

HEARING BOOKS READ IN THE FIRST LANGUAGE:  
ITS ASSOCIATION WITH READING ACHIEVEMENT  
IN THE SECOND LANGUAGE

by

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## ABSTRACT

The purpose of this study was to answer the question, "Does reading books to E.S.L. students in their first language have a greater association with gains in reading achievement than reading books to E.S.L. students in their second language?" Another purpose of the study was to determine whether reading stories to children in Chinese is associated with first language borrowing habits, and whether a teacher's attitude toward First Language Collections influences children's borrowing of first language books.

A research design was developed that consisted of one independent variable and two dependent variables. The independent variable, hearing stories read, consisted of Treatment 1, hearing stories read in Chinese; Treatment 2, hearing stories read in English, and Treatment 3, hearing no stories read (control group). The dependent variables were: 1) reading achievement as measured by the Gates-MacGinitie Reading Test Level A, forms 1 and 2, Canadian edition, 1980; and 2) the number of Chinese books borrowed by students.

The study was carried out with 39 students, ages 9 to 12, at a school located in the core of Vancouver's Chinese community. The treatment took place during two 40 minute periods a week for a duration of three months.

Two one-tailed t tests were applied to the data, firstly to test for a significant difference in reading achievement between the means of the three groups, and secondly to test for a significant difference between the pretest and posttest means within each group. ANOVAS were applied to test for a significant difference between the three groups in borrowing habits, and to test for a difference in borrowing habits between the two classes.

All three groups--the group hearing Chinese stories, the group hearing English stories and the control group made significant gains in reading achievement ( $p < .05$ ). The group hearing Chinese stories did not make greater gains in reading achievement than the group hearing English stories. There was no significant difference between the gains in any of the three groups.

There was no significant difference between the borrowing habits of the three groups. There was, however, a significant difference ( $p < .05$ ) between the number of

books borrowed by class. Because one teacher held negative attitudes towards first language books, this strongly suggests that a teacher's attitude toward first language books has a profound effect on the first language borrowing habits of students.

This study adds important information to the debate on how schools should respond to the cultural and linguistic diversity of their students. The students hearing Chinese stories learned English equally as well as those hearing English stories, and had the added advantage of being exposed, in a school setting, to their own culture.

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## CHAPTER 1 INTRODUCTION

### Need For The Study

In recent years the English-as-a-second language (E.S.L.) population of schools in Canada and the United States has increased dramatically. According to Cummins (1981a) more than 50% of the school population in Metro Toronto School Systems do not have English as their first language. In 1982 the Evaluation and Research Services of the Vancouver School Board presented a report entitled, 1982 Survey of Pupils in Vancouver Schools for Whom English Is a Second Language. There were 24,524 E.S.L. students, or 46.5% of the School District's total enrolment identified as E.S.L. students (as compared to 22.1% in 1974). Cummins (1981a) reports similar statistics for Los Angeles where it is estimated that the Hispanic population will comprise over 50% of the school population by 1985. The rise in immigrant school population is not limited to North America. Cummins (1981a) notes that if current trends continue in Europe, it is estimated that by the year 2000, one third of the European school population will be immigrant.

The increase in E.S.L. student population in North

American and European schools has given rise to increased debate on how schools should respond to the cultural and linguistic diversity of their students. Masemann (1978-79) analyzed public response to the Toronto Board Draft Report which recommended maintenance and development of the child's original language and culture. Among the concerns identified is the following:

Language maintenance or development programs in the schools, other than French or English, will retard the English language development of ethnic minority children, and they will impede English language development of the ethnic minority community themselves. (p. 39)

In her article, "First Language Materials in School Libraries", J'Anne Greenwood (1983) reports

While the days of punishing children for speaking in their own language have officially passed and educators seek to supplement rather than supplant the student's culture, there is nevertheless, the lingering feeling that encouraging the use of the mother tongue will

interfere with the learning of English.

(p. 15)

A news story with the heading "Panel Asks Stress on English Studies" by S. Daley appeared in the New York Times, May 6, 1983. It states in part:

A group of educators said yesterday that Federal money now going to bilingual programs should be used to promote proficiency in English, not to teach other academic subjects in a foreign language.... The educators said the Federal Government should support programs that teach children to speak, read and write English as quickly as possible by 'immersing' them in the language. (p. 1)

The continuing belief that use of the first language in E.S.L. classes interferes with the acquisition of English is not confirmed by research (McLaughlin, 1978). Indeed, on the basis of what has been learned about second language acquisition during the past 15 years, Ovando (1983) affirms, "It would be pedagogically unsound and sociopolitically imprudent to return to the sink-or-swim

methods of the past." (p. 567). Nevertheless, the debate over the efficacy of first language instruction and materials continues.

In 1983, as part of a Multicultural Program, the Vancouver School District purchased a First Language Collection, consisting primarily of fiction books. This collection includes books written in Chinese, Greek, Hindi/Punjabi, Italian, Japanese, Portuguese, and Vietnamese. These books form a district collection and are available to teachers on request. A large portion of the Chinese collection was used at Lord Strathcona Elementary School, whose Chinese population is about 85% of the total school population, or about 700 students.

The writer of this thesis is a teacher-librarian at Lord Strathcona Elementary School. The attitude on the part of most staff (some of whom were E.S.L. teachers) toward the First Language collection was, "What do we need these for? Aren't we supposed to be teaching the kids English?" The books ranged in reading level from primary through to upper intermediate. No teachers, however, made use of the books. To promote the use of the books the teacher-librarian contacted a Chinese speaking parent who quickly became enthusiastic about reading to groups of children in Chinese. A number of teachers invited the

parent into the classroom, and the response on the part of those teachers participating was enthusiastic, describing the story time in the student's first language as a "wonderful experience for the children". Not only that, students eagerly came to the library asking for Chinese books.

Because of the experience of the teacher-librarian in working with the parent, teachers and students in this "Story time in First Language Program", a central question presented itself: would E.S.L. students who hear stories in their first language make greater gains in reading achievement in their second language than E.S.L. students who hear stories read in their second language? It is the intention of this study to answer this question.

Research in bilingual education for minority-language children is primarily directed toward two broad issues:

- 1) What is the effect of bilingual education on cognition?
- 2) What is the effect of bilingual education on academic achievement in the second language?

The use of first language literature and its effect on reading achievement has received almost no attention by investigators. Isabel Schon (1981a, 1981b) appears to be the only investigator to explore this area. The purpose of her two studies was to determine the effect of silent reading time in first

language upon second language acquisition. The present study is unique in that it appears to be the only study to date which concerns itself specifically with the association between hearing literature read in the first language and reading achievement in the second language.

### Purpose of the Study

The purpose of the study was to answer the question, "Does reading books to E.S.L. students in their first language have a greater association with gains in reading achievement than reading books to E.S.L. students in their second language?" To answer this question the following research hypothesis was formulated:

**Hearing stories read in Chinese is associated with greater gains in reading achievement in the second language among Chinese intermediate E.S.L. students than hearing stories read in English.**

The null hypothesis will be rejected if probability is equal to or less than .05.

The study is limited to intermediate E.S.L. students (ages 9 to 12) at Lord Strathcona Elementary School which

is located in the Chinese community of the Vancouver School District.

One purpose of the study was to find evidence that will disprove the commonly held belief that the use of first language materials in E.S.L. classrooms interferes with the acquisition of English. Presently it is viewed as common sense by many E.S.L. teachers not to use first language materials. However, Wertheimer (1980, p. 347) reports that, "The argument for the provision of books for children in their mother tongue is overwhelming." Once established, concepts tend to remain fixed in human consciousness. The findings reported in this present study may play a useful part in dislodging misconceptions regarding use of first language materials in E.S.L. classrooms.

Another purpose of this study is to determine whether reading stories to children in Chinese is associated with first language borrowing habits, and whether a teacher's attitude toward First Language Collections influences children's borrowing of first language books.

### Definition of Terms

-- English-as-a-second-language (E.S.L.) students are defined as students whose first or home language (L1) is

different from the language of the wider community and its schools (L2).

-- Bilingualism is defined in a broad sense as "the production and/or comprehension of two languages by the same person" (Cummins, 1981, Preface).

-- Bilingual Education refers to a teaching model in which the E.S.L. student is taught (at least in part) in his first language. In this study the term refers to both "transitional bilingual education" (first language is used until the child can participate in English only classes) and "maintenance bilingual education" (first language is continued even after a child is capable of functioning in an English only classroom).

-- Reading Achievement is defined as the measure obtained on the Gates-MacGinitie Reading Tests, Level A, Canadian Edition, 1980.

### Generalizations

Since the sample was drawn from Chinese children living in a Chinese community, generalizations will be limited to that population.

## CHAPTER 2

### REVIEW OF THE LITERATURE

The following issues relating to bilingual education for minority-language children which are pertinent to the present study will be presented and analyzed:

- 1) What is the effect of bilingual education on academic achievement in the second language?
- 2 What is the effect of bilingual education on reading achievement in the second language?

As an introduction to the research on the above issues, a brief overview of the history of bilingualism and minority language children is given. This helps place current research in a more meaningful context. Theory which attempts to interpret research findings in terms of cognitive function will be considered at the conclusion of the review. The purpose for presenting this theory is to provide a sound theoretical basis for the research hypothesis. The summary at the end of the chapter brings focus to the research and theory presented in the review of the literature.

### History

Early research on bilingual children was concerned with cognition. From the 1920's through to the early 1960's researchers, almost without exception, held the view that bilingualism had far more negative effects than positive. Indeed, Lambert (1975) claims that only two studies prior to the 1960's suggested that bilingualism might have favourable consequences on cognition.

In 1922 the influential linguist Otto Jespersen wrote:

It is, of course, an advantage for a child to be familiar with two languages: but without doubt the advantage may be, and generally is, purchased too dear. First of all the child in question hardly learns either of the two languages as perfectly as he would have done if he had limited himself to one... Secondly, the brain effort required to master two languages instead of one certainly diminishes the child's power of learning other things which might and ought to be learnt. (Jespersen, 1922, p. 148 cited in Grosjean, 1982, p. 220)

Jespersen's view was accepted as fact, and researchers in the early period expected to find all sorts of problems, and they usually did. They found restricted vocabularies, limited grammatical structures, unusual word order, errors in morphology, hesitations, etc. It was concluded that bilingualism was a handicap, negatively affecting intelligence and cognitive development.

The major problem with early studies was that adequate controls were lacking. For example, socioeconomic status, educational opportunities, poor health and other variables were not taken into account. Another factor, as Cummins (1981a, 1983) points out, was the attempt of school systems to eradicate bilingualism in minority children, causing social, cultural and psychological problems. As well, Cummins (1981a) claims that the negative research results of early studies "should be attributed not to bilingualism itself, but rather to the lack of full bilingualism" (p. 22).

A turning point came in 1962. In that year Elizabeth Anisfeld and Wallace Lambert completed a study in which French-English bilingual children scored significantly ahead of carefully matched monolinguals both on verbal and non-verbal measures of intelligence (Lambert, 1975). The results were confirmed in a second study by Anisfeld in

1964. Lambert (1975) cites six studies between 1970 and 1973 from around the world which indicate that bilingual children, relative to monolingual controls, "show a definite advantage on measures of 'cognitive flexibility', 'creativity', or divergent thought'" (p. 65). While research on cognition has continued, researchers in the 1970's through to the present began to turn their attention to a number of specific areas of bilingual education, among them bilingual education and its effects on academic achievement in the second language. Jim Cummins of the Ontario Institute for Studies in Education, an ardent spokesman for bilingualism, describes bilingualism as "a positive force in children's intellectual and educational development" (Cummins, 1981a, p. 22). This view may not be held by all researchers in the field of bilingual education, but Cummins' stance is representative of current thinking among most researchers.

Despite the fact that there has been a dramatic change in research findings since 1962, the results of studies prior to 1962 still have their influence on the consciousness of both general public and educators. Just recently a comment was made to the writer of this thesis, "But isn't it confusing for children who are learning English to be presented with materials in their mother

tongue?"

The Effects of Bilingual Education on Academic Achievement  
in the Second Language

In the New York Times article of May 6, 1983, the educators who recommend immersing students in the language, stated, "We are not criticizing bilingual education per se... There is all kinds of contradictory evidence about whether or not it works." (p. 1)

The question really is does it work? Does bilingual education help children learn to read, solve math problems and speak in English? It should be noted at the outset that there are two major difficulties in answering these questions. First, many studies have critical weaknesses in research design (Dulay et al., 1979; MacLaughlin, 1982; Troike, 1978; Zappert & Cruz, 1977). Because any one of several weaknesses in research design, such as no baseline comparison or control group, invalidate research results, the findings from many studies cannot be considered in the discussion of the effects of bilingual education on student performance. But such studies have been quoted to support positions for or against bilingual education. Second, there is no agreed upon criteria of what constitutes a bilingual education program. In one program first language

may be used 100% as an instructional language, while in another program it may be used far less. In some cases, according to MacLaughlin (1982) first language is almost never used. It is easy to understand why there is contradictory evidence about whether or not bilingual education works. What kind of results would we find if we looked **only** at the studies which do not have critical weaknesses in research design? That is exactly what Dulay et al. (1979), Zappert and Cruz (1977) and Troike (1978) did.

Dulay (1979) and others reviewed 38 research projects and 175 project evaluations first to determine whether they met minimum research design standards, then to examine their findings. Studies showing any of the following critical weaknesses in research design were excluded:

- 1) No control for subjects' socioeconomic status
- 2) No control for initial language proficiency or dominance
- 3) No baseline comparison or control group
- 4) Inadequate sample size
- 5) Excessive attrition rate
- 6) Significant differences in teacher qualification for control and experiment groups
- 7) Insufficient data and/or statistics reported [improper

statistical applications].

Only nine of the research studies and three bilingual demonstration projects survived the selection process. All of these studies took place in the United States between 1967 and 1973. They included the following student performance variables: first language reading and language arts, second language oral proficiency, second language reading and language arts, social studies achievement (measured in second language), science/math achievement (measured in second language), cognitive function (measured in first language), cognitive function (measured non-verbally), cognitive function measured in the second language, attitude toward self and own culture, and school attendance.

Out of a total of 59 findings, 34 (58%) were positive; 24 (41%) were neutral and only 1 (1%) was negative. The largest number of findings was in second language reading and language arts (where of 14 findings 6 were positive and 7 neutral and 1 negative), and science/math achievement measured in second language (where of 14 findings 10 were positive and 4 neutral).

The studies reviewed were in effect during the first 10 years of the experimental operation of bilingual education programs in United States public schools. Dulay and others

(1979) conclude,

Despite the recentness of this complex innovation, more than half of the findings show that bilingual education worked significantly better than monolingual programs for LES/NES [limited English speaking/non English speaking] students. (p. 2)

Using essentially the same criteria, Zappert and Cruz (1977) conducted another survey of bilingual education programs. Only 3 of 108 project evaluations and 9 of 76 research studies met the criteria. Of the 66 findings reported, 38 (58%) were positive, 27 (41%) neutral and 1 (1%) negative. In considering the "neutral" findings, Zappert and Cruz (1977) point out,

A non-significant effect is not a negative finding with respect to bilingual education. A non-significant effect, that students in bilingual classes are learning at the same rate as students in monolingual classes, demonstrates the fact that learning in two languages does not interfere with a student's

academic and cognitive performance. Students in bilingual classrooms have the added advantage of learning a second language and culture without impeding their educational progress. Under these circumstances a non-significant finding can be interpreted as a positive effect of bilingual education.  
(p. 39)

They conclude,

Contrary to widespread belief, the research conducted to date is not contradictory with regards to the effects of bilingualism and bilingual education on student performance. The research reviewed ... strongly supports the use of the child's native language as a medium of instruction in U.S. schools."  
(p. 40)

Troike (1978) identified twelve "quality" bilingual programs and concluded

enough evidence has now accumulated to make it possible to say with confidence that **quality** bilingual programs **can** meet the goal of providing equal educational opportunity for students from non-English speaking backgrounds. (p. 4)

Troike then cites the twelve studies, of which the following two are representative examples:

Philadelphia, PA (Spanish)

In a third year-program both Anglo and Spanish-speaking kindergarten students in the bilingual program exceeded the city-wide mean and a control school group on the Philadelphia Readiness Test (a criterion referenced test), and attendance records were better than in the control group. (p. 5)

Lafayette Parish, LA (French)

Students in grades K-3 in the French-English bilingual program performed as well as or significantly better than a control group of students in the regular program in all areas

tested, including reading and reading readiness, linguistic structures, writing, math concepts and social science. Instruments used included the Primary Abilities Test the Metropolitan Achievement Test, and a criterion referenced test for French. (p. 6)

The work of Dulay et al., Zappert and Cruz, and Troike clearly indicates that, once studies not meeting minimum standards of design criteria are eliminated, there is agreement in research on the effectiveness of bilingual education. It should be noted, however, that the lack of clarity regarding the extent of first language used in a bilingual program could be a significant factor in the two studies (Dulay et al., 1977; Zappert & Cruz, 1978) which reported negative research finding. As well, it could also be a significant factor in explaining why some bilingual programs (58%) show positive effects while the remainder (41%) show no significant effect -- that is, bilingual groups did not score significantly higher than control groups. In the studies where there was no significant difference, it is worthwhile to remember that while the bilingual groups did not achieve significantly higher than the control group, neither did they achieve significantly

lower, and they had the added advantage (to whatever extent) of learning or maintaining a second language.

One study with negative results deserves mention. In 1978 the American Institute for Research (AIR) carried out a large scale evaluation of bilingual education under the direction of Malcolm Danoff (1978). It encompassed 38 projects and over 11,500 children in 10 states. The study reports that students in federally funded Spanish/English bilingual programs performed at a lower level in English language arts than students not in the program. The study, while impressive in size, was not impressive in other respects. The conclusions appear to suggest that the use of a student's dominant language for instruction does not make a difference and may be detrimental to the acquisition of English. Dulay et al. (1979) emphasize that

the findings do not refer to Spanish dominant limited English speaking/non-English speaking students (LES/NES), but to a heterogeneous group of students who were largely English dominant or English monolingual (65 to 81% depending on grade level) ... If one wishes to learn, therefore, whether LES/NES students benefit from basic skills instruction through

their first primary language, one cannot look to the AIR study for answers. (p. 1)

The title of Danoff's study, "Evaluation of the Impact of ESEA Title VII Spanish/English Bilingual Education Program" is a misnomer. In a telephone conversation between Dulay and Danoff (Dulay et al., 1979), Danoff acknowledges that

the numbers of such students [LES/NES] were too small to allow comparisons between the students in the federally funded program (Title VII) and non-Title VII programs with respect to their impact on these students.  
(p. 1)

Furthermore, McLaughlin (1982) raises several "serious problems" with the study, among them elementary factors in design: the initial comparability of bilingual and non bilingual groups was not clearly established with respect to language dominance, since the bilingual classrooms contained 74% non-English speaking or bilingual children, whereas the control classrooms contained only 17% non-English speaking or bilingual children. Also McLaughlin (1982) draws attention to weaknesses in

Danoff's statistical procedures, especially his use of gain scores.

A study by American investigators which has received world wide attention is the Rock Point Navajo study (Rosier & Farella, 1976; Rosier & Holm, 1980). This longitudinal study conducted from 1975 to 1977 met Troike's (1978) criteria for "a quality bilingual education program". Evaluation of it is included in Troike's research evidence for the effectiveness of bilingual education. The results are dramatically different from the AIR evaluation of bilingual programs. The primary focus of the Rock Point evaluation by Rosier and Holm (1980) and Rosier and Farella (1976) is on achievement in English reading,

particularly how introducing Navajo students to reading in the Navajo language affected their later ability to read in English (Rosier & Holm, 1980, p. 1).

The authors do not purport their studies to be a scientific experiment; "they are studies of 'things as they are' or 'were'" (Rosier & Holm, 1980, p. 1). The Stanford Achievement Test was the principal instrument used. The Metropolitan Achievement Test was also used in 1976.

Students were tested in grades two through six, except in 1975 when only second through fifth grade scores were reported. Mean scores for total reading and its constituent subtests were compared with the matched control group. Data presented suggests that,

the effects of (continuous) bilingual instruction may be cumulative: that while Navajo students who have recently (in 2nd grade) added reading in English to reading in Navajo may do no better on standardized achievement tests than Navajo students who began reading in English, they do achieve better test scores each year thereafter. Nor does the difference seem to remain the same. The students who learned to read in Navajo appear to obtain scores progressively higher than those who did not. In effect, their rate of growth helps them to achieve progressively closer to the 'national norms' in each grade third through sixth, instead of maintaining a continuous 'educationally retarded' level of achievement. (Rosier & Farella, 1976, pp. 387-388)

Rosier and Holm (1980) make the simple observation that the "ability in English (as a second language) is not necessarily a simple function of the length or amount of in-school exposure to English" (p. 28). They conclude

One cannot prove that the incorporation of Navajo language instruction into the Rock Point program caused these results. We must admit that the use of Navajo language as a means of academic instruction is part of a mix that includes, among other things, increased community control, increased parental involvement, intensive EFL [English as a foreign language] activities, on-going evaluation, and extensive NLT [Navajo Language Teaching] and ELT [English Language Teaching] training. (pp. 28-29)

Whatever the cause, the fact is that the children at Rock Point were two years behind norms in English reading by the end of Grade six prior to the initiation of the bilingual program. Students participating in the program in K through grade six (and receiving 25 to 50% of their instruction in Navajo) were performing slightly above U.S.

grade six norms in English reading, despite considerably less exposure to English instruction than previously (Cummins, 1981). These findings cause Jim Cummins to wonder about the effects of similar well implemented programs upon Canadian Native children.

The Rock Point Navajo study is supported by similar findings with Aboriginal children in Australia by investigators Gale, McClay, Christie and Harris (1981). A bilingual program in English and Gupapuyngu was started in Milingimbi School in the Northern Territory of Australia in 1973. For four years children from both English-only and bilingual classes were tested for achievement in academic subjects. The findings of the study are summarized by Gale et al. (1981):

Since the introduction of bilingual education at Milingimbi, the children are not only learning to read and write in their own language and furthering their knowledge with respect for their own culture, but they are also achieving better academic results in oral English, reading, English composition and mathematics than they were under the former English monolingual education system.

(p. 309)

Bilingual test score means in grades 5, 6 and 7 were significantly higher than English-only means in grades 5, 6 and 7 at  $p = .05$  or less in mathematics tests, Written English Composition Tests (Ferdinand & Bull), Dolch Sight Words, Schonell Reading Age Tests and Cloze Tests.

Also, Rosier and Holm's (1980) observation that ability in L2 is not necessarily a simple function of time spent with English instruction, is confirmed by Hebert's study of grade 3, 6 and 9 francophone students in Manitoba (see Cummins, 1979-80, p. 83). In reviewing the Manitoba study, Cummins emphasizes that the findings show that

there is no simple relationship between instruction through the medium of a language and achievement in that language. At all grade levels there was a significant positive relationship between percentage of instruction in French (PIF) and French achievement but **no relationship** between PIF and English achievement. In other words, francophone students receiving 80% instruction in French and 20% instruction in English did just as well in English as students receiving 80% instruction in English and 20% in French. (p. 83)

The researchers Tove Skutnabb-Kangas and Pertti Toukomaa carried out research on the educational achievement in both L1 and L2 of almost 700 Finnish children in bilingual and monolingual programs in Sweden in grades 1 to 9. Their findings are similar to the Rock Point Navajo study. They found that the longer the Finnish children were educated in Finnish, the better their academic achievement was in courses taught in Swedish. But perhaps Skutnabb-Kangas and Toukomaa's greatest contribution to the debate of bilingual education versus "immersion" for E.S.L. students is their concept of "semilingualism". They found that Finnish children, given no instruction in Finnish gradually lost competence in Finnish, without gaining full native-level competence in Swedish, producing "semilingualism" in both Finnish and Swedish.

Even after seven years they [Finnish children in Swedish only instruction classes] had not reached the average competence of Swedish children in the Swedish language. At the same time they had forgotten their mother tongue faster than they had learned Swedish. Probably both their Swedish and especially

their Finnish will always remain much poorer than the Swedish or Finnish average. (Skutnabb-Kangas, 1979, p. 10)

Skutnabb-Kangas continues:

Only 58% of [Finnish] immigrant children, compared to almost 90% of Swedish children, enter the Swedish gymnasium (terminal secondary school) after the comprehensive school, and very few of them choose the theoretical track which prepares for university education. (p. 13)

She concludes:

Semilingualism is then, according to my view, **produced** in a situation when many different factors coincide: **minority children from working class homes are forced to accept instruction in the foreign, majority middle class language, and their own language has a low prestige, both in the society and in the school ...** If a complete lost generation of

semilingual children is not to emerge, we do not have time to wait for the findings of new research and experiments. It is pedagogically wise to give migrant children and other minority children as much teaching of and in their mother tongue as possible ... Such teaching will certainly do no harm, but not giving it may prove fatal. (pp. 17-20)

Skutnabb-Kangas and Toukomaa's "semilingualism" is similar to the phenomena of "subtractive bilingualism" as described by Wallace Lambert (1975). When L1 is gradually being replaced by the more dominant and prestigious L2, the resulting form of bilingualism is "subtractive". Lambert (1975) comments on "additive" and "subtractive bilingualism":

Thus to know Afrikaans and English in South Africa, Hebrew and English in New York and Israel, or French and English in Montreal would in each case be to add a second socially relevant language to one's repertoire of skills. In no case would the learning of the second language portend the dropping or the

replacement of the other; the development of high-level skills in English among French-Canadians or Spanish-Americans does not imply a corresponding loss of French or Spanish.

We might refer to these as examples of an **additive** form of bilingualism and contrast that with a more **subtractive** form experienced by many ethnic minority groups... (p. 67)

Considering the phenomena of "semilingualism" and "subtractive bilingualism", it is possible that the bilingual children in many of the early "negative" studies were likely to have achieved less than average educational attainment in **both** L1 and L2.

French immersion programs in Canadian schools are sometimes cited by educators as proof that "immersion works" and should be used with E.S.L. students. But both languages of Canadian students in immersion programs have social value: "a second socially relevant language is added to one's repertoire of skills". It does not follow that immersion programs would be successful when the child's L1 is a minority language. Findings from studies in bilingual education demonstrate that immersion programs

for minority language students "do not work" as compared to bilingual programs.

Cummins and Mulcahy (1978) and Cummins (1981a) report on the Edmonton Ukrainian-English Bilingual Program. In this program 50% of the instruction is given in Ukrainian at the elementary school level. Evaluations of the program show no detrimental effects on the development of children's English or other academic skills. In fact, by grade 5, students in the program achieved higher scores than the comparison group in English reading skills.

Cummins and Mulcahy (1978) designed a study to compare bilingual and unilingual children in grades 1 and 3 on the following variables: 1) children's ability to analyze linguistic input, specifically, lexical, surface structure, and underlying structure ambiguities, and 2) their awareness of the arbitrary nature of word-referent relationships. Two groups of children attending the Ukrainian-English Bilingual Program were compared with matched unilingual control groups. Two x three analyses of variance were carried out on the dependent variables. The analyses revealed that students who were relatively fluent in Ukrainian were significantly better able to detect ambiguities in English sentence structure than either equivalent unilingual English-speaking children not in the

program or children in the program who came from predominantly English-speaking homes.

Are the findings of these studies generalizable to secondary students? Only one study at the secondary level was located in the search of the literature. In order to examine the effect that the language of instruction has on English reading achievement of secondary E.S.L. students in five selected school districts in California, Melendez (1981) designed a study that consisted of one independent variable and two dependent variables. The independent variable, instructional treatment, consisted of Treatment 1, English instruction (N = 94 students in grades 7 - 10), Treatment 2, bilingual instruction (N = 51 students in grades 7 - 10), and Treatment 3, Spanish instruction (N = 95 students in grades 7 - 10). The dependent variables were English and Spanish reading achievement pretest and posttest scores which were used to assess reading ability in the English language and the Spanish language.

The ANCOVA and the post-hoc multiple comparison test, Scheffe, were used in the statistical treatment. The ANCOVA was tested at the .10 level of significance and the Scheffe was tested at the .05 level of significance. Melendez concludes:

This study suggested that linguistically distinct students who were taught reading in their mother tongue did significantly better on the English reading achievement test than those students taught reading in English only or a bilingual mode. Submerging these students in the language of the host culture did not seem to improve their English reading achievement at the secondary level. The salient point of this research is that instruction in the mother tongue of the linguistically distinct students at the secondary level is essential for their continued progress in the total spectrum of the secondary school curriculum. The effective acquisition of English reading skills, a basic goal of bilingual bicultural education, is readily accomplished when a strong foundation in the mother tongue has been laid. (pp. 109-110)

Two studies by Isabel Schon (1981a, 1981b) focused on the use of first language literature and its effects on reading achievement and attitudes toward reading.

The purpose of Schon's first study (1981a) was to determine whether providing a great variety of books in Spanish and sixty minutes a week of free reading time affects the reading abilities and attitudes of Hispanic students in grades 2, 3 and 4. It was hypothesized that a positive improvement in the students' Spanish and English reading abilities and in their reading attitudes would result after the students are exposed to books in Spanish which highlight the lifestyle, folklore, fiction, poetry, and history of Hispanic people.

Comparable groups from four schools were identified and 114 Hispanic children were placed in either the control (C) or experimental (E) group. The five teachers in the E group were instructed to provide "at least 60 minutes a week of free reading time and to do everything they could to help their students develop positive attitudes toward reading." The five teachers in the C group were instructed to teach reading the way they normally do. Most of the teachers in the C group reported that they emphasized reading instruction in English, even though as bilingual teachers, they were supposed to teach reading in Spanish to those children who were Spanish dominant. The duration of the treatment was eight months.

The statistical procedure used to analyze the data was

analysis of covariance. No significant E - C differences ( $p < .05$ ) resulted at any of the grade levels on any of the three English reading measures (comprehension, vocabulary and speed). The reading attitudes of the E group improved significantly ( $p < .05$ ). Spanish reading findings revealed that E group in grades 3 and 4 significantly exceeded the C group in all three Spanish reading tests. In grade 2, the E group performed significantly better in Spanish vocabulary and speed, but not comprehension.

The authors note that while there was no significant difference between E and C on English reading tests in grade 2, students in E group had never received, either prior to or during the study, formal English reading instruction, yet considerable gains were made in the English reading scores between pre and post-tests. (See Table I.) This was similar for the control group. In other words, if a child learns to read in one language (in this case Spanish) there appears to be a transference of ability to read in the second language that is known orally by the child.

At the grade 3-4 level, the E pupils received Spanish reading instruction exclusively until February [the authors do not tell us when the study began, so this date is rather meaningless, but the authors go on to tell us ...] "yet

Table I\*  
English Reading Tests

		Grade 2		
		Pre	Post	Gain
Reading Comprehension				
	E	4.13	13.10	+9.0
	C	3.81	13.69	+9.9
Reading Vocabulary				
	E	9.08	18.17	+9.1
	C	11.06	18.25	+7.2

\* adapted from Schon (1981a), p. 6.

they improved in English reading as much as the C pupils who devoted much more time to formal English reading instruction" (p. 10). The authors conclude, "If the students are able to read Spanish well, the transition to reading English will present no major difficulty if the English words are in their English vocabulary." (pp. 10-11)

This study has a number of unsatisfactory aspects: the groups are said to be matched socioeconomically, but no mention is made of language dominance or teacher performance. In the five classes which formed the E group (consisting of 49 Hispanic students after attrition) free reading time in Spanish varied from 50 to 80 minutes per week. One teacher had her Hispanic pupils write book reports, most of which wrote at least 25. In the E classrooms all Hispanic students received reading instruction in Spanish. In the five classrooms which formed the C group (consisting of a total of 44 Hispanic students after attrition) two groups had English only reading instruction, two groups had Spanish only reading instruction and one group had English and Spanish reading instruction. One teacher in the control group encouraged Hispanic students to check out books from the library in Spanish.

In effect, because of the activities experienced in the

C group, there was no true control group. Given this weakness we may conclude, as observed in other studies (Dulay et al., 1976; Troike, 1978; Zappert & Cruz, 1977), that while the experimental group did not achieve significantly higher, neither did it achieve significantly lower than the control group. It did, in fact, have the added cultural benefit of exposure to first language materials without impeding second language acquisition, and it enjoyed a significant improvement in reading attitudes whereas the control group did not.

The purpose of Schon's second study was the same as the first, but was carried out with an experimental group of approximately 200 Hispanic students in grades 7 and 8. These students received at least 45 minutes a week of free reading time in Spanish. At the grade 7 level the mean difference between E and C groups achieved statistical significance on only one of eight measures: English reading comprehension which favoured the control group. At the grade 8 level there were significant gains in English reading comprehension in the control group. In the experimental group there were significant gains in Spanish reading speed and comprehension.

Further research is needed to refute or confirm these findings. It would appear that a number of factors in this

study have not been adequately controlled. The authors concluded by noting that within the E group, gains in English and Spanish reading abilities are positively correlated, but no indication of the amount of correlation is given.

One study not involving bilingual instruction or L1 materials, but rather involving E.S.L. students and L2 reading materials is pertinent. Elley and Mangubhai (1983) identified five critical differences between first and second language learning and hypothesized that the effect of these differences in formal education could be virtually eliminated by means of a reading program based on the use of an abundance of high-interest, illustrated story books. The design of the study involved a random assignment of 380 Class 4 and 5 students (ages 9 to 11) from eight rural Fijian schools to one of three treatments: A Shared Book Experience in English ("Book Flood" group since these students were provided with 250 high-interest books), a Sustained Silent Reading Experience in English, or the control group which employed the traditional English Syllabus. Each of the three groups contained 43% to 51% Fijian students who did not speak English as their first language. Posttest results after eight months showed that

pupils in the Shared Book Experience progressed in reading and listening at twice the normal rate, and confirmed the hypothesis that high-interest reading in L2 has an important role to play in second language learning. After 20 months the gains had increased further and spread to related language skills. The authors conclude,

One formula for raising literacy standards in L2 situations such as those prevailing in the South Pacific is to provide students with a range of suitable, well-illustrated, high-interest story books, and to set aside time in the school program to ensure that they are widely read." (p. 67)

### Theory

Wallace Lambert's (1962) and Elizabeth Anisfeld's (1964) "breakthrough" studies meant that the Balance Effect Theory no longer provided a satisfactory explanation of language proficiency. The Balance Effect Theory (which was implicit in Jespersen's thinking when he made his statement quoted on page 10 of this thesis) assumed that there was a specified capacity available for language proficiency. Sharing this capacity between two languages would lead to

lower levels of proficiency in each, compared to unilingual speakers. The theory had a second assumption: linguistic abilities in L1 and L2 are in separate "compartments". Use of one of the compartments would mean that the other compartment would decline in relation to language ability. Thus the theory would predict that teaching minority-language children through the medium of L1 would result in lower levels of L2 skills as compared to minority-language children taught through the medium of L2 (Cummins, 1981a).

From our brief consideration of the history of research in bilingual education, it is seen that the Balance Effect Theory nicely placed the early findings into a meaningful framework. However, as noted, these early findings were not consequent upon the actual relationship of the bilingual's two languages, but rather were consequent upon poorly controlled studies and social-psychological problems experienced by children in schools attempting to eradicate their first language and "assimilate them". Unfortunately, the thinking of many educators still appears to be motivated by implicit assumptions of the Balance Effect Theory.

As a result of Lambert's (1967, 1975) work and follow-up studies which confirmed his findings, a new

framework for understanding bilingual language proficiency was needed. The theory would also need to explain the inconsistencies in the results of more recent "positive" and "negative" studies. Cummins (1978, 1978-79, 1979) proposed the Threshold Hypothesis to meet these needs.

The Threshold Hypothesis proposes that there are two threshold levels of bilingual linguistic competence. In order to define the lower threshold level, Cummins (1978, 1979) borrows Skutnabb-Kangas and Toukomaa's concept of "semilingualism". If a child has a low level of language competence in his first or second language (interpersonal communication skills only), his "interaction with the environment through that language, both in terms of input and output, is likely to be impoverished" (Cummins, 1979, pp. 229-230). Such a child has not attained the lower level of competence in his first (or second) language. Bilingualism in such cases results in "semilingualism".

The attainment of the lower threshold level of bilingual competence would be sufficient to avoid any negative effects on cognitive function, but "the attainment of a second, higher level of competence might be necessary to lead to accelerated cognitive growth" (Cummins, 1979, p. 230). Once this higher threshold level of bilingual competence has been reached, the phenomena of "additive

bilingualism" as described by Lambert (1975) occurs.

Cummings and Mulcahy (1978) carried out their study of children attending the Ukrainian-English bilingual program in Edmonton to investigate the Threshold Hypothesis, and especially the concept of the "higher threshold level of bilingual competence". As noted above, the students who were relatively fluent in Ukrainian were significantly better able to detect ambiguities in English sentence structure than either equivalent unilingual English-speaking children not in the program or children in the program who came from predominantly English-speaking homes. These findings were consistent with what was predicted on the basis of the Threshold Hypothesis, and especially the concept of the "higher threshold level of bilingual competence". The Ukrainian children are, according to this, experiencing "additive bilingualism" with its positive cognitive effects.

The Threshold Hypothesis provides a framework in which the academic and cognitive effect of different forms of bilingualism (semilingualism -- or subtractive bilingualism -- and additive bilingualism) may be predicted. It also provides a theoretical basis for explaining apparent inconsistencies in "positive" and "negative" research findings. But the hypothesis does not tell us how

semilingualism and additive bilingualism develop, nor does it tell the type of school programs which are likely to promote additive and subtractive forms of bilingualism. To answer these questions, Cummins (1978, 1979, 1981b) posits the Developmental Interdependence Hypothesis.

The developmental interdependence hypothesis proposes that the level of L2 competence which a bilingual child attains is partially a function of the type of competence the child has developed in L1 at the time when intensive exposure to L2 begins. When the usage of certain functions of language and the development of L1 vocabulary and concepts are strongly promoted by the child's linguistic environment outside the school, as is the case of most middle-class children in immersion programs, then intensive exposure to L2 is likely to result in high levels of L2 competence at no cost to L1 competence. (Cummins, 1979, p. 233)

This hypothesis is strongly supported by the Rock Point Navajo study, the Milongimbi study, the study of Finnish

children in Sweden, the study of francophone students in Manitoba, and the study of the Ukrainian-English Bilingual Program. Research has shown that in both majority and minority-language learning situations there is no simple relationship between time spent through the medium of a language, and achievement in that language. Research shows that children instructed in L1 perform as well as or better than children instructed in L2 on measures of L2 skills.

There is, in effect, developmental interdependence or transference from one language to the other, provided that the higher threshold level of bilingual competence has been attained. The Developmental Hypothesis and the Threshold Hypothesis together form a theoretical framework in which paradoxical research findings may be interpreted. For example, the two hypotheses together explain why immersion "works" for majority language children, and why it doesn't "work" for minority language children.

In a more recent publication, Cummins (1981a) posits the Think Tank Model which provides a single framework in which research findings may be interpreted. The "Think Tank" represents the child's cognitive facility for learning language. The model makes the following three assumptions:

1. There is only one Think Tank which formulates thoughts that are expressed in both the first and second language as well as comprehends other people's thoughts that are expressed in both the first and second language.

2. All information is stored in the same Think Tank, and the individual potentially has access to all the information so stored.

3. The individual's experience with language is extremely important for the operation and development of the Think Tank. Thus, understanding, speaking, reading, and writing either language contributes to the development of the total Think Tank.

In his discussion of the Think Tank Model Cummins (1981a) makes the point that

Contrary to the assumptions of many parents and teachers, minority children's educational performance in the second language is not determined only by experience in the second language; instead, it is determined by the entire store of linguistic and conceptual knowledge in the Think Tank which is derived from the totality of the child's experience in both languages. (p. 31)

The Think Tank Model is a useful analogy portraying cognitive function in language acquisition. However, of and by itself, the model does not answer clearly some of the contradictory research findings. The Think Tank Model together with the Threshold Hypothesis and the Developmental Interdependence Hypothesis provides a substantial theoretical framework for interpreting research findings in bilingual education and its effects on cognitive development and academic achievement.

#### Summary and Conclusions

The brief review of the history of research on bilingual education for minority-language children emphasized the dramatic change in research findings after Wallace Lambert's and Elizabeth Anisfeld's study in 1962. Poorly controlled studies and social-psychological factors account for the almost consistent negative research finding prior to 1962.

Although there has been a fundamental shift in the position taken by most investigators on the question of the effectiveness of bilingual education for minority-language children, there continues to be debate among educators, many claiming there is contradictory evidence about its efficacy. In order to determine what the research actually

says about the effectiveness of bilingual education for minority-language children, Dulay et al., (1979), Zappert and Cruz, (1977) and Troike (1978) carried out critical surveys of research findings. By excluding research findings from poorly designed studies, it was found that there is general agreement. In fact, both Dulay and Zappert discovered that 58% of research findings were positive, 41% neutral and 1% negative. As a result of Troike's review of twelve "quality" bilingual programs, he confidently states, "Quality bilingual programs can meet the goal of providing equal educational opportunities for students from non-English background" (p. 4).

The confusion surrounding the effectiveness of bilingual education for minority-language students arises from several loci: 1) negative findings of early research; 2) poorly controlled studies in more recent years (the AIR study which received wide attention in the United States is a prime example); 3) pervading "common sense" concepts which are myths; 4) the lack of agreed upon criteria for bilingual education and the consequent wide range of the use of L1 in such programs -- from 0% to 100%. (Programs not meeting agreed upon criteria should not be called "bilingual programs"); 5) positive research finding from immersion studies on majority-language

children learning a second **socially relevant** language.

Despite the confusion, positive effects of bilingual education on academic achievement in the second language are irrefutably demonstrated in research findings from around the world. Not only do these studies show that minority children's L1 proficiency can be promoted at no cost to proficiency in L2, but also they show that proficiency in L1 is associated with **significant gains** in academic achievement in L2.

Given these factors, the use of first language materials and instruction in E.S.L. programs is more than socio-politically sensible; it is pedagogically sound.

The efficacy of bilingual education for minority-language children has been established. Bilingual education, however, has been looked upon as an undifferentiated whole, and research findings tend to relate to that "undifferentiated whole". Various **program components** and their effectiveness in improving student performance have not been investigated. One such component is the use of L1 literature. Isabel Schon has initiated research in this particular component part, but the literature on bilingual education for minority-language children contains no reference to "story time in first language" and its association with reading achievement in

L2. The empirical evidence and theoretical rationale presented suggests that "story time in first language" will at least have no detrimental effects on second language acquisition and will possibly be associated with gains in L2 proficiency. Therefore the present study was designed to investigate "story time in first language" and its association with gains in English reading achievement.

### CHAPTER 3 METHODOLOGY AND PRESENTATION OF FINDINGS

This study was designed to answer the question, "Does reading books in E.S.L. students in their first language have a greater association with gains in reading achievement in their second language than reading books to E.S.L. students in their second language?"

In order to determine whether hearing stories in L1 is associated with greater gains in reading achievement in L2 than hearing stories in L2, a quasi experimental research design was developed that consisted of one independent variable and two dependent variables. The independent variable, hearing stories read, consisted of Treatment 1, hearing stories read in Chinese; Treatment 2, hearing stories read in English, and Treatment 3, hearing no stories read (control group). The dependent variables were: 1) reading achievement as measured by the Gates-MacGinitie Reading Test Level A, forms 1 and 2, Canadian edition, 1980; and 2) the number of Chinese books borrowed by students.

#### **Research Hypothesis**

$$H_1: \mu_1 > \mu_2$$

#### **Null Hypothesis**

$$H_0: \mu_1 = \mu_2$$

where  $\mu_1$  is represented by the mean of the experimental group E1 (Chinese stories) and  $\mu_2$  is represented by the mean of the experimental group E2 (English stories).

A graphic illustration of the research design is provided in Table II.

Table II  
Research Design

Group	Treatment	Dependent Variables	
E1	Chinese stories	posttest	number of L1 books borrowed
E2	English Stories	posttest	number of L1 books borrowed
C	no stories	posttest	number of L1 books borrowed

The study was carried out with students, ages 9 to 12, from two intermediate E.S.L. classrooms at Lord Strathcona Elementary School in Vancouver. One class consisted of 20 students, and the other 19, making a total sample of 39 students. Of these, 36 spoke Chinese as their first language and 3 spoke Vietnamese. One Chinese student moved from the school during the treatment period, leaving a sample of 38. All subjects lived in the Chinese community in which the school is located.

The 39 students in the two E.S.L. classrooms were randomly assigned to one of three groups. Once the groups were comprised, each group was randomly assigned to one of three treatments: Chinese stories (E1), English stories (E2) or no stories (C). By chance the 13 students who made up E1 all spoke Chinese as their first language. E2 contained 3 Vietnamese students and C contained no Vietnamese students.

The treatment took place during two 40 minute periods a week for a duration of three months. Each session in E1 and E2 included a discussion of the stories listened to. E1 discussion was in L1 and E2 discussion was in L2.

The Control Group (C) participated in "catch-up time" with their regular classroom teacher. No formal teaching took place during this period. After students had completed unfinished work, they played various games that were in the classrooms. These included math and English games.

#### Selection of Books

The Chinese books were rated by the two Chinese speaking readers using the form "Chinese Literature - English Literature: Rating" (see Appendix I). The Chinese readers consulted together using this form to select books

to read from a total selection of some 700 books. The same form was used as a guide in selecting English books by the two English reader volunteers. Books were selected if both readers agreed on the four categories.

### Chinese and English Readers

There were two Chinese volunteer readers and two English volunteer readers, each of whom read or told stories one period a week. The four volunteers were all competent and expressive readers. In an audition all four readers demonstrated good diction, enunciation, phrasing, tempo, and ability to convey dramatic content. As well the readers had an ability to form a warm rapport with children as observed by the investigator.

The four volunteers all had teaching experience with intermediate students. One Chinese reader had previously taught at the school in which the study took place. The other Chinese reader--who had a rich background in Chinese Folk Tales, and sometimes told stories, was a recently retired principal of the Chinese School situated near Lord Strathcona Elementary. One of the English readers was a primary E.S.L. teacher at Lord Strathcona Elementary. Arrangements were made to free her from her regular classroom duties to take part in the study. The second

English volunteer reader was an experienced teacher of Canadian native Indian children. When the study was completed she volunteered to continue to read one period a week to the control group.

### Chinese Library Books

A set of 50-60 Chinese library books was maintained in each of the two intermediate classrooms, and changed approximately every two weeks. The class set of books was exchanged between the two classes, so each class was exposed to the same books. All the books selected had illustrations, many in colour and all books were judged by the investigator, a teacher-librarian who has had considerable experience with intermediate E.S.L. students, to be books which would be of interest to intermediate E.S.L. students. The majority of the books were Chinese folktales, and others were mainly English folktales told in Chinese. The Chinese books were available to all students participating in the study. A sign-out system was arranged in each classroom and monitored by the classroom teacher. The books were borrowed by students during non-instructional times (before school, at recess, lunch hour and after school). Each teacher insisted that the books be read during non-instructional times. A record was

kept of the number of books each student borrowed.

### Presentation of Findings

The Gates-MacGinitie Reading Test Level A, form 1, was administered to all subjects. Instructions were given in both English and Chinese. At the conclusion of the three month period form 2 of the same test was administered. The mean score results of the testing are shown in Table III.

Table III

Summary of Data: Table of Means

		Pretest	S.D	Posttest	S.D.	Difference
E1	Chinese	65.23	13.30	72.23	5.81	7.00
E2	English	58.77	15.76	64.72	16.84	5.85
C	Control	58.91	15.64	71.91	8.35	13.00

Two t tests were applied, firstly to test for a significant difference between the means of the three groups, and secondly to test for a significant difference between the pretest and posttest means within each group. The results are summarized in Tables III through VII.

Table IV  
t Test Between Groups

	N	Pretest/Posttest Mean Difference	S.D.	t Value (Pooled Var.)	D.F.
Chinese	13	+7.00	9.28	1.52	23
Control	12	+13.00	10.43		
English	13	+5.85	8.39	1.90*	23
Control	12	+13.00	10.43		
Chinese	13	+7.00	9.28	.33	24
English	13	+5.85	8.39		

\*Significant at .05

The mean score difference between each group was tested by a one-tailed  $t$  test. As shown in Table IV,  $p > .05$  in the Chinese-Control group and Chinese-English group.

$$H_1: \mu_1 > \mu_2$$

$$t_{24} = .33, p > .05$$

The Null Hypothesis is not rejected. The experimental treatment of hearing stories read in Chinese was not associated with greater gains in reading achievement among Chinese intermediate E.S.L. students than hearing stories read in English. There were, however, significant gains ( $p < .05$ ) in the reading scores of all three groups, as

shown in Table V.

Table V  
t Test Within Groups

		N	Pretest/ Posttest Mean Difference	S.D.	t Value	D.F.	1 Tailed p
E1	Chinese	13	+7.00	13.30 5.81	2.72	12	.01
E2	English	13	+5.85	15.71 16.84	2.51	12	.02
C	Control	12	+13.00	15.64 8.35	4.32	11	.0005

Another purpose of this study was to determine whether reading stories to children in Chinese is associated with first language borrowing habits. As shown in Table VI there is no difference in the mean number of books borrowed by groups, that is treatment E1 and E2 had no association with number of books borrowed (ANOVA  $F(2,35) = .010$ ,  $F$  prob. = .99).

Because one teacher (Teacher A) had a negative attitude toward L1 books, the number of books borrowed was analysed by class, and the results are shown in Table VII.

Table VI  
Chinese Books Borrowed by Group

Group	N	Mean	S.D.	S.E.	Min.	Max.	F
Chinese	13	14.54	17.2	4.77	1	56	
English	13	13.85	17.2	4.77	0	54	.99
Control	12	13.75	8.61	2.49	4	31	

Table VII  
Chinese Books Borrowed by Class

Group	N	Mean	S.D.	S.E.	Min.	Max.	F
Teacher A	18	8.78	8.83	2.08	0	31	.02
Teacher B	20	19.70	16.83	3.76	0	56	

The significant difference (ANOVA  $F(1,35) = 6.066$   $F$  prob. = .02) in mean number of books borrowed by class will be considered in the following discussion.

#### CHAPTER 4 DISCUSSION AND IMPLICATIONS

The research hypothesis of this study was that intermediate E.S.L. students who heard stories read in L1 would make significantly higher gains in reading achievement than intermediate E.S.L. students who heard stories in L2. This hypothesis was formulated on the basis of 1) studies that show bilingual education among minority language children has a significant and positive effect on reading achievement in L2 and general academic achievement (Lambert, 1975; Zappert and Cruz, 1977; Troike, 1978; Cummins and Mulcahy, 1978; Dulay et al., 1979; Skutnabb-Kangus, 1979; Rosier and Holm, 1980; Gale et al., 1981; Melendez, 1981); and 2) theories which interpret research findings in terms of cognitive function; namely the "Threshold Hypothesis: (Cummins, 1978; 1978-1979; 1979; and Cummins and Mulcahy, 1978); The Development Interdependence Hypothesis (Cummins, 1978, 1979; 1981b); and the "Think Tank Hypothesis" (Cummins, 1981a).

Even though the students hearing Chinese stories did not make greater gains in L2 reading achievement than students hearing English stories or students hearing no stories this study adds important information to the debate on how schools should respond to the cultural and

linguistic diversity of their students. All three groups in this study--the group hearing stories read in Chinese, the group hearing stories read in English and the control group had significant gains ( $p < .05$ ) in reading achievement. The instructional time of 80 minutes a week over a three month period to read to students in their first language had no detrimental effects on reading achievement in English. As emphasized by Rosier and Holm (1980) and Cummins (1979-1980), there is not necessarily a direct relationship between acquiring a second language and length or amount of in-school exposure to that language. Cognitive factors must be taken into account. As Cummins (1981a) states, "it [performance in the second language] is determined by the entire store of linguistic and conceptual knowledge in the Think Tank which is derived from the totality of the child's experience in both languages" (p. 31). As well, another arena must be addressed besides academic and cognitive factors. Achievement in L2 reading can not be considered the only important development in a child's life. Cultural realities must be taken into account and addressed in the school setting. The use of first language collections is one way of doing this.

The debate concerning the use of L1 instruction and materials with E.S.L. students is not focused on whether L1

materials assist students in learning their second language or not. The debate is focused on whether L1 materials **impede** second language acquisition or not. This study gives a very clear answer to those who are concerned that the use of first language materials, specifically first language books, impede second language acquisition. First language materials used in this study had **absolutely no detrimental** effects on second language acquisition. Further, not only did the students who heard Chinese stories read English **equally as well** as those who heard English stories, but these students had the added advantage of being exposed, in a school setting, to their own culture. In our multicultural society there is a growing awareness that it is the expression and acceptance of diverse cultural backgrounds that brings strength and richness to the Canadian mosaic. Indeed, as the person responsible for purchasing the First Language Collection for the Vancouver School Board expressed, "Even if first language books did not have a positive effect on learning English, these materials meet a **cultural need** in our society." The fact is first language books assist in meeting cultural needs and **do not impede** reading achievement in English. The findings in this study are one more piece of evidence which makes it possible for

Wertheimer (1980) to state, "The argument for the provision of books for children in their mother tongue is overwhelming" (p. 347).

As shown in Table IV there was a significant difference between the pretest and posttest means E2 and C ( $p < .05$ ). It can not be concluded, however, that the "no story" treatment is associated with gains in reading achievement in L2 as compared to the "English story" treatment. Such a conclusion can only be tentative. It is, of course, possible that reading L2 literature to children with low L2 proficiency has a detrimental effect on L2 acquisition. This tends to be supported by the unchanged standard deviation of the pretest-posttest scores of E2 as compared to E1 and C. (See Table III). Further research is required to determine what is, in fact, associated with the lower gains among the lower achieving students in E2.

The gain in the control group, as compared to the English or Chinese groups, was an anomaly until it was discovered that of seven students who received daily help in English from an English Language Assistant during the duration of the study (as part of their regular E.S.L. program), four were from the control group, two from the Chinese group and one from the English group. The mean increase of these students (see Appendix II) was

considerably higher on the posttest than the mean average increase of students not receiving individual assistance: 19.57 as compared to 5.97.

A purpose of this study was to uncover any factors which might influence borrowing first language books. It was anticipated that the group hearing stories read in Chinese would borrow more Chinese books than those not hearing stories read in Chinese. There was no difference between the three groups, consequently it appears that all three groups were equally motivated to read Chinese books. This could be interpreted as implying that there is, indeed, a cultural need present and that having first language books in the classroom helps to meet this need. Moreover, as demonstrated in Schon's (1981a) study, the reading attitudes of Hispanic students improved significantly ( $p < .05$ ) after silent reading in Spanish. Thus it may be expected that the reading of Chinese literature by students would have a positive effect upon their attitude toward reading.

It is possible that the unchanged standard deviation in pretest/posttest scores in E2 (English stories) as compared to E1 and C (see Table III) indicates that the attitudes of lower scoring students in E2 did not improve and may have become less positive than at the beginning of the study.

In other words subjecting students to L2 stories which they probably do not comprehend may impede L2 acquisition, or even cause a loss of previous gains, as suggested by the posttest score of subject 26 (see Appendix II). Further research is needed to understand how reading L2 literature to students effects L2 acquisition when they do not adequately comprehend what is being read.

In this study, one of the teachers (Teacher A) had a negative attitude toward L1 collections. The students in Teacher A's class borrowed significantly less books than the students in Teacher B's room ( $p = .02$ ). This strongly suggests the teacher's attitude toward L1 literature has a profound effect upon student borrowing habits of L1 literature. Teacher A initially was willing to participate in the study. Shortly after the study commenced, however, Teacher A wanted to withdraw from the study. "A" stated to the investigator, "You know how I feel about Chinese books. If you were an E.S.L. teacher you wouldn't want them either." It was only because of the insistence of the principal that Teacher A's class remained in the study.

Teacher B did not have a negative attitude toward the First Language Collection; neither did Teacher B have a strong positive attitude. The teacher was simply willing to have the class borrow books and didn't feel it would do

any particular harm. Teacher B, like Teacher A, felt the books should be read only during non-instructional time.

Because of the powerful effect a teacher's attitude toward L1 literature has on student borrowing of L1 literature, a school district survey of teacher's attitudes and beliefs relative to the use of First Language Collections should be useful as a starting point for an in-service session on First Language Collections.

#### Some Implications For Further Study

A series of considerations related to first language collections and second language acquisition present themselves, none of which appear to have been addressed in the literature on First Language Collections or Bilingual Education:

1. Would the use of First Language Collections by students have a significant effect upon student self-esteem and positive regard for their own culture?

2. Would First Language Collections resolve or lessen conflicts between cultural identity and language as described by Lambert (1967)? In other words, will First Language Collections assist students in achieving a comfortable bicultural identity in which students profit from language opportunities in L1 and L2?

3. Generalizations in the present study are limited to the Chinese population living in a Chinese community. The Chinese in Vancouver make up approximately 15% of the population, and are generally respected by the larger community in which they live. The attitude on the part of most teachers toward Chinese students seems to be "Chinese students are hard workers and do well", and consequently teachers tend to expect Chinese students to do well. Would reading to children of minority groups in L1 when the attitude of "expecting to do well" does not exist, have a greater impact on second language acquisition than reading to Chinese students?

4. Would parents reading to children in L1 in the home setting be associated with gains in reading achievement in L2?

5. Would parents listening to children read in L1 in the home setting be associated with gains in reading achievement in L2?

6. Would parents listening to children read in L2 in the home setting be associated with gains in reading achievement in L2, and would L1 be maintained?

7. Is reading L2 literature to children who have low L2 skills, and consequently can not adequately comprehend what is being read, detrimental to L2 acquisition?

Research in all of these areas is needed to realize the potential value of first language collections in school resource centres in a multicultural society.

Elley and Mangubhai's Study: Some Further Implications

Elley and Mangubhai's (1983) study in which it was shown that the Shared Book Experience with high-interest story books in the target language produced "rapid L2 learning", is worth further consideration. A further analysis was undertaken after the main study with the three groups had been completed. Class 6 pupils who were in the Shared Book Experience group were compared with other Class 6 students in Fijian schools on the Fijian Intermediate Examination test results. The Shared Book Experience groups performed well above the typical performance of rural schools in English ( $p < .001$ ) General Studies [Science and Social Studies] ( $p < .001$ ) and Mathematics ( $p < .001$ ). There was a similar, but less marked tendency in the Fijian Language Examination ( $p < .10$ ). The other contrasts between Shared Book and Silent Reading groups proved significant only in the case of English ( $p < .05$ ).

A special effort was made in the Shared Book experience to make reading as meaningful as possible to the child, or, as the authors put it, "to reduce the critical differences

between typical L1 and L2 learning". The investigators appear to have been most successful. What this emphasizes, in terms of this present study is that a **component part** of an educational system can have a powerful impact on the effectiveness of the total educational system. The critical factor was not the second language stories by themselves (as proven by results from the Silent Reading group), but rather the **meaningful communication** which **occurred during the story time**. Thus the dimension of "meaningful communication" must be added to theory which attempts to explain second language acquisition.

The term "meeting cultural needs" was used in the discussion to describe one of the positive outcomes of using First Language Collections. In view of Elley's and Mangubhai's (1983) study, it must be acknowledged that there may be needs which are more fundamental to the cognitive, social and psychological development of the child than cultural needs. One such need is the apparent need for the child to communicate about those things which are meaningful to the child. When this need is addressed--as it appears to have been in Elley's and Mangubhai's (1983) study--there is a profound impact on the child's total learning experience. This fundamental need for the child to "communicate meaningfully" is not related to

cultural factors and may be fulfilled, or partially fulfilled by using **either** L1 or L2 literature. The key factor is the meaningful relationship and communication between the child and others which seems to be facilitated most easily by the use of literature and shared book experiences. Is it possible that if this more fundamental need to "communicate meaningfully" is met, the child would move through the essential language development phases in L2 **regardless of his level of functioning in L1**? This may be what occurred in Elley and Mangubhai's (1983) study, although we do not know what level of L1 functioning was characteristic of the "Shared Book Experience" group. Further research needs to be undertaken to investigate this. If students involved in the study were "dominant bilinguals" -- "native-like level in one of the languages", then according to the theory presented by Skutnabb-Kangus and Cummins (1978), (that students must attain a level of bilingual competence termed "additive bilingualism", which is above the level of "dominant bilingualism" before there can be positive cognitive effects), there should be neither positive nor negative effects of one or the other language on cognitive functioning. But Elley and Mangubhai (1983) found there was. Does this mean that Elley and Mangubhai have put their finger on a very simple formula for

improving English language skills among intermediate E.S.L. students? Is it possible that L2 acquisition could be a much easier, more natural, enjoyable and efficient process simply by providing students with opportunity to communicate at levels which are meaningful to them through the medium of L2 literature and "Shared Book Experiences", regardless of their level of language development in their first language? Further study is obviously indicated.<sup>1</sup>

Reading Chinese literature to children in this study was not the "shared book experience" described by Elley and Mangubhai (1983). Would such a shared book experience in L1 yield findings with Chinese students similar to Elley and Mangubhai's findings with Fijian students?

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<sup>1</sup> It should be noted that in a recent publication by Cummins (1983a) he elaborates on the "Interdependence Hypothesis" and Elley and Mangubhai's (1983) findings may be interpreted within its framework: "Minority students' academic achievement in L2 is directly related to how well their common underlying proficiency is developed. However, those who argue that L1 instruction will impede L2 (e.g. English) acquisition fail to realize that experience or instruction in either language can promote development of the proficiency underlying both languages, given adequate motivation and exposure to both in either school or the wider environment" (Cummins, 1983a, p. 43). The question still must be asked, however, "How well was the 'common underlying proficiency' in the Shared Book Experience group developed?" If it was not well developed, some other factors, such as considered above must be taken into account.

## CHAPTER 5 SUMMARY AND CONCLUSION

The recent increase in ethnic minority population of schools in Canada, United States and Europe has given rise to increased debate on how schools should respond to the cultural and linguistic diversity of their students.

In analyzing public response to multicultural programs in Toronto schools, Masemann (1978-1979) found the public believes that use of first language materials and instruction with E.S.L. students in schools impedes English language development.

In her article, "First Language Materials in School Libraries", J'Anne Greenwood (1983) reports that while children are no longer punished for speaking their own language, there is, nevertheless, "the lingering feeling that encouraging the use of the mother tongue will interfere with the learning of English". (p. 15)

A news story with the heading "Panel Asks Stress on English Studies" by S. Daley, appeared in the New York Times, May 6, 1983. It states in part:

The educators said the Federal Government should support programs that teach children to speak, read and write English as quickly as possible by 'immersing' them in the language.

... 'We are not criticizing bilingual education per se. [one of the educators stated] There is all kinds of contradictory evidence about whether or not it works.'

(p. 1)

The question really is does it work? Does bilingual education--the use of first language materials and instruction during some part of the school day--help children learn to read, solve math problems and speak in English? A major difficulty in answering these questions is that many studies have critical weaknesses in research design (Dulay et al., 1979; MacLaughlin, 1982; Troike, 1978; Zappert and Cruz, 1977). Because any one of several weaknesses in research design, such as no baseline comparison or control group, invalidate research results, the findings from many studies cannot be considered in the discussion of the effects of bilingual education on student performance. But such studies have been quoted to support positions for or against bilingual education. It is easy

to understand why there is contradictory evidence about whether or not bilingual education works. What kind of results would we find if we looked **only** at the studies which do not have critical weaknesses in research design? This is exactly what Dulay et al. (1979), Zappert and Cruz (1977) and Troike (1978) did.

Dulay et al. (1979) concluded that bilingual programs worked significantly better than monolingual programs. Zappert and Cruz (1977) conclude that findings are not contradictory, but rather "strongly support the use of the child's native language as a medium of instruction ...". At the conclusion of his review, Troike (1978) states that "quality bilingual programs can meet the goal of providing equal educational opportunity for students from non-English speaking backgrounds" (p. 4).

Since the completion of Dulay's (1979), Zappert and Cruz (1977) and Troike's (1978) critical review of the literature on bilingual education, further findings support their conclusions. Skutnabb-Kangas (1979), after completing a study of almost 700 Finnish children in bilingual and monolingual programs in Sweden in grades 1 to 9, found that the longer Finnish children were educated in Finnish, the better their academic achievement was in courses taught in Swedish.

After an extensive study with Navajo children Rosier and Holm (1980) found that by the end of grade 6, children in the bilingual program were performing at United States grade norms or slightly above in English reading, whereas before the bilingual program Navajo children at Rock Point were about two years behind norms in English reading by the end of Grade 6. The author makes the simple observation: "ability in English (as a second language) is not necessarily a simple function of the length or amount of in-school exposure to English" (p. 28).

Gale's et al. (1981) findings from a four year bilingual program with aboriginal children in Australia show that students in the bilingual program achieved better academic results in oral English, English reading and composition, and mathematics than they had under the former English monolingual system.

Isabel Schon et al. (1981a, 1981b) conducted two studies with L1 literature and Hispanic students in the United States. It was found that the reading attitudes of the experimental group (students who had silent reading in Spanish) improved significantly ( $p < .05$ ). Further, the authors note that within the experimental group, gains in English and Spanish reading abilities were positively correlated.

It is important to place the above empirical findings of the effects of bilingual education on reading achievement and general academic achievement in a theoretical framework. What is taking place at a cognitive level to explain the findings?

Jim Cummins of the Ontario Institute for Studies in Education describes bilingualism as "a positive force in children's intellectual and educational development" (Cummins, 1981a, p. 22), and posits the Interdependence Hypothesis to place research findings into a meaningful theoretical framework. Cummins' (1983) rationale for his hypothesis is based in the evidence that there is little relationship between the amount of instruction minority language children receive in L2 and achievement in that language, which suggests that L1 and L2 skills are interdependent, or "manifestations of a common underlying proficiency".

He formally states the hypothesis as follows:

To the extent that instruction in Lx is effective in promoting the proficiency in Lx, transfer of this proficiency to Ly will occur provided there is adequate exposure to Ly (either in school or environment) and adequate

motivation to learn Ly. (Cummins, 1983a, p. 41)

Cummins gives a concrete example:

In a Ukrainian-English bilingual program, instruction that develops Ukrainian reading skills is not just developing Ukrainian skills, it is also developing a deeper conceptual and linguistic proficiency which is strongly related to the development of English literacy and general academic skills. (Cummins, 1983a, pp. 41-42)

In summary, despite the debate surrounding the effectiveness of bilingual education for minority-language children, positive effects of bilingual education on academic achievement in the second language are irrefutably demonstrated in research findings from around the world. Not only do these studies show that minority children's first language proficiency can be promoted at no cost to proficiency in their second language, but also they show that use of first language materials can be associated with

significant gains in academic achievement in the second language.

The empirical evidence and theoretical rationale presented strongly suggest that "story time in first language" will at least have no detrimental effects on second language acquisition and will possibly be associated with gains in second language proficiency. Therefore, in order to test the hypothesis that

**hearing stories read in Chinese is associated with greater gains in reading achievement in the second language among Chinese intermediate E.S.L. students than hearing stories read in English**

a research design was developed that consisted of one independent variable and two dependent variables. The independent variable, hearing stories read, consisted of Treatment 1, hearing stories read in Chinese; Treatment 2, hearing stories read in English, and Treatment 3, hearing no stories read (control group). The dependent variables were: 1) reading achievement as measured by the Gates-MacGinitie Reading Test Level A, forms 1 and 2, Canadian edition, 1980; and 2) the number of Chinese books borrowed by students. Another purpose of the study was to determine whether reading stories to children in Chinese is associated with first language borrowing habits, and

whether teachers' attitudes toward First Language Collections influence children's borrowing of first language books.

The study was carried out with students, ages 9 to 12, from two intermediate E.S.L. classrooms at Lord Strathcona Elementary School in the core of Vancouver's Chinese community. One class consisted of 20 students, and the other 19, making a total sample of 39 students. The 39 students were randomly assigned to one of three groups. Once the groups were comprised, each group was randomly assigned to one of three treatments: Chinese stories, English stories, or the control group. A different set of 50-60 Chinese library books was maintained in each classroom and exchanged between the two classes approximately every two weeks.

There were two Chinese volunteer readers and two English volunteer readers, each of whom read or told stories one period a week. The four volunteers all had teaching experience and were competent, expressive readers with an ability to form a warm rapport with children as observed by the investigator.

The treatment took place during two 40 minute periods a week for a duration of three months. The control group participated in "catch-up time" with their regular

classroom teacher. No formal teaching took place.

Two one-tailed  $t$  tests were applied to the data, firstly to test for a significant difference in reading achievement between the means of the three groups, and secondly to test for a significant difference between the pretest and posttest means within each group. The between the groups  $t$  test revealed one significant finding: the scores of the control group were significantly greater than the scores of the group which heard stories in English ( $p < .05$ ). It is probable that the significant difference is due to the extra assistance which a number of low achieving students in the control group received during the duration of the study. Of seven students receiving individual assistance as part of their regular E.S.L. program, four were from the control group, two from the Chinese story group, and one from the English story group. It is, of course, possible that reading L2 literature to children with low L2 proficiency has a detrimental effect on L2 acquisition. Further research is required to determine what is, in fact, associated with the lower gains among the lower achieving students in E2 (English stories) as compared to the lower achieving students in E1 (Chinese stories) and the control group.

The within the groups  $t$  test revealed significant gains

in all three groups ( $p < .05$ ).

Two ANOVAS were applied, firstly to test for a significant difference between the three groups in borrowing habits, and secondly to test for a difference in borrowing habits between the two classes. There was found to be no significant difference between the three groups, that is, hearing stories in Chinese and hearing stories in English was not associated with number of books borrowed. The significant difference ( $p < .05$ ) in mean number of books borrowed by class will be considered in the following discussion.

Even though the students hearing Chinese stories did not make greater gains in L2 reading achievement than students hearing English stories or students hearing no stories this study adds important information to the debate on how schools should respond to the cultural and linguistic diversity of their students. All three groups in this study--the group hearing stories read in Chinese, the group hearing stories read in English, and the control group made significant gains ( $p < .05$ ) in reading achievement. The instructional time of 80 minutes a week over a three month period to read to students in their first language had no detrimental effects on reading achievement in English. As emphasized by Rosier and Holm

(1980) and Cummins (1979-1980), there is not necessarily a direct relationship between acquiring a second language and length or amount of in-school exposure to that language. Cognitive factors must be taken into account. The totality of a child's experience in **both** L1 and L2 cognitively affects the child's ability to express in L2.

Moreover, the debate concerning the use of L1 instruction and materials with E.S.L. students is not focused on whether L1 materials **assist** students in learning their second language or not. The debate is focused on whether L1 materials **impede** second language acquisition or not. This study gives a very clear answer to those who are concerned that the use of first language materials, specifically first language books, impede second language acquisition. First language materials used in this study had **absolutely no detrimental** effects on second language acquisition. Further, not only did the students who heard Chinese stories learn English **equally as well** as those who heard English stories, but these students had the added advantage of being exposed, in a school setting, to their own culture. In our multicultural society there is a growing awareness that it is the expression and acceptance of diverse cultural backgrounds that brings strength and richness to the Canadian mosaic. Indeed, as the person

responsible for purchasing the First Language Collection for the Vancouver School Board expressed, "Even if first language books did not have a positive effect on learning English, these materials meet a **cultural need** in our society." The fact is first language books assist in meeting cultural needs and **do not impede** reading achievement in English. The findings in this study are one more piece of evidence which makes it possible for Wertheimer (1980) to state, "The argument for the provision of books for children in their mother tongue is overwhelming." (p. 347).

One purpose of this study was to determine any factors that might be associated with borrowing first language books. There was no difference between the three groups in borrowing habits. However, in the class where the teacher had a strongly negative attitude toward Chinese books in the E.S.L. classroom<sup>2</sup>, there were fewer books borrowed ( $p = .02$ ). This strongly suggests the teacher's attitude toward L1 literature has a profound effect upon student borrowing habits of L1 literature.

It is worth noting that while most teachers do not have a strongly negative attitude toward L1 literature, many are

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<sup>2</sup> The teacher did not want to have Chinese books in the classroom stating to the investigator, "You know how I feel about Chinese books", and only did so on the insistence of the school principal.

concerned that First Language Collections may or will impede L2 acquisition.

In-service sessions at the school district level are needed to assist teachers to become aware that

1) bilingual education or the use of first language materials such as First Language Collections with E.S.L. students does not impede the learning of English

2) use of first language instruction and first language materials such as First Language Collections can be (but not necessarily are) associated with gains in second language acquisition and general academic achievement.

3) use of First Language Collections tends to improve reading attitudes among E.S.L. students

4) attitudes held by teachers toward First Language Collections affect student borrowing habits of first language books

5) reading stories in English to E.S.L. students who have low English proficiency, and consequently can not adequately comprehend what is being read, may have detrimental effects on the acquisition of English.

6) there is little relationship between the amount of instruction received in L2 and achievement in L2, which

strongly suggests that L1 and L2 academic skills are interdependent (that is, academic skills are manifestations of a "common underlying proficiency"), and therefore L2 reading skills may be promoted by using either L2 or L1 literature.

7) transference of proficiency gained in the first language to a second language will occur provided there is adequate exposure to the second language and motivation to learn it.

The efficacy of bilingual education for minority language children has been established. Even where bilingual education programs per se for E.S.L. children do not exist, the **principle** of "interdependence" which Cummins (1983a) identified--that there is transference of linguistic skills from one language to another--may be applied to existing E.S.L. programs with little cost. First Language Collections may assist the student's development of conceptual and linguistic proficiency in his first language which will certainly not impede English acquisition and will expose the child to his cultural heritage. Moreover, in reading L1 literature to minority language students, leaders in ethnic communities may share their special skills in the class setting.

APPENDIX I  
CHINESE LITERATURE -- ENGLISH LITERATURE  
(Rating)

Title \_\_\_\_\_

Author \_\_\_\_\_

Book Number \_\_\_\_\_

PART A After reading the book, please place an x on the appropriate blank to indicate your response to the following questions:

1. This book will probably be interesting and pleasurable to children of ages 9 to 12:

\_\_\_\_\_                      \_\_\_\_\_                      \_\_\_\_\_  
yes                      maybe                      no

2. This book contains events, concepts and relationships which will be understandable to children of ages 9 to 12.

\_\_\_\_\_                      \_\_\_\_\_                      \_\_\_\_\_  
yes                      maybe                      no

3. This book has a main character with whom children of ages 9 to 12 can easily identify.

\_\_\_\_\_                      \_\_\_\_\_                      \_\_\_\_\_  
yes                      maybe                      no

4. The story is written in a language which flows naturally. Sentence length and complexity is related to the theme and character of the story, but not of such length and complexity that a young child of ages 9 to 12 cannot follow the development of the thought from the beginning to the end of the sentence.

\_\_\_\_\_                      \_\_\_\_\_                      \_\_\_\_\_  
yes                      maybe                      no

## APPENDIX I (Continued)

PART B GENERAL DIFFICULTY LEVEL \*\* Please check one of the following: For most children ages 9 to 12 this book would probably be

- ☐ 1. easy
- ☐ 2. easy to average
- ☐ 3. average
- ☐ 4. average to difficult
- ☐ 5. difficult

\*\* Oral comprehension

## Appendix II

## Data

Group	Subject	Teacher	Pretest	Posttest	Difference
E1 (Chinese)	1	B	81	78	-3
	2	B	77	79	2
	3	B	75	78	3
	4	B	75	76	1
	5	B	74	78	4
	6	A	73	70	-3
	7	A	70	75	5
	8	A	68	68	0
	9	A	62	67	5
	10	B	58	76	18*
	11	B	51	65	14*
	12	A	46	64	18
	13	B	38	65	27
E2 (English)	14	A	79	82	3
	25	B	79	82	3
	16	A	71	76	5
	17	A	70	75	5
	18	A	69	69	0
	19	A	67	68	1
	20	A	61	71	10
	21	B	61	68	7
	22	A	51	64	13
	23	A	44	58	14*
	24	B	43	62	19
	25	B	35	46	11
	26	A	34	19	-15
C (Control)	27	B	83	83	0
	28	B	77	78	1
	29	B	72	80	8
	30	A	68	72	4
	31	A	68	77	9
	32	B	59	75	16*
	33	A	58	63	5
	34	B	53	71	18*
	35	B	50	73	23*
	36	A	50	64	14
	37	B	40	74	34*
	38	B	29	53	24
	39	A	1	moved	-

\* Students who received individual English language assistance during the duration of the study.

## REFERENCES

- Cummins, J. (1983a). Heritage language education: A literature review. The Ministry of Education, Ontario.
- Cummins, J. (1983b). Mother tongue development as educational enrichment. In J. Cummins (Ed.). Heritage Language education: Issues and directions (pp. 40-43). Ministry Supply and Services Canada.
- Cummins, J. (1981a). Bilingualism and minority-language children. The Ontario Institute for Studies in Education.
- Cummins, J. (1981b). Empirical and theoretical underpinnings of bilingual education. Journal of Education, 163(1), 16-29.
- Cummins, J. (1980). Bilingualism and the ESL student. TESL Talk, 11(1), 8-13.
- Cummins, J. (1979-1980). The language and culture issue in the education of minority language children. Interchange, 10(4), 72-88.
- Cummins, J. (1979). Linguistic interdependence and the educational development of bilingual children. Review of Educational Research, 49(2), 222-251.

- Cummins, J. (1978-1979). Bilingualism and educational development in anglophone and minority francophone groups in Canada. Interchange, 9(4), 40-51.
- Cummins, J. (1978). Educational implications of mother tongue maintenance in minority-language groups. Modern Language Review, 34(3), 395-416.
- Cummins, J. & Mulcahy, R. (1978). Orientation to language in Ukrainian-English bilingual children. Child Development, 49, 1239-1242.
- Daley, S. (1983, May 6). Panel asks stress on English studies: Educators urge end of U.S. aid for bilingual programs. New York Times.
- Danoff, M. (1978). Evaluation of the impact of ESEA Title VII Spanish/English Bilingual Education Program. ERIC Document ED 154 634.
- Dulay, H., Burt, M., & Bloomsbury, W. (1979). Bilingual education: A close look at its effects. Focus. No. 1. National Clearinghouse for Bilingual Education.
- Elley, W. B., & Mangubhai, F. (1983). The impact of reading on second language learning. Reading Research Quarterly, 19(1), 53-67.
- Gale, K., McClay, D., Christie, M. & Harris, S. (1981). Academic achievement in the Milingimbi bilingual education program. TESOL Quarterly, 15(3), 297-309.

- Greenwood, J. (1983). First language materials in school libraries. Emergency Librarian, 10(4), 15-19.
- Grosjean, F. (1982). Life with two languages: An introduction to bilingualism. Cambridge: Harvard University Press.
- Lambert, W. (1975). Culture and language as factors in learning and education. In A. Wolfgang (Ed.), Education of immigrant students (pp. 55-83). Toronto: Ontario Institute for Studies in Education.
- Lambert, W. (1967). A social psychology of bilingualism. Journal of Social Issues, 23(2), 91-109.
- Maseman, V. (1978-1979). Multicultural programs in Toronto schools. Interchange, 2(1), 29-44.
- McLaughlin, B. (1982). Children's second language learning. Language in education: Theory and practice, No. 47. ERIC Document ED 217 701.
- McLaughlin, B. (1978). Second language acquisition in childhood. Hillsdale, N. J.: Lawrence Erlbaum Associates.
- Melendez, W. (1982). The effect of the language of instruction on the reading achievement of limited English speakers in secondary schools. In Outstanding Dissertations in Bilingual Education, 1981, pp. 101-112. National Clearing House for Bilingual Education.

- Ovando, C. (1983, April). Bilingual/bicultural education: Its legacy and its future. Phi Delta Kappan, pp. 564-568.
- Rosier, P., & Farella, M. (1976, December). Bilingual education at Rock Point -- Some early results. TESOL Quarterly, pp. 379-388.
- Rosier, P., & Holm, W. (1980). The Rock Point experience: A longitudinal study of a Navajo school program. ERIC Document ED 195 363.
- Schon, I. and others. (1981a). The effects of books in Spanish and free reading time on Hispanic students' reading abilities and attitudes. ERIC Document ED 204 096.
- Schon, I. and others. (1981b). The effects of special reading time in Spanish on the reading abilities and attitudes of Hispanic junior high school students. ERIC document ED 205 342.
- Skutnabb-Kangas, T. (1979). Language in the process of cultural assimilation and structural incorporation of linguistic minorities. National Clearinghouse of Bilingual Education.
- Troike, R. (1978). Research evidence for the effectiveness of bilingual education. ERIC Document ED 159 900.

Vancouver School Board Evaluation and Research Services.

(1982). English as a Second Language: 1982 Survey Summary.

Wertheimer, R., & Foy, K. (1980). Children of immigrants and multiethnic heritage: Australia, Canada, the United Kingdom, and the United States. Library Trends, 29, 339-348.

Zappert, I. T., & Cruz, E. (1977). Bilingual education: An appraisal of empirical research. ERIC Document 153 758.