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AUTHOR de Cossio, Roger Diaz

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#### ABSTRACT

Mexico is experiencing major reform in adult education. At the same time, Mexico has been the largest producer of immigrants into the United States in the last 50 years. At the beginning of the century, non-English-speaking immigrants were only required to learn enough English to perform their jobs. As the Mexican-American community grew, it demanded equal educational opportunities for its children. Today school-age children within the immigrant communities have good opportunities to attend bilingual education programs, but their parents do not have the same opportunities. Adults now arrive with more education than previously, and have less difficulty adjusting to the new environment. Due to the peculiar pattern of Mexican migration, Mexico and the United States should work together in adult, child, and bilingual education as a whole and in relation to the needs of immigrants and their families. Areas of current collaboration include teacher education, adult education in Spanish, development of printed materials in Spanish, and Internet resources. There is much room for growth in these efforts. Contains 3 references. (MSE) (Adjunct ERIC Clearinghouse on Literacy Education)

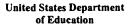
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Organisation for Economic Co-operation and Development

# **HOW ADULTS LEARN**

An International Conference Sponsored jointly by the Organisation for Economic Co-operation and Development and the United States Department of Education

> Washington, DC 6-8 April, 1998

## WORKSHOP TOPIC 1

#### HOW ADULTS LEARN A NEW LANGUAGE

Issues Paper

"Adult Education, Migration and Immigrant Education"

Roger Díaz de Cossío, National Institute of Adult Education, Mexico

Summary of workshop: This workshop will focus on successful strategies used in working with immigrant populations. Specifically, strategies for working with adults who have native literacy and those who do not will be discussed, as well as strategies for dealing with multiple foreign language groups at the same time.

> Georgetown University Conference Center 3800 Reservoir Road, NW Washington, DC 20057

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#### ADULT EDUCATION, MIGRATION AND IMMIGRANT EDUCATION

#### **Summary**

- 1. Mexico is in the midst of a huge reform in the field of adult education. At the same time, Mexico has been, far and away, the largest producer of immigrants into the United States at least during the last fifty years. Due to the peculiar pattern on Mexican migration, Mexico and the United States should work together more in adult, children and bilingual education as a whole and in relation to the needs of immigrants and their families.
- 2. This paper describes, briefly, the reform in adult education in Mexico and possible parallels with other countries. Next, useful figures and data are offered on Mexican migration to the United States. A few references will be given to successful cases in immigrants education. Finally, some comments will be made on the problems of immigrant education in the United States and further cooperation from Mexico, the sending country as an example of what other country-pairs can do.

#### Introduction

- 3. There is universal agreement on what children and youth should learn during the years of compulsory education (9 to 12 years, depending on the country). It took the world almost a century to reach this consensus. The twentieth century was the century of universal basic education for children and youth, even though there are still a few countries, especially Muslim, where a large proportion of girls do not go to school. Adult education will become the topic for the twenty-first century.
- 4. Developed countries reached universal education early in the century, while the rest of the world only recently achieved substantial educational coverage, but the aspiration of every country is the same: to reach every school person within the compulsory age brackett.
- 5. Education has thus become a gigantic industry in every country, the most labor intensive of all. It is composed of hundreds of thousands of individuals in every country, with their own traditions and manner of doing things. For many years the educational systems did not accept responsibility for those that abandoned the system before finishing. From here derived the famous and ugly words *drop-outs*.
- 6. The need for adult education was recognized later in the century. For example, in Mexico the first adult education law was passed in 1975; it defined as an adult any Mexican over 15, who had not covered at least 9 grades of compulsory education. Other countries have different target groups and definitions. Adult education is seen as vocational training, not just literacy and numeracy, for members of the work force. The concept of lifelong learning appeared later and encompassed almost all categories of adult education.
- 7. Developed countries who thought they had solved the literacy problem because the great majority of their populations had gone through compulsory education suddenly found that it was not so. Large portions of the labor force were functionally illiterate because in their lives they did not have any use for what they learned.



- 8. Simultaneously, the elderly populations of developed countries are rising while in some of them the school population is decreasing drastically like in Spain. Sooner or later many more young immigrants will be needed to perform all tasks and they will need to be integrated to the older societies, recognizing their cultural and linguistic differences. This is a colossal challenge for society, its educational systems, and especially for immigrants. The problem will become more and more acute as the years go by.
- 9. Mexico has sent the largest number of migrats received by the U.S. in recent decades. As neighbors with a 2000-mile common border which is crossed more than 300 million times they offer through their multiple experiences and practices in adult education very good examples for other countries with similar problems.

#### Adult education in Mexico

#### Background

- 10. Like in almost any country, we can find isolated efforts to educate adults in Mexico at the beginning of the century. There were night schools for workers and some efforts related to the training of textile laborers with a low level of schooling. In 1900 more than 80 percent of Mexicans were illiterate and the main priority of all successive governments since that time, especially after the Mexican Revolution, 1910-1920, was to develop a national school system. In 1998, less than 10 percent of persons older than 15 are illiterate and the school system offers basic education to 95 percent of the school-age population. During the decades of construction of the educational system, many Mexicans were left behind; they either did not have the opportunity of going to school or the system did not yet offer full cycles of study.
- 11. Starting in 1945 colossal national literacy campaigns were mounted with the simple objective to teach how to read and write through volunteers and simple materials,. All of these efforts failed because adults learned how to read and write simple texts in a few months, nothing changed in their lives and they reverted to illiteracy because they had no use for it, or did not perceive any use for it.
- 12. It was not until the mid-nineteen seventies when the government assumed responsibility for the education of adults. First, in 1973, the National Education Law was changed to allow open education. The old law did not permit any person except a teacher to examine and accredit their students. Next, in 1975, an Adult Education Law was enacted. An adult was defined as a person older than 15 who had not finished at least 9 grades of compulsory education.
- 13. The Law ordered the establishment of a national system for adult education where literacy, open primary and secondary which means in Mexico grades 7 through 9 was offered through the study of specially developed materials and accredited in a diverse succession of independent and partial evaluations until the adult completed primary or grade school and secondary school (grade 9). The adults gathered in study circles, received the texts they had to study, had a quasi-volunteer external advisor, not a professional teacher, and were examined periodically. The system was based in self-study and social solidarity.
- 14. From 1975 special texts were developed for adults, in literacy and four other areas: Spanish, Mathematics, Social Science and Natural Science. In 1981 a especial institution was created exclusively for adult education in the sense described above: *Instituto Nacional para la educación de los adultos (INEA)*, the National Adult Education Institute. INEA was developed separately from the regular and formal education



system, which has only a few night schools for workers whose presence is required a certain number of work-day hours and follow the curricula set for youngsters.

#### Present situation

- 15. During the eighties employers were increasingly requiring a basic education school certificate for almost every job and INEA filled this void offering workers the completion of their basic education through open systems of learning. But currently with the extension of the formal system, 90 percent of the workforce has at least 9 grades of schooling. Those that do not fulfill this requirement are mostly elderly workers.
- During the early part of the nineties it became more and more difficult to enroll adults in INEA's curricula because it offered only one option to complete basic education The same curricula was offered to women, men, farmers, young and mature adults. Besides, thirty or forty years ago it was thought that adults who did not have the opportunity of finishing school while young should learn later in life more or less the contents of basic education for children. INEA's curricula was developed in the seventies with these ideas in mind. This is still the idea in many countries. Adults were and are treated as old children. No account was taken of the skills they had to learn from life in order to survive. Also, no attention was paid to their specific and diverse needs, they were simply not addressed. A deep reform was needed which took into account the findings of modern research, of which one fundamental principle is that adult education should be needs based. Adults learn only what they perceive as immediately interesting and useful to them and their lives.
- 17. INEA has been working intensively throughout Mexico ever since its inception, always with a very small budget. In spite of this, for the last 26 years it has given more than 1,300,000 grade school certificates and 1,240,000 secondary school certificates. At present about 171,000 adult basic education certificates are given each year. But this is still a very low figure for the needs of the country.
- 18. Mexico's formal school system served, in 1997, almost 29 million students, of which about 19.3 million are in compulsory education grades, 1<sup>st.</sup> through 9<sup>th</sup>. Thirty percent of a country's population registered in schools is high for a developed and old nation, but not enough for a young one. We still have a low percentage of students in higher education, about 15 percent of the 18-24 year bracket compared to the 24 percent in the U.S. The terminal efficiency of the basic education system is still low. Out of 100 students entering 1<sup>st</sup> grade, only 52 will finish 9<sup>th</sup> grade. Most students leave without finishing compulsory education for financial reasons, their families require the children to help provide for their needs. As a consequence, every year the pool of adults older than 15 who require basic education is increased by 800,000;
- 19. We define rezago educativo, 'those left behind', as the group of Mexicans over 15 who have not finished 9 grades of compulsory education. They are the target group for adult education. At the end of 1997 the numbers, terrible numbers, are as follows: 6 million are illiterate, 12 million did not finish grade school and 18 million, having finished grade school, did not finish 9<sup>th</sup> grade. Altogether, 36 million men and women, 65 percent of the population older than 15. Except for the illiterates, where there are more women, the proportion of genders in the other groups is more or less the same. Economically they comprise the poorest part of Mexico, include most of the inhabitants of the Indian communities, and represent perhaps the gravest social problem in the country. The majority of migrants to the U.S. come from these groups.



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#### Adult education reform

- Research was undertaken to find out what Mexican adults had learned from their lives and what they wanted to learn. It was the first time ever an adult was asked that question. During 1996 and part of 1997 more than 20,000 adults were interviewed in every state of Mexico. The sample covered more or less the same proportion of women and men and ranged evenly between the ages of 15 to those over 40 years among rural, urban and Indian communities. Another variable was previous schooling. Three equal groups were taken: no schooling, up to 6 years and up to 8 years of education. After registering their basic data, the main questions were "What do you do?", What else can you do? There is a very precise word in Spanish for these, saberes; the closest translation in English would be whole experiential skills, commonly known as 'know how'. We decided not to have a previous list of saberes, but rather jot down the answer and the description of the skill as they explained it. After some discussion it was decided that being a housewife was a saber, and therefore more than the sum of some abilities. The same with campesino, 'fieldworker'. The second set of questions were "What would you like to learn?" and "What else would you like to learn?"
- 21. Even though the sample was perhaps not big enough to detect fully the whole diversity, the results were sufficiently clear in order to trace the course of changes that should be intended. The only significant variable was gender. Whether young or mature, urban or rural, with or without schooling, they all wanted to learn a limited number of practical skills. The six most frequent represent for each sex about 60 percent of those interviewed. They were, for women, cooking, dressmaking, beautician arts, confectionery, and knitting. For men, carpentry, electricity, car repairing, masonry and computing. Basic education as a thing to learn, in general, appeared in both groups. Computing was frequent, but not among the first six in women.
- 22. Perhaps the explanation of such concentrated selection resides in the occupations. The rezago is the other Mexico, the poor Mexico. About ten percent of them have permanent jobs. The rest of this sector consists of persons working or surviving in the informal economy, street vendors, housewives or campesinos, field laborers who eat all they produce and have to sell their artisan wares in the town market. Mexican adults in need of basic education are not part of the workforce. They know there are no regular jobs around and the only way they can improve the quality of their lives is by learning something they can control and sell. The answers then are very rational.
- 23. INEA conducted other studies on the modes of operation of its system and started upgrading technology to apply and grade exams. Taking into account the latest research on the way adults learn, INEA established the principal tenets for the reform:
  - The educational offer should be diversified according to the needs of different groups.
  - The skills learned by the adult during his or her life should be taken into account for a basic education certificate.
  - The ways of acquiring knowledge and skills should be as flexible as possible.
  - Training should count as should any previous schooling.
  - No matter what the content, the adult should be convinced that it will be immediately useful to improve his or her life.
  - A minimum amount of language, math and science skills (operational and communicational) should be acquired during the process.



- 24. Millions are now studying under the old linear and traditional mode and cannot suddenly be shifted, therefore the new model has to fit the traditional one and be applied gradually. Among the younger population of adults, in the 15 to 25 year-olds there are many thousands who try to finish basic education through INEA in order to continue on to high school and higher education, and they are successful.
- 25. The basic elements of the new adult education model of INEA are:

#### Disciplinary modules

26. They are being constructed along three lines, math, language and science, from literacy to relevant contents and abilities roughly equivalent to our present open secondary program. The final level is not yet known, because everything is being field tested right now. Anyway, there will be a succession of modules, each with printed materials, of about 40 pages each which will include final evaluations. By the end of the year we will probably have about 24 modules for all three lines.

#### Diversified modules

27. Other modules will be offered based on the needs expressed by the adults, cooking, carpentry and so forth, through which adults will also improve their math and language abilities.

## Training and vocational courses

28. If the adult wishes to take any of the established vocational course offered in our country, his successful effort will count towards earning a basic adult education certificate. So far more that 15,000 of these courses are registered ranging from haute cuisine to computing.

#### Modernized system of independent evaluations.

- 29. All evaluations will be computer produced and graded. They will be based on the requirements of each module.
- 30. Instead of giving a fixed compensation to supervisors, advisors and volunteers for their work with adults, a small amount will be given for each successful exam. If the supervisor is at the same time a school principal, he would have an incentive to convert his school, off-hours, into an adult education center, which seldom happened before.



During 1996 and 1997, the Ministry of Education established a selection exam to allocate high school-applicants to the public schools of Metropolitan México City. About a quarter million students were assigned places each year of whom more than 3,000 came from INEA's system, and the second best exam in 1997 was from a 28-year old INEA student.

An adult's journey towards a basic education certificate.

31. It was necessary to develop a system of points or credits, in order to be flexible and take into account many different inputs for each adult. The journey can be expressed as an equation which adds parts measured in points:

# Previous schooling+saberes+vocational courses+modules = 100 POINTS

32. Commencing in 1999 adults in Mexico will have a greatly expanded set of options to earn a basic education certificate. To start with, points will be given for any previous schooling. For example, 50 points for having finished 5<sup>th</sup> grade years ago, and so on. A maximum of 20 points will be assigned for saberes, depending on his or her age. A vocational course could be accredited, the points depending on the number of course-hours. Finally, they can take several modules to complete the required number of points. For adults with less than three years of schooling, the first two modules in math, language and science are compulsory.

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33. A brief explanation has been given above of the basis for adult education in Mexico and a sense of the directions of the reform in progress. For lack of space many details have been omitted. Mexico has a great tradition in developing printed matter for the whole country. This is one of its educational strengths. The success of the adult education reform will depend on the appropriateness and variety offered by the printed texts to the needs of adults. At any rate all materials will be experimental and in continuous improvement.

## Mexican migration

- Migration of Mexicans to the United States is a structural phenomenon in both societies. Mexico has never been able to provide satisfactory work to all its inhabitants and therefore those not satisfied with their conditions and expectations migrate to the northern neighbor in search for a better future. This is a Mexican tragedy. For more than a century millions of Mexicans have contributed to the development of the United States and not to their home country. The problem is accentuated by the enormous economic differences of both countries, with a 2000-mile common border which facilitates and induces migration.
- 35. The pattern of Mexican migration to the United States is very different than migration from other countries. Most Mexicans go to visit a close neighbor with the form intention of returning to their home country, sooner or later. The pattern is also circular. First, Mexicans go for a few months each year during several years and when they find permanent work, they settle and raise families. This has been going on for more that 150 years.
- 36. The Mexican-American community was born with the independence of Texas and was initially defined in 1848, after the war, when Mexico lost more than half of its original territory. The new border "crossed" Mexicans who had been there since before the war. Historians estimate this initial group at about 84,000, from California to Texas. Almost immediately after the war, Mexicans started migrating to the U.S. There has been a continuous and increasing flow ever since, as the following gross figures show:

MEXICAN POPULATION IN THE UNITED STATES AND NET IMMIGRATION (thousands of persons of both sexes)



Year	Total Mexican origin population	Original population's descendants	Immigrants	Immigrant's descendants
	(1)=(2)+(3)+(4)	(2)	(3)	(4)
1900	463	215	103	145
1950	2 573	586	451	1536
1990	14 094	1 923	4 447	7 724

SOURCE: Rodolfo Corona Vázquez, 1995, El Colegio de la Frontera Norte

- 37. The 1990 figures correspond to the last U. S. Census. Estimates from a recent binational study on Mexico-United States migration<sup>2</sup> put the total Mexican origin population close to 20 million and the Mexican born population presently living in the U.S. at about 7 million, an increase of 2.5 million in only 6 years. The average age of these 7 million immigrants is about 20 with almost 10 million descendants born in the U.S. or in Mexico. Among the 7 million there are around 2 million undocumented Mexican workers of which one third goes back and forth between both countries. Many of them are male migrant workers who follow the crops from California to Oregon or from Florida to the Carolinas. Female immigrants tend to work in the service industry and in factories.
- 38. Mexican immigrants are concentrated in a handful of states, California, Arizona, New Mexico, Colorado and Texas (the original states that were Mexican territories before 1848), and also in Illinois and New York-New Jersey. About seventy percent live there, the other 30 percent is spread out in all other states.

#### **Immigrant education**

#### Some numbers

- 39. It is difficult to estimate the exact number of immigrants and their children requiring education. The United States educational system is totally decentralized. There are more than 16 thousand school districts coordinated by the states. Each of them is fairly independent in the way they define a low English proficiency (LEP) student.
- 40. The numerical importance of Spanish as the original language of immigrants in the United States can be seen from LEP student estimates made for the whole country by Hopstock and Bucaro in 1993<sup>3</sup>. After comparing several and sometimes widely diverging sources, they estimate the total number of LEP students between the ages of 5 and 17 years old, at 2.4 million, that is, 5.5 percent of the total student population. The figure can be slightly larger in 1998 due to increasing migration in recent years. What is important is the original language of the students: 73 percent spoke Spanish, 1.7 million. The other 27 percent was divided into



<sup>&</sup>lt;sup>2</sup> Mexico/United States Binational Study on Migration, 1997. Susan Martin and Enrique Loaeza, Coordinators, Secretaría de Relaciones Exteriores, México

<sup>&</sup>lt;sup>3</sup> Hopstock, Paul J., Bucaro, Bonnie J., 1993, A Review and Analysis of Estimates of the LEP Student Population, http://.www.ncbe.gwu.edu/miscpubs/siac/leppop.html

twenty other languages of which the most commonly spoken was Vietnamese with almost 4 percent. About one third of the students were born in the United States and almost 20 percent had lived in the U.S. for less than one year.

- 41. The Emergency Immigrant Education Act (EIEA) was passed by Congress in response to the financial challenges facing school districts with large numbers of immigrant children. About \$30 million are appropriated each year and distributed to school districts in 37 states. California receives 44 percent and New York 21 percent. Not every school district applies for these funds. There are other federal grants for similar purposes. The program served 350,000 students in 1984-1985 and 826,000 in 1993-1994. Students from over 100 countries participated in the program, 40 percent from Mexico, 50 percent from Spanish-speaking countries (Mexico, El Salvador and The Dominican Republic). Vietnam was the second largest with about 5 percent of the total.
- 42. Both sources coincide, the largest proportion of immigrants by far come from Mexico.

#### General remarks

- 43. The topic of immigrant education will become more and more important for many developed countries, whose original populations are getting older and even, in some cases, decreasing. Someone said that a century from now there will be no Italians. Young migrants from other countries will be arriving in larger and larger numbers and will settle, have children and grandchildren. This has been the case in the United States, a country of immigrants. Many problems occur when the newly arrived immigrants begin to settle and adapt to the new mores. Many lessons can be learned from the history of the United States in this regard.
- 44. At the beginning of the century, the only preoccupation about non-English speaking immigrants and their children was that they be obliged to learn barely enough English to perform their jobs. The children were placed in regular schools where only English was used and, of course, performed very poorly and lagged behind. There were some schools, not very many, that offered instruction in the original language of the children, while also they learned English. In all those decades many techniques were developed to teach English as a second language (ESL). Some of them were applied in regular schools as an addition to the curriculum. Immigrant children continued doing poorly. Serious research was undertaken on all of these issues.
- 45. As the years went by, the Mexican American community grew in numbers and demanded equal opportunities for the education of its children. The same demands were made by other immigrant communities. The situation improved dramatically after the passing of the Civil Rights Law in 1964. Four years later the Bilingual Education Act was approved, and funds were allocated to the school districts, in order to establish innovative programs for the education of children whose mother tongue was not English. Research had shown that children should be taught the core curriculum in their original language, while they learned English as a second language for several years, until they could continue their education in English. But most important of all, their original culture was to be valued and respected in the school environment and used to learn other topics in both languages. If these conditions were met, immigrant children did not lag behind and



<sup>&</sup>lt;sup>4</sup> National Clearinghouse for Bilingual Education, 1996, Biennial Report to Congress on the Emergency Immigrant Education Program, http://www.ncbe.gwu.edu/ncbepubs/reports/eiep96/report.html

by the end of 4<sup>th</sup> or 5<sup>th</sup> grade their language and math skills were at the same level as their English speaking contemporaries.

- Today school-age children within the immigrant communities have very good opportunities to attend institutions with a proper bilingual program, especially if they reside in districts with large concentrations of immigrants. Their parents do not have the same opportunities immediately upon arrival into the U. S. There are several reasons for this. First, they have to work very hard, 8 to 12 hours a day, in low paying jobs, and therefore can not find the time to go to adult education courses. Other than acquiring the rudiments of oral English in their everyday contacts, they do not progress any further, and stay there for years. Second, most of the newcomers have a low level of education in their mother tongue. Typically, Mexicans arrive with two or three years of schooling in Spanish. Third, many of the ESL courses offered are English only courses. The teacher does not use the student's language or culture at all, and when the adults attend they feel diminished, have little or no grasp of the lessons and leave after a few classes. Fourth, many of them are undocumented and are afraid to go to class.
- A substantial number of Mexican immigrants arrived recently come with a greater level of instruction, even high school or more. They have fewer problems in adapting because their educational level allows them to find better jobs and learn better English. It is clear that the more you know in your mother tongue, the easier it is for you to acquire a second language. A different problem results when an immigrant from Mexico arrives with adolescent children who finished 8 or 9 years of instruction in Spanish and tries to enroll them in high school. The children are given English proficiency tests, of course fail miserably and are placed well below their age and knowledge level, with an almost permanent loss of self-esteem. Fewer high schools than grade or middle schools have full bilingual instruction, which has been shown as successful for introducing English to teens who otherwise have a very good level of math and science in their mother tongues.
- 48. Many mature immigrant adults have the opportunity of vocational training for new and better paying occupations in industry after residing in the U. S. for several years. There are many excellent organizations providing this type of service. The best of these accompany vocational training with English and Spanish (or other language) literacy and numeracy courses.
- While there is abundant research on second language acquisition and the proper practice for elementary and middle schools, the situation is not the same for mathematics learning. Math education is in an uproar, in general, not just as applied to numeracy and immigrant education. Not only in the United States but in Mexico, the underlying problems are the same: math lessons are taught by rote; elementary school teachers are not properly trained and have fear of math. Mathematics is at the same time a language for thinking and a tool for solving practical problems. Many of the materials stress either one or the other perspective, are not clearly focussed and often involve huge lists of meaningless exercises. For mature persons this is a particularly difficult topic because the great majority of materials available do not convince adults that math will be useful to them in their daily lives. Much more work is needed on successful ways of learning math.

#### Basic rules for successful cases

50. In the following paragraphs general comments will be made on the basis for successful practices for educating Mexican immigrants and their children in the United States. They will serve as examples for other countries. For those who want to follow details, theories, research, teaching methods, there is a veritable



wealth of information in the World Wide Web. Some directions to the most important sites will be indicated at the end of this text.

- 51. The following general principles to immigrant education have been taken from several reports on exemplary cases and studies 56:
  - Learning is not a piecemeal, behaviorist process, but an internal response to experiences. The
    individual derives meaning from outside input when it is presented as an integrated whole related
    to his or her own experiences.
  - The more comprehensive the use of the primary language, the greater the potential to maximize the student's academic achievement. Even though circumstances may limit the school's capability to fully develop a student's primary language, there are always ways to nurture it.
  - The more solid the foundation in the primary language the greater the chances of academic achievement in the second language.
  - Limited-English-proficient students can be provided with substantial amounts of primary language instruction without impeding their acquisition of English language reading and math skills. Math skills are more solidly grounded if learned in both first and second languages.
  - Decisions regarding transition to formal second language instruction cannot be made arbitrarily
    and be the same for all students. They have to be assessed according to first and second language
    developments.
  - Parents and the community need to play a major role in the learning process of their children.
  - Instruction must be organized to help students understand and respect themselves and their own culture as well as the culture of the broader society.
  - A comprehensive vision of school environment is essential to provide outstanding education where low English proficiency students are fully integrated to all activities.
- 52. A general conclusion in all successful cases is that the teacher should be cognizant of the student's original culture and language. The ideal bilingual teacher is an educated and well integrated immigrant or immigrant descendant from same or similar origin as his or her students. There is a huge shortage of this type of teacher in the United States.
- 53. There is no unique or perfect solution for immigrant education of children and mature adults. A good result can be achieved in many ways depending on the locality, the community setting and support from state and district authorities.



<sup>&</sup>lt;sup>5</sup> Nadeau, Adel, 1997, Linguistic Diversity and Reform?: Directions in Language and Education. National Clearinghouse of Bilingual Education, Vol. 1, No. 10.

<sup>&</sup>lt;sup>6</sup> Berman, P., Minicucci, C., McLaughlin, B., Nelson, B., and Woodworth, K., 1995, School Reform and Student Diversity: Case Studies of Exemplary Practices for LEP Students, National Clearinghouse of Bilingual Education, Washington, D.C.

# Collaboration from Mexico

54. In the particular case of Mexico and the United States, because of the vicinity, there are many possibilities of collaboration to improve the education of immigrants. The following types of actions are current, but in each there is much room for growth:

#### Teacher training

- Eleven Mexican universities offer summer courses in Spanish and Mexican culture to bilingual teachers and staff from the school districts with large concentration of children of Mexican origin.
- Many Mexican immigrants have been school teachers in Mexico. Thirty of them became bilingual teachers in California after taking a two-year program. Based on this experience, a larger project is being proposed in which at least five U.S. universities and several school districts will be involved. They will be coordinated through the Intercultural Development Research Association and the Mexican and American Solidarity Foundation.
- A few dozen Mexican teachers every year go to the United States to give lectures or short courses on the didactics of teaching math and science in Spanish.

#### Adult education in Spanish

- A few thousand Mexican immigrants are following the adult education course from INEA's curricula and materials, advised by volunteers. They will earn a Basic Education Certificate from Mexico. In some cases these courses are combined with English literacy courses in U. S. school district sites.
- Starting sometime this year INEA will recognize as credits for a Mexican certificate many vocational and ESL courses Mexican immigrants take in the U.S. The benefits of this action are two-fold: it boosts the self-esteem of Mexican immigrants who see their home country has not forgotten them, and helps them accumulate credits for a Mexican certificate, which will be useful to them if they return to Mexico, as many do after a few years.

#### Printed materials and books in Spanish

 For some years now the Ministry of Public Education of Mexico, has sporadically sent children and adult texts, as well as general books in Spanish to some school districts in the United States.
 This action should be made systematic and broadened in scope.

# Web sites

# http://www.ncbe.gwu.edu

National Clearinghouse for Bilingual Education. One of the most comprehensive web sites, with an impressive library of pertinent papers and reports.



# http://www.cal.org

CAL Center for applied linguistics. Maintains several clearinghouses in the Web, among them one for literacy education. (add .ncle to the above address)

## http://www.idra.org

Intercultural Development Research Association. Maintains several important projects and publications.

# http://www.literacy.kent.edu

This site contains many texts on adult numeracy. Of special interest is A Framework for Adult Numeracy Standards: The Mathematical Skills and Abilities Adults Need to be Equipped for the Future, which can be downloaded.



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