CBER Explorations in Bi-national Education

Number 1

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By John E. Petrovic, Graciela Orozco, Esther Gonzalez, and Roger Diaz de Cossío

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ACKNOWLEDGMENTS AND PREFACE BY THE SERIES EDITOR CBER EXPLORATIONS IN BI-NATIONAL EDUCATION

Preface to the Series

As we welcome a new century and a new millennium, dire predictions are being heard in education circles about the shortage of teachers that will face U.S. schools in the near future. In the next few years baby boomer teachers will retire in record numbers. To complicate matters, not enough young people are entering the profession. The pipeline leading from high school to the profession is poorly supplied. This is especially true of language minority youth, many of whom leave school before having the option of entering teaching as a career.

But crises sometimes lead to opportunities. Such is the case of those states with large Spanish speaking populations. Mexico has long been the number one source of Spanish speaking immigrants to the United States. Recently, immigration from Mexico, a phenomenon once limited to unskilled and semi-skilled workers, has begun to change. Mexican immigrants are now markedly diverse. Among recent newcomers there are growing numbers of people from the cities of Mexico where educational opportunities have improved markedly. This change in the demographics of Mexican immigration also means there is an increase in immigrants from the professional and technical classes of Mexico. Well prepared professionals and technicians who were educated in Mexico are coming to the United States to live and work. They have much to offer their new country.

Mexican teachers are part of this shift in immigration patterns. In difference to previous generations of teachers, the Mexican teacher of today has undergone the equivalent of a college education. The obvious difference between Mexican and U.S. teachers is that the former may not have a full command of the English language. They cannot, therefore, practice their chosen field in U.S. schools. Michael Guerrero points out in his contribution to this monograph series (Guerrero, 1999) that there may be critical gaps in the Spanish proficiency and literacy of U.S. teachers who are already credentialed as bilingual education teachers. The growing number of Mexican teachers in our midst — teachers who are fully proficient in Spanish — is welcome news for bilingual education. Here is a new and untapped pool of teaching talent waiting in the wings and eager to prepare for teaching duties in the United States.

Project Alianza, one of the initial sponsors of this monograph series, focuses energy, resources, and attention on this new resource: "normalista" teachers educated in Mexican teacher colleges (normal schools) who reside in the U.S. and who aspire to re-enter the profession in the United States. The alliance, consisting of five universities, a national R&D organization, and a bi-national foundation, has taken on the challenge of reducing the structural, cultural, and linguistic obstacles that have precluded the integration of this new pool of teachers into U.S. classrooms as full professionals. With financial support from the Kellogg Foundation, the members of ***Project Alianza*** are working to overcome these obstacles. They expect to facilitate the certification and absorption of several hundred teachers who started their careers in Mexico and hope to work here, after meeting all the requirements that are met by every other teacher in the states in which they expect to work. By pointing the way to a new form of international collaboration in education, ***Project Alianza*** will make an important contribution to diminishing the anticipated shortage of well prepared teachers in the U.S.

When the opportunity was extended to the Center for Bilingual Education and Research to become one of the ***Project Alianza*** partners, we accepted eagerly. Bi-national collaboration in all levels of education between the U.S. and Mexico is one of our interests. We see no reason why the problem of educating immigrant youngsters should fall solely on U.S. schools and teachers. We were aware, even before the ***Project Alianza*** effort began, that important players in the Mexican educational system were willing and able to help reduce the cultural and linguistic barriers to the adequate education of these students. When we reviewed the history of previous bi-national collaborations, we were surprised to learn that only a few isolated efforts had been made to bring together educators from both sides of the border, to engage in dialogue and to develop spaces and opportunities in which to explore ideas for educating immigrant children more collaboratively and perhaps more successfully. To the extent that research, collaboration, and innovation have taken place, they have occurred almost exclusively within the United States. It was as if an implicit assumption existed that Mexicans had no cards in the matter and that our respective professional obligations ended on our respective side of the border. Since we live and work along one of the most open borders in the world, it is difficult to explain why educators in the U.S. have shouldered the difficult task of educating these students without consulting or collaborating with colleagues who worked with them before they immigrated.

From these observations and concerns arose the idea of publishing a series of papers aimed at promoting a continuing bi-national conversation concerning this problem. We chose the term "Explorations in Bi-National Education" as the generic name for this collection. With the first two monographs in the series, the Center for Bilingual Education and Research (CBER) hopes to launch a lively dialogue over the nature of education in areas with substantial Hispanic concentrations and on the mutual obligations of sending and receiving schools to collaborate in meeting this challenge. By helping to arrange for the integration of Mexican normalistas into the U.S. teaching force, we hope that other issues will surface, and that researchers and scholars, in both countries, will rise to the challenge.

CBER and Arizona State University begin their involvement in ***Project Alianza*** through the preparation of three policy related research/policy reports, two of which are part of our "bi-national explorations" series. It is our hope that they will help inform policy makers and practitioners involved in these bi-national efforts.

The first of these monographs is a wide-angle view of the ways in which the U.S. and Mexico educate and credential teachers for the K-12 sequence. This report, *Mexican Normalista Teachers as a Resource for Bilingual Education in the U.S.: Connecting two Models of Teacher Preparation,* reviews the Mexican system of teacher education and sketches the similarities and differences between the Mexican and U.S. models. In the course of gathering and assembling this information we found, to no one's surprise, that the topic is more complex than first meets the eye. The Mexican case is national in scope. It is uniform and offers little between each of the Mexican states. All teachers in Mexican normal schools follow essentially the same curriculum which is prescribed by the central government through the *Secretaría de Educación Pública.* The U.S. system — in reality a hydra's head of state systems — is as variegated as the American states themselves. The role of colleges and universities is also different in the two countries and the subjects and experiences stressed in each country also vary in major ways. Still, upon completing the task, it was clear that enough similarity exists, that there is a solid common base on which to build a unifying structure, a bridge, between the two systems.

The second report in the bi-national education series focuses on the perplexing question of language proficiency of teachers. We explore whether Spanish speaking bilingual education teachers in the U.S. are sufficiently proficient and literate **in Spanish** to function in the more demanding — and more promising — program models such as the dual-language or two-way programs of bilingual education. Michael Guerrero of the University of Texas at Austin authored S*panish*

Language Proficiency of Bilingual Education Teachers, an important probe of a long neglected question in bilingual education: what level of mastery, in Spanish, is required of bilingual education teachers in order to teach effectively in two languages? The results of his analysis are worrisome. While Guerrero's exploration does not give us a final and conclusive answer, it makes a timely contribution by pointing out major research areas that require attention and policy questions that require discussion. Building on Guerrero's analysis we can infer that, in this area, Mexican teachers who obtained a full college level education in Spanish have an important contribution to make to our field.

Editor's Acknowledgments

Many people have contributed to or have encouraged the development of CBER's concept of bi-national education and the concept of a *border pedagogy* crafted expressly for the special needs of the U.S./Mexico border. They share our belief that education should not be constrained by borders and that educators must challenge the divisive nature of political borders by working together, across borders, in pursuit of our educative mission. Among those who have encouraged us to develop this idea were David Berliner, Dean of Education at Arizona State University; Margarita Calderón of the CRESPAR organization at Johns Hopkins University; and Graciela Orozco of the Mexican and American Solidarity Foundation in Mexico City. All of them have made important contributions to our work.

We invited several colleagues to read our drafts and offer suggestions. They are named and thanked in the authors' acknowledgment page, but I take the prerogative as Series Editor to acknowledge them collectively, and to assert that we could not have completed the work without their help. We are also indebted to Heidi Hagen Pearson of ASU and Elsie Szecsy of the Nassau County BOCES in Long Island, for assistance in editing the text.

Among the right brain contributors to the design of the bi-national education series were two impressive graphics artists: Tracy Fernández of Fernández Design in Chicago and Alissa Brostowicz of ASU's College of Education. The staff of the Center for Bilingual Education and Research were required to use both sides of the brain to complete these volumes. They were outstanding in their support of writers, editors, and artists. To Pauline Stark, Administrative Assistant, muchas gracias por todo. Andrea Everette and Adriana Robles plunged into the intricacies of desktop publishing software from the day they walked into the office and never looked up until the work was done. They are valuable members of the editorial team.

The Andrew W. Kellogg Foundation underwrote a substantial portion of the costs for writing and producing some of the volumes in the series. We greatly appreciate their support. Special thanks to Cuca Robledo and Lalo Villarreal of IDRA, the leaders of ***Project Alianza.*** They exercise leadership with warm support, lots of encouragement, and great humanity. In short, they are architects of this international learning community. Un abrazo para ustedes.

Finally, my heartfelt thanks to the many colleagues involved in the day to day work of ***Project Alianza.*** Your views were critically important to us since you were the first customers. I thank you for providing valuable help as the writing unfolded and helping us fine tune the contents of several of the volumes in this series.

With all these friends and supporters we could hardly go wrong in any major way. Still, for those stubborn mistakes of commission and omission that remain, I take full responsibility.

Josué M. González, Series Editor
Center for Bilingual Education and Research
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Tempe, Arizona
June, 1999

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We are also indebted to those who reviewed the monograph and provided feedback, changes, and corrections. On rather short notice, each of the readers provided insightful and thoughtful comments. We thank Robert Valek, International Credentials Evaluation Specialist at Arizona State University, Yvonne Novelli at the California Commission on Teacher Credentialing, and Professor Norma Bocanegra of the Universidad Pedagógica Nacional. The final document is a much better document as a result of their help. However, any remaining omissions or other problems in the monograph owe completely to us, the authors.

We are equally grateful to Josué M. González, editor of this series. He put in a great deal of time reading several drafts of the monograph and provided extensive feedback at every stage of its development.

Finally, we would like to thank the staff at the Center for Bilingual Education and Research, especially Gloria Armendariz and Chiara Pérez-Merino for recreating a number of tables and graphs and translating numerous pages of documents arriving from Mexico.

Mil gracias a todos,

John Petrovic
Graciela Orozco
Esther González
Roger Díaz de Cossío

INTRODUCTION

Background and Purpose

Throughout history, language has been a critical concern of formal education. It is both a tool and an objective. In the United States, a stubbornly monoglot country, many language minority parents have held the belief that their children should retain their family language while learning English, the nation's lingua franca. Further, they have argued that schools — especially the schools they support with their taxes — should support this goal. Because of this, the U.S. has a long tradition of bilingual education (González, 1975, Kloss, 1998) despite a concurrent movement for "Americanization." Between the World Wars bilingual education suffered a severe decline, but the civil rights movement helped to reinvigorate the demand for bilingual education in the public schools. Precedent for such demand had already been set by generations of European immigrants and territorial language groups, such as Native Americans and Hispanics who lived on these lands before any English speakers arrived.

The demand for bilingual education was made more urgent in the 1980s by new waves of immigration and changing ideas about what it means to be an American. Crawford (1999, p. 198) points out that in 1970, Hispanics accounted for 12 percent of California's population and Asians 3 percent; by 1995 these proportions had mushroomed to 29 percent and 11 percent, respectively. As Hispanics increased, so did the demand for bilingual education. In time this led to a severe shortage of bilingual teachers. In 1985, there was an estimated shortage of nearly 6,000 bilingual education teachers in California. This shortage has increased steadily since then and is now several times what it was in 1985.

The shortage of bilingual education teachers is part of a national need for new teachers generally. In 1997, U.S. Secretary of Education Richard Riley estimated that the nation will need some two million new teachers over the next decade. We do not know precisely how many of these should be bilingual education teachers. However, the nationwide shortage is presently estimated between 100,000 and 200,000, depending on the corresponding estimates of limited English proficient students (Fern, 1998). States and school districts with high language minority populations, predominantly Spanish speaking, are scrambling to staff bilingual classrooms with qualified teachers. In California where the teacher shortage is most severe, two of every five adults providing bilingual instruction are bilingual aides lacking a professional credential (Fern, 1998). A large proportion of practicing

teachers who are bilingual entered the work force in the 1970s. Since many of them are now approaching retirement, the shortage looms larger than ever.

An important but under-utilized source to fill these positions is the thousands of teachers trained in Mexico who have immigrated to the United States in recent years and who work here in jobs that are often unrelated to education. Given the shortage of minority teachers generally and bilingual teachers specifically, the talent and the preparation of these Mexican immigrant teachers must be exploited. To plan adequately for this, we must understand the educational background and training that these teachers bring with them, as well as broaden our knowledge of the educational system in Mexico. It is also necessary to understand their preparation patterns and how these fit U.S. certification requirements and procedures.

This monograph provides a description of teacher preparation programs in Mexico and highlights some of the similarities and differences between that system and our own. We describe in a general way the educational experiences that teachers prepared in Mexico bring with them to the United States as educated professionals. The purpose of this monograph is to shed light on these experiences so that they can be taken into account in American teacher education and certification processes. In conjunction with other policy reports in this series, we hope to promote the incorporation of this invaluable human resource in the American educational system. These normalista teachers (so-called because their preparation took place in Mexico's Normal Schools) can become valuable partners in bilingual education programs. We hope to assist them, and those who work with them, in making a smooth transition to the American way of becoming a teacher.

We anticipate that this monograph series will be used by U.S. teacher educators and program developers to build more effectively on the rich educational backgrounds and experiences of *normalistas*. The information contained here will help to avoid redundancies in the programs designed for *normalistas* and/or to fill in possible gaps. It will also help point the way to a focused research agenda aimed at exploring in greater depth the differences and similarities between our two systems.

Organization of the Monograph

This monograph has three major sections. The first is a historical and procedural overview of teacher education in the United States. We look at recent and future trends in teacher preparation and some of the basic requirements to become a certified teacher, especially in bilingual education. When providing specific examples, we have chosen to draw from states with high language minority populations, where bilingual educators from Mexico are most likely to seek

employment. The reader is also urged to consult another publication of the Center for Bilingual Education and Research (Midobuche, 1999) which provides a more in-depth treatment of the requirements to become a licensed bilingual education teacher. The report by Midobuche includes state-by-state summaries and descriptions of the requirements to receive the bilingual endorsement or certificate in seven states with substantial Hispanic populations.

General teacher certification processes and requirements are similar across states, although the details vary greatly. The process in each state involves requirements in three broad areas: general education, professional education, and examinations. In general, in order to receive a bilingual endorsement or certificate, all of the requirements in the three broad areas apply. In most cases, specialized coursework is required as well as state mandated examinations.

The second section of the monograph is an overview of teacher preparation in Mexico. We begin by outlining the general characteristics of the process of teacher preparation, including a brief description of the basic principles that guide the Mexican educational system and its present structure. We also detail, more specifically, the "normal school" system and its development over time. Included in the description of Mexican normal schools are the general characteristics of normal school preparation programs and the specific curricular contents of two types of normal schools: those that prepare elementary teachers *(Escuela Normal Básica)* and those that prepare secondary teachers *(Escuela Normal Superior)*. We should note that in Mexico the term "normal school" or *"escuelas normales"* refers to any of a wide gamut of institutions dedicated to teacher education. We focus on the normal schools but also point out other important institutions within the realm of teacher education, such as the Universidad Pedagógica Nacional.

While the Mexican normal school system has a long history of development and change, we focus on the changes that have taken place in that system since 1975. The programs of study from that point forward cover the ones undertaken by the vast majority of *normalistas* who have immigrated to the United States.

In the third section, we compare in general terms the systems of teacher education in the two countries. We present the principal differences between the Mexican and U.S. systems of teacher education and between Mexican and U.S.-trained teachers. We highlight the strengths that Mexican-trained teachers bring with them to the U.S. Proceeding from these strengths, we make general recommendations on ways to make the preparation and certification processes more efficient and valuable.

I

TEACHER EDUCATION AND LICENSURE IN THE UNITED STATES

General Overview and History

Who Grants the Teaching License?

In order to become a licensed teacher in the United States an aspirant must usually complete a teacher preparation program in an institution of higher education (IHE) recognized by the state. The IHE and its teacher preparation program (usually offered by the college, school, or department of education) must be recognized and approved by the state in order for its graduates to qualify for a teaching credential. In the U.S., it is not the IHE that grants the teaching license (referred to as certification) but the state. The IHE must submit a plan, to be approved by the state, for each preparation program it wishes to implement (elementary education, secondary education, special education, educational administration, counseling, etc.). Even though the requirements to obtain a teaching license vary greatly — not only from IHE to IHE but also from state to state — licensure is required for all teachers in public (state funded) schools. In some states, private schools are also subject to this requirement. The development of this state of affairs has a long history that we only briefly review here.

The Early History of Teacher Education

Whereas previous generations of American teachers taught without any particular qualifications, the movement in the first part of the 1800s was to recruit "trained" teachers. This preparation consisted, for the most part, of education in basic subject-matter and, especially, moral virtue (Spring, 1990). By the middle of the century, a number of two-year "normal schools" could be found throughout the country. The normal schools prepared students to teach in the elementary grades. Secondary teachers tended to be graduates of colleges, a level of education that was recognized to be a considerably higher achievement. Eventually, normal schools evolved into teachers colleges and, subsequently, teachers colleges into schools and colleges of education attached to universities (Clifford & Guthrie, 1988).

The movement to professionalize teaching began in the northeastern part of the United States and moved west. In 1838, the Massachusetts legislature created a State Board of Education to oversee and fund the normal schools in that state, the first of which was opened in 1839 in Lexington. Other states followed this lead over the

next several decades. The admission standards for normal schools were quite low. The vast majority did not even require a high school diploma (Spring, 1990).

By the turn-of-the-century, two-year normal schools were being replaced by four-year teachers colleges. In addition, most colleges and universities began to add departments and colleges of education to prepare teachers (Spring, 1990). The professionalization of teaching that such colleges were meant to engender left much to be desired in the early years. The preparation of elementary classroom teachers, mainly women, was left to the normal schools. The preparation of secondary teachers was assigned to the undergraduate colleges where students received little or no professional preparation in teaching. Graduate work was reserved for programs in educational administration, educational psychology, educational journalism, and college or normal school teaching (Herbst, 1989).

Despite the early weaknesses of teacher education programs, the professionalization of teaching in the United States progressed steadily and became more integrated into four-year colleges and universities. The corollary to this progress was increased bureaucratization of gaining teaching licensure. In the 18th century, teachers were "licensed" by a local vicar who attested to the moral character of future teachers. Later, a local school superintendent or school board "licensed" the teacher. By the middle of the 19th century, State Education Agencies (SEAs) and/or State Boards of Education were becoming the norm as licensers of teachers. Also during this period relationships were formalized between SEAs and universities whereby the latter offered the necessary courses for certification and the former granted the teaching license.

Recent Developments in Teacher Education

In the 1980s, virtually every state passed legislation to reform teacher education in the United States (Cf. Darling-Hammond & Berry, 1988, Murnane et al, 1991). Much of this legislation dealt with a general movement away from centralized school decision-making to increased site-based management. Reforms in teacher education were an effort to ensure the effectiveness of this change. The reforms were geared toward increasing the rigor of teacher education, certification requirements, and selection criteria.

During this era of reform, many states added professional education requirements for teacher certification. More specifically, where they had once specified course titles and the distribution (i.e.,required credit hours) of professional education coursework, states began to specify course content and/or competencies to be achieved by teacher candidates. Additionally, most states implemented more tests

of basic skills and knowledge. The states that did not add more tests simply raised the minimum acceptable scores for the ones already in place (Tom, 1996).

Not only were the requirements to gain certification made more rigorous, but new requirements were added to enter teacher education programs. Most states and/or schools of education now require tests of academic ability, minimum grade point averages, "rising junior" exams, or some combination.[1]

Many of the added requirements surfaced from another movement in the mid-1980s to phase out the undergraduate major in education and to give greater weight to liberal and graduate studies. Two influential groups — The Holmes Group and the Task Force on Teaching as a Profession — recommended that students first earn a degree in one of the liberal arts and sciences and then, in a fifth year of study, take graduate coursework in teacher education to gain licensure. The Task Force on Teaching as a Profession (1986), for example, specifically proposed that "States should abolish the undergraduate degree in education and make professional teacher education a graduate level enterprise, building on a base of sound undergraduate education in the arts and sciences" (The Holmes Group, 1986). This recommendation was based on the need perceived by both of these groups for teachers to have a more thorough grounding in content areas. Academic majors, especially in a content-area taught in schools, were recommended, especially for secondary teachers.

Another movement of the 1980s that continues to be a growing trend in teacher education is alternative certification. Alternative certification gained momentum with the threat of teacher shortages. These programs are primarily designed "to bring quality adults who already have at least a bachelor's degree — and many of whom have considerable life experience — into the teaching profession" (Feistritzer & Chester, 1995, p. 9). Additionally, alternative certification programs have proven to be an effective means of increasing the number of minority teachers. For example, forty-five percent and forty-eight percent of the teachers graduating from alternative licensure programs in California and Texas, respectively, were from underrepresented racial or ethnic groups, compared to only ten percent graduating from traditional licensure routes (Feistritzer, 1998). The alternative route, in various forms and degrees, can also be taken by teachers who have been licensed in states or countries other than the one in which they wish to teach.

It should be noted that the term "alternative" seems to have no consistent meaning from state to state or university to university. Some states use it simply to refer to emergency certification. Under these certification routes, non-certified but degreed

teachers can be hired by schools experiencing a shortage. These teachers are granted a temporary license, usually valid only for a specified length of time. After the expiration of this license, the school superintendent may apply on behalf of the teacher for a renewal if his/her services are still needed. Most states require that teachers complete a certain number of professional education courses for each year that they are working under a temporary license.

The details of the emergency license — the length of the temporary license and/or the number of times it can be renewed, for example — vary from state to state. Additionally, some states recognize this route to certification only when school officials can demonstrate that they have been unable to find a certified teacher to fill a position. Other states permit this route as long as the school superintendent can demonstrate that the candidate is the best qualified for the job regardless of the certification status of other persons.

In addition to seeking licensure while on an emergency certificate, some states offer "true" alternative licensure routes. For example, Colorado offers a one year site-based program of instruction. This is a program for individuals who wish to join the teaching force and already hold a baccalaureate degree in a subject area taught in Colorado schools (Colorado Department of Education, personal communication, 1999). These programs typically consist of paid teaching "internships" under a temporary license. The internship program is designed by the local school district and must be approved by the state. Often these programs involve close cooperation between the school district and a university program. Great importance is placed upon the mentoring aspect of these programs.

Emergence of the Bilingual Endorsement

In 1968, the Bilingual Education Act — Title VII of the Elementary and Secondary Education Act — was signed into law. The purpose of the Act was to improve educational opportunities for children "disadvantaged" by their limited English proficiency. Even though the Bilingual Education Act, contrary to its name, did not require the use of a language other than English for instructional purposes, the political climate was right in the late 1960s to push for such instruction. This push for bilingual education gained momentum in the 1970s and 1980s. During this period there was further momentum given to bilingual education by the Office for Civil Rights and by a number of key court cases (e.g. *Serna v Portales,* New Mexico, 1972; *Aspira v New York City,* 1974; and the famed *Lau v Nichols,* the only case dealing with language minority student rights to be decided by the Supreme Court)(see Crawford, 1999, for details of these cases).

"Beginning with New Mexico in 1969, states began to pass laws encouraging instruction in languages other than English. In 1971, Massachusetts became the first to mandate bilingual education in school districts with enough LEP students to make it practical" (Crawford, 1999, p. 42). The demand for bilingual education also created a demand for teachers trained in this new field. The rapid growth of bilingual education was paralleled by a slow response by teacher preparation institutions. However, a number of events provided an impetus for change in teacher preparation.

Perhaps the first response to the need for teachers to be specially prepared to deal with language minority students was the Aspen Institute, held in the wake of the Lau decision. The purpose of the Institute was to "assess the state of the art in undergraduate teacher-training programs in bilingual/bicultural education" (Casso, 1976, p. 45). At this meeting, teacher educators discussed the knowledge and skills needed by bilingual teachers and the educational experiences that must be provided in teacher preparation programs to realize these skills. In 1973-1974, a number of states held their first statewide bilingual education conferences (Casso, 1976). That same year, the Center for Applied Linguistics published guidelines for the preparation and certification of teachers of bilingual education (see Casso, 1976, for a description of these guidelines).

Even with this activity, by 1976, only eleven states had instituted any of these special requirements to certify teachers for bilingual education programs (Waggoner, 1977).[2] It is not surprising then that attempts to define and implement such requirements continued. In 1984, the National Association of State Directors of Teacher Education and Certification developed a model of standards for bilingual and ESL teacher preparation programs. This effort was followed in 1989 by the National Association for Bilingual Education's call for and development of national standards for the preparation of bilingual/multicultural teachers (Fleischman et al, 1995).

Presently, thirty-one states and the District of Columbia have some form of bilingual education certification or endorsement (National Clearinghouse for Bilingual Education, 1997). We should point out that recognizing or offering bilingual certification does not necessarily mean that it is required by the state. For example, Idaho, Indiana, and Oklahoma recommend an endorsement or coursework in bilingual education but do not require it. Many other states require a bilingual certification or endorsement in theory. However, because of the shortage of specially prepared teachers, many bilingual classrooms are staffed by teachers without the endorsement. For example, in Texas there are nearly 2,000 non-bilingual-education-endorsed teachers working with limited English proficient

students (Fleischman et al, 1996). In Arizona, this number is 2,297 (Arizona Department of Education, 1999). This shortage is further illustrated in Arizona by the fact that the ratio of bilingual education students to teachers with a permanent bilingual endorsement is 44 to 1 in the elementary transitional bilingual education programs and 93 to 1 in the secondary programs.

Present Teacher Education Requirements and Processes

Present teaching requirements include, to varying degrees, many recommendations toward professionalization made in the 1980s by various reform entities. Teacher preparation programs provide coursework in professional education courses (e.g., teaching methods, curriculum development, child psychology, and philosophy of education). Additionally, most states require that future teachers have a broad background in the liberal arts and sciences. This general education requirement usually precedes the professional sequence and is carried out in conjunction with other academic departments, schools, or colleges within the university. Although it existed before, the requirement for a broad general education was given greater importance by the reform movement described above (Darling-Hammond, 1988). This is balanced by an increased emphasis on college-supervised field experiences. The emphasis on general education was not aimed at improving the preparation of bilingual education teachers alone; this reform was applied to teachers in all fields and at all levels.

In many states teacher education typically consists of a four-year baccalaureate degree program with approximately two years devoted to general education and two years to professional education.[3] However, this too can vary from state to state and from university to university. Following the movements of the previous decade, in some states and universities, a fifth year of study, usually in a post-baccalaureate program, is required in order to complete the teacher preparation program. After these programs of study are completed, teacher candidates can be granted their provisional teaching license by the state.

Typically a teacher candidate earns certification in a grade span, either elementary (Kindergarten through fifth or sixth grade) or secondary (sixth or seventh grade through twelfth grade). These grade spans include children from the ages of 5 to 13 and 13 to 18, respectively. It is possible and often desirable to be certified for both grade levels. At the secondary level, teachers are also certified in a subject-area specialization. While students in a preparation program share many of the same professional education courses, much of their coursework is also designed for the level of certification — elementary or secondary — being sought.

Each state varies in its prescription of requirements for teacher education, but all require that both general education and professional education coursework be completed. Some states specify coursework, and some even specify the number of credit hours to be completed in these courses. For example, in general education Arizona requires that elementary teacher candidates complete eighteen credit hours in a minor, eight credit hours in science, six in math, and nine in fine arts. Candidates must then also complete forty-five credit hours of professional education coursework in such areas as classroom management, educational foundations, and growing and learning theory.[4] There are similar credit hour requirements for secondary teacher candidates. In secondary education, however, there tends to be less professional education coursework so that candidates can devote more time to a major in their subject-area specialization. New York specifies that secondary candidates complete thirty-six credit hours in their specialization. Some states are not quite as specific and prescribe broad-ranging "competencies" or "outcomes" that teacher education programs should achieve with their students — Colorado, for example. Other states have some combination of minimally prescribed credit hours and competencies. New Mexico requires that candidates complete between twenty-four and thirty-six credit hours in professional education coursework such that they can demonstrate a number of specific competencies. It is the responsibility of the IHE to develop courses and a program of study that serves to develop these competencies (Midobuche, 1999).

Many states, as pointed out earlier, require that teachers working with limited English proficient students have special preparation in teaching English as a Second Language and/or Bilingual Education. In most cases, receiving this endorsement requires that teachers first obtain provisional certification to which this special endorsement is attached. This attachment or endorsement signifies a pedagogical knowledge base targeting particular levels, stages of development, or circumstances. Therefore, a person seeking the endorsement goes through the same procedures and testing and is subject to the same educational requirements for certification. The bilingual endorsement requires that coursework be completed in such areas as second language acquisition, materials and methods in bilingual education, and language assessment. Again, the specifics vary from state to state. Illinois requires eighteen credit hours in five areas, whereas New Mexico requires twenty-four credit hours in six areas.

Upon completion of the university program, the typical teacher candidate must apply to the state for licensure. This involves proving successful completion of a recognized preparation program and, often, taking one or more state-implemented

examinations. Forty-three states currently require such testing. According to the Educational Testing Service (1999), thirty-five states use *The Praxis Series: Professional Assessments for Beginning Teachers* (developed by ETS). These assessments are used to measure a variety of things, including basic skills such as reading, writing, mathematics, professional education knowledge, and subject-matter knowledge. Many states also require some measure of communication skills in English, including oral language proficiency. An endorsement or certification in bilingual education usually involves a target language proficiency exam as well. Of the seven states that are the focus of this monograph, only Colorado does not require a target language proficiency exam. California has exams in eleven different languages. In most of the other states, a target language exam is available only in Spanish. Target language proficiency in other languages must be demonstrated in another manner, for example through coursework or, in the case of Native American languages, by verification from a tribal leader.

In sum, nearly all teaching candidates in the United States must complete an approved professional education program — to include coursework in both the general liberal arts and professional education — and receive passing scores on the required exams before the state will consider them for licensure. The endorsement allowing a person to teach in a bilingual education classroom must often be earned over and above the right to teach monolingually. However, some SEAs (such as Texas and Arizona) recognize bilingual education as a major. In such cases, the bilingual education coursework is not in addition to the regular professional education coursework but is itself counted for that purpose.

Future Trends in Teacher Education

One trend in teacher education that will, it seems, continue to grow is the development of alternative certification routes. Presently, 41 states and the District of Columbia report having some type of alternative teacher certification program (Feistritzer, 1998b). With the continued funding of programs like "Troops to Teachers," designed to help ex-service men and women transition into teaching careers, alternative certification routes should continue to grow. In fact, in January of 1999, President Clinton asked Congress to continue funding for the Troops to Teachers program, initiated in 1994.[5]

The National Commission on Teaching and America's Future (NCTAF) foreshadows several other future trends in teacher education in its document "What Matters Most: Teaching for America's Future" (1996). The Commission points out that too many current teachers are underqualified not only in educational theory (e.g. child

development, learning, and teaching methods) but also, perhaps especially, in content area. Nearly a quarter of all secondary teachers do not have even a college minor in their main teaching field. If the Commission's recommendations are taken seriously, and many of them seem to be, we should see more and more states establishing professional standards boards. The testing trend which gained momentum speed in the 1980s should continue and may even gain momentum since the Commission recommends that teachers be licensed "based on demonstrated performance, including tests of subject matter knowledge, teaching knowledge, and teaching skill" (NCTAF, 1996).

Another trend, continuing from the recommendations in the 1980s, will be the development of "extended, graduate-level teacher preparation programs that provide a year-long internship in a professional development school" (NCTAF, 1996). As we have seen, such fifth-year, post-baccalaureate programs have already begun to make headway and are likely to increase. New York is presently developing new regulations to require that all teachers have a master's degree in education (New York State Education Department Office of Teaching, personal communication, May 1, 1999). This allows more time for completing a major in a subject taught in schools as well as for more in-depth and hands-on professional development. In relation to the former, it seems likely that more and more states will no longer accept "education" as a major, especially for secondary teachers, but increasingly, for elementary teachers as well. Some states already require elementary teachers to have at least a "minor" in a subject area.

A final important trend is National Board Certification. The National Board for Professional Teaching Standards is an organization of teachers and other education stakeholders working to advance the teaching profession and to improve student learning. The Board has developed a system of advanced standards and assessments by which applicants can acquire National Board Certification. National Board Certification is voluntary. It complements but does not replace state certification. The difference between state certification and National Board certification is that the former sets entry-level standards for novice teachers while the latter sets standards for more experienced teachers, sometimes regarded as "Master Teachers." More importantly perhaps is the fact that the National Board is a private, professional group, not a government entity.

While National Board Certification has been established, it is only just beginning to have an impact on teaching and schools. As it gains more attention, it is likely that more and more state education agencies, universities, and schools will encourage their teachers to obtain National Board Certification. In the future, it could become

a fundamental standard for merit pay and/or promotions, a criterion by which to grant certification reciprocity between states, and other professional incentives.

Section Summary

State Education Agencies (SEAs) carry out two major functions vis-à-vis teaching in the United States. First, they approve teacher education programs. Second, they confer licenses to graduates of these programs.

The present trend is to broaden the notion of a "teacher education program." In this vein, SEAs are approving more and more non-traditional teacher education programs. Traditionally programs have been situated in colleges or departments of education within universities. While the vast majority of teaching candidates are still enrolled in these programs, increasing numbers are going through alternative programs designed by school districts or other entities. Regardless of the program, candidates are, according to the SEAs, held to the same standards of preparation although SEAs generally give IHEs wide latitude in determining the coursework and content necessary to assure that their students meet the standards.

In their function of conferring licenses, SEAs make three general requirements. First, candidates for licensure must complete an approved teacher preparation program. Second, candidates must complete a broad general education in the liberal arts and sciences. Most SEAs identify subject areas that make up "a broad general education." Third, candidates must demonstrate their competency in both of these areas through a series of examinations.

All of the states that are the focus of this monograph recognize and confer a bilingual endorsement or certificate, usually the former. (We cannot predict at this point whether California will continue to do so in the wake of proposition 227 banning bilingual education.) All of the SEAs specify coursework to be completed for the bilingual endorsement. The credit hours range from a low of 12 in Texas to a high of 24 in New Mexico. Completion of the bilingual endorsement requirements may be possible within the time allotted for the regular teacher education program, as in Arizona. However, this is not always the case. Many states have moved from a four-year program of teacher preparation to a five-year plan. Their shift may continue as other states attempt to improve teacher education programs.

MEXICAN EDUCATION SYSTEM AND TEACHER PREPARATION

Introduction

Teacher training in Mexico has followed the French model since the 19th century. Future educators are prepared in special schools for teachers: normal schools. The academic requirements for entrance into the normal school, the number of years of study required, and the normal school curriculum have changed often. But one aspect that has remained consistent is the fact that since the creation of the public school system in Mexico, the programs of study have been decided by a central governmental agency, the *Secretaría de Educación Pública* (Secretary of Public Education). These programs of study are uniform and obligatory throughout the country, in public as well as private normal schools.

This section of the monograph is divided into four major parts. In the first part, we briefly review the historical development of the Mexican educational system, outline the basic principles that guide it, and sketch its present structure. This general overview is necessary in understanding the normal school system which has grown and expanded with the growth of the Mexican nation-state and its educational system generally.

In the second part of this section we sketch the structure of the normal school system and review its historical development. Here we treat separately the development of the elementary and secondary teacher preparation systems. The most important difference here is that the latter has always been part of the higher education system of Mexico; whereas the former, until 1984, was somewhat beyond a high school diploma (*bachillerato*) but inferior to a post-secondary degree, *licenciatura.*

In part three, we provide a more detailed look into the teacher preparation system. Here we provide descriptions of the development and content of specific teacher preparation curricula, which we refer to as programs of study. These programs of study have been revised numerous times throughout the years and we focus on the programs from 1975 to the present. It should be understood from the outset that these are national and obligatory programs of teacher preparation.

We also provide an overview of bilingual/bicultural teacher preparation, programs designed primarily for teachers working in schools in indigenous communities. This

last category may be loosely compared to bilingual education in the United States although differences abound.

Overview of the Mexican Educational System

History and Guiding Principles

Mexico began the arduous development of its educational system after achieving independence from Spain in 1821. Very few (primarily religious) schools remained from the colonial period. Elementary education was under the control of civil and ecclesiastical groups. Power struggles between liberals and conservatives, internal wars, the war with the United States, and war with the French, impeded educational progress until the liberals gained power in the second half of the 19th century. They pursued the ideal of national unity, secularization, and greater control by the state over education.

Public education as a state responsibility began to take form with the first *Ley Orgánica de la Instrucción Pública para el Distrito y Territorios Federales* passed in 1867. The first National Congress of Public Instruction then took place from December of 1889 through March of 1890. It was at this Congress that leaders in teaching reached agreement on the principles, structure, and the curricular characteristics that would guide the Mexican educational system throughout much of the 20th century. The basic principles that this group defined were:

- Public education should be secular, free from any religious doctrine.
- Public education should be free, including free textbooks for all elementary school children.
- Elementary education should be obligatory (beginning at six years of age) as well as a fundamental right protected by the state.
- Education is the fundamental means of achieving national unity and, therefore, must be uniform throughout the country.
- The state should determine the curriculum for all schools, both public and private.

These principles have remained inalienable and, in fact, are included in the Mexican Constitution. They have been refined and expanded over the years. The basic right to an education now includes a secondary education (obligatory to the age of 16). The guiding premises of education now also include scientific progress and the combating of ignorance and prejudice. Specific elements that have been added to the curriculum include principles of democracy, nationalism, justice, and peaceful coexistence.

In keeping with these ideals, a federal executive branch unit was established to ensure consideration of the opinions of all factions involved in educational endeavors. The federal government through the *Secretaría de Educación,* is responsible for the operation of all educational levels, supporting scientific and technological research, and strengthening national culture. The Constitution of Mexico stipulates that the Congress will pass laws necessary to distribute educational functions within itself, among the states and municipalities, adopt the education budget, and determine applicable sanctions for failure to carry out educational mandates (Constitución Política de los Estados Unidos de Mexicanos, 1997).

Direction and Structure of the Mexican Educational System

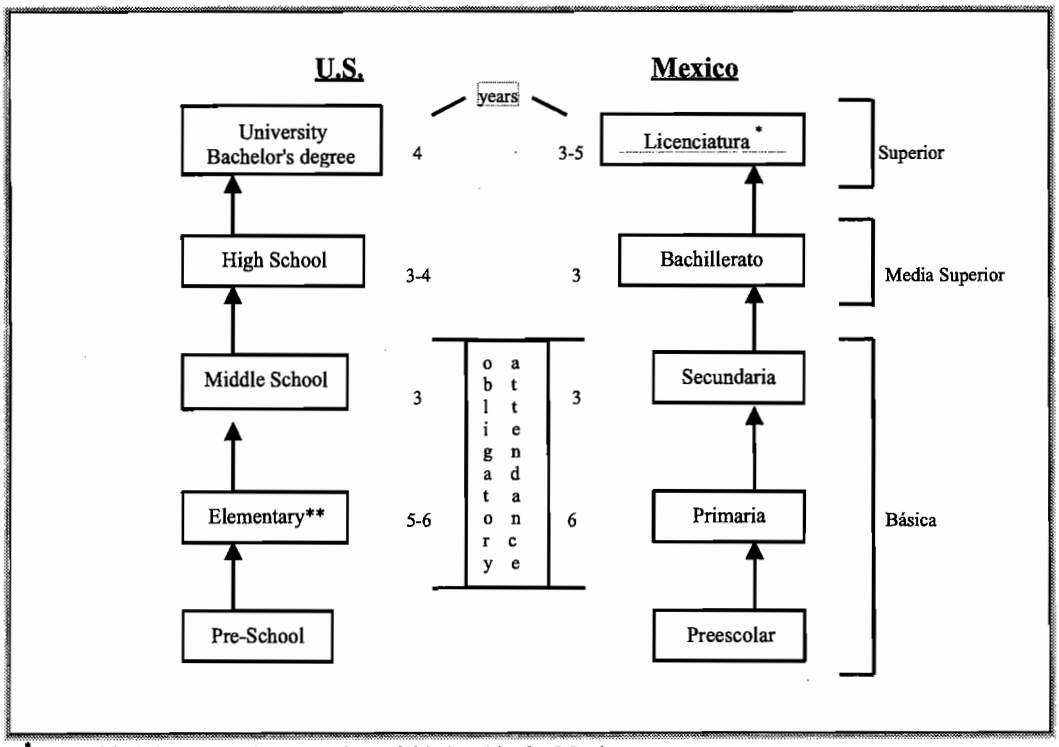
Until recently, the Mexican educational system was characterized by strong centralization that placed every aspect of education under the direction of the *Secretaría de Educación Pública.* This had advantages. An educational system principally sustained by the federal government was indispensable in reversing an illiteracy rate of 85 percent at the beginning of the 20th century. It was extremely useful in overcoming the administrative weakness of the states and in guaranteeing a common focus. Centralization enabled the educational system to cover 100 percent of the demand for elementary education (Zorrilla, 1998). Nevertheless, centralization also had major disadvantages. It created an enormous bureaucracy that, by applying uniform decisions nationwide, did not always meet the needs of every region or state.

In 1978 the *Secretaría de Educación Pública* was made less centralized by the creation of branches in each of the states. But it was not until 1992, with the Agreement on the Modernization of Basic Education *(Acuerdo de la Modernización de la Educación Básica y Normal)* that the educational system was decentralized to some degree, and became the concern of the individual states. However, the *Secretaría de Educación Pública* maintains the responsibility of standardizing education and promulgating the programs of study and curricula for elementary, secondary, and normal schools. It is also in charge of the educational budget and the distribution of financial resources earmarked for education.

The *Secretaría de Educación Pública* oversees all three levels of the Mexican educational system: elementary education *(educación básica),* middle education (*educación media*), and higher education *(educación superior).* In Table 1, this system is juxtaposed to the U.S. equivalent.

Table 1

Levels of U.S./Mexico Educational Systems



* See Table 2 for a complete overview of this level in the Mexican system.

**Includes one year of Kindergarten either half-day or full-day.

Basic education *(educación básica)* previously included preschool and elementary school. However, since 1993, it includes preschool, elementary school, and middle school. Attendance is mandatory from elementary school through middle school. Preschool is not required. In brief, the basic education level in Mexico consists of:

- Preschool *(preescolar)*. An educational program for children between the ages of three and five. Attendance is not mandatory but educational authorities promote attendance and nearly 88 percent of children attend preschool.
- Elementary school *(primaria)*. Consists of six grades. Attendance is mandatory.
- Middle/Jr. High school *(secundaria)*. Consists of three grades. Its principal goal is to prepare students for high school and/or for entry into the labor force. For the latter, there are vocational middle schools with a variety of programs to prepare student for specific types of work. For example, there are programs in auto mechanics, cooking, and drafting.

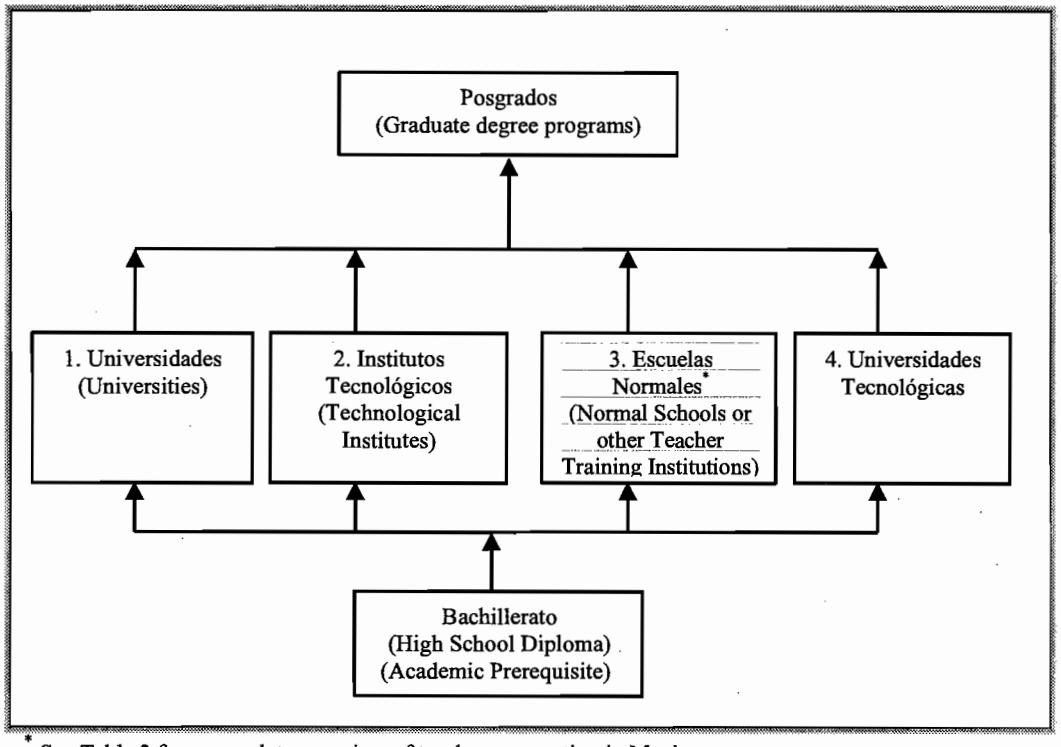
The second educational level consists of what is referred to as *educación media superior*. At this level, equivalent to high school in the U.S., students complete the *bachillerato*. The *bachillerato* is equivalent to a high school diploma and should not be confused with the U.S. bachelor's degree. The *bachillerato* consists of three years of schooling and is usually college preparatory in scope. However, there are also professional technical education programs *(educación profesional técnica)* which are on a parallel track to the regular *bachillerato* program. These are vocational programs that prepare students to enter the workforce in specialized areas. These, too, are three-year programs which include the requirements to receive the *bachillerato* as well as job training in specific areas, such as accounting.

The third educational level is the *superior,* which consists of educational programs beyond the high school diploma. Among these is a technical professional system similar in scope to the U.S. community college system. There is the *licenciatura* that is equivalent to the U.S. baccalaureate. These programs last four to five years. Normal Schools are within this level of education. As in the U.S., students must have a high school diploma (or equivalent) to enter either of these programs. However, it is important to note that a high school diploma has only been required since 1984 for entrance into elementary teacher preparation programs in Mexico. We provide further details in this area in subsequent sections.

Graduate degrees (and/or coursework) are also considered part of the superior level of education. As in the U.S., a bachelor's degree (*licenciatura*) or its equivalent is required for entry into graduate programs. Table 2 gives an overview of the superior level of education.

Table 2

Higher Education in Mexico



* See Table 3 for a complete overview of teacher preparation in Mexico.

1. Universidades are the most complete institutions. In addition to offering studies at the level of *licenciatura* in a number of areas, they have research centers and graduate programs. Undergraduate degree programs (licenciatura) typically take four to five years to complete. These institutions can be public or private. The translation to "university" is, for all intents and purposes, directly equivalent.

2. Institutos Tecnológicos are schools offering four-year degrees at the level of *licenciatura* but tend not to offer graduate programs. Their most prestigious majors are ones in technical areas (engineering, technology, and agriculture and farming) although there are exceptions and some of these institutes also offer degrees in social sciences. These are public institutions run by the Seceretaria de Educación Pública.

3. Escuelas Normales offer four-year degrees and are specifically dedicated to teacher preparation.

4. Universidades Tecnológicas are institutions that generally offer two-year degrees after the high school diploma. They are roughly equivalent in their depth and scope of studies to U.S. community colleges. These institutions are also public and run by the Secretaria de Educación Pública. Most majors are related to some aspect of engineering or technology.

The Mexican Teacher Preparation System

Structure and Institutions

The teacher preparation system is comprised of a number of distinct institutions dedicated to the formation of teachers in Mexico. The normal schools (escuelas normales) are the principal teacher preparation institutions. Consequently, we dedicate much space to their organization. However, it is important to note that normal schools are not the only teacher preparation institutions in Mexico and the preparation of teachers is beginning to diversify both in the type of program and to the institutions that offer them.

There are both private and public normal schools in Mexico, but the vast majority are public. Public normal schools include some that are supported by individual states and others financed by the federal government. While normal schools are considered to be part of a unitary system of higher education, the normal schools are separate from universities and are dedicated solely to teacher-training. The normal schools have programs for every level of teaching and are divided as such. Normal school programs exist to prepare teachers for the following:

- Educación preescolar — Kindergarten and preschool teaching
- Educación basica — Elementary teaching (grades 1 through 6)
- Educación secundaria — Secondary teaching (grades 7 through 9)[6]

There are also normal school programs for specializations, such as physical education, special education, and bilingual/bicultural education.

One of the most important institutions outside of the normal schools for teacher preparation is the *Universidad Pedagógica Nacional* (UPN). There are 75 campuses of the UPN in Mexico and 218 branch campuses. The UPN, founded in 1979, offers a number of different *licenciatura* programs in education, including Educational Administration, Psychology of Education, Pedagogy, Sociology of Education, Teaching French, as well as master's degrees in Educational Development and Pedagogy. The Ajusco campus offers a doctorate in education.

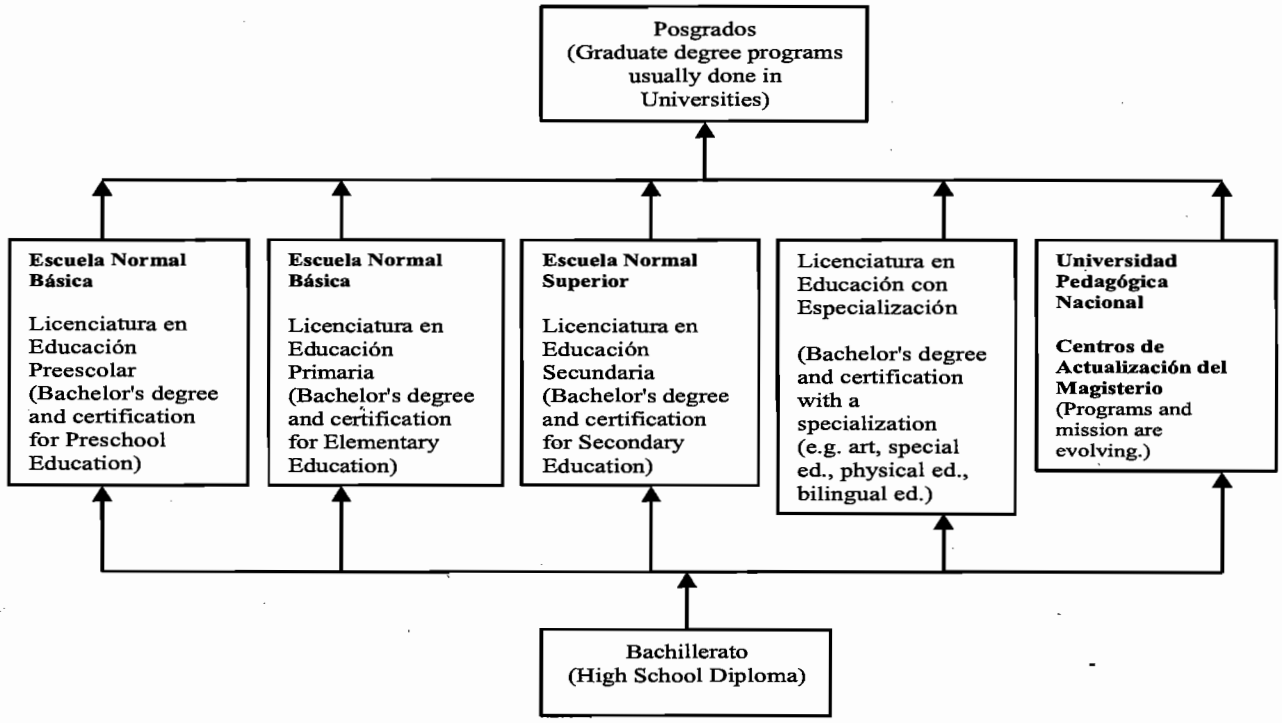
The prerequisite for entrance into the UPN is a current teaching credential. Thus, the UPN does not offer initial teacher preparation coursework. It offers coursework towards *nivelación*. This involves taking coursework to make one's credentials equivalent to later programs of study. For example, teachers who completed their training before 1984 do not hold a degree at the level of *licenciatura*. The *nivelación* coursework results in the "upgrading" of their degree. These programs are offered both through UPN-based coursework and distance-learning (Arnaut, 1998).

Another important institution is represented by the *Centros de Actualización del Magisterio* (CAM). The principal function of the CAM is to offer coursework toward the *actualización* or *capacitación* of in-service teachers. *Actualización* relates to coursework and other activities undertaken by in-service teachers to improve their teaching. These activities are not required in order for teachers to maintain their credentials, as is the case in many states in the U.S., but are taken into consideration for perquisites. *Capacitación* refers to coursework required of in-service teachers who do not yet have their teaching credentials, for example, those who began teaching in areas of high need. Another service that the CAM provides is *nivelación* in the form of a *licenciatura* for teachers in vocational high schools. Given that a decreasing number of teachers will be requiring *nivelación,* the future of CAM is ambiguous at best. In fact, the CAM system is already being replaced by *Centros de Maestros* (Teachers' Centers) dedicated to *actualización* and other activities designed to improve teaching. Some five hundred of these Centers will be operating throughout Mexico by the year 2000.

Table 3 gives an overview of teacher preparation institutions and the degrees offered.

Table 3

Teacher Preparation in Mexico



Although it is not earned at a university, the normal school degree, in all of its types and specializations, is considered to be at the level of higher education *(educación superior)*. That is to say, the degree is a *licenciatura*. As we have pointed out, this has only been the case since 1984 for elementary teacher education. Normal schools preparing secondary teachers *(escuela normal superior)* have always held this designation. The degree is, in either case, a professional degree rather than an academic one.

Historical Overview of the Growth of Teacher Preparation

A. Normal School for Elementary Teachers (Escuela Normal Básica)

As has been pointed out, until the first decades of the 19th century, basic education was a private concern. The incipient Mexican state, immersed in frequent economic and political crises, did not have the resources to attend properly to the creation of an education system. The solution was to introduce the Lancasterian system of education, which was also being used at the same time in many U.S. cities. This system consisted of an elaborate and detailed plan of instruction in which older and more advanced students taught small groups of younger students under the supervision of a senior teacher. This system, if properly implemented, could allow a single teacher to operate a school with as many as five hundred children. As Kaestle (1983, p. 41) points out in regard to the Lancasterian system in the U.S., "Lancaster's ideas were not profound, but they were timely. His system was cheap, efficient, and easy to implement. In an age when the number of poor children was increasing and there was generally no state support for elementary schooling, the Lancasterian system gave voluntary societies the tool they needed to expand their activities." The system was embraced by the Mexican government for the same reasons (Curiel, 1982).

A number of legal reforms were initiated with a change in government in the middle of the 19th century. In regard to education, the reforms were enacted to create a public education system that was secular, mandatory, and free. By the end of the 19th century, normal schools had been founded throughout the country based on these ideals. In time, the Lancasterian model was replaced with the French model, which, with the newest pedagogical advances of the time, was applied in teacher preparation programs.[7] In 1887, the *Escuela Normal para Profesores* (Normal School for Teachers) — later renamed the *Escuela Nacional de Maestros* (National School for Teachers) — was founded and became the most prestigious institution for teacher-training.

In 1921, in order to respond to the challenge of providing universal and free education to the entire country, the population of which was predominantly rural and illiterate, the *Secretaría de Educación Pública* was created. The *Secretaría de Educación Pública* established, in addition to regular education programs, numerous cultural missions to create rural schools in the most remote sections of the country. Teacher recruitment for these schools gave priority to members of the local community who, for the most part, had only completed an elementary school education of four years. These persons took charge of the schools upon completion of a brief training program within the cultural mission (Arnaut, 1998). In those communities where it was not possible to find people capable of taking charge of a classroom, older children who had just completed elementary school became "teachers" of the younger ones sometimes with little or no supervision.

It soon became evident that more professionally prepared teachers were needed. Therefore, new schools dedicated to teacher preparation were instituted, such as rural normal schools in 1922 and the National School for Teachers in 1925. Within these new institutions, profound reform took place in the preparation of and requirements for teachers. Specifically, teacher-training was expanded to include (and require) three years of secondary (middle school) education and three years of teacher preparation.

Just as industrial advances and urbanization were taking place in Mexico, the normal schools were experiencing significant changes in their programs of study. Coursework in the social sciences and pedagogical training was strengthened and less weight was placed on ideology and politics than had been the case in the 1930s and 1940s, a period characterized by a strong socialist educational agenda. This is not to say that the normal schools abandoned the commitment to social issues that had become a distinctive trait among them. Nonetheless, in 1945, new programs of study were applied uniformly in all normal schools. These programs, which maintained the requirement of three years of secondary education and three years of professional preparation, were in effect for the next fifteen years.

During the 1960s and 1970s, Mexico experienced dynamic population growth and a resulting expansion in preschool, elementary, and secondary education. Consequently, the various types of normal schools multiplied and schools were specifically created for the preparation of kindergarten, special education, and physical education teachers. Even so, the existing normal school system could not meet the demand for teachers and many private schools sprang up.

One of the most important reforms to normal school education during this period was the preparation and distribution of free textbooks. The goal of universal elementary education and literacy was still a long way off in 1959. The publishing industry did not have the capacity to prepare the millions of books needed and families were too poor to purchase books at market price. As part of the *Plan Nacional para el Mejoramiento y la Expansión de la Educación Primaria* (National Plan for the Improvement and Expansion of Elementary Education), a national commission for free textbooks was established to prepare textbooks for every elementary student in the country, in public as well as private schools.

The publication and distribution of free texts continues to this day. In 1998, 147 million free texts were distributed (Secretaría de Educación Pública, 1998). This reform has had a great impact on elementary teacher education since the contents of the textbooks are used as a base in teacher preparation coursework. Thus, when the textbooks were modified in 1972 and 1992, parallel modifications occurred in the normal school curricula. This reform also had a significant impact on elementary education generally by ensuring that all children, including the very poor, had the same materials.

In 1969, the programs of study for normal schools were once again restructured. Professional teacher preparation coursework was extended to a fourth year and a *secundaria* education was made a prerequisite for entry. Prior to this, the *secundaria* was completed in the normal school and occurred concurrently with teacher preparation.

Despite the fact that elementary school populations continued to grow at an accelerated pace until 1982, the number of normal schools in operation created an overabundance of teachers. Therefore, normal school programs were reformed again in 1984, requiring a high school diploma for entry and elevating the normal school degree to the level of *licenciatura* (Secretaría de Educación Pública, 1997).

B. Normal School for Secondary Teachers (Escuela Normal Superior)

In 1936, the Institute of Preparation for Secondary Teachers *(Instituto de Preparación para Profesores de Enseñanza Secundaria)* was created. It included a program of study for nine different content areas and a course on pedagogy was required regardless of specialization. The Institute carried a number of names over the years until its official function was passed into law in 1942. At that time it was renamed the *Escuela Normal Superior.* Since then, its programs of study have been extended to four years (from six semesters previously) and new programs have been added, including intensive summer and winter programs for teachers in states

outside the capital. The academic requirement for entry was either completion of an elementary teacher education program *(Escuela Normal Básica)* or a high school diploma *(bachillerato)*. The latter required an additional year of professional education coursework before entry into the *Escuela Normal Superior*. The programs of study were organized by specialization, i.e. the content area to be taught in the secondary school.

In 1959, the *Escuela Normal Superior* was restructured. The number of possible subject-areas of specialization was increased to thirteen and two subject areas — psychology and pedagogy — were added as requirements for normal school graduation. New programs of study were put into effect that same year.

In the 1960s and 1970s, the accelerated growth in the demand for secondary education, made more severe with the creation of vocational schools, caused a number of problems. First, the quality of education received in the *Escuela Normal Superior* began to decline due to a shortage of teachers. The courses lost the academic rigor for which they had been known. Second, the number of normal schools increased, especially private ones that did not follow the traditional models. This led to a heterogeneity that may have had a negative impact on educational quality at a time when there was great demand for better prepared teachers. Arnault suggests that the *Escuela Normal Superior* was offering a "mediocre" education at this time and that it had thus "dodged its most important objectives" by offering programs of study that were "caducous" (1998, p. 165).

The *Secretaría de Educación Pública* enacted various measures to reverse the erratic development of these new normal schools. It created a National Council of Normal Schools *(Consejo Nacional de Educación Normal)* charged with the study of the teacher preparation system and proposing changes to resolve the many problems that the system was facing. The Council met with leaders from each state in Mexico to create a plan to control normal school enrollment so that it more closely paralleled the need for teachers in the labor force and to exercise more control generally over the normal school system. This increased control resulted in a modification of the programs of study for normal schools.

The programs of study for the secondary normal schools were modified again in 1983 and now include seven areas of specialization. In 1983 another important reform towards the decentralization of the normal school system occurred: Intensive summer sessions were now offered at four normal school campuses in different states. This change was planned by the *Secretaría de Educación Pública* to reduce the concentration of power in teacher preparation of the *Escuela Normal Superior de Mexico* in the federal district (Arnaut, 1998).[8]

Specific Programs of Study for Teacher Preparation in Normal Schools

General Characteristics

Since the government, specifically the *Secretaría de Educación Pública,* controls and organizes all educational programming in Mexico, there is a national curriculum not only at the elementary and secondary educational levels but also in teacher education. Thus, normal school preparation programs are standardized throughout the country and each level of teacher preparation (elementary or secondary) has its own curriculum. For secondary teacher preparation, there is a separate curriculum for each subject area taught in schools. The normal school curricula specify the coursework and the credit hours to be completed in each course.

The programs of study that have been developed for the various educational levels in Mexico — be they elementary and secondary education or higher education — have been extensive and most are quite rigorous. They include coursework that typically requires more than thirty hours of class attendance per week. Some of the programs of technical schools require up to forty-six hours of class time per week.

In addition to the above, the programs of normal schools have two other characteristics worthy of note:

1) They have always included many hours of supervised field experience. This experience is so important that many normal schools operate elementary schools to provide field experience sites for their student teachers. Other normal schools "adopt" a nearby elementary school for this purpose.

2) In addition to the methods courses expected of teacher preparation programs, normal schools provide a thorough foundation in the content areas of the teaching levels for which students are seeking licensure. To help to ensure this, normal schools have provided free textbooks to their students since 1959.

Since 1887, fourteen programs of study for elementary teacher preparation have been implemented (Consejo Nacional Técnico de la Educación, 1984). Some of these have been very short-lived. During certain periods, radical transformation both in content and materials took place. Appendix 2 provides a general overview of these changes from 1887 to the present. In the following pages, we provide a detailed presentation of the programs of study from 1975 to date. Specifically presented are the following six programs of study:

- Elementary Teacher Education, 1975
- Elementary Teacher Education, 1975 restructured

- Elementary Teacher Education, 1984
- Elementary Teacher Education, 1997
- Secondary Teacher Education, 1976
- Secondary Teacher Education, 1984

Specific description of the coursework for the elementary programs is provided in Appendix 3.

Programs of study for Elementary Teacher Education

A. Program of Study for Elementary Teacher Education, 1975

In the early 1970s, the government of President Luis Echeverría instituted a reform plan to make elementary education more formative than informative and to base it on the principles of active schooling. In other words, the goal was to develop skills, abilities, and positive attitudes toward the learning process in children rather than simply ensuring their mastery of specific content. The new structure for elementary education consisted of seven areas of study: Spanish, mathematics, natural sciences, social sciences, physical education, art education, technology education (Meneses, 1991).

An outcome of this initiative was that between 1971 and 1973 textbooks were published for each elementary grade. Both teachers and recognized experts in each subject helped to develop the new texts. Each text had a companion teacher's edition with recommendations on how to present the material and activities. In 1973, all in-service teachers, approximately 500,000, began using the new texts. Given these substantive changes in the elementary curriculum, in 1975 changes were made to the program of study for elementary teacher education. The program was developed with the goal of creating a cogent relationship between the new curriculum and teacher preparation. It included a thorough knowledge of the subject areas to be taught, teaching techniques, and familiarity with the texts and other materials developed for the new curriculum.

The resulting Program of Study for Elementary Teacher Education, 1975, was divided into three areas of study (Consejo Nacional Técnico de la Educación, 1984):

- Science and Humanities, consisting of languages, sciences (natural and social sciences), and their methodology;
- Physical, artistic, and technological training, consisting of theory and practice in each area;
- Specific professional training, consisting of the training necessary for teachers to design and implement effective instruction in the elementary grades.

Included within the first two areas are the following:

- Instruction in science in proportion and quality equivalent to that encountered in the bachillerato (high school);
- Knowledge of the programs and textbooks used in elementary education;
- Knowledge of pedagogy and methodology necessary to facilitate learning in each of the subject areas included in elementary education.

This program integrated subject matter and pedagogical knowledge — giving equal proportion to the areas mentioned — and closely followed the contents of the textbooks issued in 1973. The teacher-training program consisted of eight, eighteen week semesters. Students attended approximately thirty hours of class every week. Field experiences were required throughout the first six semesters, including intensive experiences for the last two weeks of each semester. The final two semesters consisted of student teaching, typically from twenty-two to thirty hours a week. Finally, under the direction of their cooperating teacher, each student had to prepare a portfolio of their last two semesters of student teaching.

This program of study for teacher preparation was first implemented in the 1975-1976 school year and was applied throughout the normal school system (for elementary certification). At this time, completion of *secundaria* (junior high school) was sufficient to be able to attend a normal school. After four years of teacher preparation in the normal school, the nineteen or twenty-year old graduates began their teaching careers. This was possible due to the fact that at that time the normal school education consisted of not only teacher certification but also the equivalent of a high school diploma *(bachillerato)*. Graduates were awarded the title of *profesor de educación primaria* and a high school diploma. But this did not resolve the disparity in knowledge and prestige between them and university graduates. It did, however, provide the opportunity for these teachers to pursue higher degrees (i.e., at the level of *licenciatura*).

1975 PROGRAM OF STUDY FOR ELEMENTARY TEACHER PREPARATION*									
FIRST SEMESTER:									
Math & its Didactics, I	Spanish & its Didactics, I	Social Sciences & its Didactics, I	Natural Sciences & its Didactics, I	Art Education & its Didactics, I	Physical Education & its Didactics, I	Technological Education & its Didactics, I	Psychology, I	Philosophy, I	Weekly Contact Hrs.
4 hrs.	4 hrs.	4 hrs.	4 hrs.	2 hrs.	2 hrs.	2 hrs.	4 hrs.	4 hrs.	30 hrs.
SECOND SEMESTER:									
Math & its Didactics, II	Spanish & its Didactics, II	Social Sciences & its Didactics, II	Natural Sciences & its Didactics, II	Art Education & its Didactics, II	Physical Education & its Didactics, II	Technological Education & its Didactics, II	Psychology, II	Philosophy of Education	Weekly Contact Hrs.
4 hrs.	4 hrs.	4 hrs.	4 hrs.	2 hrs.	2 hrs.	2 hrs.	4 hrs.	4 hrs.	30 hrs.
THIRD SEMESTER:									
Math & its Didactics, III	Spanish & its Didactics, III	Social Sciences & its Didactics, III	Natural Sciences & its Didactics, III	Art Education & its Didactics, III	Physical Education & its Didactics, III	Technological Education & its Didactics, III	Psychology, III	History of Education, I	Weekly Contact Hrs.
4 hrs.	4 hrs.	4 hrs.	4 hrs.	2 hrs.	2 hrs.	2 hrs.	4 hrs.	4 hrs.	30 hrs.
FOURTH SEMESTER:									
Math & its Didactics, IV	Spanish & its Didactics, IV	Social Sciences & its Didactics, IV	Natural Sciences & its Didactics, IV	Art Education & its Didactics, IV	Physical Education & its Didactics, IV	Technological Education & its Didactics, IV	Psychology, IV	History of Education, II	Weekly Contact Hrs.
4 hrs.	4 hrs.	4 hrs.	4 hrs.	2 hrs.	2 hrs.	2 hrs.	4 hrs.	4 hrs.	30 hrs.

1975 PROGRAM OF STUDY FOR ELEMENTARY TEACHER PREPARATION*, cont.									
FIFTH SEMESTER:									
Math & its Didactics, V	Spanish & its Didactics, V	Social Sciences & its Didactics, V	Natural Sciences & its Didactics, V	Art Education & its Didactics, V	Physical Education & its Didactics, V	Technological Educ. & its Didactics, V	Educational Technology, I	History of Education, III	Weekly Contact Hrs.
4 hrs.	4 hrs.	4 hrs.	4 hrs.	2 hrs.	2 hrs.	2 hrs.	4 hrs.	4 hrs.	30 hrs.
SIXTH SEMESTER:									
Math & its Didactics, VI	Spanish Methods, VI	Social Sciences & its Didactics, VI	Natural Sciences & its Didactics, VI	Art Edcuation & its Didactics, VI	Physical Education & its Didactics, VI	Technological Educ. & its Didactics, VI	Educational Technology, II	History of Education, IV	Weekly Contact Hrs.
4 hrs.	4 hrs.	4 hrs.	4 hrs.	2 hrs.	2 hrs.	2 hrs.	4 hrs.	4 hrs.	30 hrs.
SEVENTH SEMESTER:									
Math Teaching Practicum, I	Spanish Teaching Practicum, I	Social Sciences Teaching Practicum, I	Natural Sciences Teaching Practicum, I	Art Education Teaching Practicum, I	Physical Education Teaching Practicum, I	Technology for Education Teacher Practicum, I	Administration & Legislation of Education, I	Social & Economic Problems of Mexico	Weekly Contact Hrs.
4 hrs.	4 hrs.	4 hrs.	4 hrs.	2 hrs.	2 hrs.	2 hrs.	4 hrs.	4 hrs.	30 hrs.
EIGHTH SEMESTER:									
Math Teaching Practicum, II	Spanish Teaching Practicum, II	Social Sciences Teaching Practicum, II	Natural Sciences Teaching Practicum, II	Art Edcuation Teaching Practicum, II	Physical Education Teaching Practicum, II	Technology for Education Teacher Practicum,, II	Administration & Legislation of Education, , II	Community Development	Weekly Contact Hrs.
4 hrs.	4 hrs.	4 hrs.	4 hrs.	2 hrs.	2 hrs.	2 hrs.	4 hrs.	4 hrs.	30 hrs.
*See Appendix 3 for descriptions of coursework.									

B. Program of Study for Elementary Teacher Education, 1975 restructured

In the six-year period from 1976 to 1982 the various programs of study for pre-school, elementary, and specialized (physical education, special education, etc.) teacher preparation were once again modified. In 1978 the new program for elementary teacher preparation, known as the "Program of 1975 Restructured," was implemented (Consejo Nacional Técnico de la Educación, 1978).

1975 PROGRAM OF STUDY FOR ELEMENTARY TEACHER PREPARATION(RESTRUCTURED)*											
FIRST SEMESTER:											
Mathematics, I	Spanish, I	Natural Sciences, I	Social Science, I	Art Edu., I	Physical Education, I	Technological Education, I	Psychology, I	Philosophy, I	General Pedagogy	English, I	Weekly Contact Hrs.
3 hrs.	3 hrs.	3 hrs.	3 hrs.	4 hrs.	2 hrs.	2 hrs.	3 hrs.	3 hrs.	4 hrs.	2 hrs.	32 hrs.
SECOND SEMESTER:											
Mathematics, II	Spanish, II	Natural Sciences, II	Social Science, II	Art Edu., II	Physical Education, II	Technological Education, II	Psychology, II	Philosophy, II	General Didactics	English, II	Weekly Contact Hrs.
3 hrs.	3 hrs.	3 hrs.	3 hrs.	4 hrs.	2 hrs.	2 hrs.	3 hrs.	3 hrs.	4 hrs.	2 hrs.	32 hrs.
THIRD SEMESTER:											
Mathematics, III	Spanish, III	Natural Sciences, III	Social Science, III	Art Edu., III	Physical Education, III	Technological Education, III	Psychology, III	Philosophy, III	Special Didactics & Practicum, I		Weekly Contact Hrs.
3 hrs.	3 hrs.	3 hrs.	3 hrs.	4 hrs.	2 hrs.	2 hrs.	3 hrs.	3 hrs.	6 hrs.		32 hrs.
FOURTH SEMESTER:											
Mathematics, IV	Spanish, IV	Natural Sciences, IV	Social Science, IV	Art Edu., IV	Physical Education, IV	Technological Education, IV	Psychology, IV	Philosophy, IV	Special Didactics & Practicum, II		Weekly Contact Hrs.
3 hrs.	3 hrs.	3 hrs.	3 hrs.	4 hrs.	2 hrs.	2 hrs.	3 hrs.	3 hrs.	6 hrs.		32 hrs.

1975 PROGRAM OF STUDY FOR ELEMENTARY TEACHER PREPARATION(RESTRUCTURED)*, cont.										
FIFTH SEMESTER:										
Mathematics, V	Spanish, V	Natural Sciences, V	Social Science, V	Art Edu., V	Physical Education, V	Technological Education, V	Educational Technology, I	History of Education, I	Special Didactics & Practicum, III	Weekly Contact Hrs.
3 hrs.	3 hrs.	3 hrs.	3 hrs.	4 hrs.	2 hrs.	2 hrs.	3 hrs.	3 hrs.	6 hrs.	32 hrs.
SIXTH SEMESTER:										
Mathematics, IV	Spanish, IV	Natural Sciences, IV	Social Science, IV	Art Edu., IV	Physical Education, IV	Technological Education, IV	Educational Technology, II	History of Education, II	Special Didactics & Practicum, III	Weekly Contact Hrs.
3 hrs.	3 hrs.	3 hrs.	3 hrs.	4 hrs.	2 hrs.	2 hrs.	3 hrs.	3 hrs.	6 hrs.	32 hrs.
SEVENTH SEMESTER:										
Sem: Program Analysis, Elementary Textbooks and Teacher Guides, I			Elaboration of the thesis, I	Sem: Administration & Legislation of Education, I		Sem: Social & Economic Problems of Mexico, I		Community Development, I	Special Didactics & Practicum, V	Weekly Contact Hrs.
4 hrs.			2 hrs.	4 hrs.		4 hrs.		4 hrs.	12 hrs.	32 hrs.
EIGHTH SEMESTER:										
Sem: Program Analysis, Elementary Textbooks and Teacher Guides, II			Elaboration of the thesis, II	Sem: Organization of Extracurricular Education		Sem: Social & Economic Problems of Mexico, II		Community Development, II	Special Didactics & Practicum, VI	Weekly Contact Hrs.
4 hrs.			4 hrs.	4 hrs.		4 hrs.		4 hrs.	10 hrs.	30 hrs.
* See Appendix 3 for descriptions of coursework										

The changes in the restructured program included the addition of a number of required courses — including philosophy of education, pedagogy, methods, and program analysis — and an increase in the hours of class to be completed. The subject matter necessary to complete the *bachillerato* was continued under this program. However, the study of the principles of teaching the subject matter was made separate from the study of the subject itself. This change served two purposes. First, it allowed students to study the subject matter at the level required for the *bachillerato.* Second, it allowed them to concentrate in their methods courses on the subject matter level that they would actually encounter in the field.

As in the Program of 1975, this new program was developed by defining the general objectives to be achieved in each course as well as the particulars of the units they incorporated. The idea was that the program would be a flexible guide that would permit normal school professors to determine, according to their experiences and the demands of their particular situations, the specific objectives, methods, evaluation techniques, and methodologies that best fit.

The program in the restructured program of 1975 consisted of eight semesters. The first seven semesters had thirty-two hours of class per week and the last semester thirty. Upon completion of the program, students received the title of *Profesor en Educación Primaria* and completed the equivalent of the *bachillerato.* The program of 1975, as restructured, was implemented first in the fall of 1978 and continued until 1983.

C. Program of Study for Elementary Teacher Education, 1984

The accelerated growth in the demand for educational services in K-12 education in the 1970s resulted in the need to prepare greater numbers of teachers. It also motivated the opening of a number of private normal schools. Because of this, toward the beginning of the 1980s, the need for teachers began to decline, giving rise to a teacher surplus, especially in urban areas (Secretaría de Educación Pública, 1997). Of the 40,000 elementary education teachers graduated in 1982-1983, only 19,000 could be employed (Arnaut, 1998). In order to deal with the disproportion between the number of teaching graduates and the demand for them, the *Secretaría de Educación Pública* began another restructuring of the teacher preparation system. This change made it possible to integrate normal school studies into the nation's core system of higher education.

By the Presidential Accord of March 22, 1984, normal schools were recognized as part of the *licenciatura* academic level. This designation placed the normal schools on equal academic footing with other institutions of higher education. This also meant that the *bachillerato* became a prerequisite to entry into the normal schools (Zapata, 1993). In a period of some ten years, the requirement for

admission to the normal schools had increased from a middle school education to a high school diploma.

The goal of the 1984 reform of elementary teacher education programs was to reinforce the professional and general education of future teachers and to incorporate research and publication activities. It placed greater emphasis on theory, especially on psychopedagogy,[9] and resulted in fewer hours of field experience. The reform also included a number of objectives in teacher preparation covered in two broad areas: core requirements for all degrees in education and requirements specific to the grade level(s) to be taught (Secretaría de Educación Pública, 1984).

The 1984 core requirements consisted of some thirty-six courses in three general areas:

1. Social Foundations. The coursework in this area was designed to reinforce an understanding of the historical processes — including economic, political, social, cultural, legal, philosophical, ideological, moral, and educational processes — of Mexico in order to facilitate analysis and reflection on present-day Mexico and the world. The goal of such foundations was to promote responsible attitudes vis-à-vis social problems among educators.

2. Pedagogy. The objective of the coursework was to develop a critical and scientific consciousness of the educational process as a social phenomenon as well as pedagogy in terms of reflection on theory, methodology, and strategies in the teaching process with the goal of connecting theory and praxis.

3. Psychology. This coursework reflected the perceived need for knowing the theory of psychology in order to understand the learning process. This included the process of socialization in the family and school, aspects of child development and psychology, and the effects of outside forces (e.g. the socio-cultural milieu of children) on learning.

These three general areas were supplemented by additional coursework in mathematics, statistics, and educational theory.

Coursework specific to the grade level to be taught consisted of twenty-seven courses. The goal of this coursework was to provide an understanding of aspects of organizational structure and administration as well as knowledge of the curriculum to be used at the elementary level. It also included two courses devoted to the study of the characteristics, needs, and resources of the region in which the teacher expected to work, which was typically the region in which the normal school was located.

1984 PROGRAM OF STUDY FOR ELEMENTARY TEACHER PREPARATION*								
FIRST SEMESTER:								
Seminar: Socio-Economic & Political Development of Mexico, I	Mathematics	Educational Theories, I	Developmental Psychology, I	Spanish, I	Observation of Teaching Practice, I	Health Education, I	Artistic Expression, I	Weekly Contact Hrs.
4 hrs.	3 hrs.	4 hrs.	4 hrs.	4 hrs.	3 hrs.	4 hrs.	4 hrs.	30 hrs.
SECOND SEMESTER:								
Seminar: Socio-Economic & Political Development of Mexico, II	Statistics	Educational Theories, II	Developmental Psychology, II	Spanish, II	Observation of Teaching Practice, II	Health Education, II	Artistic Expression, II	Weekly Contact Hrs.
4 hrs.	4 hrs.	4 hrs.	4 hrs.	4 hrs.	3 hrs.	3 hrs.	4 hrs.	30 hrs.
THIRD SEMESTER:								
Economic, Political & Social Problems of Mexico, I	Educational Research, I	Technological Education, I	Developmental Psychology, III	Children's Literature	Introduction to Teaching	Physical Education, I	Artistic Expression, III	Weekly Contact Hrs.
3 hrs.	4 hrs.	4 hrs.	4 hrs.	4 hrs.	3 hrs.	4 hrs.	4 hrs.	30 hrs.
FOURTH SEMESTER:								
Economic, Political & Social Problems of Mexico, II	Educational Research, II	Technological Education, II	Psychology of Learning	Elementary School Curriculum I	Teaching Practicum, I	Physical Education, II	Scientific Development & Creativity	Weekly Contact Hrs.
3 hrs.	4 hrs.	4 hrs.	4 hrs.	4 hrs.	4 hrs.	4 hrs.	3 hrs.	30 hrs.

1984 PROGRAM OF STUDY FOR ELEMENTARY TEACHER PREPARATION*, cont.

FIFTH SEMESTER:

The Mexican State & the National Education System	Education Planning	Social Psychology	Educational Computation & Technology	Elementary School Curriculum II	Teaching Practicum, II	Educational Technology, II	Weekly Contact Hrs.
3 hrs.	3 hrs.	4 hrs.	4 hrs.	6 hrs.	5 hrs.	4 hrs.	29 hrs.

SIXTH SEMESTER:

Sociology of Education	Curricular Design	Education Psychology, II	Elementary School Curriculum, III	Teaching Practicum, III	Educational Technology, II	Weekly Contact Hrs.
4 hrs.	4 hrs.	4 hrs.	6 hrs.	6 hrs.	4 hrs.	28 hrs.

SEVENTH SEMESTER:

Community Development	Education Evaluation	Learning Problems	Seminar: Pedagogical Comparisons	Elementary School Curriculum, IV	Teaching Lab, IV	Diferencial, I	Weekly Contact Hrs.
4 hrs.	5 hrs.	3 hrs.	3 hrs.	6 hrs.	6 hrs.	4 hrs.	31 hrs.

EIGHTH SEMESTER:

National Identify & Values	Perspective of Educational Policy	Sem: Contributions of Mexican Education to Pedagogy	Sem: Contemporary Educational Models	Elementary School Curriculum, V	Teaching Lab, V	Sem: Educational Administration	Sem: Social Responsibility of Professional Educators	Sem: Adm. of Elementary Education	Elaboration of the thesis	Diferencial, II	Weekly Contact Hrs.
2 hrs.	2 hrs.	2 hrs.	2 hrs.	3 hrs.	6 hrs.	3 hrs.	2 hrs.	2 hrs.	2 hrs.	4 hrs.	30 hrs.

*See Appendix 3 for descriptions of coursework.

Along with this new program of study, the *Secretaría de Educación Pública* established special academic programs for teachers who had graduated under previous programs. In these programs of *nivelación,* teachers could upgrade their credentials and receive a *licenciatura*. It is important to point out that these reforms — the new program of study and the high school diploma requirement — were preceded in 1978 by a general push to upgrade elementary teachers' degrees to a *bachillerato* (Zapata, 1993).

D. Program of Study for Elementary Teacher Education, 1997

The elevation of the elementary normal school degree to *licenciatura* was still having effects nearly a decade later. For one, enrollment in elementary teacher preparation programs declined drastically. This may have been due, in part, to the normal school education having lost its attraction as a short program offering the possibility of a respectable career. Enrollment decreased from 72,100 in 1984 to 26,500 in 1990. By 1995, it had stabilized somewhat at 48,700 (Secretaría de Educación Pública, 1997). This had a significant positive effect on the supply and demand of teachers, albeit not consistently throughout the country. Furthermore, it reinforced the ideal that people became teachers out of desire and interest, not just to enter quickly into a career.

Every reform lent greater prestige to the normal school degree and to the profession of teaching. However, the program of study that was implemented at the same time put greater emphasis on theory and less on field experiences and teaching, which had always been the central focus of normal schools. This fact, added to a decision in 1993 to redesign the elementary school curriculum and textbooks, necessitated further changes in the normal school program of study.

The new program of study, put in force since 1997, is directly linked to the contents in the plan of elementary studies and textbooks developed in 1993. As with prior programs, this one has eight, eighteen-week semesters. It is divided into three principal types of preparation which complement each other:

a) Scholarly activities and coursework in the normal school. This area is made up of 35 classes carried out during 6 semesters.
b) Introduction to teaching via field experiences. This is carried out during the first six semesters and increase from six to eight hours per week by the last semester. These field experiences are designed to connect theory to praxis by combining them with seminars to reflect on activities in the schools and classrooms.
c) Student teaching. The last two semesters are dedicated almost entirely to student teaching. Each student teacher is in charge of an elementary classroom and

is under the supervision of a master teacher as well as professors from the normal school.

During student teaching, the students participate in a seminar in which they analyze and evaluate their experience and plan future activities. In this seminar they prepare their *documento recepcional,* which is similar to a thesis requirement in the U.S. During this time, the students receive subsidies (e.g. for travel and meal expenses) to enable them to complete a social service requirement, required for all higher education degrees in Mexico. This is volunteer service to contribute to the betterment of a community in some form. For normal school students, the satisfactory completion of student teaching fulfills this requirement.

For this new program of study, The *Secretaría de Educación Pública* developed books and other specific materials for teachers and students for each of the required normal school classes, as well as a series of required readings.

1997 PROGRAM OF STUDY FOR ELEMENTARY TEACHER PREPARATION*							
FIRST SEMESTER:							
Philiosophical, Legal & Organizational Foundations of the Mexican Educ. System	Problems and Policies in Basic Education		Content & Purpose of Elementary Education	Child Develop-ment, I	Communica-tion & Study Strategies, I	Social & School Context	Weekly Contact Hrs.
4 hrs.	6 hrs.		4 hrs.	6 hrs.	6 hrs.	6 hrs.	32 hrs.
SECOND SEMESTER:							
Education in the Historical Develop-ment of Mexico, I	Mathe-matics & its Teaching, I	Spanish Methods, I	Child Develop-ment, II	Communication & Study Strategies, II		Introduction to the Teaching Profession	Weekly Contact Hrs.
4 hrs.	6 hrs.	8 hrs.	6 hrs.	2 hrs.		6 hrs.	32 hrs.
THIRD SEMESTER:							
Education in the Historical Develop-ment of Mexico, II	Mathe-matics & its Teaching, II	Spanish Methods, II	Special Educational Needs		Physical Education, I	Observation & Practicum, I	Weekly Contact Hrs.
4 hrs.	6 hrs.	8 hrs.	6 hrs.		2 hrs.	6 hrs.	32 hrs.
FOURTH SEMESTER:							
Selected Themes in Universal Pedagogy Seminar, I	Natural Science, I	Geography , I	History, I	Physical Education, II	Art Education, I	Regional Analysis, I	Observation & Practicum, II	Weekly Contact Hrs.
2 hrs.	6 hrs.	4 hrs.	6 hrs.	2 hrs.	2 hrs.	4 hrs.	6 hrs.	32 hrs.

1997 PROGRAM OF STUDY FOR ELEMENTARY TEACHER PREPARATION,* cont.								
FIFTH SEMESTER:								
Selected Themes in Universal Pedagogy Seminar, II	Natural Science, II	Geography, II	History, II	Physical Education, III	Art Education, II	Ethical and Civic Formation in Elementary Schools, I	Observation & Practicum, III	Weekly Contact Hrs.
2 hrs.	6 hrs.	4 hrs.	4 hrs.	2 hrs.	2 hrs.	4 hrs.	8 hrs.	32 hrs.
SIXTH SEMESTER:								
Selected Themes in Universal Pedagogy Seminar, III	Regional Analysis, II	Lesson Planning and Evaluation of Learning	Elementary Education System	Art Education, III	Ethical and Civic Formation in Elementary Schools, II	Observation & Practicum, IV	Weekly Contact Hrs.	
2 hrs.	6 hrs.	6 hrs.	4 hrs.	2 hrs.	4 hrs.	8 hrs.	32 hrs.	
SEVENTH SEMESTER:								
Student Teaching, I						Sem: Analysis of Student Teaching, I		Weekly Contact Hrs.
28 hrs.						4 hrs.		32 hrs.
EIGHTH SEMESTER:								
Student Teaching, II						Sem: Analysis of Student Teaching, II		Weekly Contact Hrs.
28 hrs.						4 hrs.		32 hrs.
*See Appendix 3 for descriptions of coursework.								

Programs of study for Secondary Education Teachers

With respect to the programs of study for secondary teacher education, the situation is somewhat complicated by the different organizational structures that have come about. Until 1942, the majority of training programs were structured as intensive courses during vacation periods. When the *Escuela Normal Superior* was created for the education of secondary teachers, regular semester programs, as well as intensive courses for foreign teachers, were established during the summer and winter. Since then, new and revised programs of study were drawn up in 1945, 1959, 1976, and 1983 and implemented in all secondary normal schools in the country, public and private. The specifics of the programs of study varied by content area specialization of the future teacher.

Appendix 4 provides a general overview of all the programs of study for secondary education teachers. As specific examples, we provide the programs of study for 1976 and 1983. (The latter is presently in effect,) with a specialization in Spanish language and literature. Similar programs exist for other subjects.

1976 PROGRAM OF STUDY FOR SECONDARY TEACHER PREPARATION (Specialization in Spanish)						
FIRST SEMESTER:						
Psychology, I	Technology for Education, I	Mathematics, I	World Literature, I	Applied Linguistics, I	Spanish & its Didactics, I	Weekly Contact Hrs.
5 hrs.	5 hrs.	5 hrs.	5 hrs.	5 hrs.	5 hrs.	30 hrs.
SECOND SEMESTER:						
Psychology, II	Technology for Education, II	Mathematics, II	World Literature, II	Applied Linguistics, III	Spanish & its Didactics, III	Weekly Contact Hrs.
5 hrs.	5 hrs.	5 hrs.	5 hrs.	5 hrs.	5 hrs.	30 hrs.
THIRD SEMESTER:						
Psychology, III	Foreign Language, I	Mathematics, III	Natural Science, I	Applied Linguistics, II	Spanish & its Didactics, II	Weekly Contact Hrs.
5 hrs.	5 hrs.	5 hrs.	5 hrs.	5 hrs.	5 hrs.	30 hrs.
FOURTH SEMESTER:						
Psychology, IV	Foreign Language, II	Mathematics, IV	Natural Science, II	Applied Linguistics, IV	Spanish & its Didactics, IV	Weekly Contact Hrs.
5 hrs.	5 hrs.	5 hrs.	5 hrs.	5 hrs.	5 hrs.	30 hrs.

1976 PROGRAM OF STUDY FOR SECONDARY TEACHER PREPARATION (Specialization in Spanish), cont.						
FIFTH SEMESTER:						
Philosophy of Education, I	Foreign Language, III	Social Sciences, I	Natural Science, III	Spanish Literature, I	Spanish & its Didactics, V	Weekly Contact Hrs.
5 hrs.	5 hrs.	5 hrs.	5 hrs.	5 hrs.	5 hrs.	30 hrs.
SIXTH SEMESTER:						
Philosophy of Education, II	Foreign Language, IV	Social Sciences, II	Natural Science, IV	Spanish Literature, II	Spanish & its Didactics, VI	Weekly Contact Hrs.
5 hrs.	5 hrs.	5 hrs.	5 hrs.	5 hrs.	5 hrs.	30 hrs.
SEVENTH SEMESTER:						
Education Legislation	History of Education, I	Social Sciences, III	Latin American Literature, I	Mexican Literature, I	Student Teaching, I	Weekly Contact Hrs.
5 hrs.	5 hrs.	5 hrs.	5 hrs.	5 hrs.	5 hrs.	30 hrs.
EIGHTH SEMESTER:						
Education Administration	History of Education, II	Social Sciences, IV	Latin American Literature, II	Mexican Literature, II	Student Teaching, II	Weekly Contact Hrs.
5 hrs.	5 hrs.	5 hrs.	5 hrs.	5 hrs.	5 hrs.	30 hrs.

1983 PROGRAM OF STUDY FOR SECONDARY TEACHER PREPARATION (Specialization in Spanish)						
FIRST SEMESTER:						
Reading and Writing Workshop , I	Statistics as Applied to Education Workshop, I	Communication for Education, I	Education Pedagogy	Contemporary History of Mexico	Greco-Latin Etymology	Weekly Contact Hrs.
3 hrs.	3 hrs.	3 hrs.	3 hrs.	3 hrs.	3 hrs.	18 hrs.
SECOND SEMESTER:						
Reading and Writing Workshop , II	Statistics as Applied to Education Workshop, II	Communication for Education, II	Psychology of Learning	Education and the State of Mexico	Literary Theory	Weekly Contact Hrs.
3 hrs.	3 hrs.	3 hrs.	3 hrs.	3 hrs.	3 hrs.	18 hrs.
THIRD SEMESTER:						
Education Investigations	General Didactics	Understanding the Student	Social and Economic Problems of Mexico	Spanish Literature	Communication Theory	Weekly Contact Hrs.
3 hrs.	3 hrs.	3 hrs.	3 hrs.	3 hrs.	3 hrs.	18 hrs.
FOURTH SEMESTER:						
Analysis of the National Education System	Technology for Education	Student Development	Methods of School Influence on the Community	Latin American Literature	Linguistics, I (theoretical aspects)	Weekly Contact Hrs.
3 hrs.	3 hrs.	3 hrs.	3 hrs.	3 hrs.	3 hrs.	18 hrs.

1983 PROGRAM OF STUDY FOR SECONDARY TEACHER PREPARATION (Specialization in Spanish), cont.						
FIFTH SEMESTER:						
Seminar: Pedagogical Comparisons, I	Educational Evaluation, III	Methods of Approaching Student Problems	Demo-graphics and Education	Mexican Literature, I	Linguistics, II (morpho-syntaxis, I)	Weekly Contact Hrs.
3 hrs.	3 hrs.	3 hrs.	3 hrs.	3 hrs.	3 hrs.	18 hrs.
SIXTH SEMESTER:						
Seminar: Pedagogical Comparisons, II	Curriculum Design	Student Teaching	Sociology of Literature	Mexican Literature, II	Linguistics,III (morpho-syntaxis, II)	Weekly Contact Hrs.
3 hrs.	3 hrs.	3 hrs.	3 hrs.	3 hrs.	3 hrs.	18 hrs.
SEVENTH SEMESTER:						
Seminar: Contributions of Pedagogy of the Mexican Educ. Sys.	Contempo-rary Education Models	Student Teaching	Literary Critique, I	Modern & Contemporary Literature	Linguistics, IV (semantics)	Weekly Contact Hrs.
3 hrs.	3 hrs.	3 hrs.	3 hrs.	3 hrs.	3 hrs.	18 hrs.
EIGHTH SEMESTER:						
Teaching Lab	Student Teaching	Seminar: Development & Understaning of the Area	Literary Critique, II	Means to Collective Communication	Sem: Theater	Weekly Contact Hrs.
3 hrs.	3 hrs.	3 hrs.	3 hrs.	3 hrs.	3 hrs.	18 hrs.

While the secondary programs of study vary by specialization, all share a common core of courses that make up more than 60 percent of the total number of courses required. In the 1976 program, thirty of the forty-eight courses are part of this core. In the 1983 program, thirty-one courses are part of the core requirements.

Summary of the Programs of Study

As we have noted, the Mexican teacher preparation system has gone through a number of transformations. The educational requirements — both for entrance into and graduation from normal schools — have been described here. We have focused on the programs of study that are presently in effect as well as some of the older programs under which a number of teachers in the present labor force were educated. The following tables summarize these programs:

Elementary Teacher Education

Program of Study	Entrance Requirements	Title Awarded	Notes
1975	Secondary Certificate (equivalent to a ninth grade education, US)	Teacher of Elementary Education	The program simultaneously included requirements for entrance into teaching and the bachillerato (high school diploma)
1975 Restructured	as above	as above	as above
1984	Bachillerato or prior completion of a normal school degree	Licenciatura in Elementary Education	Many graduates from pre-1984 programs participate in nivelación
1997	as above	as above	as above

Secondary Teacher Education

Program of Study	Entrance Requirements	Title Awarded	Notes
1976	Elementary Teacher Preparation or bachillerato	Teacher of Secondary Education with Specialization in ...	If the student entered with the bachillerato and not a normal school degree in elementary education, a year of pedagogical training is/was required.
1984	as above	Licenciatura in Secondary Education with a Specialization in ...	as above

In sum, receiving a Mexican teaching credential, in either elementary or secondary education, requires the following:

- Passing all classes and student teaching included within the respective program of study.
- Completion of a thesis or project related to student teaching or a specific educational concern.
- Passing an exam given by a committee of the normal school faculty.
- Completion of community service for a duration of at least six months and a total of 750 clock hours. For teachers, this requirement may be satisfied by field experiences. It should be noted that some students in normal schools are former teachers who have returned to "upgrade" their credentials, for example those who graduated under the 1976 to 1983 programs of study who wanted to obtain the licenciatura. In these cases, prior teaching may be substituted for this community service requirement.

Bilingual Education and Teacher Preparation

The programs of study that we have described so far represent the general preparation programs for all teachers. But, as we noted earlier, there are also areas of specialization — physical education, special education, technical education, and bilingual/bicultural education — in which teachers can receive something similar to an endorsement in the U.S. Most germane to this monograph is the bilingual/bicultural specialization.

Some bilingual education programs for language majority children are in operation in Mexico. Graham and Brown (1996), for example, describe a dual language program in a small community in northern Mexico with a sizable English-speaking population. However, for the most part, bilingual education focuses on the indigenous language minority populations (see Mena et al (1999) for a thorough discussion of such programs).

The demands of Mexican indigenous peoples for recognition of their languages and cultures parallel the movement in the U.S. to shift policy from assimilationism to pluralism. Just as policies in the U.S. had been driven by "Americanization," the explicit goal of indigenous education in Mexico well into the 1970s was *"castellanización"* (Spanish-ization) (Calvo and Donnadieu, 1983). There is also a close parallel in the time-frame of the movements. In the U.S., the demands for bilingual education gained momentum with the *Lau* decision in 1974; in Mexico, momentum was created with the *Carta de las comunidades indígenas* (letter from

the indigenous communities) in 1975. In this document, Mexico's indigenous leaders announced the formation of the Council of Indigenous Peoples, denounced several centuries of economic and cultural oppression, and demanded educational services to promote language maintenance (Patthey-Chavez, 1994). These proclamations spurred further action among indigenous teachers, mainly from preschools, who created the *Alianza Nacional de Profesionistas Indígenas Bilingües* (National Alliance of Bilingual Indigenous Professionals) in 1976 (Patthey-Chavez, 1994).

This flurry of activism among indigenous peoples encouraged a political shift towards language and culture maintenance for minority populations in Mexico (Hidalgo, 1994). Even so, school programs have not yet lived up to that shift. Most bilingual education programs in indigenous communities last only through the first few years of elementary school (Patthey-Chavez, 1994). Primary language materials are scarce and even in so-called bilingual programs there is often minimal use of the indigenous language (Hidalgo, 1994).

Another scarce resource is teachers. Presently, schools in Mexico are serving students in fifty-two different indigenous languages or dialects. There are more than seven million people in Mexico who speak a language other than Spanish as their first language, and they represent more than eighty different languages or dialects (Secretaría de Educación Pública, 1997). One can imagine the difficult task that Mexico faces in adequately staffing bilingual education programs, given that more than a million language minority children are now attending some 17,000 schools (Secretaría de Educación Pública, 1998). Table 4 presents the largest language minority groups in Mexico today.

Table 4

Principal Indigenous Language Groups

ETHNICITY	APPROXIMATE NUMBER OF SPEAKERS	PERCENTAGE OF TOTAL INDIGENOUS POPULATION
Nahua	1,640,000	27.2
Maya	740,000	12.2
Zapoteco	498,000	8.2
Mixteco	391,000	6.5
Mazahua	368,000	6.1
Tzeltal	300,000	5.0
Totonaca	266,000	4.4
Tzotzil	264,000	4.4
Otomi	223,000	3.7
Mazateco	175,000	2.8
Chol	128,000	2.1
Huasteco	120,000	2.0
Purepecha	120,000	2.0
All others (47)	815,000	13.4

Source: adapted from Grimes, B. F. (Ed.)(1996). Ethnologue. Mexico, D.F.: Instituto Lingüistico de Verano.

Historically, in order to staff schools with teachers who actually spoke the target language, indigenous youth who had completed at least *secundaria* (junior high school) were actively recruited to go into teaching. They received little preparation. This preparation was formalized and made somewhat more specific in 1973 with the creation of the *Dirección General de Educación Extraescolar en el Medio Indígena* (Office of Indigenous Education) (Bertley, 1998). Even so, teacher preparation only consisted of an introductory teaching course that included teaching methods and an introduction to the classroom textbooks. Students of these programs then began teaching, having signed a letter of intent to continue their professional development in the *Instituto Federal de Capacitación del Magisterio* (Federal Institute of Teacher Preparation). The practice of recruiting middle school graduates to become teachers in indigenous schools is on the decline. However, it does still occur, given the shortage of teachers who speak an indigenous language, but their preparation is minimal, consisting of a 100-day preparation program (Secretaría de Educación Pública, 1997b).

The more common process of becoming a teacher in indigenous bilingual schools is to go through a *licenciatura* program that provides specialized training in bilingual/bicultural education. In 1983, a licenciatura program in Indigenous Education was created in the *Universidad Pedagógica Nacional.* Since its implementation in 1983, the program of study has been revised twice, in 1990 and 1995 (Ibarrola, 1998). The program, officially called a *Licenciatura en educación preescolar y primaria para el medio indígena* (Licenciatura in preschool and elementary education for indigenous environments), is offered at seventy-five branches of the *Universidad Pedagógica Nacional.*[10] The program of study is the same duration as all other programs: eight semesters. However, it consists of slightly fewer courses. A list of the coursework is provided in Appendix 5.

The entrance requirement for the Indigenous Education program, as with all *licenciaturas,* is the *bachillerato* or graduation from the *escuela normal.*[11] The vast majority of students enter the program with the *bachillerato.* The number of students entering who do not have a *bachillerato* continues to decline rapidly. In 1995, one in nine students entered the program without the *bachillerato.* By 1998, this ratio had dropped to one in thirty (Gisela Salinas Sanchez, Universidad Pedagógica Nacional, personal communication, June 1999).

Section Summary

Despite efforts to devolve education to the states, the educational system in Mexico is highly centralized. While this has begun to change somewhat over the years, the

Secretaría de Educación Pública still controls the development of curricula for elementary, secondary, and normal schools. In this vein, the *Secretaría* also publishes and freely distributes the textbooks to accompany the curricula. Changes in the elementary curricula have led to parallel changes in the normal school curricula since a great portion of teacher preparation deals directly with the textbooks prescribed by the *Secretaría*. In this section, we have presented the most recent reforms to the programs of study but readers are cautioned that as changes occur in the prescribed curricula, parallel changes will take place in the preparation of teachers.

The majority of teachers in Mexico are prepared in public normal schools. However, Mexico is experiencing increasing diversification in the institutions that prepare teachers. One of the most important of these is the *Universidad Pedagógica Nacional* (UPN), created in 1978 and currently expanding. Regardless of the institution, every program of study includes a great amount of coursework in professional education, including classes like philosophy of education, educational psychology, and teaching methods. UPN programs also include hundreds of hours of student teaching and other practical in-school experiences. This is true for all of the preparation programs and levels, including preschool, elementary, and secondary. At the secondary level, the programs also require that students graduate with the U.S. equivalent of a major in a specific content area.

The development of education in Mexico and the characteristics of the educational system generally have resulted in unique characteristics not only of the educational system itself, but also of teachers. These characteristics have endured in spite of the numerous and dynamic changes that have occurred in normal school education throughout the century. One of these characteristics is the deep sense of professional identity that Mexican teachers have. Throughout the history of Mexico, the teacher has played many roles such as cultural missionary, founder of rural schools, and participant in the intense literacy campaigns of the first half of the century. The importance of their position has been passed down through the generations. This strong sense of professional identity also derives from the fact that the Mexican teacher is trained in schools dedicated exclusively to the preparation of educators. This has been the case since the beginning of the 20th century. From the first day of class, coursework deals directly with the skills and abilities necessary to being a teacher and knowledge of the subject matter to be taught.

Another characteristic, stemming from the first, is their ability to reach out to and become a leader within their community. Mexican teachers have always had close involvement with the communities they serve. Perhaps this is because one of the

ways employed to educate the country was, and continues to be, the recruitment of the most advanced students of an area into teaching. Furthermore, the normal school experience, in addition to student teaching experiences, includes a community service component.

The component — and the sense — of community service is developed in conjunction with coursework in the social foundations of education, giving Mexican teachers a clear conception of the reality of the country, including the poverty that prevails in many sectors of society and the changes that need to occur. In many parts of Mexico, teaching is an arduous and difficult job, sometimes performed under conditions of hardship. Taking on their leadership roles, Mexican teachers demonstrate a strong commitment to social and popular causes.

III

COMPARISON AND CONCLUSIONS

Systemic and Educational Differences

In Mexico, the equivalent of a bachelor's degree in education is called a *licenciatura*. The most prominent difference between the U.S. and Mexican systems of teacher certification is that the Mexican *licenciatura* is not only a university degree but also the license to commence a teaching career. This is true for most career areas. In other words, the two-step system in the U.S. in which students complete a degree and then apply to the state for a license to practice their professions does not exist in Mexico, where one's degree and the license are one and the same. The IHE is, for all intents and purposes, the licensing agent in Mexico. This is possible because IHEs in Mexico follow the French Napoleonic model. They are authorized by the state to grant admission to professions. This is true of the normal schools which, unlike schools or colleges of education in the U.S., are entities separate from a university.

Making the IHE, in effect, the licensing agent in Mexico has come to mean that there should be uniform and obligatory programs of study throughout the country for all teacher preparation. In other words, the same programs of study for the various educational levels and subject areas are used in every normal school in Mexico (both public and private).

Given the differences in the teacher preparation systems in the two countries, it is not surprising that there may be important differences in the educational preparation and experiences of graduates from the two systems. First is the difference in the requirements for "general education." As we saw in the first section of this report, state education agencies in the U.S. require a broad grounding in the liberal arts, which is generally obtained in the first and second year of college study. Therefore, students typically spend at least half of their university careers doing coursework to fulfill this general education requirement. U.S.-trained teachers, therefore, tend to have a broader education, in terms of university level coursework in the liberal arts, than their Mexican peers, especially when compared to Mexican graduates of the most recent programs of study.

A second difference is the type and amount of coursework in professional education required in the two systems. Since IHEs in Mexico are specialized, students begin study in their area of specialization immediately. American students

seeking to become teachers generally do not begin coursework in professional education until the junior year. At best, they will have taken an introductory course or two in the sophomore year. This means that Mexican-trained teachers graduate after having completed significantly more professional education coursework — as much as three to five times more — than their U.S. counterparts.

Mexican-trained teachers similarly graduate with significantly more practical time spent in schools. As was pointed out in section I of the monograph, teacher preparation programs in the U.S. continue to increase the number of practical hours required in addition to student teaching. Additionally, most university programs require that students take part in "practica" which provide in-school experiences before student teaching. Even so, Mexican-trained elementary teachers usually have spent approximately twice as much time in student teaching experiences, in addition to the required pre-student teaching observations and practica. For example, the 1997 program of study for elementary teacher preparation requires students to do four semesters of practicum and two semesters of full-time student teaching. Students devote six hours a week throughout the four, eighteen-week semesters of practica. In secondary preparation, the student teaching hours are similar in the two countries.

Tables 5 and 6 present a general comparison of the education experiences of U.S. and Mexican teachers upon completion of their respective teacher preparation programs. The reader is cautioned that these are approximations to demonstrate general differences in preparation. On the Mexican side, the "semester units" reported were determined by multiplying the weekly contact hours given in the programs of study, by eighteen weeks and dividing that by fifteen hours (fifteen contact hours being the typical requirement for one semester unit in the U.S.). On the U.S. side, it should be remembered that not all state educational agencies have specific semester unit requirements. Hence, the units reported here represent an average figured from high language minority states (Midobuche, 1999) that have specific requirements.

Table 5

General Characteristics of U.S./Mexico Teacher Preparation (Elementary)

	United States	Mexico	
		1984 Program	1997 Program
General Education Requirements	49 semester units in the liberal arts	A minimum of 12 courses that qualify as liberal arts*, equivalent to 50 U.S. semester units	A minimum of 2 courses that qualify as liberal arts**, equivalent to 10 U.S. semester units
Professional Education Requirements	35 semester units in professional education courses	41 professional education courses, equivalent to 170 U.S. semester units	37 professional education courses, equivalent to 196 U.S. semester units
Practical Experience	7 semester units of student teaching, (approximately 525 clock hours)***	486 clock hours of student teaching and 108 clock hours of pre-student teaching practica	1,008 clock hours of student teaching and 504 clock hours of pre-student teaching practica

* We have included the following courses: Economic, Political and Social Description of Mexico seminars, Community Development, Mathematics, Statistics, Spanish I and II, Application of Scientific Development, and Social Psychology.Others may apply.

** These are the two communication and study strategies courses which include elements of what U.S. educators typically call Freshman Composition and Speech, among others.

*** In addition to student teaching, Illinois and Texas specify clock hours (100 and 45, respectively) to be completed in a pre-student teaching practical experience (practica). While state boards tend not to specify such experiences, the trend in teacher preparation programs is to require them.

Table 6

General Characteristics of U.S./Mexico Teacher Preparation (Secondary)

	U.S.	Mexico	
		1976 Program	1983 Program
General Education Requirements	49 semester units in the liberal arts	16 courses in the liberal arts*, equivalent to 96 U.S. semester units	5 courses in the liberal arts**, equivalent to 18 U.S. semester units
Specialization Requirements (content area to be taught)	34 semester units	18 courses, equivalent to 108 U.S. semester units	17 courses, equivalent to 61 U.S. semester units
Professional Education Requirements	26 semester units in professional education courses	12 courses, equivalent to 72 U.S. semester units	22 courses, equivalent to 79 U.S. semester units
Practical Experience	7 credit hours of student teaching, (approximately 525 clock hours)***	180 clock hours of student teaching****	216 clock hours of student teaching****

* We have included the coursework in Mathematics, Social Sciences, Natural Sciences, and Foreign Language. Other areas (e.g. World Literature) may also apply.

** We have included the reading and writing workshops (equivalent to Freshman Composition), Contemporary History of Mexico, Social and Economic Problems of Mexico, and Development and Understanding of the Area. Other courses may also apply.

*** In addition to student teaching, Illinois and Texas specify clock hours (100 and 45, respectively) to be completed in a pre-student teaching practical experience. While state boards tend not to specify such experiences, the trend in teacher preparation programs is to require them.

**** The apparently large difference in U.S. and Mexican clock hours of student teaching owes to the fact that the U.S. hours reflect a full day in a school. Thus, the hours include tasks beyond actual teaching, e.g. study hall monitoring, planning periods, etc. The Mexican clock hours reflect only the actual time spent teaching the content area.

Profile of Bilingual Education Teachers

As we saw in the first section of this monograph, teachers trained in the U.S. must complete a number of requirements to gain the bilingual education endorsement. This typically consists of specialized coursework (ranging, for example, from 12 credit hours in Texas to 24 credit hours in New Mexico). Other requirements include practical experience in a bilingual classroom and demonstration of proficiency in the target language (explicitly required in five of the seven high language minority states presented by Midobuche, 1999).

Bilingual education teachers in Mexico mainly serve indigenous communities and are usually from the communities they serve. Given the great variety of indigenous languages, the number of speakers of these languages (especially in the larger ethnic communities such as Nahua and Maya), and the recent policies towards the promotion of cultural diversity, there exists in Mexico, as in the U.S., a shortage of qualified bilingual education teachers. Therefore, students within the various indigenous communities often go directly from *secundaria* into teaching. They receive some preliminary preparation before entering a classroom, but the bulk of their training comes while they are in-service. Some of the preparation that these students receive is specific to the unique skills required of bilingual education teachers. However, virtually none of these teachers are among the *normalista* immigrants to the U.S. In short, while U.S. bilingual teachers have endorsement requirements *over and above* those of non-bilingual teachers, this is not often the case in Mexico. A bilingual teacher in Mexico is often a poorly trained *maestro rural* who has a lower level of preparation than most *normalistas*. When we speak of "Mexican teachers" in this report and the resource they represent, we are referring to the *normalistas* who have earned a *licenciatura* and not to the rural teacher who mentors children in their own (indigenous) language.

Even though the vast majority of the immigrants from Spanish-speaking countries to the U.S. have had little or no preparation specific to bilingual education, it is imperative that U.S. schools take advantage of this resource. We must employ teachers with the cross-cultural communication skills, which includes knowledge of the students' language and culture as well as knowledge of the myriad cultures in the U.S. whenever possible. *Normalistas* bring specific knowledge and experiences that can be brought to bear in this area. They are fluent in the language of the vast majority of students participating in bilingual education programs. They have a firm grasp of the cultural backgrounds of the Mexican students who immigrate to the U.S., and they have a relatively better idea of the cultural backgrounds of other Latino students.

Normalistas can be an invaluable resource in the education of Mexican immigrant children given their knowledge of the educational experiences that these students had in Mexico. *Normalistas* are familiar with the Mexican curriculum and the pedagogy used. With this knowledge base, they are well prepared to provide appropriate instructional experiences that build upon those the students bring with them. They are well prepared to diagnose the causes of learning difficulties that may surface from a mismatch of, for example, pedagogy and learning styles.

Finally, we can assume that *normalistas* are prepared to put these skills into practice, at least in Spanish. Even the most recently licensed *normalista* has more than a thousand clock-hours of practical classroom experience. This does not include the hundreds of clock-hours that they spend working with leaders and parents in their communities as part of the community service program required of all Mexican teachers and other professionals. This "volunteer" service compels future teachers to devote significant time and effort to understanding the local community and to implementing projects designed to address community concerns.

Indeed, *normalistas* have many desirable skills and experiences to offer U.S. schools. That is not to preclude, however, the fact that they may require further preparation in some areas, especially in the English language. We point out the most important of these areas next.

General Points of Consideration and Recommendations

Immigrant *normalista* teachers represent an invaluable human resource as part of a strategy to ameliorate the lack of qualified bilingual education teachers. The processes for getting them into our classrooms must be made as expeditious as possible without sacrificing state requirements. Teacher preparation programs in the U.S. can do this by recognizing the strong pedagogical and practical background that these teachers bring with them. Program coordinators should be careful not to create redundancies in the "re"-education of *normalistas,* e.g. requiring courses that will simply replicate parts of the *normalista* preparation. Coordinators and transcript evaluators should carefully consider the *normalista* programs of study which often include many hours of general education in addition to the professional education coursework. It is understood that *normalistas* will need practical experience in American classrooms in order to obtain licensure in the U.S. However, wherever possible, credit should be given for the great number of hours that *normalistas* have already spent in practica and student teaching. As one example of taking these experiences into consideration, many preparation programs require or offer a course on parent and community involvement. In many

cases the community service requirement in Mexico could be considered an equivalent to this.

It is especially important for transcript evaluators to keep in mind two important aspects of the *normalista* preparation and experience:

1) The *normalista* credential *(licenciatura)* is awarded upon completion of a four-year course of study at the university level. It is, in other words, the equivalent of a U.S. bachelor's degree. This has been the case for elementary preparation programs since 1984 and has always been the case for secondary preparation programs.

2) Even before 1984, many of the courses taken in teacher preparation programs were the equivalent of university undergraduate level coursework and were not high school courses – even when entry requirements did not include the *bachillerato*.

3) A Mexican "credit hour" is heftier than its U.S. counterpart since Mexican semesters are longer and the number of contact hours is greater.

There are at least three areas that should be specifically required in U.S. programs for *normalistas*. First, most *normalistas* will need intensive English courses and experiences in which they can use the language in professional settings. Second, the low pass rates of minority groups generally, and language minority groups in particular, on high-stakes tests, including teacher competency tests, are well-documented (FairTest Examiner, 1989; Gillis, 1991; Tanner and Pohan, 1992; Hill, 1996). Therefore, programs should include a course designed to provide test-taking strategies and to review the content and style of the teacher licensure examinations. To avoid this feature in a bi-national program is to court disaster. Finally, *normalistas* will require coursework specific to bilingual education in the U.S. context. Often, this may be the same coursework required of U.S. teachers, whose initial preparation is designed towards the same monolingual purpose.

Specific Applications

The routes that normalistas will have to take to obtain certification in the United States will vary depending upon two things: the program of study they completed in Mexico and the U.S. state in which they are seeking certification. In the following sections, we describe some of the possible contingencies.[12]

Contingency 1

This contingency involves *normalistas* licensed as elementary teachers in Mexico and seeking the same credential in the U.S. The easiest case to deal with is that of the

elementary trained *normalista* whose transcript reveals that s/he completed the 1997 or the 1984 program of study in Mexico. Recall that both of these programs had the *bachillerato* (high school diploma) as a prerequisite and are granted the *licenciatura* upon graduation. In other words, these *normalistas* come to the U.S. with the equivalent of a four-year bachelor's degree in elementary education in hand.

Even though some states do not recognize education as a major for their own graduates, they often do in cases of reciprocity or urgent need. This is the case in California, for example. There, *normalistas* technically need only to complete coursework in reading methods (for English reading) and the U.S. Constitution. They would also have to pass the required exams, such as Reading Instruction Competence Assessment (RICA), the California Basic Educational Skills Test (CBEST), and subject matter exams. Or, in place of the subject matter exams, they can demonstrate completion of an approved liberal arts subject-matter program. While they are subject to change, these coursework and exam requirements apply to all teacher candidates in California (Midobuche, 1999).

Upon completion of the above requirements, as "post bac" work, these *normalista* teachers may be granted provisional licensure in California. However, this is not all that is required to obtain the bilingual (BCLAD) certification. There are a number of BCLAD examinations that are required and students will need to complete further coursework in such things as second language acquisition, bilingual methods, and cultural diversity. Additional exams — especially of target language proficiency — and coursework are similarly required in other states that recognize the bilingual endorsement or certification (Midobuche, 1999).

Contingency 2

The second contingency is the same as the first except that it involves *normalista* teachers who completed their degrees under the 1975 program of study. These teachers will require significantly more coursework to receive elementary teaching certification in the U.S. Recall that the completion of *secundaria* (middle school) was the only academic prerequisite for entry into teacher preparation institutions under this program of study. Students simultaneously completed their *bachillerato* and teacher preparation in a four-year program. State educational agencies may, therefore, view these four years only as the equivalent of a high school diploma, which, based strictly on years of schooling, it is. Thus, unlike their colleagues who studied under later programs, these *normalistas* do not have the prerequisite bachelor's degree necessary to seek certification. It is likely then that they will be required to complete a four-year teacher preparation program, including both the required general and professional education coursework. It should be taken into

account, however, that these *normalistas* completed the equivalent of *more than 100 credit hours in professional education coursework and that they have been classroom teachers for a number of years.* Therefore, a strong argument could be made to limit the additional coursework for their baccalaureate programs in the U.S.

Contingency 3

Most *normalistas* in the U.S. today were prepared in Mexico as elementary teachers. However, there are also *normalistas* in the U.S. who graduated with a secondary teaching credential in Mexico. The third possible contingency, similar to contingency 1, involves secondary teachers seeking the same credential in the U.S. These teachers hold a *licenciatura* which includes significant amounts of coursework in their subject-area specialization. The amount of coursework in their subject area, as well as in professional education, is approximately three times what is required by state educational agencies in the U.S. Thus, graduates of secondary teacher preparation programs should not have to take coursework beyond the specific requirements for all teachers, such as the Reading Instructional Methods and U.S. Constitution in California. Again, additional coursework for the bilingual endorsement and all exams may be required as well as mastery of English.

Contingency 4

A final contingency concerns the *normalista* holding a secondary teaching credential but seeking U.S. certification in elementary education. Recall from the beginning of the monograph that its stated purpose is to begin the process of preparing Mexican teachers to work in bilingual education programs in the U.S, and recall that this is the most likely place that *normalistas* will find teaching positions anyway given the language and culture strengths they bring with them. The vast majority of bilingual education programs in the U.S. are in elementary schools. Therefore, this fourth contingency is not unlikely.

Given that these *normalistas* already hold the equivalent of a bachelor's degree and secondary teaching preparation, they may only need go through the same processes as U.S. teachers who wish to extend their secondary certification to a K-12 one. This process typically involves passing the required elementary examinations and making up deficiencies in professional education coursework. As an example, in Illinois, candidates would have to pass the Subject Matter Knowledge Test in Elementary Education and take courses in such things as psychology of the exceptional child, elementary methods, and elementary reading methods, i.e., courses not required for secondary certification. In some states, secondary certified teachers can begin teaching in an elementary classroom before receiving their elementary credentials. In Colorado, school districts are permitted to

evaluate and hire secondary teachers for elementary positions. After a year of full-time elementary teaching, the candidate can then apply for the elementary endorsement based on this one year of teaching experience and course credits. Again, deficiencies in elementary education coursework may need to be made up as well as deficiencies in English.

Summary

For *normalista* teachers who have received a *licenciatura* in Mexico, the bulk of the coursework they will be required to take to receive bilingual education certification in the U.S. will be in bilingual education itself. Much, if not most, of their professional education experience should be credited and their degrees recognized, especially given the significantly greater amount of coursework that they have completed in comparison to their U.S. peers. This is true for graduates from both elementary and secondary preparation programs. Graduates from secondary programs who wish to teach in elementary schools may require far more coursework to make up deficiencies in elementary methods. In many instances the bilingual education coursework and the elementary methods coursework will overlap and can count for both areas.

Of the seven high-language-minority population states, only Colorado and California do not recognize "elementary education" as a major. However, even these two states recognize the education major in cases of reciprocity. Given that they already hold the equivalent of a degree in this major, we recommend that preparation programs in the U.S. designed for graduates of Mexican elementary teacher preparation programs focus their attention on coursework specific to the bilingual education endorsement as opposed to more general elementary methods courses. However, more of the latter may be required for graduates of Mexican secondary preparation programs. As was already mentioned, U.S. programs must also give priority to English language and test taking skills.

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Important HomePages

National Board for Professional Teaching Standards
<http://www.nbpts.org/>
This site provides a description on the National Board Standards and the logistics of becoming a National Board Certified teacher.

National Commission on Teaching and America's Future
<http://www.tc.columbia.edu/~teachcomm/>
This is the site of the Commission dedicated to providing a blueprint for recruiting, preparing, and supporting excellent teachers in all of America's schools. Provides statistics on teaching in America, including the teacher qualifications and the amount of resources going (or not) to put qualified teachers in our schools.

National Center for Education Information
<http://www.ncei.com/>
This site provides extensive, up-to-date information on alternative certification in all 50 states.

APPENDIX 1

CONTACT NUMBERS AND WEB SITE ADDRESSES FOR SELECT STATE DEPARTMENTS OF EDUCATION AND TEACHER CERTIFICATION INFORMATION

- Arizona Department of Education, Certification Information
  602 542 4367, automated line
  602 542 5393, operator assisted line
  602 542 5414, testing office
  ADE Homepage, http://internet.ade.state.az.us/
  Department of Certification Homepage,
  http://internet.ade.state.az.us/prodev/Default.htm

- California Department of Education, Certification Information
  916 445 7254 or 916 445 7256
  CDE Homepage, http://goldmine.cde.ca.gov/
  Commission on Teacher Credentialing Homepage, http://www.ctc.ca.gov

- Colorado Department of Education, Certification Information
  303 866 6628
  CDE Homepage, http://www.cde.state.co.us/
  CDE Licensure Homepage, http://www.cde.state.co.us/edlic.htm

- Illinois State Board of Education, Certification Information
  217 782 2805
  ISBE Homepage, http://www.isbe.state.il.us/
  Division of Professional Certification Homepage,
  http://www.isbe.state.il.us/isbesites/teacher

- New Mexico Department of Education, Certification Informatio
  505 827 6728 or 505 827 6587
  NMDE Homepage, http://www.sde.state.nm.us/index.html
  Professional Licensure Unit Homepage,
  http://sde.state.nm.us/divisions/ais/licensure/index.html

- New York State Education Department, Certification Information
  518 474 3901
  NYSED Homepage, http://www.nysed.gov/
  Office of Teaching Homepage, http://www.nysed.gov/tcert/homepage.htm

- Texas Education Agency, Certification Information
  1 888 863 5880
  TEA Homepage, http://www.tea.state.tx.us/
  State Board for Educator Certification Homepage, http://www.sbec.state.tx.us/

Appendix 2

Programs of Study for Elementary Teacher Preparation, (Mexico) 1887-1997

PLAN	In Effect Until	CHARACTERISTICS
1887	1901	68 courses which were studied in four academic years. Prerequisite for admission was completion of sixth grade.
1902	1908	69 courses, which included anthropology, political economics, and experimental psychology. The six year plan was to supplement the students' elementary education during the first three academic years.
1909	1916	53 courses that were covered in five academic years.
1917	1924	52 courses that were covered in five academic years, plus one year professional practice.
1924	1934	26 courses that were covered in three academic years with a prerequisite of secondary education (*secundaria)*, which at that time was achieved with a minimum of requirements. The subjects were intensive and greatly influenced by the philosophies of Dewey & Decroly.
1936	1944	35 courses which were covered in three academic years. Embedded with socialist philosophy which was very controversial. At that time the secondary education (*secundaria*) was executed by the normal schools as a prerequisite to the three academic years of professional education.
1945	1959	38 courses which were covered in three academic years. Included for the first time, mineralology, geology, and logic. It also included Greco-latin roots, visual art, and extra curricular activities.
1955	1962	30 required and six optional courses covered in three academic years. The emphasis on science and social content was reduced; a greater emphasis was placed on techniques for teaching.
1963	1968	18 semester-long courses and 10 year-long courses in three academic years.
1969	1971	23 semester-long and 32 year-long courses. The professional career track was extended to four academic years of study with a prerequisite of a secondary education (*secundaria*) completed outside of the normal school.
1972	1974	Transitional period
1975	1983	The new texts had been published and the change was radical. Contained 72 semester-long courses that were covered in 4 academic years with 30 hours of class per/week. The plan contained general introductory subjects which were equivalent to a high school diploma. Admissions requirement was a secondary education (*secundaria*).
1984	1996	For the first time, a high school diploma (*bachillerato*) was required to enter any normal system. The *escuela normal basica* was now formally recognized as a university level education; a *licenciatura* is obtained. It included 64 semester-long courses, including seminars and labs, completed in four academic years.
1997	Present	Contains 42 semester-long courses within the first 3 academic years of study. The fourth year, semesters 7 and 8, are dedicated to practical experience.

APPENDIX 3

OVERVIEW OF COURSEWORK IN THE PROGRAMS OF STUDY FOR ELEMENTARY TEACHER PREPARATION

1975 PROGRAM OF STUDY

The coursework in the areas of science, social science, art, technological, and physical education, as described below, are basic to elementary teacher education. The coursework includes not only the study of the content area but also the teaching-learning techniques (didactics) applicable to each grade of elementary teacher education.

MATHEMATICS AND DIDACTICS I, II, III, IV, V, VI
Includes the following areas from the 1st to the 6th semester: arithmetic, calculus, mathematical logic, statistics, and geometry. Also includes corresponding teaching practice (I and II) for the 7th and 8th semesters.

SPANISH AND DIDACTICS I, II, III, IV, V, VI
Includes the following areas from the 1st to the 6th semester: linguistics, general literature, literature for children, speaking workshop, composition workshop and reading workshop. Also includes corresponding teaching practice (I and II) for the 7th and 8th semesters.

NATURAL SCIENCE AND DIDACTICS I, II, III, IV, V, VI
Includes the following subjects from the 1st to the 6th semester: biology, physics, chemistry, earth sciences and, cosmography (descriptive astronomy). Also includes corresponding teaching practice (I and II) for the 7th and 8th semesters.

SOCIAL SCIENCES AND DIDACTICS I, II, III, IV, V, VI
Includes the following subjects from the 1st to the 6th semester: history, anthropology, sociology, economics, demography, and political science. Also includes corresponding teaching practice (I and II) for the 7th and 8th semesters.

ART EDUCATION AND DIDACTICS I, II, III, IV, V, VI
Includes curricular and extracurricular activities in visual arts, music, dance, and theatre. The student develops his/her personal creativity in some of the mentioned areas through extracurricular activities. Teaching practice (I and II) in the 7th and 8th semesters occurs in every grade of elementary teacher education.

PHYSICAL EDUCATION AND DIDACTICS I, II, III, IV, V, VI
Comprised of activities for the development of psychomotor coordination and creativity through the use of bodily movement as well as knowledge, practice, and learning to conduct diverse recreational activities in the school or in the community. Also includes corresponding teaching practice I and II for the 7th and 8th semesters.

TECHNOLOGICAL EDUCATION AND DIDACTICS I, II, III, IV, V, VI
Includes the use of tools and the execution of the diverse operations that prepare the student to make toys and other didactic materials, as well as the ability to make simple repairs on domestic appliances. In the rural schools, the basic agricultural technologies characteristic of the region are considered. In the 7th and 8th semesters teaching practice (I and II) applies to every grade of elementary education.

PHILOSOPHY (1ST SEMESTER) AND PHILOSOPHY OF EDUCATION (2ND SEMESTER)
The subject of philosophy encompasses a historical overview, the philosophic disciplines, the contemporary trends, and the methodology of science. The subject of philosophy of education includes the contemporary trends in this field and the principles and goals that guide the legal and ideological bases of education in Mexico.

PSYCHOLOGY I, II, III, IV, (1ST, 2ND, 3RD, 4TH SEMESTERS, RESPECTIVELY)
Includes the gradual study of the different branches of psychology, beginning with the current trends with an emphasis on child and adolescent behavior.

EDUCATIONAL TECHNOLOGY I AND II (5TH AND 6TH SEMESTERS, RESPECTIVELY)
Includes the contributions of the diverse educational sciences including general pedagogy, open systems, programming, evaluation, dynamic learning techniques, programmed teaching, cybernetics, and mass media communications.

HISTORY OF EDUCATION I, II, III, IV, (3RD, 4TH, 5TH, AND 6TH SEMESTERS, RESPECTIVELY)
Includes history of education, starting with a general overview from antiquity until the 19th century, and contemporary history (20th century). Subsequently, the history of education in Mexico is studied from pre-Hispanic times to the present, concluding with present education policies.

SOCIAL AND ECONOMIC PROBLEMS OF MEXICO (7TH SEMESTER)
Outlines the fundamental problems of present day Mexico and analyzes possible solutions.

COMMUNITY DEVELOPMENT (8TH SEMESTER)
Offers practical and theoretical knowledge that contributes to a community development project.

ADMINISTRATION AND LEGISLATION OF EDUCATION I AND II (7TH AND 8TH SEMESTERS, RESPECTIVELY)
Includes the study of the structure, standards, and norms of the national education system. Encompasses the rights and obligations of educational personnel, organizational techniques, and the management of documents pertaining to the schools.

1975 PROGRAM OF STUDIES (RESTRUCTURED)

Here we only describe the new subjects that were incorporated into the 1975 Program.

ENGLISH I AND II (1ST AND 2ND SEMESTERS)

The teaching of English in these two courses emphasizes reading comprehension with the purpose of helping the student acquire language proficiency sufficient to manage information within texts written in English.

PHILOSOPHY II AND IV (3RD AND 4TH SEMESTERS)

These two courses in philosophy have specific goals: the formulation of a hierarchy of values to guide the professional and individual behavior of the student, and the formation of distinction between different artistic manifestations, and the appreciation of artistic expression in Mexico.

GENERAL PEDAGOGY AND DIDACTICS (1ST AND 2ND SEMESTERS)

These are introductory methods courses. Specifically, "pedagogy" deals with the science of education, including cognitive style, teaching/learning processes, and assessment. "Didactics" deals with the art of teaching, including methods and strategies for teaching specific concepts or subjects.

SPECIAL DIDACTICS AND TEACHING PRACTICE I, II, III, IV, V, VI (3RD, 4TH, 5TH, 6TH, 7TH AND 8TH SEMESTERS)

Courses I and II in didactics and teaching practice focus on the identification of content and objectives in Spanish and mathematics from 3rd to 6th grade. They also focus on the application of the didactics of those subjects via field experiences in 3rd to 6th grade classrooms. Courses III and IV of special didactics refer to the same aspects but in relation to the natural and social sciences for the same elementary school grades. The special didactics and teaching practice V and VI function within the program of studies to consolidate the professional formation and to support the teaching practice that is carried out in all areas of the program. During the 7th semester the studies in special didactics are developed and focused towards students in 1st and 2nd grades. In the 8th semester students exclusively participate in student teaching and work on their thesis.

SEMINARS: A) COMMUNITY DEVELOPMENT I AND II; B) ADMINISTRATION AND LEGISLATION OF EDUCATION; C) SOCIAL AND ECONOMIC PROBLEMS OF MEXICO; D) ORGANIZATION OF EXTRACURRICULAR EDUCATION; E) PROGRAM ANALYSIS, TEACHER'S BOOKS AND THE ELEMENTARY EDUCATION STUDENT, I AND II, AND F) ELABORATION OF THE THESIS I AND II (7TH AND 8TH SEMESTERS)

During the 7th and 8th semesters, the special didactics course already mentioned, as well as the seminars, serves the purpose of preparing the student to carry out the following activities: a) the study of the physical, psychological and social characteristics of the children that form the practice group; b) the study of the socioeconomic conditions of the community that surrounds the school, as well as that of the children's homes; c) the study of laws, rules and regulations for the administration of the Mexican educational system; d) the study of the structure of education and the functioning of the school and the practice group, and e) the study of the hygienic conditions of the school building and annexes and other factors that might affect the teaching and learning process. The material achieved by this research and field experience will serve as a base for students to begin working on their thesis.

1984 PROGRAM OF STUDY

A) LINE OF SOCIAL PREPARATION

SEMINARS ABOUT THE SOCIO-ECONOMIC AND POLITICAL DEVELOPMENT OF MEXICO I AND II

Studies and evaluates the historical process of Mexico since the pre-colonial period until today.

ECONOMIC, POLITICAL AND SOCIAL PROBLEMS OF MEXICO I AND II

Aspects like development, the decentralization of national life, population growth and its effects, the planning and financing of education, and the deterioration of the environment, among others, are analyzed. This is done in order to achieve an understanding of the present condition of the country and be in a position to explain it and act on it.

THE MEXICAN STATE AND THE NATIONAL EDUCATION SYSTEM

Defines the responsibilities of formal education, its structure, and its philosophical orientation and ideologies.

PERSPECTIVES OF EDUCATIONAL POLICY

Involves the implementation of short, medium, and long-term projections having to do with the country's educational situation, taking into account elements that will permit necessary changes in the future.

SOCIOLOGY OF EDUCATION

Entails the theoretical-methodological contributions of sociology to the interpretation of educational problems.

COMMUNITY AND DEVELOPMENT

Analyzes demographics, family life, quality of life, and sexuality, in order to be in a position to promote and encourage the participation of the population in the socioeconomic process.

NATIONAL IDENTITY AND VALUES

Starting from universal values, analyzes Mexico's value system and its importance to the national culture as well as how it supports the diverse ethnic, popular, and regional cultures.

THE SOCIAL RESPONSIBILITY OF THE GRADUATE IN EDUCATION

Reflects on the roles an educator must play in actual society, starting from the normalist Mexican tradition and analyzing the positive and negative changes that have occurred in the identity of the education professional.

B) LINE OF PEDAGOGICAL PREPARATION

OBSERVATION OF EDUCATIONAL PRACTICE I AND II

An observation and analysis of the educational process in actual classrooms in order to establish the causal links between theory and praxis and to propose viable alternatives for educational action.

EDUCATIONAL TECHNOLOGY I AND II

Contributes the technical elements having to do with applications to the educational process, including the development of evaluation instruments.

EDUCATIONAL PLANNING

Reviews the accepted theories and methodologies in educational planning at the institutional level.

CURRICULAR DESIGN

Involves training in the design, interpretation and application of the curriculum.

EDUCATIONAL EVALUATION

Involves the study of the evaluation of educational systems and student learning.

EDUCATIONAL ADMINISTRATION

Reviews the different criteria and techniques for the administration of material and human resources and other aspects of school administration.

INTRODUCTION TO TEACHING AND THE TEACHING PRACTICUM

Applies the conceptual aspects of "Observation of the Teaching Practice," "Educational Theory," and "Educational Research" to the solution of specific educational problems.

COMPARITIVE PEDAGOGY SEMINAR

Analyzes the different pedagogical paradigms from different times and countries in order to derive differences and similarities by means of a comparative approach.

CONTEMPORARY EDUCATIONAL MODELS SEMINAR

Starting from the theoretical knowledge acquired from "Comparative Pedagogy," analyzes the influence of various contemporary pedagogical theories.

THE CONTRIBUTIONS OF MEXICAN EDUCATION TO PEDAGOGY SEMINAR

Studies the contributions of Mexican educators and pedagogues from various historical periods.

EDUCATIONAL RESEARCH I AND II

Provides the conceptual instruments that will be applied in the field experience.

C) PSYCHOLOGICAL PREPARATION LINE

DEVELOPMENTAL PSYCHOLOGY I, II, III
Focuses on the study and analysis of human development theories, especially childhood development.

EDUCATIONAL PSYCHOLOGY
Involves theories of understanding and interpreting human behavior in various learning situations. with the purpose of preparing the future teacher to apply and design effective teaching strategies.

PSYCHOLOGY OF LEARNING
Studies the theories that support the analysis of the teaching process, and its different approaches in order to interpret human performance in different learning situations. Focuses on the design and implementation of a variety of instrumental methods.

SOCIAL PSYCHOLOGY
An in depth study of the theories in this discipline in order to analyze group behavior and understand social relations.

SCIENTIFIC ORGANIZATION OF CLASSROOMS
Tackles the fundamental theoretical methodologies and technical instruments for working with and organizing groups of students.

LEARNING PROBLEMS
Identifies factors that hinder the learning process, including both student and school-centered problems.

GENERAL COURSES

EDUCATIONAL THEORIES I AND II
Studies the epistemological, axiological, and teleological principles of education.

MATHEMATICS AND STATISTICS
Allows for the processing, interpretation, and communication of quantified information in order to be applied to educational practice, especially in the teaching of mathematics to children.

SPANISH I AND II
Focuses on the development of oral and written expression and includes communicative techniques. Taught in a workshop.

SPECIFIC AREAS OF ELEMENTARY EDUCATION

ELEMENTARY EDUCATION SCHOOL CURRICULUM I, II, III, AND IV

Analyzes the entire elementary school curriculum-its differentiation sequence -- as well as teaching methods in each area.

HEALTH EDUCATION I AND II

Offers scientific knowledge in this field to promote conduct to improve the conditions and quality of life of the students, their families, and their communities.

PHYSICAL EDUCATION I AND II

Promotes the development of sporting activities and the knowledge to implement them with students.

CHILDREN'S LITERATURE

Studies the contributions done in this field, from Mexico and the rest of the world, in order to promote the students' love of reading.

ARTISTIC APRECIATION AND EXPRESSION I, II, AND III

Involves training using technical resources for promoting the formation of the students' esthetic values and encouraging their appreciation of art and creativity.

ADMINISTRATION OF ELEMENTARY EDUCATION SEMINAR

An analytical study of the administrative aspects of elementary education, organization, and function, from teaching perspectives to managerial character.

ELABORATION OF THE THESIS PROJECT

Applies knowledge acquired throughout the program of study to the thesis project, which should deal with some educational problem.

EDUCATIONAL COMPUTATION AND TECHNOLOGY

Complements the teacher with computer knowledge which allows for the use of quantitative and qualitative analysis in the educational process.

SCIENTIFIC DEVELOPMENT AND CREATIVITY

An analysis of the application of scientific knowledge to the improvement of the quality of life with a historical focus.

TECHNOLOGICAL EDUCATION I AND II

Offers technical elements about scientific technological applications, specifically in the educational field and always in light of the specific social context.

1997 PROGRAM OF STUDY

PHILOSOPHICAL, LEGAL AND ORGANIZATIONAL FOUNDATIONS OF THE MEXICAN EDUCATION SYSTEM

Includes the historical vision and the evolution of philosophical foundations that direct education in Mexico: the constitutional precepts, statutory legislation with an emphasis on the legal definitions of the federalization of the *básico* and normal school education; organization of educational levels and their characteristics; and an analysis of situations and problems related to these aspects.

PROBLEMS AND POLICIES IN BASIC EDUCATION

Involves the central problems in basic education in modern-day Mexico and an analysis of governmental policies related to those problems at national, regional, state, and local levels. It includes the preschool, elementary, and high school education and focuses on three aspects: coverage, quality, and equality (degrees and forms of inequality in access to education of the different social groups).

CONTENT AND PURPOSE OF ELEMENTARY EDUCATION

Studies the formative purpose and content of the elementary curriculum in force since 1993, analyzing the continuity and the depth of the knowledge acquired between first and sixth grade as well as the relation between the courses given in each grade. Includes knowing the various forms of didactic work, the relation with the group and the criteria for evaluation.

CHILDHOOD DEVELOPMENT I AND II

Focuses on the study of the various processes of child development, which includes three fields: biological growth, psychometric and cognitive growth, and emotional and interpersonal relationships, as well as interdependence of these areas. Also includes the study of biological and environmental factors that influence learning. Covers childhood development from birth to the age of 14. The second course analyzes models of the cognitive processes especially those relevant to this age group. This course concentrates on themes like attention and memory, the formation of concepts, the ability to reason and solve problems, and theories and research involving intelligence (including multiple intelligences), and the development of linguistic aptitude (that specialize in Spanish and its teaching).

COMMUNICATION AND STUDY STRATEGIES

Involves the control and application of comprehensive and critical reading, as well as clarity of oral and written expression by means of research projects, the production of textbooks, and the practice of oral expression be it through expositions, conferences, or group discussions. These courses are given in workshops.

OBSERVATION AND TEACHING PRACTICE I, II, III, AND IV, STUDENT TEACHING I AND II, AND ANALYSIS OF STUDENT TEACHING SEMINAR I AND II

These courses are offered sequentially from the 3rd semester. They include five areas of analysis: the conditions and organization of work in schools; classroom teaching strategies; the interaction and participation of students in class and in school; the articulation and use of materials and educational resources; and the relationship between the school, the families, and the community. The sequence begins with guided observation in various elementary schools and continues with observations of and activities with groups of school children, both in and out of the classroom. It incorporates teaching experiences through design and application of proposed didactics for specific content and ends in the last year of normal education with two semesters of student teaching. The observations and teaching practices are supervised by a master teacher, who guides the student and evaluates his/her performance together with professors from the *escuela normal.* Moreover, these experiences are analyzed individually and collectively, in the "Analysis of the Teaching Profession." Experiences are shared with colleagues and self-evaluation is elaborated in a thesis project.

SOCIAL AND SCHOOL CONTEXT

Analyzes the relationship between the school and its social setting, allowing students to appreciate various dynamics and social environments (urban, rural, urban-outcast, indigenous), and their cultural characteristics which will influence the relationship. Parent participation, the organization of the school, the development of the different school activities, didactic resources and materials, student behavior, and local characteristics are studied through guided visits and interviews with those involved in the relationship. A minimum of six visits is typically required.

INTRODUCTION TO THE TEACHING PROFESSION

Focuses on the complexity of the teaching job while identifying the multiple daily activities, the demand for individual and collective attention by students, and the relationship between the teacher and parents in order to support classroom work. Students also engage in activities relevant to working with the groups of students, such as organizing games, guiding group and individual work, and taking part in committees. A minimum visit of nine days in two different elementary schools is typically required.