implications for classroom teaching.
G. Mathematics for Elementary Teachers	Comprehensive review of the mathematics needed by teachers, and the mathematics taught at the elementary level (grades 1 through 6). Insightful understanding of mathematical concepts, nature and stages of development of mathematical knowledge, impact of new technologies (calculators and computers) on the elementary mathematics curricula, critical thinking and problem solving strategies, etc., with emphasis on the new topics in the elementary mathematics curricula.
H. Science for Elementary Teachers	Comprehensive review of the sciences taught at the elementary level (grades 1 through 6). Insightful understanding of scientific concepts, the learning cycle of development of scientific knowledge, scientific method of investigation and inquiry, experimentation and laboratory skills, critical thinking and problem solving strategies, etc., with emphasis on the new topics in elementary science curricula.

4. Absence of university level programs for the preparation of intermediate level teachers (Cycle 3). It is worth noting that although the intermediate level of schooling (Cycle 3 in the Lebanese curriculum) is defined by Lebanese law, programs aimed specifically at intermediate teacher preparation are not offered at Universities. This may be due to the perception of some educators that the needs of intermediate students are similar to those of secondary students, hence programs such as the one at the American University of Beirut in which intermediate and secondary level teachers take the same courses. However, this lack of differentiation could also be due to financial reasons: Private universities cannot afford to offer differentiated programs for intermediate level students because of low enrolment in specialized courses.
5. Relative lack of emphasis on field work. Descriptions of the programs presented above show that most teacher preparation programs include relatively short periods of field work ranging form the equivalent of one or two semester courses, with very few having longer periods of field work.

VIII. Future Directions for Teacher Preparation

What are the future directions of teacher preparation programs in Lebanon and what are the prospects for improving these programs? The curriculum reform movement in all subject areas, spearheaded by CERD, was expected to spur significant changes in Lebanese teacher preparation programs. However, this has not happened yet as evidenced by the similarity of findings of BouJaoude's (2000) study that analyzed science education teacher education programs in Lebanon. One of the needed changes is the preparation of specialized teachers for each of the stages of the new educational ladder because students at each of these stages have different academic, social, and psychological needs. For example, there is a need to design special programs for the preparation of third cycle teachers (intermediate school teachers) because students at this level have specific academic, social, and psychological needs that are different from those of secondary students.

Another needed change is requiring certification for teaching in private schools. Presently private school teaching does not require certification. Consequently, many private schools employ beginning teachers that have degrees in the subject area with no pedagogical preparation, resulting in an over-emphasis on disseminating information because teachers tend to teach the same way they were taught and because they have not been trained in teaching.

In light of the call for longer periods of field work, for transforming teaching into a profession and teachers to reflective professionals, and for designing five-year teacher preparation programs to accommodate new requirements, there is a need to put more emphasis on fieldwork and collaboration with schools in the preparation of teachers. This will require new structures and new ways of thinking about the roles of both universities and schools in teacher preparation. Finally, as indicted by Levine (2006), there is a need to transform education schools into professional schools focused on classroom practice and creating incentive programs to attract the best students to teaching because of the centrality of the teacher in the teaching learning process.

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