This bulletin summarizes the arguments for bilingual education in the United States. More than one language is needed as the medium of instruction where the child's mother tongue may not be English. Instruction in a weaker language not only retards reading, but arithmetic and other subjects are not as well learned if the child must cope with unfamiliar subject matter in an unfamiliar tongue. In the past, many tests of language proficiency have not been properly designed, resulting in misleading scores. A committee of educators and administrators has suggested that bilingual schooling can result "in superior educational achievement." Experimental projects, using the mother tongue as the medium for instruction at early stages, support this proposition. In addition, bilingual programs tend to improve community involvement in the education process. Three pages of selected bibliography cover Research, Background Information, Selected Programs in Bilingual Education, and Further Information. (MK) CH
Throughout the United States, a substantial number of children entering school do not speak English, the language of instruction. The child who is confronted with an alien language and new concepts is likely to have classroom difficulties: he must not only try to adjust to a different culture which contains new standards, but to a new tongue—one in which he cannot immediately express himself verbally.

There are a number of factors contributing to the possibility of scholastic retardation. Children between the ages of five and seven use language at an accelerating rate for purposes of problem solving. The switch to a new language, when the child has not yet sufficiently developed cognitive skills in his first language, can lead to his becoming what Zintz calls a "non-lingual"—a premature bilingual whose functioning in both languages develops in only limited ways. Knowlton points to Southwestern school districts that "have the honor of graduating students who are functionally illiterate in two languages." The same can be said of New York City, Los Angeles, Miami, and dozens of other cities where children of linguistic minorities are forced to deal with a new language before they have begun the mastery of their mother tongue.

To the emotional and intellectual difficulty of learning a new language is added the serious impairment of the first language. Literacy in the mother tongue is not guaranteed by the educative process; if achieved at all, it must be achieved outside the classroom. Equally important, the schools' rejection of the mother tongue sharply reduces the possibilities for strengthening school-community ties. At the same time, "English-only" policies contribute to students' alienation from home and culture.

In significant ways, our educational system ignores the language and culture of minority groups in this society. With the exception of a handful of schools, the possibilities of utilizing tongues other than English as media of instruction are rejected. Speaking in a language other than English is viewed as a handicap that interferes with the student's learning of English.

With these and other factors in mind, a UNESCO Commission has recommended that "every effort be made to provide education in the mother tongue... pupils should begin their schooling through the medium of the mother tongue, because they understand it best, and because to begin their school life in the mother tongue will make the break between home and school as small as possible."

Will such an education lead to facility in English? There is no question that schools must insure students' command of the national language. There is, however, much question about ways to achieve this goal. Research studies have indicated that one of the best predictors of success in the national language is mastery of the mother tongue: children who are instructed in their beginning school years in their "first" language—and then advance to the "second" language—quickly learn the second tongue. At the same time, they can become balanced bilinguals, capable of functioning fully in two languages.

This issue has been prepared to assist those people interested in developing bilingual programs. Funding for bilingual projects is now possible under the Bilingual Education Program, Section VII of the Elementary and Secondary Education Act of 1965, as amended in 1967. Guidelines are available from the Office of Education, 400 Maryland Avenue, S.W., Washington, D.C., 20202.
LEARNING IN A WEAK LANGUAGE

There is a sharp contrast between classes where children are instructed in a weak language—the language introduced to them in school—and in classes where the children's first language is employed.

There are many difficulties associated with learning in a language which the child does not practice extensively outside the classroom. Modiano, reviewing the effects of learning to read in a second language says that reading comprehension is highly dependent on physical perception of graphic symbols; perception also depends upon experience with the language and the subject matter. It is less confusing for the child to learn the new skill of reading with familiar material than to learn two new, only somewhat related skills using material that has no meaning. "Attitudes, culture, and cognitive development, including the perception of objects and symbols, are linked inextricably to one another and to language."

Macnamara, in recounting the results of a reading study he did with Kellaghan, found that "articulation, and consequently communication, is slower" for students performing in their weaker language. The authors present the possibility that the encoding of ideas, and the organizing of syntactic structures, occur with less rapidity in the weaker language.

Instruction in a weaker language has produced adverse effects in subjects other than reading. In Ireland, when a group of English-speaking children were taught arithmetic in Irish over a six-year period, Macnamara found that their arithmetic deteriorated, particularly in the area of problem solving. In addition, instruction in the second language often had an erosive effect on the first language. This "balance effect" was noted in the Macnamara study: when the English-speaking children in Ireland were taught all subjects in Irish they tested poorly in two languages—both English and Irish.

Saer illustrated progressive retardation in all phases of classroom achievement in a Welsh school where children aged 7-11 were instructed in their second language.

Macnamara and Manuel also refer to emotional problems which may result from instruction in the weaker language. Both authors cite the students' discouragement and frustration in attempting to understand unfamiliar subject matter in an unfamiliar tongue. Stuttering is one of many concrete responses to this frustration, and studies have shown it a frequent companion to rapid adjustment to a foreign language.

TESTING BILINGUALISM

The term "bilingual" as it appears in the research literature, does not necessarily mean "fluent in two languages." Jensen, in reviewing literature on the effects of childhood bilingualism, points to problems in defining bilingualism. The "pseudo" bilingual, for example, is more familiar with one language than another, and does not use his second language in communication. The true or balanced bilingual masters both languages early and uses them with equal facility in appropriate domains.

Many studies undertaken to compare bilingual and monolingual children's achievement and intelligence have failed to take into account the extent to which the children were bilingual. (Some studies, e.g. one done by Pintner in 1932, select "bilinguals" on the basis of the child's last name.) Many studies have had no controls for age, sex, or socio-economic background.

While it is true that the "bilingual" tests poorly in his second language, the handicap of the child is often exaggerated by deficiencies in the tests themselves. To a large degree, test scores reflect previous education and achievement: testing a child in English—when his English is poor—or in his native tongue, when he has had no formal training in that language, guarantees poor results. Many tests also contain cultural references with which the children are not familiar. Interference—the process of intermixing pronunciation, grammar and word meaning in two languages—also occurs, and such confusion shows up in lower test scores.

*Recently tests have been developed (Fishman, Cooper, et al, 1968) to measure the extent of bilingualism in different contexts or domains such as home, school or job.

**It is important, in this light, to look at recent studies which show a definite correlation between socio-economic status and general linguistic development. In W. R. Jones' study (1960), control groups whose economic class backgrounds were comparable scored similarly on non-verbal intelligence tests—whether the group was monolingual or bilingual in background.
BALANCED BILINGUAL PERFORMANCE

Today there are challenges to the widely held belief that bilingualism in itself is a source of intellectual disadvantage. "Whether or not bilingualism constitutes a handicap, as well as the extent of such a handicap depends on the way in which the two languages have been learned." Some educators now hold that when instruction proceeds in the child's first tongue, mental and educational development is unimpaired, and that learning two languages from childhood has a favorable impact on the thinking process.

In a study of 10-year-old French Canadian children in Montreal, Canada, bilingual children scored significantly higher on intelligence tests than monolingual children. According to the authors, the balanced bilingual children had a language asset, a greater ability in concept formation, and a greater cognitive flexibility than their monolingual peers. The investigators conclude that "the bilinguals appear to have a more diversified set of mental abilities than the monolinguals."

The findings of this study are supported by other researchers who find that true bilinguals test as well as, if not better than, monolinguals. At the third annual conference of the Southwest Council of Foreign Language Teachers, a committee of educators and administrators suggested the following: "If school policy and other conditions are favorable, bilingual schooling results in superior educational achievement."

EXPERIMENTAL PROJECTS USING THE MOTHER TONGUE

Mother tongue is defined as the language which is acquired in one's early years, and which normally becomes the natural instrument of thought and education. There are a number of experimental programs which have tested the comparative effectiveness of instruction in the mother tongue and instruction in a second language.

The three programs we list below were divided by their designers into experimental groups, in which children were taught in their first language, and into control groups, where instruction was exclusively in the second language.

The Philippines, Iloilo Province: Children in an experimental group were taught reading, arithmetic and social studies in the local vernacular (Hiligaynon) in grades one and two. The children were then switched to instruction in English in grade three. Children in the control group received all instruction from grades one through three in English.
At the end of the first and second grades, tests were given in reading, arithmetic and social studies. The performance of the vernacular-educated children was superior to that of the English-educated children.

In the third grade, the experimental group began instruction in English. Within six months, their ability to speak and understand English equalled that of the control group, which had been instructed in English since the first grade. By the end of the third grade, children with a two-year foundation in the vernacular performed better on oral English tests, and only slightly worse on written English tests, than the control group. At the same time, the experimental group continued to surpass the control group in reading, arithmetic and social studies.

Sweden: Similar results emerged from a Swedish study. The experimental group had an initial ten weeks of reading instruction in Pitean, the local dialect. They then advanced to classes conducted in literary Swedish. A second Pitean-speaking group received all reading instruction in literary Swedish.

At the end of the first ten weeks, the Pitean-taught group had progressed further in reading than the Swedish-taught group. At the end of a year, the experimental group did significantly better on word recognition and in speed and accuracy of reading in literary Swedish than the control group did.

Chiapas, Mexico: Children in three Indian tribes were included in this study. Teachers were recruited from the local population, and the students were taught reading in the vernacular. When they had mastered the vernacular primers, they entered first grade, where the texts were in Spanish. Here, a larger proportion of Indian students in the bilingual schools were selected by their teachers as being "able to understand what they read in Spanish" than the exclusively Spanish-educated children in the control groups. Test data confirmed the teachers' selection; reading tests conducted in Spanish showed that students initially taught in the vernacular read with greater comprehension than those taught from the beginning in Spanish. The study also suggests that the teachers' ability to communicate with students may have outweighed their training or educational level.

In addition, the results of another Mexican study tend to support these findings. In Michoacan, Mexico, monolingual Tarascan Indian children had done poorly in the federal schools, which were conducted in Spanish. They learned little Spanish, the language of instruction, and therefore little arithmetic, history, or geography. In a special project, the monolingual Tarascan Indian children were introduced to the Tarascan alphabet which is similar to the Spanish alphabet. Instruction proceeded in Tarascan, which was then used as a bridge to Spanish. Literacy in both languages was achieved in two years, after which the children were able to enter the second grade of public school, where Spanish was the sole medium of instruction.

**BILINGUAL SCHOOLS IN THE U.S.**

Until recently, most states had laws compelling schools to use English as the sole language of instruction. Changes are now being made: Colorado and California, for example, have repealed this law; and the experimental use of Spanish as a teaching language is now permitted in Texas, New York, and other states.

Gonzalez describes bilingual education as "the concurrent use of two languages as media of instruction for a child in a given school in any or all of the school curriculum except the actual study of the languages themselves." The goals of bilingual education are threefold: the elimination of educational handicap for non-English-speaking children; the preparation of individuals who can effectively speak, read and write in two languages, and who are familiar with the values and heritage of two cultures; and the development in students of respect, not tolerance, for cultural and social difference. Such acceptance of minority group language and culture in educational policy runs counter to traditional social pressures on students to "cut all ties and Anglicize."

A number of bilingual schools in the United States have by now been established. The quantity and quality of evaluative information on their programs varies. We list two programs on which objective evaluation has been completed: many other newly-established bilingual schools are in the process of compiling evaluative reports, but data are not yet available.

San Antonio, Texas: Four elementary schools in the Harlandale Independent School District participated in a one-year bilingual project (1966–67). One first grade class in each of the four elementary schools was instructed bilingually in Spanish and English. The other first grade classes, which functioned as control groups, were taught in English only. The children were all Mexican-Americans. Tests at the end of the school year showed that: the bilingual sections did as well in reading English as the classes instructed in English only; pupils in all four experimental sections could speak, read and write in both Spanish and English at the end of the first grade; and three of the four bilingual classes made more progress in every measure (communicative skills, conceptual development, and social and...
personal adjustment) than those children taught in English only. The project was extended for a second year and tests were again administered. They indicated basically the same results as the first year’s tests.

The program is now in its third year. The number of bilingual classes has expanded to 30, and are conducted in first through third grade. The pupils who were in the first experimental classes are now in third grade. As a matter of general interest, the school superintendent notes that there is significantly more participation among those parents whose children are involved in bilingual classes than among those parents whose children are in conventional classes. In addition, teachers in the program feel the bilingual pupils have a "better self-concept" and "greater pride in their home culture and its language."

Miami, Florida: The Coral Way Elementary School enrolls both Spanish-speaking and English-speaking students. From first to third grade, Spanish and English speakers have separate classes. All subjects are taught in the mother tongue in the morning. In the afternoon, the lesson is repeated in the second language. In later grades, classes are mixed; children learn equally well in either language, and do not need lesson repetition in their mother tongue.

This program has been in operation for five years. According to a three-year evaluative study, the bilingual program is as effective as the regular curriculum in achieving progress in paragraph meaning, word meaning, spelling, arithmetic reasoning, and arithmetic computation for English and Spanish-speaking pupils. Although, at the end of the third year, the students were not yet as proficient in their second language as in their native language, they had made impressive gains in learning their second language.

COMMUNITY-SCHOOL RELATIONSHIPS

For many educators, learning in two languages is not seen as an end in itself, but as a process for better achieving many social and educational goals. Thus, parental and community involvement has been a continuing concern in many bilingual schools. For example, at Rough Rock Demonstration School, Navajo parents have become involved on many levels of school organization, participating in administrative decisions and functioning as classroom aides; at the bilingual sub-school of P. S. 155, Brooklyn, Spanish-speaking people from the community are involved in school planning and in classroom activities.

Such participation is a first step in John’s suggestion that bilingual education be used as a core for community involvement, in order to create an educational atmosphere of interchange. Developing such educational models, the author points out, may make possible the growth and maintenance of "cultural forms and language diversity of sub-groups within this pluralistic society. . . . such a model could become a crucial resource, a balance to counter the increasing standardization imposed upon our language and our way of life."

A bilingual class at P. S. 155, Brooklyn, N. Y. Photo by Bob Pemire
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BACKGROUND INFORMATION


SELECTED PROGRAMS IN BILINGUAL EDUCATION


FOR FURTHER INFORMATION


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