A Global Perspective on Bilingualism and Bilingual Education

August 1999
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The number of languages spoken throughout the world is estimated to be 6,000 (Grimes, 1992). Although a small number of languages, including Arabic, Bengali, English, French, Hindi, Malay, Mandarin, Portuguese, Russian, and Spanish serve as important link languages or languages of wider communication around the world, these are very often spoken as second, third, fourth, or later-acquired languages. Fewer than 25% of the world's approximately 200 countries recognize two or more official languages, with a mere handful recognizing more than two (e.g., India, Luxembourg, Nigeria). However, despite these conservative government policies, available data indicate that there are many more bilingual or multilingual individuals in the world than there are monolingual. In addition, there are many more children throughout the world who have been and continue to be educated through a second or a later-acquired language, at least for some portion of their formal education, than there are children educated exclusively via the first language. In many parts of the world, bilingualism or multilingualism and innovative approaches to education that involve the use of two or more languages constitute the normal everyday experience (see, e.g., Dutcher, 1994; World Bank, 1995). The results from published, longitudinal, and critical research undertaken in varied settings throughout the world indicate clearly that the development of multiple language proficiency is possible, and indeed that it is viewed as desirable by educators, policy makers, and parents in many countries.

Multiple Languages in Education
The use of multiple languages in education may be attributed to numerous factors, such as the linguistic heterogeneity of a country or region, specific social or religious attitudes, or the desire to promote national identity. In addition, innovative language education programs are often implemented to promote proficiency in international language(s) of wider communication together with proficiency in national and regional languages. In Eritrea, for instance, an educated person will likely have had some portion of their schooling in Tigrigna and Arabic and English, and will have developed proficiency in reading all these languages, which are written using three different scripts (Ge'ez, Arabic, and Roman). In Papua New Guinea, a country with a population of approximately 3 million, linguists have described more than 870 languages (Summer Institute of Linguistics, 1995). Here it is common for a child to grow up speaking one local indigenous language at home, to speak another in the market place, to add Tok Pisin to her repertoire as a lingua franca, and to learn English if she continues her schooling. Analogous situations recur in many parts of the world in countries where multilingualism predominates and in which children are exposed to numerous languages as they move from their homes out into surrounding communities and eventually through the formal education system.

Research on the Use of First and Second Languages in Education

A comprehensive review of research on the use of first and second languages in education, carried out for the World Bank (Dutcher, 1994), examined three different types of countries: (1) those with no (or few) mother tongue speakers of the language of wider communication (e.g., Haiti, Nigeria, the Philippines); (2) those with some mother tongue speakers of the language of wider communication (e.g., Guatemala); and (3) those with many mother tongue speakers of the language of wider communication (e.g., Canada, New Zealand, the United States). Several conclusions can be drawn from this study:

- Success in school depends upon the child's mastery of cognitive/academic language, which is very different from the social language used at home.
- The development of cognitive/academic language requires time (4 to 7 years of formal instruction).
- Individuals most easily develop literacy skills in a familiar language.
- Individuals most easily develop cognitive skills and master content material when they are taught in a familiar language.
- Cognitive/academic language skills, once developed, and contentsubject material, once acquired, transfer readily from one language to another.
- The best predictor of cognitive/academic language development in a second language is the level of development of cognitive/academic language proficiency in the first language.
- Children learn a second language in different ways depending upon their culture and their individual personality.
- If the goal is to help the student ultimately develop the highest possible degree of content mastery and second language proficiency, time spent instructing the child in a familiar language is a wise investment.

Common Threads of Successful Programs

In the research review conducted for the World Bank (Dutcher, 1994), the following common threads were identified in successful programs that aimed to provide students with multiple language proficiency and with access to academic content material.

- Development of the mother tongue is encouraged to promote cognitive development and as a basis for learning the second language.
- Parental and community support and involvement are essential.
- Teachers are able to understand, speak, and use with a high level of proficiency the language of instruction, whether it is their first or second language.
- Teachers are well trained, have cultural competence and subject-matter knowledge, and continually upgrade their training.
- Recurrent costs for innovative programs are approximately the same as they are for traditional programs, although there may be additional one-time start-up costs.
- Costbenefit calculations can typically be estimated in terms of the cost savings to the education system, improvements in years of schooling, and enhanced earning potential for students with multiple language proficiency.

Cross-Cutting Themes
Two cross-cutting themes that appear critical for policy or planning discussions within the domain of language education reform are discussed below.

Nurturing the first language. Despite decades of sound educational research, there still remains a belief in many quarters that when an additional language is introduced into a curriculum, the child must go back and relearn the academic concepts already mastered. Although there remains much to be learned about the contexts and strategies that facilitate transfer across languages, the fact that such transfer occurs should not be a topic of debate. The work of Hakuta (1986) and his colleagues provides clear evidence that a child who acquires basic literacy or numeracy concepts in one language can transfer these concepts and knowledge easily to a second or third or other later-acquired languages. The literature and our practical experience are replete with examples confirming the importance of nurturing the child's mother tongue. Gonzalez (1998), in particular, writes and speaks especially compellingly about the need to develop basic functions of literacy, numeracy, and scientific discourse in the first language to the fullest extent possible while facilitating transfer to the second language.

Importation of models versus importation of "cycles of discovery." Swain (1996) described the need to "transfer" the stages and processes of evaluation, theory building, generation of hypotheses, experimentation, and further evaluation that will help to ensure the implementation of programs appropriate for the unique sociocultural contexts in which they will operate. That is, she cautioned that it is not a particular model of innovative language education (and, in particular, a Western model) that should be transferred but rather a "cycle of discovery" that should be transferred. Swain reminded us that the so-called threshold levels of second language skills required for successful participation in formal education may differ dramatically across content areas, and that a majority of children face a language gap that must be bridged when they move from learning the target language to using the target language as a medium of instruction. Many policy makers have characterized bilingual education as a high risk undertaking, by which they mean that it is necessary to attend to a complex set of interacting educational, sociolinguistic, economic, and political factors.

Key Issues Warranting Further Attention
Based upon a review of available literature, four areas have been identified that appear to deserve additional attention. These include (1) sociolinguistic research throughout the world; (2) a more thorough examination of the concept and parameters of transfer; (3) materials development, reproduction, and distribution in the truly less commonly spoken languages (e.g., the majority of the African languages spoken in Namibia); and (4) development of a cadre of trained teachers who are proficient speakers of these languages.
Despite several decades of extensive sociolinguistic fieldwork in many areas, there remains much to be done to describe the language situation in many parts of the world. Many of the world's languages have yet to be written, codified, or elaborated. Furthermore, there are no materials available for initial literacy training or for advanced education; nor are there teachers who have been trained to teach via many of the world's languages.

These are all issues that have been identified as crucial by the World Bank (1995) in a recent report of priorities and strategies for enhancing educational development in the 21st century. They are issues that must be dealt with effectively before systemic reform that will encourage multilingual proficiency can be widely implemented.

Questions to Address Regarding Multilingual Education in Your Community

The cumulative evidence from research conducted over the last three decades at sites around the world demonstrates conclusively that cognitive, social, personal, and economic benefits accrue to the individual who has an opportunity to develop a high degree of bilingual proficiency when compared with a monolingual counterpart. Below are a number of important questions to be addressed whenever parents, educators, and adminstrators discuss the prospects of multilingual education for their communities.

- What are the explicit or implicit goals for formal education in the region?
- Is there general satisfaction throughout the region with the level of educational attainment by all participants (both those who terminate their education relatively early and those who wish to go on to tertiary studies)?
- Is the region relatively homogeneous or is it heterogeneous linguistically and culturally, and how would bilingual education complement the linguistic and cultural characteristics of the community?
- Does the region have an explicit or implicit policy with respect to the role of language in education, and how would bilingual education fit or not fit with this existing policy? Is this policy based upon tradition or the result of language (education) planning?
- What priorities are accorded to goals such as the development of broadly based permanent functional literacy, the value of education for those who may permanently interrupt their schooling at an early age, and the power of language to foster national identity and cohesiveness?
- Are the language(s) selected for instruction written, codified, standardized, and elaborated?
- Is there a well developed curriculum for the various levels/stages of formal educationthat is, a framework that specifies fairly explicitly a set of language, content, cognitive, and affective objectives that are then tied to or illustrated by exemplary techniques, activities, and supported by written materials?
- Are sufficient core and reference materials available for teachers and students in the language(s) of instruction? If not, are there trained individuals available who can prepare such materials?
- Is there a sufficient number of trained and experienced teachers who are fluent speakers of the language(s) of instruction and who are trained to teach via that language(s)?

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