Education for multilingualism and multi-literacy in ethnic minority communities: the situation in Asia[1]

Susan Malone, SIL International[2]
Bangkok, Thailand

Introduction

Since 1990, the world-wide emphasis on "Education for All" has led to greater commitment on the part of most governments in Asia to provide quality education for their citizens, with special focus on girls and women, the disabled and people with HIV/AIDS. Until recently, however, there has been less awareness that the "all" in "Education for All" also includes the speakers of ethnic minority languages. In spite of lobbying by language groups and NGOs and clearly stated support from some multi-lateral agencies,[3] few governments in Asia have yet demonstrated a commitment to providing linguistically and culturally appropriate education for their minority peoples.

Even so, the number of programs that promote multilingualism and multi-literacy among minority language speakers is slowly growing. This paper argues that linguistically and culturally appropriate education in ethnic minority communities is both necessary and feasible. It discusses the current situation in Asia with respect to multilingual education (MLE), presents an overview of the types of MLE programs that have been established and describes the program features that seem to be essential for achieving the programs' long term goals.

Education in ethnic minority communities: current situation

Almost one-third of the world's 6000 languages are spoken in Asia. A study of language and education policies and practices in the region, however, reveals that in most countries, a limited number of languages are associated with power and privilege while the rest are merely tolerated, ignored or actively suppressed. Nowhere are these differences more clear than in education. Although there are exceptions (described below), most formal education systems tend to underutilize the knowledge and experience that ethnic minority children bring to school:

> *Only Language of Wider Communication (LWC)[4] allowed*; the children's heritage language is banned in the classroom and on the school grounds.
>
> *LWC used as Medium of Instruction (MOI); Minority Language (ML) allowed informally***.** All instruction is in the LWC; children are allowed to converse in their heritage language during "free time" within and outside the classroom.
>
> *LWC used as MOI; ML used to explain new concepts, as needed***.** Instruction is in the LWC; teachers use the children's heritage language to explain new concepts.
>
> *ML used for special classes***.** Instruction is in the LWC except during "Culture Time" classes (1-3 hours a week) in which the children's heritage language is used to talk about their culture.

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[2] E-mail address: Susan_Malone@SIL.Org. Suggestions and questions are welcome.

[3] UNESCO's clearly stated position paper, "Education in a Multilingual World" (2002), emphasizing the right of all people to education in a language they speak and understand is on the internet at http://unesdoc.unesco.org/images/0012/001297/129728e.pdf.

[4] The following terms (with abbreviations) are used in this paper to talk about the languages used in education: Language of Wider Communication or *LWC:* usually a dominant or majority language which is often also a national and/or official language; minority language or *ML:* the heritage language, or mother tongue, of ethnic minority community members; medium of instruction or *MOI*: language used for classroom instruction.

If the teacher does not speak the ML, mother tongue speakers from the children's community are invited to teach the class.

ML used to introduce children to school. The children's heritage language is used when they first begin school; the LWC is immediately introduced in oral and written form and quickly becomes the MOI.

ML used as initial MOI with rapid transition to LWC. The children's heritage language is the MOI for the first (and sometimes part of the second) year of school and is the language of initial literacy. LWC in oral and then in written form is introduced in the first year and then becomes the MOI.

The negative consequences of hierarchical language and education policies and practices for ethnic minority communities have been noted throughout the region and, indeed, the world:

…for the learners themselves

Lack of access to formal and non-formal education of any kind because there are no schools at all in the minority language areas or because the few schools that have been established are too far from many of the learners' homes.

Schools that are inappropriate to the minority communities because most teachers—if there are teachers—do not speak the learners' language. Teaching and reading materials—if there are any available—are in the majority language, which the learners may not speak or understand and which focus on topics that are unrelated to their lives.

High attrition rates for many of those who do enter formal or non-formal education because they understand neither the language nor content of instruction.

Lack of skills necessary for paid employment because of inadequate education and therefore inadequate LWC language skills required for most jobs.

Alienation from heritage language and culture because both are replaced in the curriculum by the majority language and culture which are presented as the norm.

…for many minority language communities

Loss of ethnic identity as young people are estranged from (and made to feel ashamed of) their home communities and fail to pass on their own language and culture to their children.

Demoralization as communities lose awareness of their linguistic and cultural heritage, their history and their unique place in the larger society.

Disproportionately high rates of alcoholism, crime, poverty and suicide as a result of the factors above, as well as other forms of social, economic and political discrimination.

…for many nations and for the world in general

Societies that are divided, rather than enriched, by linguistic and cultural differences

Loss of accumulated wisdom and knowledge that are embedded in indigenous languages and cultures are lost.

Loss of the world's linguistic and cultural diversity—a consequence as tragic as the loss of biological diversity

The need for policy and program change

Three types of action are needed if linguistic and cultural diversity is to be preserved and if ethnic minority communities are truly to be included in "Education for All":

New language and education policies that affirm and protect language diversity and provide linguistically and culturally appropriate education for ethnic minority communities;

New models of development that meet the needs of all segments of society and that encourage integration, rather than forcing assimilation of ethnic minority groups into the majority society; and

New education programs that enable ethnic minority learners to achieve their educational goals without forcing them to sacrifice their linguistic and cultural heritage. Such programs would

- Provide a strong *educational foundation* in the language the learners know best, enabling them to build on the knowledge and experience they bring to the classroom;
- Provide a *good bridge* to speaking and listening, reading and writing the new language using sound educational principles to build the learners' fluency and confidence; and
- Encourage and enable them to use *both /all* their languages to continue learning.

Research studies have repeatedly demonstrated that a strong foundation in the first language and a carefully planned process of bridging to the new language is an important factor in minority language learners' success in education. In the report of their long-term study of over 40,000 children from non-English speaking backgrounds in United States schools, Thomas and Collier concluded that

> *The strongest predictor of L2 [second language] student achievement is the amount of formal L1 [the children's first language] schooling. The more L1 grade-level schooling, the higher L2 achievement* (Wayne Thomas and Virginia Collier, 2001). [5]

Results of studies from other parts of the world (cf. Williams, 2001; Muskin, 1999) also affirm the importance of this kind of "strong foundation and a good bridge."

Variety of MLE programs in Asia

Presently, most MLE programs in Asia are found within non-formal education systems and are the result of "grassroots" movements—local communities usually supported by NGOs and occasionally by universities. However, a limited number of programs have also been initiated in primary schools with varying degrees of support from local, state or national governments. Programs are established for children and adults, in some cases to help ML speakers bridge into the LWC for education and/or employment, and in other cases to help learners bridge back into their heritage language, usually as part of a larger language revitalization movement.

Four categories of MLE programs can be identified (Malone, 1998):

[5] See the Annex for Thomas and Collier's graph which shows the relative effectiveness of several types of MLE programs

Type 1. ML→LWC for children For educational success and maintenance of heritage language	**Type 3. ML→LWC for adults** For employment, access to information, education, socioeconomic integration, etc.
Type 2. LWC→ML for children For revitalization and/or maintenance of heritage language	**Type 4. LWC→ML for adults** For access to heritage language texts, for revitalization and/or maintenance of heritage language

*Type 1. Programs for ML children who must learn the LWC to succeed in formal education***.** MLE classes for ML children begin in the children's heritage language and later add the LWC. Some programs begin as pre-primary classes and continue as after-school and weekend classes once the children start (LWC) school. Other programs are incorporated into the formal system. Examples of Type 1 programs are the elementary classes that have been established in over 300 languages in Papua New Guinea[6], the Kalinga language program in the Philippines[7] and the Dong language program in China. [8] The Dong program, now in its third year, was planned specifically to provide a strong foundation in the ML and good bridge to Chinese. It begins with two years of pre-primary classes in which focus is on the children's oral language development in Dong and on helping them acquire reading and writing skills in that language. The children are then introduced gradually to oral and written Chinese. Over the six years of primary school, the time devoted to Chinese will increase each year so that the children will achieve the government's expectations for Chinese language learning by the time they finish Grade 6. Dong language and culture will remain a vital part of the curriculum throughout primary school.[9]

Type 2. Programs for ethnic minority children for whom the LWC has become the first language. The purpose of Type 2 programs is to help ethnic minority children who have lost most or all of their heritage language learn to speak, read and write that language. In Asia, MLE/ language revitalization programs of this type may be established inside the formal system, sometimes incorporated into the "Culture Time" component of the school curriculum, or as after-school or weekend classes. An example of a Type 2 program in the formal system is the Chong language revitalization program in Thailand. [10] In this program, ML classes begin in Grade 3 and focus on helping the children become comfortable using oral Chong, then help them bridge into reading and writing the language. Because the Chong orthography is based on Thai script with only a few adaptations, the children are able to transfer from Thai into Chong literacy relatively quickly.

Type 3. Programs for young people and adults with no previous education who are monolingual in their heritage language (ML). Successful MLE classes for monolingual adults begin by introducing them to literacy in their heritage language. As they gain fluency in reading and writing that language, they are introduced to the oral LWC but bridge to LWC literacy only when they have developed confidence and oral fluency, a process that may take several years. An example of a successful program of this type is the Central Subanen adult literacy program in the Philippines. According to reports, the adult learners in this program have become bilingual and bi-literate (their own language and Filipino).[11]

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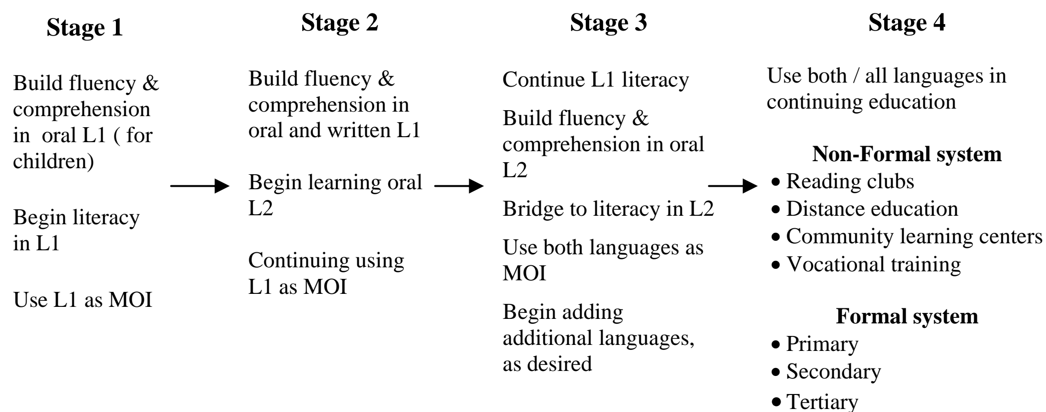
[6] Kale and Marimyas, 2003; Klaus, 2003
[7] Dekker and Dumatog, 2003
[8] Geary, 2002; Cobbey, 2003.
[9] The Dong program might be classified as a "One-way developmental program" on Thomas and Collier's graph (See Annex.)
[10] Choosri and Sisombat, 2003
[11] Pina, 2003.

Type 4. Programs for young people and adults who are bilingual in their heritage language and the LWC and have learned to read and write the LWC. The purpose of this type of MLE program is to help bilingual adults, who have some LWC literacy skills, bridge back into literacy in their heritage language. Learners may attend these classes for a variety of reasons: to read their sacred texts and/or traditional literature; to write letters to family members; or simply to re-establish their ties to their heritage language and culture. Mother Tongue speakers of the language who want to be teachers in the community's MLE program may also attend these classes. If the ML and LWC use the same script, the bridging process might require only self-study transfer guides and diglot reading materials (text in both ML and LWC). Unfortunately, there are few written reports of these types of programs, possibly because learning is often informal and independent.

Features of strong MLE programs

Sustainable MLE programs in Asia can be divided into four general stages although the length of time and specific activities of each stage are context-specific. [Note that in the model below, "L1" refers to the language the learner knows best—their heritage language or the LWC. "L2" refers to the new language that they want to learn, either the LWC or their heritage language.]



Stages of MLE programs in ethnic minority communities

Stage 1—Beginning Literacy. An early emphasis in Stage 1 of children's (but not adults') programs is on oral language development. Activities involve talking about familiar people, places and activities, singing songs, acting out stories and playing games. The learners (children and adults) are introduced to reading and writing in their L1, which is also used as medium of instruction (MOI). Curriculum and reading materials are based on topics that are familiar to the learners and relevant to their lives.

Stage 2—Fluency. Emphasis now is on gaining fluency in reading and writing the L1, which is still used as the MOI. Also at this stage, teachers introduce the learners to oral L2 (no reading and writing yet).

Stage 3—Bridging. As the learners have attained fluency in L1 literacy and are gaining confidence in using L2 orally, they begin bridging to L2 literacy. The duration of the bridging process is determined by several factors, among them the degree of difference between the oral and written forms of the L1 and L2, the availability of reading materials in both languages, the teachers' educational level and quality of training, the availability of instructional materials that focus on the bridging process and the age and previous education of the learners. Unfortunately, this crucial stage is too often initiated without careful planning, good teacher training or relevant materials. Consequently, this is the point at which MLE programs most frequently fail. Careful attention to the bridging strategy, good

instructional materials and good training and supervision of the teachers help to ensure that the learners will succeed at this stage.

Stage 4—On-going education. At this stage, minority language learners should be able to continue learning in both their first and second languages, either in the formal or non-formal education systems or through informal learning.

Challenges to developing MLE programs in multilingual contexts

Most people agree that it makes little sense to force children or adults to learn in a language they neither speak nor understand. Why, then, has there not been more support for MLE? The following reasons are frequently given why MLE "can't be done":

"Supporting diversity will foster divisiveness and lead to ethnic conflict." Some LWC speakers claim that linguistic and cultural diversity leads to ethnic strife, arguing that a single language and culture are necessary for national unity. A glance at recent and current history shows the opposite is more often true: it is when their language and ethnicity are suppressed that people are more likely to rebel. Consider the Bangladeshis who fought a war and gained independence from Pakistan over the issue of language, the Lithuanians, whose anger over the mandatory use of Russian in their schools was an early factor leading to their break with the Soviet Union or the Catalonians who are even now agitating against what they perceive as the Spanish government's linguistic and cultural imperialism. Compare those situations with Papua New Guinea where the government has initiated early education in over 300 of the country's 820 languages. PNG celebrates rather than regrets its diversity, as noted by John Waiko, former Minister of Education:

> *Our greatest national resource is the diversity of cultures in our country. Diversity means more viewpoints to clarify, more ways of solving problems, more creative ideas, a greater ability to deal with change… Where diversity is crushed…the nation becomes weak and divided (*Waiko, 1997).

"Learning in one's first language will mean less success in learning a second language." The argument here is that ML learners need as much time-on-task as possible in the LWC, even if they do not speak and understand it in the beginning—that giving time to learning the ML will result in poor learning of the LWC. William and Cooke argue that the opposite is true:

> *It is abundantly clear that education in a language that few learners, and not all teachers, have mastered detracts from quality and compounds the other problems of economically impoverished contexts (*Williams & Cooke, 2002: 317, quoted in Benson, 2003, unpublished paper*).*

In fact, the argument that it's better to "submerge"[12] learners directly in the LWC, even though they neither speak nor understand it, makes so little pedagogical sense that one must assume that educators making such an argument have other reasons for resisting MLE.

The fact that this is also the reason why some ethnic minority parents resist MLE programs for their children emphasizes the need for more and better awareness-raising in their communities. Unfortunately, awareness-raising and/or mobilization among the intended beneficiaries of MLE programs is too often forgotten in the hurry to establish programs. In one situation, when a consultant asked a group of parents for their opinion about the MLE program established in their community, they responded with the question, "Why are they starting in our language? We want our children to learn the national and international language." They had not been told (or did not understand) the educational benefits of building a strong foundation in the children's first language and then of providing them with a good

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[12] That is, forcing a learner to learn in a strange language is equivalent to throwing a child into deep water in order to teach the child to swim.

bridge to the new language(s). At the end of that meeting, the parents said, “Go back to [the capital city] and tell the people there that we want that strong foundation and good bridge!”

“Some ethnic minority languages lack writing systems.” Indeed, many smaller ethnic languages have not yet been put into written form. A misconception verbalized by some of those who use this argument, however, is that developing a writing system requires designing a new script, an impossible task in countries with large numbers of languages. However, as experiences throughout the world have demonstrated repeatedly, existing scripts can be adapted to a variety of languages (e.g., Roman script for Indonesian and Vietnamese and Devanagari script for writing Hindi and Nepali.) With the help of linguists, minority language communities throughout Asia and elsewhere have adapted scripts from related languages to develop their own writing systems.[13]

“There are too few mother tongue speakers qualified to teach in the schools.” ML communities without access to quality education may lack people with the qualifications normally required for teaching in the formal education system. The best solution, of course, is to provide quality education in the minority communities so that ML speakers can become professional teachers. Until that happens, a common practice throughout Asia and in developing countries around the world is to equip non-professional ML speakers as teachers, providing them with careful pre-service training and on-going supervision and support. In some cases the ML speakers serve as teaching assistants (e.g., in BRAC’s pilot “Education for Indigenous Children” program in Bangladesh)[14] and in some cases as teachers for early primary grades (e.g., Papua New Guinea’s MT elementary classes which make up the first three years of formal education)[15].

“There are no instructional materials that ‘fit’ all the minority language communities.” This is true; simply translating an LWC curriculum into minority languages may result in content that is unfamiliar and inappropriate to ethnic minority learners, especially those in more remote communities. Developing curricula for many different ethnic groups may appear to be an impossible task, but again, solutions have been found. One solution that is quite promising involves the preparation (by the national education department) of intended learning outcomes (or learning objectives) as well as curriculum guidelines for each grade level. ML teachers use these centrally produced materials to help them develop their instructional plans, but use content that is appropriate to the children’s cultural context for teaching the different subjects. An excellent example of centrally produced curriculum guidelines comes from the Department of Education in Papua New Guinea (National Department of Education, 2003).

”The minority languages lack graded reading materials that can be used in their schools.” Minority communities frequently lack graded reading materials that enable new learners to gain reading fluency and then encourage them to continue reading. Creating literature in multiple languages is certainly a challenge. However, experiences in many countries have demonstrated clearly that with appropriate training, minority language speakers are able to produce excellent reading materials. Locally developed materials are especially enjoyable and stimulating to new readers because they are about people, places and activities that are familiar to them (Cf., D. Malone, in press; Choosri and Sisumbat, 2003).

“Minority communities lack funding to support their programs.” The majority of ML communities will not be able to sustain their own education programs without outside assistance. Even when community members offer their homes and other local buildings for use as classrooms and volunteer as teachers and writers, the community will likely need financial support to print instructional and reading materials and purchase classroom supplies.

[13] Easton, 2003.
[14] Sagar and Poulson, 2003
[15] Kale and Marimyas, 2003

However, these costs do not seem so high when compared to the long-term costs of the inappropriate systems currently in place (cf., Dutcher, 1995). Cooperative efforts, in which a variety of outside agencies and organizations work together creatively with the minority communities, are the best ways to ensure that the necessary resources will be found.

Establishing and sustaining quality MLE programs in multilingual contexts

In spite of the many challenges to MLE, solutions are being found and programs are being established and sustained in countries around the world. A review of these programs reveals that , in addition to leadership and support for the program among a critical mass of mother tongue speakers of the minority language,[16] successful MLE programs in ethnic minority communities usually include the following components:

Preliminary research that gathers information about the language situation, the community's motivation for MLE, and potential resources for the program (especially people).

Awareness-raising and mobilization activities that provide information, generate interest and support for the program within and outside the community (government, NGOs, universities, donors, businesses).

Recruitment methods that bring motivated, knowledgeable and respected ML speakers into the program (and keep them there).

On-going training and supervision that help MT speakers—teachers, writers, artists, editors, supervisors and trainers—gain competence, creativity, commitment and credibility within and outside the community.

A process of developing and testing a writing system that will be acceptable to the majority of mother tongue speakers and to the government (where required), and will encourage members of the language communities to continue reading and writing in their language.

Government-produced curriculum guidelines that can be adapted to a variety of ML communities.

Curriculum development workshops in which local teachers use the guidelines to develop teaching plans.

A literature production and procurement process that

- Equips ML speakers to develop (write, illustrate, edit) graded reading materials in their own languages on a variety of topics that are familiar and interesting to the learners.
- Identifies and utilizes localized production processes for inexpensive production of ML reading materials for testing in the communities. (Once the materials have been tested and approved, funding will be needed for producing additional copies.)
- Provides graded reading materials in the LWC that are interesting and relevant to people in the community and help them bridge into literacy in that language.

Documentation and evaluation systems that provide information on a regular basis for strengthening the program and for reporting to government, donors and other stakeholders.

Cooperation among the individuals and entities—government agencies, NGOs and academic institutions—that are committed to supporting appropriate education in ethnic minority

[16] A "critical mass" does not necessarily imply a majority of the population, at least in the beginning. In the author's experience, many (or most) MLE programs are initiated as pilot projects by a small group of respected individuals from the language community. The programs are sustained and expand when others in the community observe the positive impact on language and cultural revitalization and/or on increased access to and success in education.

communities. In such cooperative efforts, each stakeholder group can contribute to different aspects of the program:

Minority Language communities

- Conduct preliminary research
- Mobilize support within the local community
- Develop community-centered curricula and instructional materials (using centrally developed guidelines)
- Teach classes
- Train and mentor new teachers**;** supervising classes
- Write, translate, illustrate, edit and distribute graded reading materials in the ML

Government agencies

- Establish a positive political climate; mobilize support for MLE nationally and internationally
- Develop policies that support language development and MLE
- Develop curriculum guidelines that can be adapted to different ML communities
- Train supervisors and trainers
- Provide funding or identify and encourage outside donors to support MLE programs
- Distribute graded reading materials in the LWC

NGOs

- Train ML speakers to conduct preliminary research
- Provide linguistic expertise to support orthography development
- Train ML speakers as trainers, teachers, supervisors, writers, artists, editors
- Develop curricula, specifically help ML speakers to adapt curriculum guidelines to their local context
- Facilitate the development of ML literature as well as "bridging" literature
- Provide funding or identify and link ethnic minority communities to appropriate donor agencies

Academic institutions

- Collect and provide information about the language situation
- Train ML speakers to conduct linguistic research
- Provide linguistic expertise to support orthography development

Conclusion

Can MLE be done? As noted by several presenters at this conference, evidence from minority language communities in Asia and around the world indicates that indeed, MLE programs *can* be and *are* being implemented and sustained.

Is it difficult? It is certainly challenging, especially in multi-lingual countries lacking extensive financial resources, to develop writing systems, establish the necessary training programs and support the production of instructional and graded reading materials in multiple languages, all of which are necessary for linguistically and culturally appropriate MLE programs in ethnic minority communities.

Is it really necessary? It is if "Education for All" is truly to be for *all*. However, perhaps a better question would be: Is it really acceptable to force minority learners into education programs that are inappropriate to their lives and destructive to their heritage language and culture? John Waiko, himself a member of a minority community in Papua New Guinea, provides his perspective on the second question:

> *The failure of formal education for indigenous minorities [is] well understood by indigenous peoples all over the world. The so-called drop-out rates and failures of indigenous people within non-indigenous education systems should be viewed for what they really are—rejection rates.* (John Waiko, PNG Minister of Education. 2001).

Is it worth the effort? Perhaps the best people to answer that question are the members of the ethnic minority communities themselves:

> *For you, schooling simply serves to open the door to professional employment, but for me it is something else. It is the means of training for life… I would start with what I already possess and add what is given to me, rather than abandoning what I possess to look for what might be given* (From a speech by Chief Djoumessi, translated and abridged from Momo, 1997, in Bird, 2001).

"Education for All" that is truly for *all* must not leave the minority feeling rejected by the majority or force minority learners to abandon what they already possess—their heritage language and culture and their life experiences—in order to achieve their social, political and educational goals. Better that the majority—government agencies, NGOs and academic institutions—support ethnic minority communities in developing education programs that celebrate who they are and what they have been given and, in so doing, provide them with "training for life".

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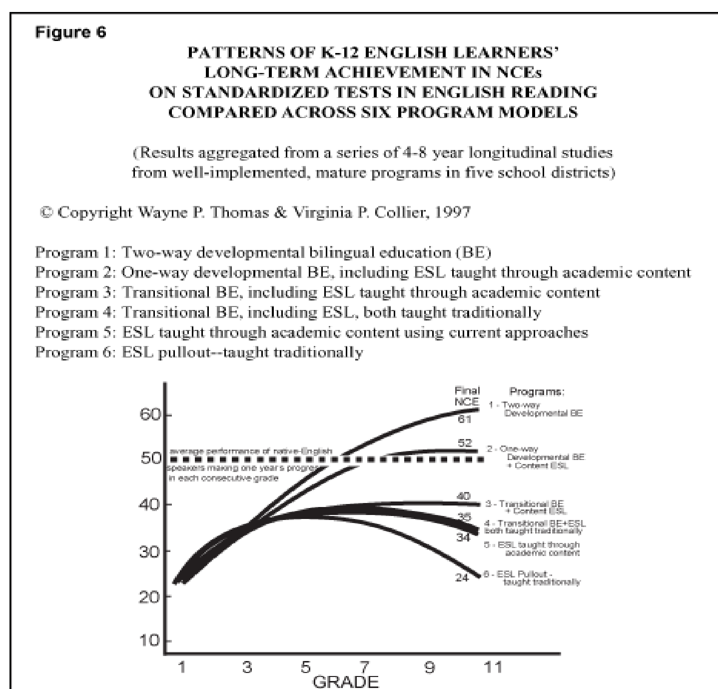
Annex 1. Comparison of Achievement on Standardized Tests

Thomas, Wayne P. & Virginia Collier (1997). School Effectiveness for Language Minority Students.
NCBE Resource Collection Series

http://www.ncela.gwu.edu/ncbepubs/resource/effectiveness/
National Clearinghouse on Bilingual Education
The George Washington University Center for the Study of Language and Education
Washington, DC

The graph below is from Wayne Thomas and Virginia Collier's report of their longitudinal study of over 40,000 children in bilingual education programs in the USA.[17] It compares long-term results on achievement tests of children in several different types of bilingual education programs[18] and demonstrates that children who built a strong and long-lasting foundation in their first language, while also learning, and learning *in*, the majority language (in this case, English), achieved higher test results than did those who were moved quickly into the majority language. While this study focused on programs in the USA, other studies in Africa and Latin America (c.f., Williams, 2001; Benson, 2003) have come to the same conclusion: A strong foundation in the L1, and an educationally sound and extended process of bridging to additional languages provide the best long-term educational (and social and cultural) results for minority language learners.



[17] See http://www.ncela.gwu.edu/ncbepubs/resource/effectiveness for the full text of this article. Thanks to Drs. Collier and Thomas for permission to use their graph in this article.

[18] Please note that NCEs are not equivalent to percentiles, but NCEs are equal-interval percentiles. Without going into the technicalities of the statistical processes involved, here are the percentile equivalents for the NCEs (W. Thomas, personal communication, 2004):

NCE	Percentile
61	70
52	53
40	31
35	24
34	22
24	11

Following are descriptions (adapted) of the bilingual programs that were examined in this study[19], beginning with the strongest in terms of providing long-lasting educational benefits.

Program 1. Two-way developmental bilingual education. Minority language-speaking and English-speaking children share the same classrooms, from kindergarten to grade 12. Both languages are used for instruction according to a specific plan (e.g., one language used one day, the other language used the following day). The most common alternation between the two languages of instruction is a half-day in each language. The objective is that both groups of children—minority and majority language speakers—will become fully proficient in both languages.[20]

Program 2. One-way developmental programs. Like Program 1, this is an enrichment program that aims at full bilingual competence. The primary difference between these programs and the two-way programs is the absence of mother tongue-speakers of the majority language in these classrooms. Minority language children receive at least 9 years of education (K-8) in their mother tongue (MT) from bilingual teachers who are also MT speakers of the minority language and who use the MT as medium of instruction. The MT is also used to introduce the children to reading and writing. In some programs, English is introduced orally with later introduction to reading and writing in that language. In other programs, L1 and L2 literacy are learned at the same time and both languages are used for instruction according to a specific plan (as described in Program 1). The objective is that the minority language children will be fully proficient in both languages by the end of Grade 8. In this model, students may have access to some courses in high school taught through their MT as well as the many courses taught in English.[21]

Program 3 – Transitional bilingual education programs that introduce English by teaching content. The first two or three years of education provide children with instruction in the MT by teachers who speak the MT as their first language. The minority language is used as medium of instruction and reading and writing are introduced in that language. English (majority language) is introduced orally with some instruction in basic English literacy (typically in a 50:50 time ratio), beginning in the first year of school. Both languages are used for instruction according to a specific plan. The idea is that children *learn* English through learning *in* English—that is, the children learn the new language at the same time that they are learning new content. The expectation is that the children will have learned enough academic content that they will not be behind native speakers of English when they enter full English language classes.

Program 4 – Transitional bilingual education with language-based ESL (another type of early- exit program). Language minority children receive 2-3 years of education in their MT from MT teachers who use the MT as medium of instruction and to introduce initial literacy. As above, English may be introduced orally with basic English literacy later but it is taught as a subject, not used for learning content. The objectives are basic literacy in both languages and sufficient proficiency in English to enter the mainstream by the end of the 3rd grade.

Program 5. Content-based ESL. In these programs, as in Program 3 above, minority language children learn English via content instruction by teachers who have been specially

[19] In their report, the authors emphasize that these data represent programs that were in place in the 1980s and 1990s.
[20] According to Collier (personal communication, 2004), "Some U.S. schools actually do continue these programs into middle school [grades 6 to 8] and high school [grades 9-12]. Very few have yet developed courses at the high school level. In our 1997 research report, we were only examining those programs that provided bilingual schooling through fifth grade (the end of elementary school), but there are many other programs that continue into the middle school years."
[21] Thomas and Collier's 2002 report includes data from a K-12 one-way model from northern Maine.

trained for this type of ESL teaching. This learning often takes place in "self-contained ESL content classrooms, taught by ESL teachers. As the children move along in ESL development, they may spend a part of the day in mainstream classes until they are fully mainstreamed after 2-4 years. The objective is that the children will have acquired enough English so they can function in the mainstream classes without lagging too far behind in the content areas.

Program 6 – Language-based (traditional) ESL. Language minority children receive basic or traditional ESL instruction usually in pull-out classes. The objective is that they will acquire sufficient mastery of English to function in English mainstream classes.