The experimental program described in this report provided English-speaking Canadian children with elementary schooling exclusively in French for kindergarten and grade 1, and then from grade 2 through grade 5 mainly in French except for two half-hour periods of English language arts. The guiding principle for this form of bilingual education (referred to as a home-school language switch) is that priority for early bilingual schooling should be given to the language or languages least likely to be otherwise developed or most likely to be neglected. Several questions concerning results observed thus far are considered in the report, involving evaluation of the children's language development, cognitive development, and attitudes. (VM)
THE HOME-SCHOOL LANGUAGE SWITCH PROGRAM
GRADES K THROUGH FIVE*

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This paper reports on a longitudinal, community-based study of two groups of English-Canadian children (a Pilot and a Follow-up class) who undertook their elementary schooling exclusively in French for Kindergarten and Grade I, and then, from Grades II through V mainly in French except for two half-hour periods of English Language Arts. This report focuses on the working hypotheses that guided the evaluation and on the measurement techniques used to assess the program’s impact on the cognitive development of the children. This educational experiment has universal relevance since it touches on an educational matter faced also by minority groups in all countries and by most citizens in developing nations.

The parents of the children were concerned about the ineffectiveness of current methods of teaching foreign languages, and were impressed with recent accomplishments in teaching science and mathematics in the early elementary grades. They also realized that, as residents of a bicultural and bilingual society, they and their children are part of a much larger experiment in democratic co-existence that requires people of different cultures and languages to develop mutual understanding and respect. An essential first step for them was learning the other group’s language thoroughly. The program worked out may well serve as a model because the

The overall scheme (referred to as a home-school language switch) is simple enough to be tried out in other bi- or multicultural communities around the world, or, and perhaps of more importance, in essentially unicultural settings where a serious desire exists to develop second or foreign language proficiency. In any case, a basic educational issue is involved here: rather than estimating how many years of schooling should be provided in order to develop an undefined level of ability in a foreign language, the educator in this case asks how one goes about developing complete bilingual balance in the home and school languages (see Lambert and Tucker, 1971).

The hypotheses that guided us are given below along with a resumé of the types of measures used and the overall results obtained. We have compared the linguistic, cognitive and attitudinal development of the Pilot and Follow-up experimental groups with control children carefully matched on non-verbal I.Q. and social class background, who followed normal English-Canadian and French-Canadian academic programs. The Experimental and English Control classes were also comparable as to parental attitudes toward French people and culture, and motivation to learn the other language; in fact if given the opportunity, the large majority of the control parents would have placed their children in experimental classes.

(1) What effect does such an educational program have on the Experimental children's progress in home language skills compared with the English Controls? The overall answer is that they are doing just as well as the Controls, showing no symptoms of retardation or negative transfer. On tests of English word knowledge, discrimination and language usage, the Experimental Pilot Class falls above the 80th percentile on national norms as do the
Controls, indicating that those in the experimental program do as well as the Controls and still perform at a very high level in terms of national norms. Their reading ability in English, their listening comprehension and their knowledge of concepts in English (Peabody Picture Vocabulary) are all at the same level as those of the English Controls.

All signs are favorable also as to their progress in English expressive skills. When asked to retell or invent short stories in English they do so with as much comprehension and with as good or better command of rhythm, intonation, enunciation and overall expression. Their spontaneous productions are as long and complex and their vocabulary as rich and diverse.

Their facility at decoding and utilizing descriptive English speech produced by children or adults is also at the same level as that of the Controls, and their word associations in English show as much maturity and appropriateness. Since they were at the same time reliably faster in making associations in English than the Controls, their speed of processing English may be advanced over that of the Controls.

(2) How will do children progress in developing foreign language skills under such a scheme when compared with children from French-speaking homes who follow a normal all-French program of study? The answer is that they fare extremely well. Their French listening comprehension score was comparable to that of the Controls from Grade II on, and their knowledge of complex French concepts, measured with a French version of the Peabody Picture Vocabulary Test, is remarkably advanced. In fact, at the Grade IV level, they score at the same level as the French controls. From Grade I on, they have developed native-like control over the smaller units of French, but when asked to retell and invent short French stories, the linguists
rating their oral proficiency find that their rhythm and intonation and their overall expression in French are noticeably inferior to that of the French Controls, even at Grade IV. Still, they have much better overall expression, enunciation, and rhythm and intonation when inventing stories of their own rather than simply retelling stories, suggesting that they are particularly motivated and clever when permitted to express their own flow of ideas with their own choice of expressions. The verbal content of their productions in French is as long and complex as that of the Controls and shows a similar degree of comprehension and vocabulary diversity. They make more errors in their French productions, especially errors of gender and contraction, but after Grade II, they do not make more syntax-type mistakes. Their free associations in French are as rapid, mature and appropriate as those of the Controls. They also show as much aptitude as the Controls in decoding spontaneous descriptions given by French adults or children their own age. By Grade IV, however, they are no longer as able as native speakers to decode the descriptions of children even though they are still as proficient as the controls when decoding adult descriptions. Amazing as the progress is when one considers their concurrent standing in English competence, there is room for improvement in the expressive skills in French, assuming that it is desirable to become native-like in the spoken aspects of the language. Imaginative changes could be introduced into the program as it now stands so as to assure the high level attained in the more passive skills while increasing expressive capacities as could easily be done by teaching physical education, music and arts (subjects that lend themselves naturally to social communication) in French. Teachers, new at this type of program as they all were, have perhaps overlooked the need to
compensate for the lack of occasions outside school for improving skill in French expression. We believe now that attention can be directed to the content and fluency of the child's speech without sacrificing appropriate form, structure and style. Interaction with French children (up to now practically non-existent) would also improve the decoding abilities.

(3) How well do children following this program perform in comparison with Controls on tests of a non-language subject matter such as mathematics? The answer is that they perform at the same high level (both groups scoring beyond the 80th percentile) in both computational and problem-solving arithmetic tests. One can be confident that these children have been as able as the French control groups to grasp, assimilate and utilize mathematical principles through French, and that they are able to transfer this knowledge, acquired exclusively through French, to English when tested in arithmetic skills through English. The teachers in the Experimental program are not better trained in mathematics than those in the Control classes nor is more time devoted to mathematics; their texts are French versions of those used in the English Control classes.

(4) What effect does a bilingual program such as this, extended through Grade IV, have on the measured intelligence of the children involved? There is no sign at the end of Grade IV of any intellectual deficit or retardation attributable to the bilingual experience judging from yearly retesting with Raven's Progressive Matrices and Lorge-Thorndike tests of intelligence. On the standard measures of creativity there is evidence that the Experimental children are also at the same level or slightly advanced in generating imaginative and unusual uses for everyday objects. This mental alertness is consonant with their generally faster
rate of making free associations in English, noted earlier.  

(5) What effect does the home-school language switch have on the children's self concepts and their attitudes towards French people in general? At the Grade II and III levels their attitudes were much more fair and charitably than those of the English and French Control children. They were less ethnocentric and less biased towards their own ethnic group, and they had healthy views of themselves as being particularly friendly, nice, tall and big but not extreme in smartness or goodness, suggesting that suspicion and distrust between groups may be effectively reduced by means of this particular academic experience.

However, in the Spring 1970 testing, we found both the Grade IV and III level groups essentially similar to the English Controls in their attitudes: neutral to slightly favorable toward European French, more hostile towards French-Canadians and clearly favorable to their own group. We are not certain what caused this shift, e.g., the French-Canadian demands for separatism that were intense at this time; a realization that the few French-Canadians they meet at school happen to be from a lower social-class background and are academically poorer; or just wanting to be like others in their peer group as they grow older; i.e., not wanting to appear too French.

In the Spring 1971 testing, when the Experimental groups had moved up to the grade IV and V levels we surveyed their attitudes in greater detail and compared them with the English Control classes. Here it became very evident that the Experimental children are able to use the French language so effectively that they are able to communicate with and establish satisfying friendship with French-speaking people. Thus in contrast to the English Control children they have developed sufficient language competence to enable
them to enter into the French-Canadian sphere of social activities, to understand and appreciate French people and French ways to a much greater degree, and to consider themselves as being both French and English Canadian in make-up. Furthermore they are extremely satisfied with the French program offered them and reject the idea of switching now to an all-English program. In contrast, the Controls who have had hardly any French training relatively, other than a standard FLES program, feel they have had too much French and are much more favorable to the possibility of switching to an all-English school system.

Finally, there is no evidence that the self concepts are confused in any way since the Experimental children at all grade levels describe themselves as being very good, happy, strong, friendly, etc., relative to the Control children's self ratings.

In Perspective

Although the procedure seems remarkably effective in this Canadian setting, permitting us to challenge various claims made about the harmful effects of early bilingual education, still the scheme is not proposed as a universal solution for those nations planning programs of bilingual education. Instead a more general guiding principle is offered: in any social system where there is a serious widespread desire or need for a bilingual or multilingual citizenry, then priority for early schooling should be given to the language or languages least likely to be otherwise developed or most likely to be neglected. In the bilingual case, this will often call for the establishment of two elementary school streams: one conducted in language A and one in language B, with teachers who either are or
who function as though they were monolingual. If $A$ were the more prestigious language, then native speakers of $A$ would start their schooling in $B$, and after functional bilingualism is attained, use both languages for their schooling. Depending on the socio-cultural setting, various options are open to the linguistic minority group: pre-kindergarten or very early schooling, with half day in $B$, half in $A$; concentration on $B$ until reading and writing skills are certified, with switching delayed; or a completely bilingual program based on two monolingually organized streams, etc. Rather than teaching languages $A$ and $B$ as languages, emphasis in all cases would be shifted from a linguistic focus to using the languages as vehicles for academic content.

The Province of Quebec provides a convenient illustrative example. Here the French-Canadians - a national minority group but a clear majority in the Province - have a fairly powerful political movement underway based on French as the "working language" and a desire to separate politically from the rest of Canada. For English-speaking Canadians who see the value and importance of having two national languages, the home-school language switch as described here is an appropriate policy since French for them would otherwise be bypassed except in typical second-language training programs that have not produced the required proficiency and since it is certain that the use of English will be supported because of the English nature of the rest of Canada and the proximity to the U.S.A. French-Canadians, however, have reason to fear a loss of their language faced as they are with the universal importance of English and the relatively low status attached to minority languages in North America. French-Canadians also may denigrate their dialect of French, since it is at variance with that version
given such high status in France. The home-school switch would worry them, as it would any North American minority group, because they believe that English would easily swamp out French, and that their home language is not standard enough, making training in "school" French a requisite. In such circumstances, a valuable alternative would be to start a pre-kindergarten program at age 4 with half day in French and half day in English taught by two different teachers presenting themselves as monolinguals, continuing through kindergarten. Starting at Grade I, two separate academic offerings could be instituted, one fully French and the other fully English, with options for each student to move from one to the other for one or several courses until the two languages are brought to equivalent and high-level strengths.

Such a program could, of course, integrate French- and English-Canadian children who so far have remained essentially strangers to one another because of separate schools based on religion and language.

In the Canadian setting, however, political decisions could have important counteracting consequences. For instance, a widespread movement for unilingualism and separatism could postpone the thorough mastery of English beyond the receptive early years and all the advantages of being bilingual could easily pass from the minority group to the powerful English-speaking majority whose children now have the opportunity to become fully proficient in French and English.

Reference