This collection of statements describes the rationale and research behind the bilingual reading education program in the Philadelphia public schools where students are learning to read in two languages. The native Spanish speakers learn to read in Spanish and are taught to read in English only after having mastered the aural-oral skills of understanding and speaking. Statements include cover learning to read in the mother tongue, degree of difficulty in learning to read in Spanish, transfer of skills, the problem of interference, affective factors in learning readiness, and results of the Philadelphia program. A bibliography listing 22 relevant books and articles provides the sources for the statements. (VM)
LEARNING TO READ IN TWO LANGUAGES

Statements from the Research Literature on Reading in Bilingual Programs

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Students in bilingual programs in the Philadelphia Public Schools are learning to read in two languages. If they are native Spanish speakers they learn to read first in Spanish and are taught to read in English only after having mastered aural-oral skills of understanding and speaking. The rationale and research suggesting these approaches are described below.

I. Learning to read in the mother tongue

It is widely recognized, throughout the world that reading is best taught in the language which one learned first, in the earliest years, at home. Gaarder has pointed out that in 1951 a UNESCO committee stated, "It is axiomatic that the best medium for teaching a child is his mother tongue." (Studies in Mexico, the Philippines, Sweden, the U.S. and elsewhere support this position.

The following project-descriptions are excerpted from the DOBLE Research Supplement. (2)*For purposes of comparison we can consider Spanish as the "vernacular" or "first language" and English as the "national" or "second language" in the Philadelphia programs.

The PHILIPPINES, Lloilo 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, ...and 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.

* Numbers in parenthesis refer to items in bibliography.
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. 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 teacher's ability to communicate with students may have outweighed their training or educational level.

Leading authorities on the teaching of English as a Second Language emphasize the natural progression from listening and spoken language to reading which can take place in the native language. In relation to the studies in the Chiapas highlands of Mexico, Nancy Modiano notes:

"The reading act itself depends upon the ability to perceive graphic symbols and to attach meaning to them. In order to perceive a graphic symbol as a differentiated phenomenon it is necessary to have some familiarity with it and to be able to attribute some meaning to it. When the symbol represents a nonsense syllable learned by rote this is far more difficult and confusing than when it represents a known object; learning to read in a foreign language is far more difficult and confusing than learning to read in one already known." (16)

Mary Finocchiaro, noted authority on the teaching of English as a second language, states:

"Reading is a language related process. The teaching of beginning reading consists in helping pupils relate and transfer the auditory signals that they will have already learned (since initial reading is always based on material the students can understand and say) to new visual signals.

... Current research also seems to indicate that there may be some advantages in teaching illiterate language learners to read in their native tongue before teaching them to read in English.

... Since reading is language related, native speakers of other languages can be taught more easily to read the tongue they have understood and spoken since birth."(5)
Faye L. Bumpass, another highly regarded English as a Second Language expert, says:

"No reading should be given in the foreign language until the reading skill has been developed as an automatic part of the child's response in his native language." (4)

Hillerich & Thorn, describing the rational for their Experiment in Reading for Mexican-American Students, note:

"We do not expect the Anglo child to begin his reading in material that is outside his listening-speaking vocabulary, so why expect it of the (Spanish-speaking) child? The task of the beginning reader should be limited to that of converting the printed word into its spoken form which he already recognizes." (10)

II. It's easier in Spanish.

Native Spanish-speakers have an additional advantage in learning to read in their mother tongue because of the very close match between Spanish writing and Spanish sound. As Bruce Gaarder noted in testimony during the senate hearings on Bilingual education, "there are no reading problems, as we know them, in Spanish-speaking countries.

..."It is much easier for a Spanish-speaking child to learn to read Spanish than it is for an English-speaking child to learn to read English." (8)

This contention is based on a study by the International Institute of Teachers College, Colombia University conducted in Puerto Rico in 1925. Quoting Gaarder:

"In comparison with children in the continental United States on tests of reading, arithmetic, language and spelling... the Puerto Rican children's achievements through Spanish was, by and large, markedly superior to that of the continental U.S. children who were using their own mother tongue, English."

The investigators attributed these results to the "facility with which Spanish is learned (which) makes possible the early introduction of content into the primary curriculum." (8)

III. Transfer of skills? - a hoped for bi-product.

Many teachers feel that it is common sense to assume that learning to read in one language facilitates development of reading skills in the second language. Some studies have not confirmed the assumption of a transfer of reading skills, but at least one study has focused directly on this question. In a study which involved teaching reading skills in Spanish to Spanish-speaking junior high school students in New York, Maurice Kaufman concluded:

"There was some evidence of positive transfer of learning from instruction in reading Spanish to reading ability in English." (12)
Kaufman drew the following implications:

"Planned transfer of learning from Spanish to English has some value for improving reading ability in English of Spanish-English bilinguals who are retarded in reading English. Direct instruction in reading in Spanish should be offered to Spanish-speaking retarded readers because of its potential value as a source of transfer to reading ability in English, and because reading ability in Spanish has value in its own right." (12)

Modiano says that, "Youngsters who first learn to read in their mother tongue, approach reading in a second language strengthened by their existing skills." (16)

Bumpass notes, "If the child can read well in his own language, he may be led to develop reading skill in the foreign language (in this case, English) provided that the reading activities are limited to only the written forms of those concepts that have been taught orally." (4)

IV. No Interference

Whether or not learning in Spanish facilitates learning in English, there is considerable evidence which shows that at least instruction in Spanish has no adverse effect on the learning of English.

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. (2)

A study at the Applied Language Research Center, El Paso Public Schools showed that "the classroom use of Spanish caused no undue interference in learning the second language." (9)

An evaluation report on the Pecos Language Arts Program included the statement that "the notion of notable interference in learning and using English because of Spanish language instruction in the elementary grades has been negated..." (19)

A three-year evaluative study of the Coral Way Elementary School (Miami, Fla.) showed that 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." (2)
V. Readiness for learning: Affective Factors.

Children don't learn well when they are confused, scared, or when everything in the school setting appears strange and different from what they have known from infancy. This is what happens when a child who speaks little or no English enters a classroom in which only English is spoken.

Approaches to language learning involving use of the mother-tongue and emphasizing listening and speaking skills assume that understanding the meaning of spoken language is essential to the learning-to-read process. (C.F. Modiano quoted on p.2)

Chester Christian, in speaking on the acculturation of the bilingual child, notes:

"The meanings which have been given to him in one culture do not exist in other cultures, and therefore cannot be replaced. It is a fallacy, for example, to assume that there is an English equivalent for the Spanish word mamá or that there is a Spanish equivalent for the English word mami. These and hundreds of other words which give to the child his existence in terms of his relation to others and to the world occur in cultural contexts which do not coincide. And teachers who do not know these meanings usually find the response of the pupil who knows no others baffling, annoying, and exasperating. Then, when the child begins to discover that the teacher does not understand, he develops negative reactions not only to the teacher but to the educational process, and finally to the entire culture and language which the teacher represents. Or conversely, he may decide that his parents have provided him with an inferior world, and subsequently attempt to reject entirely what they have provided for him as a cultural base upon which to build a meaningful life. This may mean that the life he chooses will lack the essential meanings which have their roots in infancy, roots which are nourished by the words his parents have taught him." (22)

Modiano considered the attitudes toward reading and the teachers' ability to communicate meaningfully with their students:

"Attitudinal factors also greatly influence perception. Language not only serves for purposes of communication but also to indicate a person's reference group; his language is inexorably tied to his image of himself. The more desirable learning a second language appears to him, the easier it will be for him to do so. The more the learning of a second language appears to be fraught with frustrations and insurmountable obstacles or the more learning it appears to move him away from his reference group and toward an undesirable one, the more likely he is to encounter difficulties in learning it." (16)
Dick Yoes, writing about a first grade Spanish program, in Edinburg, Texas, says:

"The most noticeable benefit of the Spanish oral language program was a reduction in the bewilderment of Spanish-speaking children and corresponding increases in their awareness, self-assertiveness, and confidence. Readiness for school tasks, such as reading, is developed more easily with the aid of a language they understand." (21)

VI. The Philadelphia Story

Some of the most exciting information on reading readiness comes from the Philadelphia programs. At the Potter-Thomas Model School, many prekindergarten students gained enough reading readiness skills to warrant a special kindergarten program in which reading in the mother tongue is being introduced in 1970-1971.

The program raised the scores of Anglo and Latino children on the Philadelphia Readiness Test to above the 1969 school mean when the instructions for the test were in the students' mother tongue. In fact, Latino students tested in Spanish had higher scores than did the students in the best scoring school in the entire city of Philadelphia during 1969.

SUMMARY

Reading involves relating graphic symbols to already learned words and structures of spoken language. This process is most easily learned using one's native language because of greater facility with spoken words of the language. It is hoped that reading skills learned in one language will transfer to learning to read in a second language. Instruction in Spanish does not interfere with learning English. Reading in English as a second language is taught only after mastery of listening and speaking skills. Understanding the meanings of spoken language is essential to the learning-to-read process; meanings are culturally determined and relate to how children feel about language and learning. In Philadelphia's bilingual program, children in kindergarten are learning to read.
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