

Encyclopedia of Language and Education

Volume 5

BILINGUAL EDUCATION

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BILINGUAL EDUCATION FOR INDIGENOUS COMMUNITIES IN MEXICO

INTRODUCTION

In Mexico as in the rest of Latin America, discussion about indigenous bilingual education centres around two central questions. The first relates to the macro-political and anthropological dimension: Will it be possible to build a plurilingual and pluricultural nation state that will be able and willing to reconcile the forging of a national identity and unity with the preservation of linguistic and cultural diversity? The second, of a rather micro nature in the field of psycholinguistics and pedagogy, refers to the modalities of bilingual education, more precisely to the relation between language use and academic achievement in education, in the context of an asymmetric relationship between Spanish as the dominant and the indigenous as the subordinate languages (Hamel, 1988, 2000).

The socio-political dimension emerges in the debates about the policies that the dominant Mestizo society and the state they control design for the nation's autochthonous peoples: Should their members be assimilated and forced to give up their ethnic identity and languages in order to become accepted citizens of the nation? Conversely, could they integrate and acquire full membership while at the same time preserve and foster their own identity and diversity? Ever since the beginning of Colonization through Spain in 1519, and even earlier in the Aztec Empire, the state has assigned a central role to education in this process (Heath, 1972).

The pedagogical and psycholinguistic dimension comes into sight when the question arises how the global socio-political goals could best be achieved through education. How might a given school population of indigenous children who have practically no command of Spanish, the national language, best acquire the knowledge they are supposed to obtain? And, what understandings, orientations and ideologies do those in power cultivate about the role of languages in education: Would those children have to abandon their native language in order to learn the national language properly and become useful citizens? Or, on the contrary, could their first language be a fundamental instrument to acquire literacy, other academic skills, second order discourses

and content matters? Should monolingualism in the state language or enrichment bilingualism be the envisaged aim of indigenous education?

Since colonial times, two basic strategies of ethnic and language policies developed in Mexico, which gained shape after Independence in the early nineteenth century. The first and generally dominant strategy considered the assimilation (i.e. dissolution) of Indian peoples and the suppression of their languages as a prerequisite for the building of a unified nation state. A second strategy favoured the preservation of Indian languages and cultures in this process, without giving up the ultimate goal of uniting nation and state. As a result a gradual process of language loss took place which accelerated during the twentieth century as an outcome of the social dynamics following the Mexican Revolution (1910). Out of approximately 130 indigenous languages (henceforth ILs) spoken at the time of the Conquest, some 62 vernaculars have survived. Although the indigenous population—roughly 10% of the total—is growing in absolute numbers, most indigenous peoples are undergoing a process of assimilation and language shift (Hamel, *Indigenous Language Policy and Education in Mexico*, Volume 1).

The two strategies materialized in education and Spanish teaching—the main pillars of cultural policies for the Indians—through two basic approaches which differed considerably in their cultural and educational philosophy and methods, their view on sociocultural integration, and, above all, in their procedure of using and teaching Spanish as the national language. The first strategy pursued the goal of linguistic and cultural assimilation through direct Hispanicization (*castellanización*), i.e. submersion or fast transitional programmes. Education in Spanish should actively contribute to language shift and cultural change. The national language was to be the only target and medium of instruction; teaching materials, content and methods were the exclusive preserve of the dominant society. Transitional programmes reflected the second strategy; they applied diverse bilingual methods where the Indian language played a subordinate, instrumental role as language of instruction and for initial alphabetization.

No doubt the Mexican governments have always subordinated the questions of psychological appropriateness and the quality of learning to the political questions of control and integration of the indigenous population, from colonial times until our days. Today the two dimensions converge in favour of the stabilization of indigenous peoples as fundamental components for the construction of a new, pluricultural and plurilingual state; and enrichment bilingual education based on instruction and literacy development through the medium of the mother tongue, although still an exceptional model in practice, has shown its

superiority over submersion and transitional syllabuses in terms of quality education and the development of academic proficiency in both languages (Hamel and Francis, 2006).

Given the size of the native population and the significant historical commitment to public services, the Mexican state developed by far the largest public school system for the indigenous population in the Americas.

In this chapter I will briefly refer to education in colonial and early republican times. I will then concentrate on indigenous education, its approaches, problems and results since its consolidation as an educational system of its own in the 1970s and review the main contributions, work in progress and perspectives. The emphasis will be on the role of the languages in bilingual education, the curriculum and the learning processes, where the rare cases where mother tongue education emerges will be highlighted. The macro questions of language policy and linguistic human rights in Mexico are dealt with in another volume (Hamel, *Indigenous Language Policy and Education in Mexico*, Volume 1).

EARLY DEVELOPMENTS

Although assimilationist education predominated throughout the colonial regime in Mexico (1519–1810), its early period in the sixteenth century witnessed some of the most exciting experiments of indigenous language based education that have occurred in Mexico until our days. Along with other religious congregations, the Franciscans developed an educational philosophy and practice of their own for the Indians. According to Aguirre Beltrán (1983) and his sources, Franciscan education was based on empathy with indigenous cultures and world views, mother tongue instruction, communication and, above all, Christianization; the Franciscans were the first to practice syncretism in education, a principle that would become relevant during the times when anthropology played a significant role; they adapted many of the native instructional practices. Their strategy also implied the use of young Indians as cultural brokers and assistant teachers. In the renowned Colegio Imperial de Santa Cruz de Tlatelolco, founded in 1536, further education included the development of literacy in Nahuatl, the study of Latin grammar as a path to theology and philosophy, with the ultimate goal to ordain the graduates as priests (Aguirre Beltrán, 1983; Heath, 1972). Given that the Nahuas (Aztecs) had their own pictographic and ideographic writing systems and used paper (*amatl*) and ink (*tlilli*), they could quickly adopt the European alphabetic writing system for their own language (Lockhart, 1992). Similar to the other Vice Kingdom in Peru, a generation of Nahuatl writers

recruited from the Aztec elite burgeoned in the Colegio. Since they had already received formal instruction and acquired second order discourse competence in their own culture (Francis, 2003), they obtained literacy in their language and were able to transfer their knowledge successfully to the literate culture of Spanish and Latin. In the course of the sixteenth century, the alphabetic writing system rapidly displaced pre-conquest pictographic writing, and the development of native language literacy as a social practice spread swiftly through the Spanish colonies. In Mexico, such an early experience of both L1 literacy acquisition and social use was never reached again until our present days.

Throughout the later part of Colony the Spanish Crown tried to enforce Castilianization. Since the feudal order established segregation between Indians and non-Indians, however, massive spread of Spanish proved an impossible task. Here, a well-known principle in education that remains relevant until today emerges for the first time: Formal education will hardly ever reverse general societal tendencies of language use, shift or spread. It was only through radical political and economic change, of devastating community dissolution and loss of territory through violent expulsion, not as a result of education, that in the course of the nineteenth century Spanish became the language of the majority in Mexico (Cifuentes, 2002).

Only in the 1930s would a new turn towards mother tongue education emerge in Mexico. Under the leadership of the US linguist Maurice Swadesh, the well-known *Tarascan Project* was born (Aguirre Beltrán, 1983; Castillo, 1945). In the P'urhepecha (Tarascan) region of Michoacán in central Mexico, a team of Mexican and US anthropologists and linguists developed an integrated programme of bilingual education. They elaborated an appropriate alphabet of P'urhepecha based on linguistic and sociolinguistic studies, they trained indigenous teachers in basic indigenous grammar and the alphabet based on the most advanced literacy approaches of the time. The programme offered a more adequate pedagogical model for the acquisition of literacy and at the same time fostered the indigenous languages and their maintenance by moving them into the prestige domain of literacy. Although the project was quite successful at the beginning, it only lasted two years (1939–1941) as official policy, due to political changes which returned to assimilationist programmes. However, the abundant anthropological and linguistic research surrounding the education project, as well as the proposal of L1 literacy teaching had a long lasting effect on the national and international debate on bilingual education. Thus, the Mexican delegation played a significant role at the 1953 UNESCO conference on vernacular languages education in Paris, and a Mexican contribution (Barrera-Vázquez, 1953) entered the final publication.

For the period from Colony to the 1950s, little specific research on the language question in education exists, although education and indigenous education appears in various studies. For extensive summaries and references see Aguirre Beltrán (1983); a shorter report in English is Hidalgo (1994). The classical text on language policy from colony to the nation, including education, is Heath (1972).

MAJOR CONTRIBUTIONS: INDIGENOUS EDUCATION TODAY

After 1950 no clear maintenance programmes materialized in the following decades. Nevertheless, some of the most progressive pilot projects led by pro-Indian anthropologists did contain elements of maintenance programmes, mainly through L1 literacy and a series of contextual ethnic activities. Given their limited pedagogical resources, and—in the long run—political support, however, they eventually turned into transitional programmes.

In 1978 previous modalities of indigenous education found their definite place as a Department in the Federal Ministry of Education under the name of Dirección General de Educación Indígena (DGEI, General Department of Indigenous Education), a subsystem of elementary education.

Since the 1970s the official programme was labelled “bilingual and bicultural”. It consists of two pre-school years plus six grades, the same as the general primary system in the country. In 1992 the administration of elementary education including the indigenous systems was handed over from the federal government to the state governments. Public elementary education in Mexico is based on a common curriculum for all students in the country. Therefore, the indigenous schools are supposed to cover the same curriculum as the ordinary monolingual system. The Federal Department of Education produces common compulsory primers for each grade and subject matter which are distributed freely to all school children, some 28 million copies each year in recent times. These textbooks are oriented towards monolingual Spanish speaking children, mainly in an urban cultural context. Therefore, although they may serve as an appropriate tool for L1 literacy teaching, they are not adequate for bilingual education and the teaching of Spanish as a second language.

In 2005 some 55,000 indigenous teachers instructed over 1.2 million primary school students (50% of the total), speakers of one of the 62 indigenous languages (DGEI, 2005). At the beginning of each school year DGEI distributes over 2.5 million primers written in native languages to the indigenous schools, possibly more than in the rest of the Americas all together. Unfortunately, for reasons outlined below,

most of them are rarely used; and most observers would agree that the indigenous school system does on the whole not contribute to maintain and foster indigenous languages.

Little detailed research exists about indigenous education under the bilingual and bicultural programme. Nancy Modiano's study is the first to demonstrate, in the case of the Tzotzil and Tzeltal Indians in Chiapas, that L1 or even bilingual literacy instruction yields better results for Spanish L2 literacy skills than the common Spanish alphabetization practiced at that time. Her book was first published in English (Modiano, 1972) and two years later in Spanish. More than in Mexico, it had a significant impact in the USA as a study of advocacy for mother tongue instruction within the emerging debate on bilingualism and bilingual education for immigrant children (Francis and Reyhner, 2002).

In an extensive study, Bravo Ahuja (1977) analysed indigenous education focusing on the Castilianization process; from a perspective that fosters transition to Spanish, she developed the first systematic proposal to teach Spanish as a second language (L2), and her team elaborated an official primer for that purpose. Ros Romero (1981) shows that common teaching practice contributes to IL language shift. A new debate arose in view of the overt contradictions between the official programme that should foster bilingual and bicultural maintenance education, and Castilianization practice, a conflict that continues until the present time. Scanlon and Lezama Morfin's (1982) collection of papers discussing these issues becomes a central reference for the 1980s. Citarella (1990) is the most extensive summary of DEGEI's programmes, proposals and activities during the previous period.

Most of the relevant components that relate the general sociolinguistic context to indigenous teachers' orientations, curriculum design, the functions of the languages involved, and classroom interaction are analysed in an extensive study of the Hñähñús (Otomis) in the Mezquital Valley reported in Hamel (1988). In general terms, sociolinguistic analysis identifies for Mexico, as well as the rest of Latin America, that a diglossic language conflict between Spanish as the dominant language and the ILs as the subordinate ones contributes to generalized language shift and loss, in spite of some language maintenance and revitalization processes (Hamel, 1996). The indigenous schools reproduce this general tendency, mainly through the diglossic ideologies of the indigenous school teachers who value Spanish and Spanish literacy as their most precious cultural capital, whereas their own native languages are not considered suitable for academic activities. They share, by and large, the nationalist values of a common nation state that promises upward mobility through a school system of cultural and linguistic

assimilation. Indigenous schoolteachers, who depend—not on their community—but on the state for their appointment and salary, have accumulated considerable power over the past 20 or 30 years. In many communities they replaced traditional community leaders, since the teachers' capacity as cultural and political brokers is considered more useful than the skills of traditional leaders (Sierra, 1992). Even those indigenous teachers' organizations that are critical of the state party and its regime have generally prioritized their status and union interests as tenured state employees over and above community, ethnic, or indigenous language issues. Over the years they have forged a powerful structure, within a powerful national teachers' union, that acts objectively as a language movement in favour of Spanish and linguistic assimilation.

Consequently, they attempt to teach literacy in Spanish from first grade on to pupils who are at best incipient bilinguals, instead of developing cognitively demanding higher order discourses such as literacy in their mother tongue (Hamel, 1988; Hamel and Francis, 2006). Both languages are used orally for instruction, with frequent repetitions and translations that foster neither literacy nor the acquisition of Spanish as L2. Given the lack of communicative contextualization in L2, literacy practices in Spanish become mechanical repetitions, and the reading and writing of isolated phrases with no semantic and pragmatic value. Instead of developing cognitively demanding and context-reduced tasks in the students' native language, the growth of the mother tongue in these areas is cut off and neglected throughout elementary education. Thus the curriculum and teaching practices do not profit from a central and widely acknowledged feature of any bilingual programme: the learners' capacity to transfer cognitively demanding skills from one language to the other, a process which could bring about significant academic growth in both languages (Cummins, 2000). In sum, the observed classroom practices build up a factual curriculum, which implies an ensemble of predominantly negative effects on the development of academic language proficiency. The attempt to teach literacy in a second language without sufficient acquisition of the necessary oral skills leads the teachers to under-exploit the communicative potential of the primers, and to return to traditional practices of synthetic methods and structural pattern drill. The fundamental distinction between conversational and academic uses of language is not acknowledged in either language, as becomes evident in the teachers' attempt to teach oral skills in L2 as a by-product of literacy. And the decision not to develop any academic skills in the L1 fails to take advantage of the cumulative effects of cognitive growth and transfer capacities to Spanish. On the whole, indigenous schools show very poor results in the acquisition of literacy and other content matters. At the same time,

the subordinate role of the mother tongue as a transitional language of instruction reproduces the diglossic conflict between the languages.

Generally speaking, most publications of that period arrive at similar conclusions, namely that the general diglossic orientations shared by the dominant society and most indigenous teachers and parents generate a kind of education that contributes to language shift and does not produce the expected educational skills. Summaries of that period can be found in Berteley Busquets (1998) and Hidalgo (1994).

WORK IN PROGRESS

At the present a range of pedagogical practices are in use in the Indigenous Educational System. The most widespread modality teaches literacy in Spanish, uses the official Spanish primer for elementary education as the basic textbooks, and employs the indigenous language as the initial medium of instruction (Hamel, 1988). An increasing number of teaching materials in indigenous languages is being used alongside with Spanish primers. And, since the 1990s a number of pilot projects within the public system develop literacy skills in L1, either as the point of departure of schooling, or as a supplementary activity to L2 literacy teaching. On the whole, given extended poverty in indigenous regions and poor conditions of education along with transitional and submersion programmes, the indigenous educational system exhibits the poorest results in general proficiency among the different subsystems.

Until the last decade of the twentieth century, the federal government sustained through DGEI a bilingual and bicultural model as the target of indigenous education (DGEI, 1990). School children should develop coordinate bilingualism and become fluent in the four basic skills in both languages. Similarly, both cultures should be present through appropriate content matters. During the 1990s, the label "bicultural" was replaced by the new concept of "intercultural bilingual education" on the grounds that the term "bicultural" implied a dichotomous worldview that separated cultures inappropriately. The new intercultural bilingual perspective in turn would propel the recognition, knowledge and integration of both cultures in a pluralistic enrichment perspective (for a critique, see Muñoz Cruz, 2002). Both languages should now be the medium and object of instruction (DGEI, 1999). And, similar to the Law of Education approved in Bolivia in 1994, education should be intercultural for the country as a whole, meaning that all school children ought to be educated in a perspective of pluricultural enrichment producing knowledge, tolerance and positive attitudes towards indigenous cultures and languages. Throughout the following years, ethnicity

and interculturalism in relation to education moved into the centre of academic and educational debate (see Bertely Busquets and González Apodaca, 2003 for extensive summaries of the existing literature). Massive migration of indigenous families to the cities and to the USA motivated new studies about education for indigenous children in urban contexts (*ibid.*).

Educational modernization, quality, productivity and other concepts of a neo-liberal discourse occupied the arena. However, the federal government maintained the dogma of a unified curriculum for all school children. The DGEI even dissolved their department of curriculum development, thus giving up any previous attempts to design an appropriate curriculum of its own for indigenous schools. The centrality of *intercultural* education even relegated the question of *bilingual* education to a secondary place. No advances were achieved during the 2000–2006 conservative administration in terms of L1 literacy and the teaching of Spanish as a second language on a programmatic level. And the administration of the educational system, which in 1992 had been decentralized from the federal to the state level except for the questions of normativity and curriculum, did by no means imply the transfer of control, planning and administration to the indigenous communities and organizations. Implementation, again, did not occur with the expected intensity and speed. By the end of the administration in 2006, practically none of the proposals or even the new debates had reached the teachers and classrooms.

Thus, the central questions of indigenous education remain largely unsolved in Mexico. The global dimension of the construction of a new, pluricultural and pluriethnic nation state advanced significantly on a political, conceptual and legal level (Hamel, *Indigenous Language Policy and Education in Mexico*, Volume 1), but little change has occurred on the grass root level of bilingual education in the classroom. General claims expressed by the growing indigenous movement to achieve greater autonomy have so far not included education, although most experts agree that appropriateness and quality of indigenous education will only improve if indigenous control and curricular diversity advance.

The second dimension mentioned at the beginning, i.e. the pedagogical and psycholinguistic thrust of mother tongue education and literacy have shown little progress and seem to occupy a less central role in the educational policy debates than in previous times. And research findings that document the academic advantages of such an education are still scarce (see however Francis, 1997, 2000) and have so far not been able to convince either policy makers or the indigenous communities themselves on a global level.

FUTURE DIRECTIONS

On the local and regional level, however, an increasing number of initiatives and experiences try out new ways of improving indigenous education and new relations between academic achievement and bilingual language use. An extremely interesting collective pilot project is reported in Meyer and Maldonado (2004). See Podestá Siri and Martínez Buenabad (2003) for more summaries. Mostly opposed to previous models, the new experimental projects are based on a pluricultural conception of the state and the full respect for Indian peoples and their ethnic rights. They claim as their target the maintenance or revitalization of Indian cultures and languages.

As one example among others, the local initiative of a team of indigenous teachers to develop consequent mother tongue education shall be summarized. In 1995 the P'urhepecha (Tarascan) teachers of two bilingual elementary schools in Michoacán, in the central Highlands of Mexico, introduced radical changes to the previous curriculum which had been based on the fast transition to Spanish and submersion L2 Spanish instruction as described in the earlier case. Academic results had been extremely poor since most children enter primary school as IL monolinguals. Since 1995 they have been teaching all subject matter including literacy and mathematics in P'urhepecha, the children's first language. As a first step they had to convince the community, especially the parents who agreed once the teachers explained that the new curriculum would certainly lead to higher levels of achievement in literacy, Spanish and other subject matters. The teachers had to create their own materials and decide on an appropriate alphabet. The most difficult part was to develop their own writing skills and the necessary academic discourse for all subject matters in their language. Several years later a research team carried out a comparative study between these and another school with the same sociolinguistic characteristics that followed traditional Castilianization. The study was based on extensive classroom observation and a specially designed battery of tests in both languages. The findings showed very clearly that pupils who had acquired literacy in their L1 achieved significantly higher scores in both languages than those who were taught reading and writing in Spanish (see Hamel and Francis, 2006 for a general description of the school project). Furthermore, the study revealed much more intensive classroom interaction and meaningful learning of content matters. Different from most indigenous schools in Mexico, P'urhepecha had become the legitimate, unmarked language of all interaction at school, a sociolinguistic achievement still quite exceptional in indigenous education. In several years of cooperation with the research team the schools developed their own validated curriculum

based on L1 literacy, content teaching of most subject matters in L1, and a specially designed syllabus for Spanish as L2 (Hamel and Francis, 2006). This enrichment curriculum serves now as a model for intercultural bilingual education for other communities and schools. The collaborative work shows very clearly that such a curriculum is feasible and more successful than traditional submersion education; it demonstrates furthermore the validity of the “common underlying proficiency” model (Cummins, 2000 for an updated version), since success in Spanish L2 literacy is best explained through the previous development of core proficiencies and academic discourse abilities in L1, which could then be accessed much more easily in L2.

See Also: Rainer Enrique Hamel: Indigenous Language Policy and Education in Mexico (Volume 1)

REFERENCES

- Aguirre Beltrán, G.: 1983, *Lenguas vernáculas. Su uso y desuso en la enseñanza: La experiencia de México*, CIESAS, México.
- Barrera-Vázquez, A.: 1953, ‘The Trascan project in Mexico’, in UNESCO (ed.), *The use of vernacular languages in education*, UNESCO, Paris.
- Bertely Busquets, M.: 1998, ‘Educación indígena del siglo XX en México’, in P. Latapí Sarre (ed.), *Un siglo de educación en México*, Volume 2, Fondo de la Cultura Económica, México.
- Bertely Busquets, M. and González Apodaca, E.: 2003, ‘Etnicidad en la escuela’, in M. Bertely Busquets (ed.), *Educación, derecho sociales y equidad*, SEP, México.
- Bravo Ahuja, G.: 1977, *Las castellanización de los indígenas mexicanos*. El Colegio de México, Mexico.
- Castillo, I.: 1945, ‘La alfabetización en lenguas indígenas: El proyecto Tarasco’, *América Indígena* 5(2), 139–151.
- Cifuentes, B.: 2002, *Lenguas para un pasado, huellas de una nación: Los estudios sobre lenguas indígenas de México en el siglo XIX*, INAH and Plaza y Valdés, Mexico.
- Citarella, L.: 1990, ‘México’, in F. Chiodi (ed.), *La educación indígena en América Latina*, Volume 1, PEBI and Abya Yala, Quito.
- Cummins, J.: 2000, *Language, Power and Pedagogy: Bilingual Children in the Cross-fire*, Multilingual Matters, Clevedon.
- DGEI (Dirección General de Educación Indígena): 1990, *Fundamentación para la modernización de la Educación Indígena*, SEP, Mexico.
- DGEI: 1999, *Lineamientos generales para la Educación Intercultural Bilingüe para niños y niñas indígenas*, SEP, Mexico.
- DGEI: 2005, *Estadística inicial y básica de la Educación Indígena*, SEP, Mexico.
- Francis, N.: 1997, *Malintzin: Bilingüismo y alfabetización en la Sierra de Tlaxcala*, Abya-Yala, Quito.
- Francis, N.: 2000, ‘A shared conceptual system and language processing in bilingual children: Findings from literacy assessment in Spanish and Náhuatl’, *Applied Linguistics* 21, 170–2005.
- Francis, N.: 2003, *Schooling and Bilingualism in Latin America: Perspectives for Bridges in the Language-Literacy Divide*, in Ryan P.M. and Terborg R. (eds.), *Language: Issue of Inequality*, UNAM, Mexico.

- Francis, N. and Reyhner, J.: 2002, *Language and literacy teaching for indigenous education*, Multilingual Matters, Clevedon.
- Hamel, R.E.: 1988, 'Determinantes sociolingüísticas de la educación indígena bilingüe', *Signos Anuario 1988*, 319–376.
- Hamel, R.E.: 1996, 'The inroads of literacy in the Hñähñú communities of Central Mexico', *International Journal of the Sociology of Language*, 119, 13–41.
- Hamel, R.E.: 2000, 'Políticas del lenguaje y estrategias culturales en la educación indígena', in IEEPO (ed.), *Inclusión y diversidad. Discusiones recientes sobre la educación indígena en México*, IEEPO, Oaxaca.
- Hamel, R.E. and Francis, N.: 2006, 'The teaching of Spanish as a second language in an indigenous bilingual intercultural curriculum', *Language, Culture and Curriculum* 19, 3, 171–188.
- Heath, S.B.: 1972, *Telling Tongues. Language Policy in Mexico: From Colony to Nation*. Teacher's College Press, New York and London.
- Hidalgo, M.: 1994, 'Bilingual education, nationalism and ethnicity in Mexico: From theory to practice', *Language Problems and Language Planning* 18(3), 184–207.
- Lockhart, J.: 1992, *The Nahuas after the Conquest: A Social and Cultural History of the Indians of Central Mexico, Sixteenth to Eighteenth Century*, Stanford University Press, Stanford.
- Meyer, L. and Maldonado, B. (eds.): 2004, *Entre la normatividad y la comunalidad: Experiencias educativas innovadoras del Oaxaca indígena actual*, IEEPO, Oaxaca.
- Modiano, N.: 1972, *Indian Education in Chiapas Highlands*, Holt, Rinehart and Winston, New York.
- Muñoz Cruz, H. (ed.): 2002, *Rumbo a la interculturalidad*, UAM-I, Mexico.
- Podestá Siri, R. and Martínez Buenabad, E.: 2003, 'Sociolingüística educativa', in M. Bertely Busquets (ed.), *Educación, derecho sociales y equidad*, SEP, México.
- Ros Romero, C.: 1981, *Bilingüismo y educación. Un estudio en Michoacán*, INI, México.
- Scanlon, A.P. and Lezama Morfín, J. (eds.): 1982, *México pluricultural: De la castellanización a la educación indígena bilingüe bicultural*, SEP-Porrúa, Mexico.
- Sierra, M.T.: 1992, *Discurso, cultura y poder: El ejercicio de la autoridad en los pueblos hñähñús del Valle del Mezquital*, CIESAS-Gobierno del Estado de Hidalgo, México-Pachuca.