# An historical comparison and analysis of College Entrance Examination Board test scores and background characteristics of E.S.L. and bilingual students at Cambridge Rindge and Latin School. 

Samuel Robert Framondi<br>University of Massachusetts Amherst

Follow this and additional works at: https://scholarworks.umass.edu/dissertations_1

## Recommended Citation

Framondi, Samuel Robert, "An historical comparison and analysis of College Entrance Examination Board test scores and background characteristics of E.S.L. and bilingual students at Cambridge Rindge and Latin School." (1988). Doctoral Dissertations 1896 - February 2014. 4346.
https://scholarworks.umass.edu/dissertations_1/4346


AN HISTORICAL COMPARISON AND ANALYSIS OF COLLEGE ENTRANCE EXAMINATION BOARD TEST SCORES AND BACKGROUND CHARACTERISTICS OF E.S.L. AND BILINGUAL STUDENTS AT
CAMBRIDGE RINDGE AND LA'IIN SCHOOL

A Dissertation Presented
by

SAMUEL ROBERT FRAMONDI

Submitted to the Graduate School of the University of Massachusetts in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION
September, 1988
Education
(C) Copyright by Samuel Robert Framondi 1988

All Rights Reserved

AN HISTORICAL COMPARISON AND ANALYSIS OF COLLEGE ENTRANCE EXAMINATION BOARD TEST SCORES AND BACKGROUND CHARACTERISTICS OF ENGLISH-AS-A-SECOND LANGUAGE AND BILINGUAL STUDENTS

## AT CAMBRIDGE RINDGE AND LATIN SCHOOL

A Dissertation Presented
by

SAMUEL ROBERT FRAMONDI

Approved as to style and content by:


Kenneth A. Parker, Chairperson of Committee


Frank Rife, Member


Helen H. Schneider, Member


```
    DEDICATION
    To my family:
        my Wife
        Rhina
        my children
Salvatore, Fabiola, and Marcella
my Mother-in-Law
    Lucille Mejia
            and
        in memory of
        my Mother
        Elisa Delicato
        and my Father
Menotti Framondi
```

I wish to express my deepest appreciation to the many people whose help and cooperation made it possible for me to complete this work. Special feelings of gratitude and thankfulness, of course, are extended to all members of my Dissertation Committee: to Dr. Kenneth A. Parker who, as my major advisor, lent me a helping hand from the very outset and prevented me from pitfalls awaiting the outsider; to Dr. Helen Schneider who indefatigably gave me her wise guidance; and, to Dr. Frank Rife who so generously gave me his time and expertise.

Special appreciation and acknowledgement is due to Mr. Henry Lucas, conceiver of the Academic Excellence project; to Mr. John Zuman, Project Director; to Mr. Jose Figuerido, Coordinator, Bilingual/E.S.L. Program; and, to Mr. Guy Deluca, Data Processing Manager, who so unselfishly gave their precious time and assistance during this task.

I also extend my profound indebtedness to my family, wife and children, for their continuous encouragement and moral support.

> This work of mine could never have been
accomplished without the altruistic assistance and suggestions of both Mrs. Eleanor Farinato and Mr. Tony Bruno to whom I am greatly indebted.

I would like to express my gratitude to students and their parents for their support and patience during our mutual endeavors. And, above all, I would like to dedicate this endeavor of mine to the less known, the unfortunate ones and, indeed, to the rejected, the unwanted, and the ethnics. To all those millions upon millions of disengaged immigrants who escaped the bigotry, the poverty and political intolerance of their native countries to come over to this country hoping and dreaming for a more humane and just world where they would find work, progress, and respect as well as liberty and democracy for themselves and their offspring, Furthermore, I hope this document will stand both as a symbol and as a sacred monument through which I can express my solidarity with the millions of immigrants who are living exemplary lives outside of their countries of origin, having been forced to find new working opportunities in this land of ours.

Finally, a very special thanks is due to Ms. Kathy McPherson for giving so much of her time and effort in typing the early drafts. I shall always be grateful to her for helping me with this project.

> ABSTRACT
> AN HISTORICAL COMPARISON AND ANALYSIS OF COLLEGE ENTRANCE EXAMINATION BOARD TEST SCORES AND
> BACKGROUND CHARACTERISTICS OF E.S.L. AND BILINGUAL STUDENTS AT CAMBRIDGE RINDGE AND LATIN SCHOOL

## September 1988

SAMUEL ROBERT FRAMONDI, B.S., San Diego State College M.Ed. and C.A.G.S., Boston State College Ed.D., University of Massachusetts Directed by: Professor Kenneth A. Parker

This in-depth study compares the relationship between the English-as-a-Second Language and Bilingual students with regard to socioeconomic factors, language proficiency, and education and their relationship to the students' College Entrance Examination Board test scores, high school performance, and college admissions.

The study was conducted at Cambridge Rindge and Latin School, Cambridge, Massachusetts. The subjects were the Bilingual students assigned to House D and the English-as-a-Second Language students assigned to other houses and programs at the school. The participants from the two groups (E.S.L. and Bilingual) were equivalent on the basis of chronological age and having been born outside of the United States. They were different, however, in their knowledge of the English language and other factors such as socioeconomic background, linguistic proficiency, and level of education.

The findings of this study were that certain aspects of family background, such as socio-economic factors, language proficiency and educational level, are highly correlated to the children's degree of educational attainment. Three other factors--the students' grade point average, their level of courses taken, and their rate of absenteeism--were also found to be excellent indices of their level of achievement in school.

This report concludes that the best means to improve the academic and language competence of all the bilingual students at Cambridge Rindge and Latin School is to give these students and their parents a "freedom of choice" that includes an effective instructional program. This educational approach would mainstream foreign-born (bilingual) students more effectively and in less time.

The researcher further concludes that because of the complex pedagogical approach used with language minority populations, teachers must be well prepared to meet the various needs of bilingual pupils in the following areas: 1) Native language skills, including listening, speaking, reading, and writing; 2) Second language skills, including English or Spanish, etc., as a second language; 3) Content areas, i.e., subjects taught in the child's dominant language; and 4) Culture, i.e., knowledge of majority and minority culture.

## TABLE OF CONTENTS

page
ACKNOWLEDGEMENTS ..... v
ABSTRACT ..... vii
LIST OF TABLES ..... xii
CHAPTER
I. TNTRODUCTION ..... 1
The Unfinished Country ..... 1
History of Cambridge Rindge and Latin School ..... 7
Bilingual Education in Cambridge ..... 12
Bilingual Education Elsewhere in Massachusetts ..... 18
The History of the Scholastic Aptitude Test ..... 27
II. STATEMENT OF PROBLEM ..... 29
General Problem and its Significance ..... 29
Cambridge Rindge and Latin School: An Overview ..... 36
Cambridge Rindge and Latin House System and Alternative Programs ..... 38
Bilingual Education/English-as-a-Second Language ..... 39
Registration of Newly Entering Limited English Proficiency Students ..... 40
The Alternative Programs in Detail ..... 41
The Scholastic Aptitude Test and the Achievement Tests ..... 47
Significance of the Study ..... 52
III. REVIEW OF THE LITERATURE ..... 55
Historical Background on Bilingual Education ..... 56
Modern Bilingualism ..... 59
The Origin of Bilingual Education in the U.S.A. ..... 60
Present Legal Status of Bilingual Schooling ..... 66
Bilingual Education in Massachusetts ..... 68
Bilingual Education in Cambridge ..... 70
The SAT and ACH ..... 71
IV. DESIGN OF STUDY ..... 79
Hypothesis ..... 79
Bilingual Students' Parental Variables ..... 79
E.S.L. Students' Parental Variables ..... 79
E.S.L. and Bilingual Students' Characteristics ..... 80
Subjects ..... 80
Questionnaires ..... 80
How the Study was Conducted ..... 81
Limitations of the study ..... 82
Human Subjects Guidelines ..... 83
V. FINDINGS ..... 84
Demographic Variables ..... 84
National Honor Society Membership ..... 84
Houses and Programs of Origin ..... 85
Countries of Origin ..... 85
Ethnic Background ..... 88
Immigrant History ..... 88
Grade and Gender of Students Under Investigation ..... 89
Parental Occupation ..... 90
Household Characteristics ..... 91
Language Spoken at Home ..... 92
Elementary School Attendance ..... 93
Correlation Between Variables ..... 94
Conclusions ..... 107
VI. CONCLUSIONS AND RECOMMENDATIONS ..... 108
ENDNOTES ..... 125
APPENDICES ..... 130
Appendix A Senior Survey and Questionnaires ..... 130
Appendix B Permission Letter and Research Application Information ..... 135
BIBLIOGRAPHY ..... 140

## LIST OF TABLES

page
Table 1 Houses and Programs of Origin ..... 85
Table 2 Continent of Origin: E.S.L. Students ..... 86
Table 3 Continent of Origin: Bilingual Students ..... 87
Table 4 Students' Ethnic Code ..... 88
Table 5 Numbers of E.S.L. and Bilingual Students Under Investigation ..... 90
Table 6 Parents' Profession: E.S.L. Students ..... 90
Table 7 Parents' Profession: Bilingual Students ..... 91
Table 8 Household Characteristics: Bilingual Students ..... 92
Table 9 Language Spoken at Home ..... 93
Table 10 Crosstabulation of Level of English Taken Last Year ..... 94
Table 11 Crosstabulation of Math Level Taken Last Year ..... 95
Table 12 Crosstabulation of Foreign Language Enrollment ..... 96
Table 13 Crosstabulation of Level of Science Taken Last Year ..... 96
Table 14 Crosstabulation of Educational Plan After High School ..... 97
Table 15 E.S.L. and Bilingual Students Compared on Other Factors ..... 98
Table 16 Scholastic Aptitude Test (S.A.T.) Average Scores 1986 for E.S.L. Students Selected Tests ..... 100
Table 17 Scholastic Aptitude Test (S.A.T.) Combined Math and Verbal Scores for E.S.L. Students on Selected Tests ..... 102
Table 18 Scholastic Aptitude Test (S.A.T.) Combined Math and Verbal Scores for Bilingual Students on Selected Tests ..... 104
Table 19 Achievement Tests (ACH) Average Scores 1985-86 for E.S.L. Students Selected Tests ..... 105

## The Unfinished Country

According to Douglas Massey, Associate Professor of Sociology and Chairman of the Graduate Group in Demography at the University of Pennsylvania, "The truth in the U.S. is an on-going experiment." Massey goes on to say: "It always has been and it always will be." "The unfinished country," Harvard Professor Nathan Glazer calls it.

Others call it "the melting pot," "the American stew," or 2
"the salad bowl."
First came the English who escaped religious persecution. In 1840-50 many Irish Catholics came. Then came the Germans, followed by the Jews, the Italians, the Hungarians, the Greeks, Bulgarians, Romanians, Poles, and Swedes. Nathan Glazer, in Beyond the Melting Pot, says that "the melting pot is still melting."

Each ethnic group settled into an urban ghetto, filling the prejudices of the already established groups until it was also established and could look warily at the next wave of newcomers and speculate on whether a good thing had gone too far.

The decade 1976-1986 has brought an unprecedented new wave of immigrants to Cambridge, many of them from war-
torn countries of Central America such as El Salvador and Guatemala. Students in other ethnic groups are from families who immigrated from the refugee camps of Southeast Asia as well as from China, the Phillipines, Korea, Japan, and Vietnam. Still others have escaped the poverty and famine of East Africa. Some of them came with money, possessions, an education, and a command of English. But the majority, like their predecessors in the 1800s and early 1900s, arrived with only the clothes on their backs, fleeing war, poverty or tyranny in their homelands, seeking in their forced mobility not so much happiness and well-being, but simply survival. and a refuge. This massive influx of Asian and Hispanic children has brought new languages, new cultures, and a unique set of challenges into the public school systems of metropolitan areas such as Cambridge.

And the new immigrants are arriving in Cambridge at a time when the federal government is curtailing its commitments to public education. Massachusetts Proposition $21 / 2$, the Massachusetts Surtax Repeal, and the Federal Gramm-Rudman Act are rapidly taking the "large" out of government "largesse" and have slashed even further the supply of money needed for many changes: strengthening our programs, lowering class size, buying equipment and supplies for classrooms, setting aside money
for professional and curriculum development, and finally, for providing enough resources to urban schools such as Cambridge Rindge and Latin School with its culturally diverse student populations. Under the federal Gramm3 Rudman deficit-reduction law, the Department of Education is mandated to cut $\$ 170.9$ million from its programs as its share of the nearly $\$ 12$ billion in proposed savings.
Although the law spares the neediest students from cuts in the $\$ 3$ billion Pell Grants (named for Senator Claiborne Pell, Democrat-R.I., who sponsored the program of scholarship aid for low-income students), the savings will come mainly from the pockets of students who were only barely eligible.

Moreover, according to Sally Christensen, the Department's top budget officer, $2,691,000$ students got the Pell Grants for the $1986-87$ academic year, or 68,000 fewer than in 1986. The income cut-off for a student from a typical family of four was $\$ 25,000$ adjusted gross income but that figure will drop to $\$ 24,000$, she said. According to Christensen, for the last five years students have had to pay a 5 percent origination fee when they take out a guaranteed student loan; now the fee will be 5.5 percent. Until 1986, when a student borrowed the maximum $\$ 2,500$, the bank would hold back $\$ 125$ and give that money to the
government. Now, it will be holding back $\$ 135.50$, 6
according to Christensen. The $\$ 6,000,000$ cut from bilingual programs could mean the loss of 36 projects 7 serving 13,500 students.

Furthermore, the same siren's song that led our citizens to spurn their schools in 1980 is being sung today by William J. Bennett, Secretary of Education, this time with a new set of lyrics. Bennett's major legislative proposal would give vouchers worth $\$ 600$ to needy parents to help pay for their children's education at the public or private schools of their choice.

Bennett has also renewed debate over the best way to 9
teach non-English-speaking students. In fact, in a public address to a business group in New York City regarding the Bilingual Education Program, Mr. Bennett advocated more flexible approaches to bilingual educations, urging schools to put less emphasis on promoting students' native languages and cultures and more emphasis on teaching English more quickly. He argued the Administration's case for changes in the Bilingual Education Act. "As fellow citizens," Bennett said "We need a common language. In the United States this language is English. Our common history is written in English. Our common forefathers speak to us, through the 10
ages, in English." English as a second language
(E.S.L.) is one method of instruction Bennett endorses 11 because of its strong emphasis on English. Bennett has also said, in reference to the Gramm-Rudman law, "We can live with these cuts which are mandated by law ..."

Boston School Superintendent Laval Wilson says that although he supports bilingual education, he recognizes that the program perpetuates racial and cultural divisions. Dr. Wilson urges accelerating the system in order to bring students into the mainstreaming process more quickly.

The Cambridge Superintendent of Schools, Robert Peterkin, has recommended that "... an intensive English program be available to non-English speaking students by June 1988 and that the integration of foreign-speaking 13 students into regular classrooms be speeded up." Unfortunately, this has not as yet happened. The time will most likely be adjusted due to Peterkin's departure from Cambridge in 1988.

Another well-known critic of bilingual education programs was former Boston Public Schools Superintendent Robert R. Spillane who stated: "Get out of the bicultural ritual. Get more into the mainstream. More English as a Second Language Programs. The Hispanic community 14 particularly has to come to that conclusion."

Perhaps no aspect of education policy in this country excites political passions more than bilingual education. As a matter of fact, a San Diego County Grand Jury just recently recommended that all local school districts eliminate bilingual education for students with limited English proficiency because such programs are "impractical, expensive, and, in a sense, un-American."

Not only is the concept of bilingualism under siege but it seems to be in the process of breeding resentments as well, according to Jay Carney's article in Time 16 magazine.

In November 1986, Californians voted on Proposition 63, a resolution to make English the state's official 17
language. Had this initiative been successful,
California would have joined six other states (Nebraska, Illinois, Virginia, Indiana, Kentucky, and Georgia) that have English as an official language. Similar efforts are under way in 15 other states, including Florida, New York, 18
and Texas. A national, Washington-based group called U.S. English, chaired by former California Senator S.I. Hayakawa, is lobbying for a constitutional amendment that would make English the country's official language.

Another English-only advocate, former Colorado Governor Richard Lamm, has said: "We should be colorblind but not linguistically deaf," and "We should be a
rainbow but not a cacophony. We should welcome different people but not adopt different languages."

On the other hand, Jessica Fiske of the American Civil Liberties Union in opposes Proposition 63: "We oppose it because it would breed intolerance, divisiveness and bigotry."

Offering a third point of view, Boston University Professor Maria Brisk said that a statutory three-year limit on the transitional bilingual program was a result of political compromise and not sound educational research and practice. Successful bilingual programs are those that focus on quality education and academic success, which includes success in the second language, rather than measuring success by how quickly the children get out of the bilingual program. We will never be able to improve the quality of bilingual education, she says, if we continue to spend all our energy in defending the concept rather than helping teachers and school administrators improve the methodologies, materials and structures that 21
guarantee learning.

## The History of Cambridge Rindge and Latin School

Cambridge Rindge and Latin School is one of the oldest high schools in the nation. Its rich history reflects the philosophical changes in our country since

English men and women first landed on the then wild shores of Plymouth in 1620 in search of religious freedom.

In 1643, Elizah Cortlett founded a school on what is now Holyoke Street in Cambridge. This small "lattin schoole" existed for one reason: to prepare young men for the ministry. This, of course, was the main reason for educating so many youths at Harvard in the seventeenth century.

By the 1840's Cambridge had three wards or sections: Old Cambridge, East Cambridge, and Cambridgeport. Each section had its own school. Cortletts old "lattin schoole," now located on Garden Street and called the "Latin Grammar School," served Old Cambridge. The "Otis Schoolhouse" was for East Cambridge, and a school at the corner of Windsor Street and Broadway, known as "Cambridge High School" served Cambridgeport. Cambridge was a deeply divided city at the time: immigrants and old Cantabrigians regarded each other with mutual hostility. In 1864 the high school moved to a new building at the corner of Broadway and Fayette Street, at the time one of the best equipped and most elegant in the Commonwealth. In 1886, the high school was divided, its classical department becoming the Cambridge Latin School, and its remaining departments the Cambridge English School. The Cambridge Latin School soon won fame as one
of the best preparatory schools in the country. In fact, Harvard's President Eliot once said "it was the best 22 fitting school for Harvard."

In 1887 a young philanthropist, Frederick H. Rindge, gave the city of Cambridge a parcel of land on which to build Cambridge Latin School and an industrial school building. Over the main entrance to this building were to be the words, "Work is one of the greatest blessings: 23 everyone should have an honest occupation." The school opened as the Cambridge Manual Training School. Later, when the scope of training had broadened, its name was changed to Rindge Technical School. During the twentieth century the school grew and kept pace with our rapidly changing technology.

In 1977, the two schools were merged into one high school: Cambridge Rindge and Latin School. The new name represented the spirit of the two former high schools. It also expressed the will of a majority of the Cambridge School Committee who wanted both to include Mr. Rindge prominently in the high school name, and to acknowledge the tradition of Cambridge High and Latin School.

Cambridge Rindge and Latin School is a strong institution, whose strength derives from its long history, illustrious traditions, and general support from the
community of which it is an integral and vital part. Its importance and significance are also a function of the commitment and dedication of the staff, the vast heterogeneity of its students and, indeed, of the substantial change the school has undergone in recent years. Some of the changes have been abrupt and forcible. It is not easy, for example, to merge a coeducational academically-oriented school with a boys' technical school. It is also not easy to adjust to the influx of new immigrant groups, some of whom remain isolated through the barriers of language and culture. In a real sense the school is a microcosm not only of the community, but also of the world around us.

Under the leadership of Mr. William C. Lannon, Superintendent of Schools, and the Cambridge School Committee, the Cambridge Rindge and Latin School reorganized its educational structure in 1978. The recommendations for reorganization involved the high school, the secondary academic program, and the personnel structure. The plan contained recommendations for changes in existing practice and policy, including structure and policy changes necessary to implement the "House Plan." Also, it comprised changes in job description, evaluating and hiring procedures, curriculum development and implementation procedures, and other appropriate
matters. This innovative approach was intended to humanize an otherwise dehumanized educational institution and its elephantine bureaucracy.

Reorganization required a plan of substantial scope with the objectives of economy, efficiency, and educational change. The plan involved all levels of the organization.

The plan's major objectives were:

1. Central office curriculum management will be redesigned to place emphasis more directly within individual programs.
2. Curriculum Specialists will assume greater responsibility on a $K-12$ basis.
3. The newly merged high school will address its problems by redesigning and expanding its resources to meet the existing problems.

The principal concerns of the school, as addressed through administrative functions were:
a. Student involvement,
b. Curriculum coordination and design,
C. Campus environment,
d. Coordination of leadership for alternatives, and e. Effective management at school level.

The proposed plan for the secondary school emphasized a new, strong position of headmaster, who would be the single responsible agent for all secondary programs and all alternative programs. A cabinet team of administrators, charged with policy, management, and curriculum responsibilities, supported the headmaster's position. School functions and policy, to the extent possible, remained within the school. The Headmaster's position assumed cabinet level rank, replacing the earlier position of assistant superintendent for secondary schools.

The position of coordinator became a strong model. While instructional decisions are made at the coordinator level, they must report through and receive approval of the assistant headmaster for instruction.

All house masters report to the office of the headmaster. While these individuals have considerable authority in managing the houses, the major authority rests within the headmaster's cabinet.

## Bilingual Education in Cambridge

Working with an ethnic community which has a growing population of limited-English-speaking citizens, the Cambridge School Department has increasingly concentrated its efforts on the education of all children, regardless of their background. In fact, Cambridge was one of the
first cities in the Commonwealth of Massachusetts to start a bilingual program and thus anticipated the state's bilingual law by over a year.

Cambridge has in the past made several attempts to provide for the education of its limited-English-speaking population. In the 1940's, the Cambridge School Department started an English-as-a-Second Language (ESL) Program. Students in the program spent most of their time in standard curriculum classes and were offered "special" classes in the study of English. The ESL Program was moderately successful in educating students and in keeping them in school. Part of this success can be attributed to the relatively sophisticated background of these first ESL students, many of whom were the children of students and faculty at Harvard and M.I.T. The ESL program did provide English classes but offered no instruction in other subject areas. The program's shortcomings were compounded by the lack of any bilingual testing; it was necessary to place children in grade levels according to their performance on standardized tests in English. Therefore, they were often put in the embarrassing situatin of attending classes with English-speaking children who were several years younger.

In an attempt to determine the causes of the generally low levels of performance of limited-Englishspeaking students, the Cambridge School Department first placed them under the supervision of the Bureau of Pupil Services. Students of different linguistic backgrounds were placed together to study English as a Second Language.

Later, students of non-English-speaking backgrounds were placed under the Language Arts Department. This program for elementary school students of Portuguese and Spanish backgrounds began as an intensive ESL program but quickly developed into one of Massachusetts' first bilingual programs. At the same time, the Department of Modern Languages initiated courses in Portuguese language and culture and American studies for students of nonEnglish speaking backgrounds at the high school. In the next three years, bilingual classes were offered at the Harrington, Kennedy, Longfellow, and Webster Schools and at Cambridge High and Latin School for Portuguese, Spanish, Haitian, and Greek children.

In 1973, Mr. Joseph Fernandez was put in charge of bilingual education. Mr. Fernandez worked to implement the state's guidelines to develop a program large enough for all of Cambridge's limited English-speaking children. In 1974, the Cambridge School Committee established a
separate Bilingual Department and named Mr. Fernandez its first director.

The growth of the Bilingual Department has surpassed all projections. In the $1972-73$ school year, the department had a staff of about 35 teachers and paraprofessionals serving 334 students. In 1973-74, student enrollment increased to 433 and staff increased to 46 . In 1974-75, the program had 567 students and a staff of 81 teachers and specialists. At mid-year 1975-76, the bilingual student enrollment was 738 , including 450 Portuguese, 140 Spanish, 67 Haitian, 60 Greek, and 21 Chinese. In addition, there were approximately 60 students from linguistic groups whose numbers did not warrant a full bilingual program; special ESL programs were provided for these students. The 96 staff members at this time included teachers, instruction and integration aides, home-school liaisons, Parent Advisory Council coordinators, administrators, and specialists (learning disability tutors, counselors, psychologists, and speech therarists). Classes are now held at four elemntary schools: Harrington (Portuguese), Kennedy (Portuguese), Longfellow (Spanish and Chinese), We'sster (Greek and Haitian), and at the Cambridge High and Latin School (all groups).

Furthermore, the Bilingual Department has placed the various language programs as close as possible to the neighborhoods of the respective language groups to insure and marshal community and parental involvement and support for these programs. For smaller groups that may be spread over larger areas of the city, buses are provided to bring the children to the respective schools. Each school program is coordinated by a teacher-in-charge.

Under the Bilingual Education Act of 1968 Non-English speaking students have a right to special assistance as 25 they seek literacy in English. These rights, however, seem to be regularly curtailed by inadequate, funding from federal (Gramm-Rudman) and state sources (Proposition 2 $1 / 2$ and Surtax Repeal) and by ineffective bilingual programs which are taught in foreign languages and are primarily concerned with preserving the students' native languages and cultures. Critics argue that many teachers hired for "bilingual" positions are unqualified for their jobs because of their limited command of English. Other so-called bilingual teachers are actually monolingual in their native tongue. It is not unheard of for teachers or a bilingual bureaucracy to keep students in bilingual classes beyond the mandated three years in order to preserve their jobs.

Education Secretary William J. Bennett may thus have a point when he remarks that other approaches to bilingual education need more of a chance than the present law allows. In fact, speaking in Manhattan, Mr. Bennett proposed that local schools be given more flexibility in deciding how to run the bilingual education programs; he also called for greater emphasis on English in the programs.

Indeed, America is a diverse nation that welcomes and sustains many cultures. But America is also a nation in which English is the language of business, commerce, and industry. It is almost impossible for a young person to find good employment and to prosper without a command of the English language. The goal of bilingual education must be to teach English so that students can progress into other courses. Certainly, the bilingual student will become a better student more quickly and be more prepared for the job market if he or she masters the English language as soon as possible.

Furthermore, bilingual education remains a very important tool for ensuring equal educational
opportunities for all students. But, in its current form, it is not fulfilling that function. Hence, we must direct and concentrate our efforts toward revolutionary ways of addressing the current realities of bilingualism in our
nation, especially in the communities in which we live and work.

The Massachusetts approach appears to be at odds with Mr. Bennett's call for a quicker transition to English instruction. Fortunately, however, it already takes a flexible approach to bilingual education and provides a good deal of local autonomy to individual school districts. If a school system wants to conduct an "innovative" program, one that stresses E.S.L. over native language instruction, for example, it can apply to the state for a waiver of state bilingual requirements. Furthermore, if parents want their children exposed to more English, they can opt to place them into fully English-speaking classrooms. Such an innovative bilingual education program should be designed to move students more quickly into English programs as well as urge the acceleration of the system in a way that would bring students into the mainstream well within the three years recommended by legislators. In other words, there should be a "clear entry and exit place" for the above-mentioned program.

Bilingual Education Elsewhere in Massachusetts According to Mr.. Richard Pavo, Director of the Bilingual Education Program in Fall River, MA, the

Bilingual Education program there went through its period of controversy, had its enemies and foes and continues to have its detractors, but for the past 20 years has proved itself to be not only worthwhile but essential to the well-being of a very significant portion of that school population. Pavo said that the program has won fairly broad acceptance among teachers and administrators in Fall River because it has brought stability in terms of teaching methodology, student progress, and educational transition for the large bilingual population. Pavo also said that the Fall River school desegregation plan approved by the school committee is the first in the nation to assign students on the basis of "language" rather than "race." Fall River, he said, is the first community in Massachusetts to desegregate voluntarily, without any legal requirement and without pressure from the state. Finally, he suggests that in the future more attention be given to pre-school bilingual education, bilingual vocation and special needs.

On the other hand, Mr. Mario Teixeira, Director of the transitional Bilingual Education Program in New Bedford, informed this researcher that in addition to the bilingual education program, the New Bedford school system provides the following three programs:
A. A full-time program serving 25 academically talented sixth grade students. Within this program there are two integral components: one for multi-cultural awareness and sex-racial destereotyping, and one for career exploration and computer instruction.
B. A part-time Career Awareness and Preparation for Life Program which serves students in grades $1-6$.
C. A talented and gifted Magnet Resource Program which serves 120 academically talented fourth, 28 fifth, and sixth grade students.

Teixeira stated in our conversation that the city of New Bedford has been committed to transitional bilingual education since September, 1972. New Bedford's Transitional Bilingual Education Program currently serves 844 students enrolled in kindergarten through 12 th grade. There are 550 Portuguese students, 235 Hispanics and 60 Haitians. He further explained that the bilingual students have equal access to all educational services available from the New Bedford School district. The city's program consists of four parts, at the pre-school, elementary, junior high and high school levels. These programs are described below.

The Pre-School Program serves 31 pre-school-age Portuguese, Spanish, and Cape Verdean bilingual children
with limited English language and developmental skills. The program is overseen by an administrator and two liaison workers. In addition, there are three instructors, one bilingual in Portuguese, one bilingual in Spanish and one English-speaking teacher who is assisted by three teacher's aides. Three components have been designed to provide a comprehensive approach to meet the needs of the children and their families: an instructional component for services to children, a Parent Involvement Program for services to parents, and a training component for up-grading skills for staff.

The Elementary Transitional Bilingual Education
Program serves grades $K$ through 6. After being screened for both English and native language proficiency, those students who are identified as having Limited English Proficiency (L.E.P.) are placed and grouped by educational background, age, level of English and grade level of native language. Level 1 classes are for those students who have no English language skills. In level 1, the student's native language is used as the medium of instruction. These students, after successfully completing Level 1 English objectives, move on to a level 2 class. In the same way, level 2 students move on to a level 3 class. Having successfully completed level 1

English language objectives, students move to level 2 classes where the use of English is increased. Finally, the student is placed in a level 3 class where English is used as the medium of instruction.

The Junior High School Program includes grades seven and eight. The students are grouped by age, level of English and level of native language, based on three English proficiency levels and native language proficiency. Initially, a student will receive instruction in ESL and native language in the remaining subjects. Then the English instruction is gradually increased to the point where the English language skills are used as the medium of instruction, except for classes in their native language and culture.

The High School Education Program serves students in grades 9-12. These students are interviewed by the parent contact worker, tested for language dominance and then evaluated by the director of the Transitional Bilingual Education (T.B.E.) and counselor. If the student is found to have limited English proficiency, his/her transcript is evaluated and he/she is enrolled in some of the 50 bilingual course offerings at New Bedford High School. As in the elementary program, students are grouped according to their level of English.

Mr. Teixeira states further that the New Bedford School Department is very pleased with the results of the Transitional Bilingual Program in the city of New Bedford. It is felt that the transitional bilingual instructional program is the most effective and comprehensive program for students of limited English proficiency.

Last year, as a result of the bilingual program, 20 students $(26 \%)$ of the T.B.E. students at the junior high level were eligible to become members of the Honor Society: this indicates that the bilingual instructional program is working on all levels. Furthermore, in 1985, New Bedford High School graduated 543 students, of which 104 were T.B.E. students or former T.B.E. students. Fifteen percent of these students achieved highest honors, and another seventeen percent achieved honor classification. The average age for these students at graduation was 18 years and 5 months.

Consistently over the past five years, $70 \%$ of New Bedford high school graduates have gone on to higher education. Bilingual students have received full scholarships in nursing, accounting and track and field. A former bilingual student was the top student in the graduating class of 1985 and is now attending Harvard University. Three times as many T.B.E. students are
pursuing high school diplomas today as were doing so 10 years ago.

To summarize, it seems that both Pavo and Teixeira support a strong bilingual education program and, of course, jointly condemn the program cuts proposed by the Reagan Administration. Both gentlemen said that if we follow along the path that we now are on, with no cuts, then the bilingual instructional program will work on all levels.

The goal of speeding up the transition process in bilingual education is one of the most controversial undertakings. The goal is, nevertheless, a practical one that deserves support from all educators and parents. The bilingual education program also needs review and revision. There does not seem to be an urgency in preparing students to adapt to an outside world where English is spoken by people from many cultures.

There is no question that bilingual education is
needed to protect the rights of all students, especially the more vulnerable, to equal educational opportunities. However, the primary goal of education is to prepare the young generation of students for productive work in today's society, including higher education. This means teaching non-English-speaking students to speak English, so that they will be able to compete in the world of work
or education equally and successfully with their American counterparts.

Most people learn because they must. The greater the need, the better the knowledge. Hence, bilingual programs that last forever do not encourage children to learn proper English. As a matter of fact, this researcher sees many individuals who have been attending bilingual education for years and can only communicate in two mutilated languages (not to mention their ability to read or writel. If the system provides children with all their needs in their native tongue on a long-term basis--if they talk, live, are educated, work, and socialize in it-obviously there is no need to learn English and become integrated into the mainstream society. If a student can get a math, science, or history class in Spanish (or Cambodian or Portuguese), where is the motivation to master English quickly? Henceforth, bilingual education should only be a temporary measure, a stepping stone toward learning proper English. The sooner the students become integrated into the regular curriculum, the better equipped they are to fit into American society and progress.

In fact, a bilingual program without time limits only delays an individual's progress and, in time, this pseudo-
pedagogical program will both preclude and impede the formation of a new individual coming out of one of America's most cherished Latin motto "e pluribus unum." Furthermore, bilingual education as it is set up today is an insult to the intelligence of non-Englishspeaking people. It presumes they do not have the ability to stay afloat in an English-immersion program without the crutch of their native language.

It might be useful to examine the bilingual programs of Newton and Brookline, Massachusetts which stress a more rapid transition to English. What components could be incorporated into or serve as a basis for our future educational system? While this researcher strongly advocates the emphasis on English instruction in the Cambridge School System, it is acknowledged that this approach may not be the right one for all bilingual populations. The school systems of both Newton and Brookline, unlike Cambridge, are working with a much larger population of professional families who plan to stay in the U.S.A. for only a few years, and want their children to learn English as quickly as possible. Furthermore, these are two of Boston's most affluent suburban cities. They are dealing with a largely transient population, and instruction in the native language is not essential to preserving native culture,
since many families will return to their original countries within a few years. Cambridge has a much smaller transitory bilingual population and a very large permanent non-English-speaking population. This reality should be taken into account in making changes and adjustments to the bilingual education program at Cambridge Rindge and Latin School. What works in some settings may be ineffective and even harmful in others.

The History of the Scholastic Aptitude Test In the 40 years since the Scholastic Aptitude Test was introduced, it has evolved from a useful tool (developed to handle huge numbers of World War II veterans seeking to enter college). School Boards, administrators, teachers, parents, and students alike tend to perceive the SAT scores as the barometer of a school's success: if scores inch up a point or two, backs are patted; if they drop, hands are twisted. In most schools standardized test results are the single most important measure of educational success in the eyes of the school committee people, administrators, the parents, the community, and the media. This being the case, most teachers make every reasonable effort to prepare their students for this contest. To an even more insidious extent, the SAT is seen as the measure of a student's worth. In fact, the

Scholastic Aptitude Test seems to have tremendous power over the lives of young people by stamping some of them "qualified" and others "less qualified" for college work. On the other hand, the tests have served as a very efficient device for screening out the Blacks, the Spanish-speaking, students with low socioeconomic status, youngsters who have not yet been culturally assimilated, and other minority applicants to college. According to Harvard Professor David C. McClelland, the Scholastic Aptitude Tests are discriminating against those "who are not exposed to the culture out of which the tests have been developed ... such facts make it abundantly clear that the testing movement is in grave danger of perpetuating a mythological meritocracy in which none of the measures of merit bear significant demonstrable validity and respect to any measure outside the charmed 29 circle.

This researcher suggests that because of the limitations stressed by authorities like Professor McClelland, it might be advisable to consider reducing our reliance on standardized tests, at least for our bilingual population.

General Problem and Its Significance
The first purpose of this study is to investigate the relationship between certain background characteristics of English-as-a-Second Language and Bilingual students at Cambridge Rindge and Latin School, Cambridge, Massachusetts. The background factors to be researched and studied are: socio-economic factors, language proficiency, parental education level and the College Entrance Examination Board Test (C.E.E.B.) scores.

The importance of this research rests in its potential contribution to an understanding of the factors that determine whether the two groups of students' (E.S.L. and Bilingual) do or do not find opportunities to succeed in school. Other background factors may also be discovered which explain the conditions of life that cause some students to achieve more education than others.

The second purpose of this study is to look at the "College Boards" experience for some Cambridge students. Although commonly referred to as "College Entrance Examination Boards," the examination is really comprised of two distinct tests with two distinct functions: the SAT, the Scholastic Aptitude Test, measures the reasoning
power of the student; the achievement tests measure the specific material learned in major courses. Both the aptitude tests and the achievement tests are required for admission to the more selective colleges. In Cambridge, the scores of all students taking the achievement tests were lower three years ago than in either of the two succeeding years; the scores of students taking the aptitude tests have dropped during the same period.

In any assessment of the SAT results, it is necessary to examine the nature of the SAT test itself and to consider the influence that the educational level of the test population has upon the results. The SAT test is designed to predict the probable success of high school students during the first year of college. The SAT test is not designed to ascertain the number of facts accumulated in any specific area of knowledge: that is the function of the achievement test. Instead, the SAT is intended to test the student's reasoning power. This reasoning power is developed through all prior influences on the child's thinking, including learning both in and out of school. Although the SAT test is divided into verbal and mathematics segments, it is not to be confused with a test of English and mathematics per se. Clearly the more experience a student has with analyzing material,
the more skillful he/she will become with methods of analysis, but the isolated specifics of course material are not requisite for adequate performance on the SAT test. The items selected for inclusion in the SAT test are drawn from a variety of fields including natural science, art, social studies, political science, philosophy, and literature. Thus, a discussion of verbal scores implies more than aptitudes in just the field of English.

The SAT test is composed of a three-hour examination, during which the student is to respond to various multiple-choice questions. The seven separately timed segments are a mixture of math segments and verbal segments in a varied order of presentation. All the verbal areas, with one exception, contain combinations of comprehension and vocabulary questions. The comprehension questions consist of two parts: paragraphs for the student to read, and sets of questions designed to assess the student's understanding of what he/she has just read. The answers generally must be inferred from the selection, a process that demands more than superficial reading ability. The vocabulary questions are presented in sets of synonyms, antonyms, and analogies. The final verbal section is a test added within the last few years as a result of the growing concern on the part of colleges that
their incoming freshmen were less and less capable of writing English that was grammatically correct and logically structured. In an effort to aid colleges in course placement for freshmen English sections, the College Entrance Examination Board added the Test of Standard Written English. This test combines errors of grammar with errors of diction involving proper choice of idiom and effective expression. Cambridge students have scored consistently higher in this subset of the SATverbal than they have in either the vocabulary or the comprehension sections.

The results of the Scholastic Aptitude Test are considered a valid indicator of the students' probable success in handing college-level material. Moreover, the norm of the test is considered to be a constant indicator of this ability; that is, a score of 507 in 1978 is equivalent to a score of 507 in 1941-1942, the year in which the norms of the Scholastic Aptitude Test were established.

In contrast to the constancy of the norm, however, the population of the students taking the Scholastic Aptitude Test has changed. The national population of test takers is different from what it used to be, and the local population of test takers is different from the
national population. The Cambridge population differs from the national in two characteristics: the degree of heterogeneity and the percentage of students from bilingual backgrounds. Of the bilingual students, only some are recognized as such; those students who are recognized as speaking English as their second language are given a special test by the College Entrance Board. The bilingual students, however, are tested along with students for whom English is the first language. Their scores constitute part of the Cambridge test population. A second group of students must also be recognized as part of the test population: those students who, although born in the United States and clearly fluent in English, speak a second language at home. These students, while enjoying the benefit of two languages, also reflect an attendant difficulty acquiring an extensive English vocabulary. Consequently, comparing Cambridge means scores with national mean scores may not be as informative as a comparison of Cambridge mean scores with those of a city whose population displays similar characteristics. In addition, the national population itself is changing. In the past, students taking the Scholastic Aptitude Test were primarily applicants to four-year colleges. They had studied, for the most part, college preparatory material that included at least some of the
suggested courses and books agreed upon in the earlier part of the century by scholars convening on behalf of the College Entrance Board. All across the country, teachers chose between Lady of the Lake and Idylls of the King. Long hours were spent looking up words in dictionaries and writing them neatly into homework papers. Sections of Dickens were studied for periodic and balanced sentences, and stanzas of Keats were laboriously paraphrased into polished prose. When the day came for the entrance examinations, students responded to essay questions on the literature they had studied, and they did so in the coherent prose they had so long studied. Most of these students had a taste of Latin, and almost everyone could spell "receive."

Along with a change in the college preparatory program came a change in the post-secondary schools themselves. In the late 1960's a proliferation of courses, programs, junior colleges, and community colleges provided the opportunity for continued education to many who had not initially intended to pursue education beyond a high school diploma. Military programs offered special educational benefits to enlisted men. More and more women began to return to the classroom to complete their career training. For entrance into many of these programs, the

SAT was required. The attendant drop in scores reflected a new population of test takers, many of whom had never studied the material of the college-bound curriculum.

The Wirtz Commission, a panel appointed by the College Entrance Examination Board to study the decline in test scores, has attributed the dropping of scores prior to 1970 largely to this shift in the population of the test takers. The decline in the scores after 1970 , however, the Wirtz panel considers to be the result of a combination of factors other than the population shift. The Wirtz panel indicts the attitudes towards education itself on the part of parents, schools, and society. At home, the child is allowed to watch television in place of being taught to find enjoyment in reading books. The increased rate of absenteeism, too, reflects permissiveness. When the child is in school, he is studying materials that fail to challenge. He is not forced to exert his mind to encompass new ideas and complex relationships; instead, he is allowed to read simple words in simple sentences. Again, according to the report, many of the courses that present this high school material do not demand the mastery of fundamentals. Even the order of the courses has changed from a consecutive presentation It is too easy. of sequenced material in the major fields to a series of elective courses.

Homework, if any, is rarely detailed. The very tests the students take are, with increasing frequency, multiple choice; students need only circle, underline, or fill in the blank. Writing skills are not developed because they are not practiced; the basic organization of the paragraph is a mystery. All of this applies to the nation as a whole.

Society, according to the Wirtz Commission, must demand academic excellence. Schools must offer both fundamental skills and material of sufficient complexity and sophistication to challenge the student.

As a final note, it is interesting to observe that while the scores on the Scholastic Aptitude Test have been diminishing, there is one subset of students for whom the mean score of the Scholastic Aptitude Test has actually risen 23 points: the subset of students who have had some Latin.

Cambridge Rindge and Latin School An Overview Cambridge is a city of about 100,000 people reppresenting a broad cross-section of nationalities, customs, and talents. It is, as many have observed, one of the most diverse, polyglot, and multiracial cities in the state of Massachusetts. It is the home of Harvard University and Massachusetts Institute of Technology,
attracts scholars and students from around the world, and supports a nucleus of liberal, civic-minded residents.
Furthermore, Cambridge has a solid core of blue-collar, essentially conservative residents, and many second- and third-generation families.

In 1977, Cambridge High and Latin School and Rindge Technical School, for a host of reasons, were merged into a single high school named Cambridge Rindge and Latin School under the direction of Principal Edward R. Sarasin. The school includes four main houses ( $A, B, C, D$ ), three different alternative programs (Pilot, Fundamental, and Enterprise Co-op), an Occupational Education Program, an Adolescent Parenting Program, a Bilingual Program, and a Community Based Learning Program. A comprehensive curriculum of over 470 courses is offered to approximately 2,800 students on the main camus located at 459 Broadway, Cambridge.

House $D$ is unique in its makeup because it serves regular students as well as 300 bilingual students who are taught in their native language of Portuguese, FrenchHaitian, Spanish, or Chinese. The majority of these students come from Portugal, from Spanish-speaking coutries of Latin America, from Haiti, and from China, especially from Hong Kong and Taiwan. Recently, however, House $D$ has had a strong influx of political refugees from

Ethiopia and El Salvador. There are also students from North Africa as well as from other Middle Eastern countries, as well as from countries such as Korea, Vietnam, and the Cape Verde Islands. Indeed, House D is truly a microcosm of the multicultural, multilingual, multiethnic makeup of our community.

Each house and program has a house administrator, a teacher-in-charge, the guidance counselors, an adjustment counselor, a school psychologist, and other supportive school personnel. Obviously, the house or program is a semi-autonomous entity. Grades 9 and 10 are both served by a Teacher Advisory Program, in addition to, and complementary to, regular guidance services. The objectives are to reinforce and further cement a sense of togetherness, of community involvement and "esprit de corps" among the student population.

The alternative programs, in addition to the house system, each have their own special physical and pedagogical status or niche which make them very attractive to a very special and selective clientele. Cambridge Rindge and Latin School House System and Alternative Programs

The house system consists of Houses $A, B, C$, and $D$. These offer general academic courses for grades 10-12. They include: the Pilot School, the Cluster School (K-
100), the Fundamental School, the Occupational Education Program, the Enterprise Co-op, the Community Based Learning Program, the Adolescent Parenting Program, and the Achievement School.

For the purpose of this study, both the house system and the alternative programs at Cambridge Rindge and Latin School are administrative entities or arrangements consisting of well defined physical boundaries, and a specific group of students, teachers, and administrators. Each house or individual alternative program operates under and is an integral part of Cambridge Rindge and Latin school. The high school (C.R.L.S.) is the sole grantor of high school diplomas for its graduating student body irrespective of house or program affiliation.

## Bilingual Education/English-as-a-Second Lanquage

These two programs were established at C.R.L.S. for students of limited English speaking ability. The objectives of the English as a Second Language Program are to meet both the academic and social needs of the foreign born students so they can experience a smooth integration into their new country. The Transitional Bilingual Program, on the other hand, is a three-year program of study. Its objectives are to allow time for the students to learn English as a second language, American History,
and American Culture while making progress in their first language. At the end of this period, the students are mainstreamed into the regular classroom. The E.S.L. and Transitional Bilingual programs both attempt to provide an opportunity in which the enrolled students can learn at their own rate in both theirnative language and English. Registration of Newly Entering Limited English Proficiency

All students with limited English proficiency entering C.R.L.S. are referred to the House D bilingual teacher-in-charge for assessment, so that they will be correctly placed in their classes. They are given the 30
following examinations:

1. Language Continuum (Lau category),
2. Welcome to English Placement Test (E.S.L. level),
3. Comprehensive English Test Conly if placement is determined to be Regular English),
4. Mathematics Test (Math level),
5. Social Studies Test (Social Studies level), and
6. Native Language Test (Native Language level).

All the results, as well as a recommendation for placement, are given to the counselors and ESL/Bilingual Teachers. Teachers who wish to review these examinations may do so at any time.

The Alternative Programs in Detail
In addition to the four basic houses (A, B, C, D), eight alternative programs are offered at Cambridge Rindge and Latin School, as listed above. Each alternative program has its own character and philosophical beliefs, and each operates within the high school with a modified house structure. These programs are now described in turn.

The Pilot School was founded in 1969 as an
alternative public high school program at C.R.L.S. The Cambridge Pilot School is an attempt to create a community of students, parents, and educators mutually accountable to each other for the goals, the program, and the successful operation of the school. Basic principles focus on those areas which make the school in some sense an alternative: the diversity and representativeness of the student body, the quality of human relationships within the Pilot School community, the nature of the decision-making process in the school, and the program's focus on the needs and concerns of individual students.

The Pilot School program has a population of approximately 193 students, grades $9-12$, and there are openings for about 45 new freshmen in each academic year. The students are selected at random after steps have been taken to insure a representative cross-section of the
community in terms of geography, race, sex, academic interest, and parental occupation.

The Cluster School was an alternative high school founded in 1974 by a group of students, parents, and teachers. Students from grades $9-12$ were selected by lot from a pool of volunteers and the student body reflected Cambridge's diverse school population.

The Cluster School was based upon Dr. Lawrence Kohlberg's moral development theory and democratic philosophy. All students participated in the cluster core curriculum in English and Social studies. The curriculum centered on moral discussion, communication skills, and relating the governance of the school to that of American society and other world societies.

Students and staff met together regularly to
establish the school's rules and guidelines. The goal was to develop a school which was seen as fair by all who participated. The Cluster School was the first heterogeneous public school in the country to attempt such consciously shared decision-making as part of its core curriculum.

The $K-100$ replaced the Cluster School in 1979. This alternative program consists of approximately forty students and two teachers, who meet for two periods during the school day. $K-100$ offers 20 credits in English and

Social Studies in a varied and highly interesting curriculum. Students take the remainder of their courses in the regular high school program. $K-100$ is a unique attempt to create a diverse, democratically run learning setting in an urban high school. Based on Dr. Kohlberg's work in moral-cognitive development, it is a learning environment that tries to stimulate students' capacities for identifying ethical issues and dealing with them in a manner fair to the group.

The Fundamental School is an alternative program located on the fourth floor of the C.R.L.S. building. It emphasizes basic skills, citizenship, and personal responsibility, and enlists parental involvement and support in reinforcing the discipline code.

The basic premise is that learning involves work, and a concomitant assumption is that the best learning occurs when students know exactly what is expected of them. With this in mind, goals and objectives are oriented around more specific types of learning activities and processes that foster practical skills which are job directed and intellectually rewarding. This program emphasizes that citizenship can be taught in its proper perspective with love, respect: and honor. As an aspect of character building, a balanced presentation of our country's
heritage is also emphasized. To put this program on a continum with the 3 programs mentioned above, we would place it on the opposite end from the Pilot, Cluster, and $\mathrm{K}-100$ programs. As a rule, students attend the Fundamental School at their parents' formal request.

The Occupational Education Program is an innovative high school program which provides its students a diploma and marketable skills in an occupation of their choice. The first year of this four-year program is devoted to an exploratory cycle in which students can experience all the technical areas offered at the school. Upon completion of the exploratory cycle, students may choose to major in any of the following career areas: auto body, auto-mechanics, carpentry, computers, culinary arts, drafting, electrical, graphic arts, machine technology, or metal
fabrication/welding. There is also an elective unit, one year in length, open to 10 th, 11 th, and 12 th graders, for enrichment rather than occupational purposes.

The Enterprise Co-op is an alternative career-
oriented program for high school students who have either dropped out of school or who are not successful in the conventional school setting. Three actual businesses--a student sub shop, a teachers' cafeteria, and a woodshop factory--are operated by the students in an atmosphere which simulates the real business world. The academic
curriculum relates directly to the students' experiences in the business. It is anticipated that after one year of participation in the Enterprise Co-op a student will be prepared either to re-enter the mainstream high school program, or to secure entry-level employment in a career of his/her own choosing.

The Co-op has specific eligibility requirements. Any student who is 16 years old and who meets at least one of the following criteria will be eligible to apply for entry to this program. The criteria are:

- High school drop-out,
- 60 days or more missed from school the previous year, or the equivalent of 60 days in classes cut,
- Recommended by a school administrator or counselor as a high drop-out risk,
- Recommended by the Court Clinic or Cambridge Police Department as a youth who would benefit from the services,
- Recommended by a Core Evaluation Team in consultation with Enterprise Co-op staff.

The Community-Based Learning Program is a high-school-without-walls program which uses community resources as its educational program. This program provides students an opportunity to select a community
internship, academic college level coursework, or courses designed for potential drop-outs. Students who select community internships will gain practical work experience in a career of their choice and an awareness of the skills needed for entry level jobs in business and industry.

The Adolescent Parenting Program is an alternative academic program is offered by C.R.L.S. to Cambridge residents who are pregnant and parenting high school students. The A.P.P. program also provides its students with counseling and assistance in accessing social services. A clinician and community liaison assess both the counseling and concrete needs of each program participant at intake, make home visits, contact parents, make referrals and accompany young parents to appointments at other agencies.

The Achievement School is an alternative seventh and eighth grade program for students with special needs (underachiever, disadvantaged, perceptually handicapped). It offers intensive compensatory education in the academic areas in order to increase achievement and proficiency in the basic skills of reading, mathematics, social studies, science and English. The program is based on an interdisciplinary and individualized curriculum combining academic disciplines with shop work and career development skills. Criteria for acceptance into the program are:

1. Age 14.
2. At least one full year in grade six.
3. I.Q. of 80 or above.
4. Recommendation by the Bureau of Pupil Services.
5. Interview by psychologist or counselor and Dean of Achievement School.
6. Acceptance by the Achievement School.
7. Written consent by parent for transfer.

From the wide expanse of students at CRLS the population under investigation in this study was the $1985-$ 1986 Bilingual and E.S.L. students assigned to the various Houses and Programs at Cambridge Rindge and Latin School as they have been defined above. Indeed, it is these two components out of the greater school population which were most closely examined in this study.

The Scholastic Aptitude Test and the Achievement Tests
Both the Scholastic Aptitude Test and the Achievement Tests are administered by the Educational Testing Service (E.T.S.) of the College Entrance Examination Board (C.E.E.B.). This organization was co-founded in 1900 by Professor Nicholas Murray Butler from Columbia and 31 President Charles w. Eliot from Harvard University.

The SAT consists of three hours of multiple-choice questions and has three sections:
a. Verbal. The verbal questions test for vocabulary, verbal reasoning, and understanding of what the student has read.
b. Mathematical. The math questions test the student's ability to solve problems involving arithmetic, elementary algebra, and geometry.
c. Test of Standard Written English. The questions in this text measure one's ability to recognize and interpret standard written English.

The Achievement Tests (ACH) measure a student's knowledge or skills in a specific area and his or her ability to apply that knowledge. The ACH includes gives tests in 14 subjects which fall into five general subject areas: English, Foreign Languages, History and Social Studies, Mathematics, and Sciences.

The scores on both the Scholastic Aptitude Test and the Achievement Tests are reported on a scale ranging from 200 to 800. On the Test of Standard Written English the lowest score is 20 and the highest is 60. Approximately six weeks after students take the SAT or the $A C H$, they receive a report which includes the scaled scores and their percentile rank.

According to the E.T.S., college-bound high school students take the SAT to give admissions directors an objective measure of the student's academic performance
and promise in college. Most of the nation's colleges and universities require it. The scores on the Achievement Tests are used by admissions personnel at colleges and universities to assess how well prepared the incoming freshmen are and also to predict whether or not applicants are ready for various programs of college study.

This paper seeks to evaluate the relationship between College Board scores and personal factors in students' lives. The following background factors were chosen because they seem to represent the best indicators of students' future educational attainment.

1. Grade Point Average in the study year (1986);
2. Absenteeism (percent of days absent) in study year (1986);
3. National Honor Society Membership;
4. Level of English taken: Advanced, Intermediate, Basic (including Humanities and Reading Lab), or Bilingual;
5. Level of Math taken: Advanced, Intermediate or Basic;
6. Level of Science taken: Advanced, Intermediate or Basic;
7. Study in Foreign Language (not including native language or English);
8. Continent of Origin: Africa, Asia, Europe, or Central/South America;
9. Father's level of education: 1) 6 years (elementary school, 2) 9 years (some high school), 3) 11 years (more high school, 4) 12 years (business/trade school), 5) 14 years (some college), 6) 16 years (bachelor's degree), 7) 17 vears (some graduate work), 8) 18 years (graduate degree, 9) $20+$ years (doctorate);
10. Mother's level of education: 1) 6 years (elementary school, 2) 9 years (some high school), 3) 11 years (more high school, 4) 12 years (business/trade school), 5) 14 years (some college), 6) 16 years (bachelor's degree), 7) 17 years (some graduate work), 8) 18 years (graduate degree, 9) $20+$ years (doctorate);
11. Post-graduation plans: 1) 4 -year private (highly competitive college), 2) 4 year public (competitive college), 3) junior college, 4) trade school/postgraduate training, 5) Work, 6) Don't know.

For the purpose of this study, this researcher will use the SPSS (Statistical Package for the Social Sciences) as a tool to investigate and to test the hypothesis, and also to find the level of significance ( $P$ value) among the
above-mentioned factors and the following variables. A P value of .05 or lower will be considered to be statistically significant.

According to Norman H. Nie of the Department of Political Science and the National Opinion Research Center at the University of Chicago, the SPSS is a tool for data 32 analysis. The SPSS is based on a batch system which is a comprehensive tool for managing, analyzing, and displaying data developed in 1965 at Stanford University. The SPSS Batch System simplifies the process of the data analysis by using English-like language.

SPSS operates in batch mode, which means that all the data to be analyzing is put into one file before anything else. The way that variables are selected is critical at this stage because if poor data is used, the results will not be very reliable and may not be valid. It is necessary to select all the different variables to be compared during the analysis and include them all in the file.

Once a data file of appropriate student information has been assembled, it is then converted to an SPSS system file. This process includes the definition of all the variables in our analysis and the storing of the
information in machine code that is easy for the computer to read but cannot be printed.

After an SPSS system file has been created, a large variety of statistics can be obtained on any of the variables, or on the relationships between variables. In addition, subsets of the original system file can be created to look at differences between particular groups of students.

## Sianificance of the Study

The results of this research should be of interest to school personnel or guidance counselors, curriculum development specialists, educational researchers, school committee members, court personnel, social workers, and other school administrators who deal primarily with E.S.L. and Bilingual students.

Today national attention is being given to the feasibility of continuing bilingual education as it has been developed over the past twenty years. This study could provide one more element for evaluating whether or not to alter the current bilingual system which is being severely criticized by educators.

Another goal of this dissertation will be to present reliable data to the administrators, support personnel and teachers at Cambridge Rindge and Latin School, and to the School Committee and the community. This author hopes
that this report will alert my colleagues to the major problems faced by limited-English-speaking youth. By helping to sensitize them to the particular needs of the bilingual student, it may help to create an accepting, understanding environment that transcends the barriers of language and culture.

This research has two objectives. Its short-range objective is the writing of a dissertation via a thorough review of the issues and previously published studies on the subject. The author's long-range objective is to carry this investigation into the future by continuously collecting, summarizing, and interpreting educational testing data and other background factors surrounding the prediction of E.S.L. and bilingual students' College Board test scores and their educational attainment.

Furthermore, the author intends to provide the Cambridge school administrators with sound, current knowledge on the educational status of E.S.L. students in relation to bilingual students. The present report suggests the need for increased research in testing-evaluation and broader survey research on the self-concept and educational aspirations of bilingual high school students. Attempting to understand why Bilingual students succeed or fail to attain higher education is an inductive
enterprise which has no absolute beginning or end. The pattern of results seems to suggest that better research understanding is needed as to how background, personal factors, and institutional factors affect the prediction of high school and college achievement among the Bilingual student population versus the E.S.L. group. Hence, there is an urgent need to develop better methods for representing and assessing bilingual students' educational attainment, growth or change in achievement, and relation of achievement to background and personal characteristics of students. Obviously, because of time constraints and other limitations, this author will be unable to study the more far-reaching issues related to the bilingual
students' population characteristics and educational wellbeing. Thus, this research should not be considered comprehensive.

## CHAPTER III

REVIEW OF THE LITERATURE
"Bilingualism" has its roots in the history of humankind and has been recognized worldwide since time immemorial as a valid pedagogical approach to the learning of another language. In the United States, however, this new learning style has been criticized on purely political and ethnocentric grounds rather than being judged on its academic merits or demerits. Throughout its 34
history the "bilingual phenomenon" has in fact had different lines of demarcation depending on the route by which one wanted to tackle it: economics, politics, ideology, education, culture, linguistic assimilation, employment, army, business, etc.

The latest salvo of criticism and admonitions comes from William Bennett, Secretary of Education, who called the bilingual education programs a failure in a speech prepared for delivery in New York. He stated that "... we have no evidence that the children whom we sought to help--that the children who deserve our help--have benefitted." Mr. Bennett said "...this figure [the high school dropout rate for Hispanic students is about 50\%] is 35
as tragically high now as it was 20 years ago," before the U.S. Congress enacted the bilingual education laws.

Conversely, popular books, studies, and research reports carry such alarming titles as The Ugly American, by $W$. Lederer and E. Burdick; and The Tonque Tied American: Confronting the Foreign Language Crisis, by $P$. Simon; and phrases such as: "America's scandalous incompetence in foreign languages."

Hence, to avoid the present disastrous situation in the education of now native speaking students, every possible effort must be made "... to promote bilingualism 37 in its widest sense in the national interest ..."

The formidable task suggested above carries many connotations, both of negative public sentiments and of unpopular, unfashionable and unresolved political issues. In the opinion of this author, to accomplish this it is imperative that we follow Professor Wallace Lambert, of McGill University, who conducted extensive worldwide studies on this subject. Lambert suggests simply that "we embark on effective programs of language learning and 38
bilingualism."

## Historical Background to Bilingual Education

According to E. Glyn Lewis, in his Bilingualism and
Bilingual Education -- The Ancient World to the
Renaissance, polyglotism is as old as civilization 39
itself. In fact, it seems that bilingualism has always enhanced human societies whereas monolingualism has had a
restricting effect upon human development. Indeed, it is doubtful whether any community or any language, for that matter, has existed in isolation from other communities and languages. According to C.A. Ferguson, the first evidence of children using two languages in their school work comes from Cuneiform tablets from Mesopotamia between 3,000 and 2,000 B.C. ${ }^{40}$ By the second millennium B.C., there were Sumerian texts and the beginnings of an Akkadian literature. Thus, a pattern of bilingual education was well established. The Mesopotamians' technique of writing with a stylus on soft clay was widely accepted by neighboring civilizations. Their methods of training scribes and their bilingual tradition were prevalent throughout the Near East during the second millennium, B.C. Moreover, a Norwegian of the Middle Ages claimed that mastery of many languages, especially Latin and French, was necessary to an educated man. Languages in New Guinea and in vast areas of South America and Africa, though restricted to one village or many villages, are understood by everyone. In the latter part of the Middle Ages, writers would use language other than their own because of its higher claims to cultural preeminence. Furthermore, according to Lewis, it was a Greek slave named Livius Andromicus who set up the first bilingual
school in Rome. At the same time, bilingual Gaelic teachers were employed by the Romans to set up schools because of the fame and excellence of the Gaelic schools. It was for such schools that bilingual textbooks were prepared. These textbooks contained a Greek-Latin lexicon arranged alphabetically as well as acrording to subjects and topics.

On the other hand, however, there was deep-seated antipathy to bilingualism and especially to bilingual education. In his Cena Trimalchionis, the Roman writer Petronius satirized the inept bilingualism of the Greekspeaking residents of Rome. Plutarch wrote that Marius, the demagogue, never learned Greek well nor used it for any cultural or civilized purpose, thinking it foolish, as Plutarch says, "To learn a language that was taught by men who were themselves slaves." The Romans themselves recognized some of the more pressing difficulties of their form of bilingual education. In fact, Quintillian noted that if formal instruction in the mother tongue were too long delayed in order to help the child consolidate his Greek, he might come to speak his native tongue with a foreign accent. Of course, we do know now that this fear was not exaggerated. For instance, Cicero took great care to caution his son, who was being educated in Athens, not to neglect his Latin exercises. St. Augustine was also
very critical of the futility of a system of bilingual education which imposed the exclusive use of the second language as the medium of the instruction of the young, for this, St. Augustine thought, would lead to boredom and drudgery. Furthermore, he said, it was unnatural: "While Latin came to him in the course of nature, Greek was a mechanical imposition."

## Modern Bilingualism

Today, many nations continue the tradition of bilingual education, and many of these countries have even more complex patterns of multilingual education. For example, in India over 150 different languages are spoken; in South America there are 500 different languages spoken along with Spanish and Portuguese; in Africa there are at least 1,000 languages, some 100 different Bantu languages in the Congo alone.

However, multilingualism and bilingual education are not limited to the so-called Third World. Europe, excluding Russia which has 120 languages within its boundaries, has some 50 major languages. A classical example is Switzerland's four official languages--French, German, Italian, and Romansch, which are used in the schools. Furthermore, German-speaking Switzerland has two distinct varieties, a formal "high" standard German, and
the very different local Schweitzerdeutsch, or Swiss
German. As one final example everyone in Somalia speaks Somali which is not a written language, while Arabic is used for written purposes, with Italian and English used for
wider communication with the rest of the world.

The Origin of Bilingual Education in the U.S.A.
Historically, the instructional appreciation for language minority education in the United States followed the pedagogical philosophy of a "melting-pot" theory which still holds for the rapid and complete assimilation of the student. This principle was very clearly stated by E. Cubberly:
... assimilate and amalgamate these people as part of our American Race, and to implant in their children, as far as can be done, the Anglo-Saxon conception of righteousness, law, order, and our popular 43
government...
Likewise, Israel Zaugwill, in The Melting Pot Drama in Four Acts, wrote that "... The school's mission is to transmit the values of society, which in this case are the ideal of the crucible, the Fires of God" that are "making 44
America."
From these social philosophers was taken the "laissez faire" approach which came to be known as the "submersion"
method. Using this strategy the minority language students were schooled with no recognition of differences in language and culture, except as a burden to the efficiency of the school. Following World War II, however, because of increased urbanization and the need for a more literate work force, more efficient ways were found of assimilating language minorities.

As a consequence of the shortcomings and the extremely damaging effects of the above approaches, other models of compensatory education (E.S.L.) were designed. These began to take into account the social, cultural, linguistic, and psychological differences among students. In addition, as a by-product of the Civil Rights movement of the 1960 's, language minorities (especially Spanishspeaking people) demanded better and more relevant education, in a school system more linguistically and culturally responsive to their needs.

Of course, the response from the political and education arena was swift, predictable, and reactionary. The established political, economic, and educational power machine offered a bilingual education program based on a promise to accelerate the English acquisition process and to avoid early academic failure. This new program was used as a vehicle to prepare large numbers of minorities
for entry into the military and into the high technology world of work.

On January 17, 1967, Senator Yarborough, Democrat from Texas, introduced a bill to provide assistance to local educational agencies in establishing bilingual schools for Mexican-American and Puerto Rican children. The chief purpose of Senator Yarborough's bill was "just to try to make those children fully literate in 45
English." Afterwards, Congressman Scheuer of New York rewrote Yarborough's bill. The new bill included all children who did not speak English and emphasized teacher training, the development of didactic materials, and demonstration programs. In combination Yarborough's and Scheuer's bills came to be known as Title VII of the Elementary and Secondary Education Amendments of 1967.

At the local level, the implementation of Title VII has varied enormously from place to place. In fact, in some school systems, bilingual teaching was meant only for children of a non-English mother tongue; in others, it was for all pupils. Some schools aimed at preventing or at least slowing down assimilation; others aimed to accelerate it by a deft detour via the mother tongue. In some schools all branches of learning (except native language skills) are taught bilingually, whereas in others, English only is used for some of the branches and
the minority tongue only for the rest of them. Use of the minority tongue in some cases terminates with grade two, while in others it may last through grade six.

However, from the point of view of the federal authorities, the Bilingual Education Act was primarily of socio-economic relevance, part of a large program to aid the under-privileged masses, whether they were monolingual English-speaking poor whites, bi-dialectal Negroes, Spanish-speaking workers, or Native Americans. Hence, in the process of collaboration between the local authorities and the parents, for most groups this program retains a purely cultural aspect while in others it may lead to political nationalism.

The literature on the evaluation of bilingualbicultural education in the United States as well as in Massachusetts has become extensive over the past two decades. In large cities such as Fall River and New Bedford, Massachusetts with a growing number of language minority children, bilingual education programs have managed very well and are quickly becoming models for other communities.

Mr. Richard Pavo, Director of Bilingual Education for the Fall River Public Schools, provided in a personal interview with this researcher the following information,
ideas, approaches and strategies that made the Bilingual Education Program in Fall River one of the best in the 46 state of Massachusetts. Fall River was also the first community in the state to desegregate voluntarily, without any legal requirement and without pressure from the state, he said. During the course of the interview Pavo explained that under the leadership of Mr. John R. Correiro, Superintendent, the Fall River Schools created a Controlled Choice Plan and three other programs, which are described in the next two pages.

First, Superintendent Correiro is credited with initiating the Controlled Choice Plan, a language-based desegregation plan which assigns students on the basis of "language" rather than "race." It is the first plan of its kind in the nation, and is aimed primarily at Fall River's Portuguese children, who make up slightly more than $25 \%$ of the 1,950 students in the city's public schools. The plan differs from other desegregation programs in giving parents greater control over what school their children attend. Although parents are not guaranteed their first preference, most would get at least their second or third choices, Mr. Pavo said. The plan calls for eliminating neighborhood assignments in the future. Instead, enrollment in each school would be
controlled to ensure a mix of racial and linguistic minorities in proportion to the entire school system.

The Fall River plan has national implications, says Pavo. It shows you don't have to have lawyers threatening lawsuits in order to desegregate, and it doesn't have to be done because of "race."

In addition, as part of Fall River's overall bilingual program, there are provisions for other needs. The Dissemination and Assessment Center has developed qualitative, highly successful and valuable supplementary reading materials in Math, Science and Social Studies for a particular language or groups of languages such as Portuguese, Spanish, French, and Khmer. For Special Needs Bilingual Students, those students who have failed to enter the mainstream through a transitional process (three years in Massachusetts) because of a "learning deficiency," the schools have developed "bilingual education special needs assessment" instruments. There are also Training and Resource Centers, involved in preparing people in the area of "special needs" and "Tests and Measurements" such as bilingual-bicultural guidance counselors and school psychologist.

If one of the major responsibilities of the public schools is to prepare our young people to go into college, business, industry, and the armed forces for the purpose
of building a strong, intelligent and articulate nation, then the Fall River Public Schools advocate a partnership in government at the local, state and federal levels.

However, despite a very strong bilingual education program, Mr. Richard Pavo supports the further strengthening of three particular areas: pre-school program for Portuguese immigrant children, a vocational or occupational program, and some provision for children with special needs. Also, Pavo would like to see an evercontinuing effort directed toward involving the bilingual education parents, the bilingual education students and both the parents and students of the larger community in the bilingual education program which they offer.

Pavo terminated his interview with one more observation. He concluded by saying that "The most fundamental and pressing issue isn't as much that the form of bilingual education might change but that it mighe be eliminated altogether."

Present Legal Status of Bilingual Schooling
Since the passage of the Bilingual Education Act (BEA) in 1967-68, the problem of bilingual schools, buried and almost forgotten since World War $I$, has gained new significance. Underlying the silence of the laws, we find a good many cases of a stubborn conviction that it "goes
without saying" that all teaching has to be done through the English language. Other states' laws merely envisage the goal of promoting the acquisition of English by use of the mother tongue. On the other hand, some states obviously permitted children to acquire equal ability in handling both their mother tongue and the English language.

Since 1970, a number of states have enacted laws permitting and promoting bilingual education. Some of these laws aimed at paving the way for "organic simulation" by using the mother tongue as a springboard for the acquisition of English.

Moreover, there has recently emerged in the United States a third movement in the area of bilingual teaching. This has more to do with the teaching of foreign languages to English-speaking children than with "language maintenance" among non-English groups. In fact, educators have become aware of the fact that teaching Spanish to "Anglo" children may become vastly more effective if the second language is not merely taught as a subject matter but is used as a medium or as a vehicle for the teaching of some of the branches in learning such as World History, etc. This "content teaching" through the foreign languages has long been a practice in the Soviet Union. It has been tried out in a good many high schools in
various parts of the U.S.A., and both California and Pennsylvania explicitly authorized this particular method. According to H. Kloss, "content teaching" through the target tongue, while originally designed for Englishspeaking children, may very well become an efficient instrument in strengthening the mother tongue among students who happen to be native speakers of this 47
"foreign" language.
Furthermore, in 1963 a strong movement to create Spanish-English schools all over the Southwest came into being. This movement gained nationwide significance and quickly reached its first climax with the passage in 1967 of the Federal Bilingual Education Act. Some of these schools' goals were genuine attempts to bring about a fully bilingual and even bi-cultural education. Other schools simply tried to speed up assimilation by the temporary use and teaching of the mother tongue. This new process was called TESL (Teaching English-as-a-Second Language).

Bilingual Education in Massachusetts. In
Massachusetts the need for bilingual education was first dramatized by a 1970 study on student absenteeism entitled The Way We Go To School: The Exclusion of Children in Boston, prepared by the Task Force on Children Out of

School. This study showed that the failure of traditional curricula to meet the needs of limited-English-speaking children had been a major cause of high absenteeism and the large number of minority dropouts.

In 1971, Massachusetts was the first state to legislate transitional bilingual education. This new law stipulated that in every school district which had twenty or more students of limited-English-speaking ability in a particular language group, a full bilingual program must be provided for those children. Such a bilingual program would offer students the opportunity to study in their native language all the major subjects required by the state and city. This would enable them to maintain an academic level similar to that expected of other children in their age group. They would also be given intensive English classes with the intention of transferring them to standard curriculum classes. While the goal of the programs would be to facilitate this transfer, it was also hoped that bilingual students would develop an appreciation of and competence in their native language and culture.

Furthermore, to help prevent the segregation and alienation of these students, provisions were included for their integration into standard art, music, and physical education classes as well as most other extracurricular
activities. The law also provided for parental involvement in all decision-making, program planning, and evaluation. Finally, the state would reimburse communities for all the additional educational costs which resulted from the implementation of bilingual programs. The state of Massachusetts chose transitional bilingual education over other programs because it was felt to be the best political and educational answer to the needs of the limited-English-speaking community. By teaching classes in the student's native language, not only would a valuable cultural asset to the community be protected, but now these students would be better able to grasp more advanced academic concepts which previously were beyond their reach due to the language barrier.

Also, the parents of these students who feared that American education often served to isolate and penalize their children for their language handicap, were quite amenable to the idea of a gradual transition into English, especially since parental involvement would be an important part of the program.

Bilingual Education in Cambridge. In recent years, Cambridge has experienced an influx of immigrants that has created greater isolation for bilingual students both in the city itself and at Cambridge Rindge and Latin School.

The reason for this is that people of the same economic level, cultural background and language minority tend to live in the same area where the neighborhood may not be as privileged. These bilingual students come to the high school (C.R.L.S.) and are assigned to "House D" primarily on the basis of language (Bilingual Program) rather than personal choice with parents having little or no say. This arbitrary assignment can result in a de facto resegregation of Cambridge Rindge and Latin School's bilingual student body.

## The SAT and ACH

Researchers have found that since its inception the Scholastic Aptitude Test has been the object of much criticism by the educational community as well as lay people. The College Entrance Examination Board (C.E.E.B.) and the Educational Testing Service (E.T.S.) claim that colleges and universities can use the Scholastic Aptitude Test (SAT) scores as a valid predictor of their applicants' future accomplishment in school. This claim is increasingly coming under attack from researchers who argue that the SAT should be abolished as a requirement for college entrance. Ross Gelbspan, of the Boston Globe staff, wrote that the SAT is turning out to be a better criterion of a student's ability to outsmart the test writer. Gelbspan claims that the the test is sensitive to
coaching and is full of many ambiguous questions. Finally, he says it is less effective than grades in predicting a student's future college performance. Perhaps as a result of the above-mentioned reasons, Gelbspan reports, both Bowdoin and Bates, two small selective liberal arts schools in Maine, have stopped requiring the SAT for incoming freshmen. Bates' Dean of Admissions, William C. Hiss, explains the unusual move of dropping mandatory SAT in favor of redefining achievement tests in five subject areas. "We found that the achievement tests are slightly better predictors of a student's first year performance than SATs," Hiss said. He also mentions "ethical issues," and contends that there is "a relationship between SAT scores and family income due to a marked increase in SAT scores through costly coaching courses." He adds that "Bates has decided to minimize the weight of standardized tests and give more trust to the quality of a student's written essay, high school grades and activities, and teachers' 48 recommendations."

Paradoxically, however, Arthur Kroll, a vice president of E.T.S., is in accord with Hiss's contention about down-playing standardized testing. But Kroll still defends their continued use on the basis that the tests
"provide a common yardstick for students who come from different kinds of educational backgrounds with different standards and grading systems." Harvard University is also considering similar actions and may opt for the Achievement Tests which measure knowledge of specific curriculum-based subjects.

Another criticism is offered by Slack and Porter in their article "The Scholastic Aptitude Test: A Critical Appraisal." They raise serious doubts about the fairness of the test, its validity as a measure of academic potential and its uses as a conditio sine qua non for admission to college.

On the other hand, in his article "The SAT--What Does it Measure and Does it Still Work?" Jay Comras says that in spite of what has been said either pro or con, the SAT still works. He continues: "... it works because it provides useful information and because it acts as a kind of educational barometer by which to judge verbal and mathematical abilities that have been developed during the 51
student's school career." E.T.S. President Gregory Anrig, however, disputes the reported test-score gains, saying that coaching usually produces mode increases of 52
only 14 to 26 points.
Furthermore, in "None of the Above: Behind the Myth of Scholastic Aptitude," David Owen shows with examples what
he thinks to be the conceptual and structural errors in the Scholastic Aptitude Test. He also zeroes in on other faults and weaknesses such as the design of the SAT, and its administration and scoring. In Owen's view, the "aptitude" scores that finally emerge are worthless-telling more about prospective college students' socioeconomic status, including their opportunities to buy coaching on the SAT--than anything else. For this purpose, Owen cites as evidence the work done by Lewis Pike, who tested 400 students in 1972 after they were coached on three types of mathematical test questions and found that their test scores increased by 50 to 100 points. John Katzman, who operates Princeton Review, a rapidly growing national chain of SAT-coaching centers headquartered in New York, boasts according to Owen [70] an average gain of 250 points. Students at stanley $H$. Kaplan Education Centers, however, experience less 53 dramatic improvements of 100 to 175 points.

Owen's None of the Above is very critical of the
SATs. He identified several questions which, he says, reflect the cultural biases of test-writers. He gives the following multiple-choice SAT question as an example: "Unfortunately, certain aspects of democratic government sometimes put pressure on politicians to take the easy way
out, allowing ... to crowd out ..." The answers include: (A) exigencies ... necessities; (B) immediacies ...
ultimates; (C) responsibilities ... privileges; (D)
principles ... practicalities; (E) issues ... problems. The right choice, according to E.T.S. is (B). When owen questioned this answer, he was told that choice was approved by six E.T.S. reviewers. Owen then tested the question on six other people, including columnists Nicholas von Hoffman, and William F. Buckley; history professor John Simons; novelist Elizabeth Hardwick; and political scientist Andrew Hacker. None chose (B) as the only correct answer. Wrote von Hoffman: "such examinations test the ability of the test taker to please 54
the test writer."
Moreover, the problem of ambiguity was underscored by a 1980 Boston Globe study by Harvey and Laurie Scott of the Huron Institute. Their conclusion was that "ambiguities in some questions were so pronounced that several different answers could be justified by valid 55
thinking process."
Owen concludes that the use of the SAT intensifies the effects of economic inequality on college admissions. This disturbs him very much; so does the effect on the high school curriculum of an examination whose items are often deliberately ambiguous and misleading.

Other problems with standardized tests are due to their being machine-graded. This process, of course, is devoid of creative or analytical thought about real intellectual questions, according to Jewell, a member of 56 the N.E.A. Board of Directors.

More recently, however, Standardized Aptitude Tests have come under fire from other non-traditional quarters as well. According to Gelbspan of the Boston Globe, civil rights leaders and educational activists are filing discrimination suits against E.T.S. and recently have won a series of important lawsuits forbidding and limiting the use of standardized tests on the grounds that they deny certain minorities access to colleges, graduate schools, and professions. s Gelbspan goes on to say that critics charge that the tests are culturally biased, that they do not predict later school or job performance by minority applicants, and that they unfairly fail to measure mental. 57
abilities nurtured in black and Hispanic society.
In a study conducted for the National Institute of Education, Peter Garcia, Dean of Pan American University in Texas, concluded that standardized screening tests "have no predictive validity" for future performance. Garcia wrote that "scientific and ethical problems" pervade the testing process, and "high failure rates in
tests are a sure sign of unfairness in test 58
applications."
Professor George Madoms, director of Boston College's Center for the Study of Testing, Evaluation and Educational Policy, has also criticized the SAT. The tests are invalid, Professor Madons says, because they fail to measure "real teaching skills that we want to see 59 in the classroom."

John Weiss, director of Fair-Test, a Cambridge-based group, is working very closely with several national Hispanic and Black civil rights groups to promote legislation which will eliminate testing discrimination in this country. The Massachusetts Senate was expected to vote on one such proposal, according to 60
Weiss.

Finally, Charles V. Willie, Professor of Education and Urban Studies at Harvard's Graduate School of Education, would like to eliminate standardized testing entirely. He says, "I would eliminate all aptitude testing. It is unethical and immoral to use an instrument 61 we know to be harmful to certain people..."

Nonetheless, whether we favor or dismiss the Scholastic Aptitude Test, many experts seem to share the notion that although intellectual ability is an important factor in achieving success, so are other intangibles--
energy, motivation, and capacity to work against competition. These characteristics escape any known testtaking instrument.

A seven-year study by the Educational Testing Service in cooperation with nine colleges, which involved 25,000 students, showed that "a student's persistence and success in extracurricular activities was a strong predictor of
academic leadership and social accomplishment in 62
college."
Furthermore, according to Warren Willingham, a
research psychologist with E.T.S., it was found
that
...if colleges rely on the combination of six factors, not only class rank and SAT scores, but high school honors, a student's ability to stick with an outside interest, the personal statement and the high school references, then the colleges will improve their ability to predict overall success of a student by about 9 percent.

## 63

Because extracurricular activities have been found to be an important factor in success, the Educational Testing Service, began to provide colleges additional information about a student's extracurricular activities in the fall 64 of 1986 .

This study is historical and narrative--introducing, interpreting, describing, and analyzing primary and secondary sources of data. It includes a consideration of such background factors and/or characteristics as socioeconomic factors, language proficiency, and parental level of education.

## Hypothesis

The following relations are hypothesized:

## Bilingual Students' Parental Variables

First, the level of professional success among the parents will correlate with the level of educational attainment among their children. Second, the level of education among the parents will correlate with the level of success in school among the children. Third, the parents' lack of familiarity with the English language will correlate with a low level of test performance among bilingual students.
E.S.L. Students' Parental Variables

Three relationships are hypothesized in this
category. First, the high professional level of the E.S.L. students' parents will correlate with a high level of educational attainment among their children. Second,
the parents' higher degree of educational attainment will correlate with a high level of educational success among their children. Third, parental knowledge of the English language will correlate with their children's higher test scores.

## E.S.L. and Bilingual Students' Characteristics

Four relationships are hypothesized in this category. First, the Grade Point Average (G.P.A.) of both E.S.L. and bilingual students will directly relate to their level of educational attainment. Second, their rate of absenteeism will directly relate to their educational attainment. Third, the SAT test scores will be found to relate directly to the students' levels of educational attainment. Finally, their scores on the $A C H$ test will directly relate to their levels of educational attainment.

## Subjects

The total number of students at C.R.L.S. involved in the study was 25 E.S.L. students $(100 \%$ of the total population) and 25 Bilingual students (25/288 = . 0933\% of the total population, randomly selected by computer).

## Questionnaires

Two types of questionnaires were administered to the E.S.L. and Bilingual population. The first, entitled the Senior Survey, was given during the month of May 1986 , to
all E.S.L. and Bilingual graduating seniors to assess their post-graduation plans. The second questionnaire, called the students Questionnaire, was given to both E.S.L. and Bilingual students to gather certain background information.

This study also includes historical analyses in which the author introduces, interprets, describes and finally analyzes the data collected.

## How the Study was Conducted

The working phase of the study covered a period of two months, from May 1 until June 25 , 1986. Both groups of students were given the "Student Questionnaire" and only the graduating seniors were given the "Annual Senior Survey." Each student met with the researcher in his office to go over the two questionnaires. Each office meeting was 45 minutes in length.

The gathered data were analyzed to provide information pertaining to the main purpose of this study. That is, what is the impact of certain parental background factors on the educational attainment of E.S.L. and bilingual students at C.R.L.S.? In addition, the data were analyzed to determine the impact of other factors such as Scholastic Aptitude Test scores, Achievement Test scores, students' performance in school, their rate of absenteeism, and college-preparatory courses taken.

Finally, the null hypothesis was tested. This states that there will be no statistically significant difference at the .05 level of confidence between the two population means.

## Limitations of the Study

Two limitations restrict the generalizability of the findings presented in this study. First, the sample was limited to students at Cambridge Rindge and Latin School. a large urban school in the northeastern United States. Second, participation was restricted to English-as-a-Second-Language students and bilingual students. The findings of this study, therefore, should not be applied to students who do not possess the characteristics stated above.

For the purpose of this study, the E.S.L. students are foreign-born students who speak English to some degree of proficiency. They are academically quite advanced; and, because of their parents' demands, these students are mainstreamed immediately into one of the Houses or Programs with regular students at Cambridge Rindge and Latin School. Their parents work for their country's embassy or consulate or are employed by foreign banks and business; or they may be students, academic fellows or teachers at local universities. All of them, however, will go back to their native countries.

## Human Subjects Guidelines

Letters of approval to conduct the research were received from Dr. R. Peterkin, Superintendent, Cambridge School Department, and from Mr. A. Giroux, Public Relations Director. They can be found in Appendix C.

## CHAPTER V <br> FINDINGS

The first purpose of this study is to investigate the relationship between certain background characteristics of English-as-a-Second Language and Bilingual students at Cambridge Rindge and Latin School, Cambridge, Massachusetts. The background factors to be researched and studied are: socio-economic factors, language proficiency, parental education level and the College Entrance Examination Board Test scores (C.E.E.B.).

The importance of this research rests in its potential contribution to an understanding of the factors that determine whether the two groups of students' (E.S.L. and Bilingual) do or do not find opportunities to succeed in school. Other background factors may also be discovered which explain the conditions of life that cause some students to achieve more education than others.

## Demographic Variables

## National Honor Society Membership

Twenty-four percent of E.S.L. students were either inducted in 1985 (two students) or in 1986 (four students) in the Derry-Wood Chapter of the National Honor Society. None of the bilingual students made the N.H.S., however. The inductees have shown a high degree of accomplishments,
distinction and have a cumulative average of $87.5 \%$ in their junior or senior year at C.R.L.S.

Houses and Programs of Origin
Fifty-six percent of the English-as-a-Second Language students came from House C, 32\% from House D, 8\% from House B, and 4\% from the Pilot Program. All the bilingual students, however, were from House D. See table 1.

Table 1<br>Houses and Programs of Origin

|  | E.S.L. | Bilingual |
| :--- | :---: | :---: |
| House A | 0 | 0 |
| House B | $2(8 \%)$ | 0 |
| House C | $14(56 \%)$ | 0 |
| House D | $8(32 \%)$ | $25(100 \%)$ |
| Pilot | $1(4 \%)$ | 0 |
| TOTAL: | $25(100 \%)$ | 25 |

Countries of Origin
The "transitory" E.S.L. students come from three different continents. The largest group (48\%) come from Asia; the middle group (28\%) come from three countries of Western Europe; and the smallest group (24\%) come from two one-time Italian colonies in North Africa: Ethiopia, once
known as Abyssinia, and Eritrea, along the Red Sea coast. All the E.S.L. students, besides speaking their own national language, speak English to a certain degree of proficiency. The students from Eritrea and Ethiopia speak Amharic and English as well as French and Italian. Table 2 illustrates these data.

Table 2
Continent of Origin - E.S.L. Students

## Continent

Primary Language Spoken

## Africa <br> 6 (24\%)

Eritrea
1
Ethiopia 5
Tigrigna
Amharic

Asia 12 (48\%)

India 3
Indonesia
2
Philippines 2
Republic of China 2
South Korea
2
Sri Lanka

1

Hindi
Indonesian
Tagolon
Cantonese
Korean
Tamil

Europe 7 (28\%)
Germany 3
Italy 3
Netherlands 1

German Italian Dutch

TOTAL: 25 (100\%)

As Table 3 shows, the bilingual students coming into C.R.L.S. in the decade $1976-86$ have assumed new racial, cultural and linguistic characteristics. One hundred
years ago, $90 \%$ of the immigrants came from Europe and in 1965 the Europeans still made up more than 50\% of the new arrivals. Today, on the other hand, only $8 \%$ of the immigrants come from Europe (only Portugal). The remainder is made up of $80 \%$ who are Latin American immigrants, plus $4 \%$ from Africa (all are political refugees), and $8 \%$ from Asia. These bilingual students speak a dialect of their national language; the Cape Verdeans and Haitians speak Portuguese Creole or French Creole.

Table 3
Continent of Origin - Bilingual Students

Continent Primary Language Spoken

| Africa | $1(4 \%)$ |  |
| :--- | :--- | :--- | :--- |
| Cape Verde (W.A.) | 1 |  |
| Cape Verdean |  |  |

Asia
2 ( $8 \%$ )

South Korea
Vietnam
Europe
2 (8\%)
Portugal
Korean
Vietnamese

Portuguese
Latin America 20 (80\%)
Dominican Republic
El Salvador
Guatemala
Haiti
Mexico
TOTAL: 25 (100\%)

1

1
1

1

Spanish Spanish Spanish Haitian Spanish

## Ethnic Background

Forty-eight percent of all the E.S.L. students studied were Asian; $28 \%$ were Caucasians; the remaining $24 \%$ (Eritreans and Ethiopians) indicated "Others" because they had failed to identify themselves with any of the predesignated ethnic groups. Sixty percent of the bilingual students characterized themselves as Blacks and $16 \%$ as White/Hispanics. Table 4 illustrates these data.

Table 4
Students' Ethnic Code
E.S.L.
Bilingual

American Indian
0
0

Black
0
15 (60\%)
Asian
12 (48\%)
2 (8\%)
Black/Hispanic
0
1 (4\%)
White/Hispanic
0
4 (16\%)
White
7 (28\%)
3 (12\%)
Other

| Eritrean | 1 | $(4 \%)$ | 0 |
| :--- | ---: | ---: | :--- |
| Ethiopian | 5 | $(24 \%)$ | 0 |
| TOTAL: | $25(100 \%)$ | $25(100 \%)$ |  |

## Immigrant History

E.S.L. students characterized their parents as being students, scholars, trainees, teachers, professors,
research assistants, specialists, or leaders in a field of specialized knowledge. These categories comprise the sons and daughters of professional families, mostly transient, who do not need native language instruction to preserve their native culture but want their children to learn English as quickly as possible since many of them will return to their native countries within a few years. The bilingual student population, on the other hand, come from three categories: Preference categories, immediate relatives of a United States citizen, and refugees. Since the city of Cambridge was declared an Asylum City, we cannot verify the legal status of these students at C.R.L.S. The Sanctuary Movement believes that the U.S. government's practice of deporting aliens back to their hostile homelands in Central America is both immoral and illegal, because they may be endangered if they are forced to return home. We also have a number of political refugees from Ethiopia and Eritrea.

Grade and Gender of Students Under Investigation
The researcher took pains to match the students in each grouping with respect to grade and gender and the results are illustrated in Table 5.

|  | Table |  |  |  |  | 5 |
| :--- | :---: | :---: | :--- | :---: | :---: | :---: |
|  | Numbers of | E.S.L and Bilingual | Students | Under | Investigation |  |
|  | Freshman | Sophomore | Junior | Senior | Total |  |
| Male | 6 | 6 | 6 | 6 | 24 |  |
| Female | 6 | 6 | 6 | 8 | 26 |  |
| Total | 12 | 12 | 12 | 14 | 50 |  |

## Parental Occupation

Tables 6 and 7 indicate the professions of the parents of both groups of students. The information suggests that the parents of E.S.L. students are primarily professionals in their own field of endeavor. Some are here to acquire further specialization, while others are involved in research or teaching and still others are students or are employed by their own governments.

Table 6
Parents' Professions: E.S.L. Students

|  | Fathers | Mothers |
| :--- | :---: | :---: |
| Architect | 1 |  |
| Banker | 3 | 1 |
| Businessman | 1 | 3 |
| Government Employee | 5 | - |
| Librarian | - | 1 |
| Medical Doctor | 6 | 1 |
| Not Working | 1 | 1 |
| Student: | 16 |  |
| $\quad$ Harvard | 4 |  |
| J.F.K. School of Gov't | 1 | - |
| M.I.T. | 1 | - |
| University Professor | 3 | - |
| TOTAL | 25 | 2 |

> Table 7
> Parents' Professions: Bilingual Students

Bank Teller
Coop Employee
Employment Agency Fathers Mothers

Factory Worker
Fast Food Chain Employee Nurse
Cleaner in Nursing Home Taxi Driver
Not Working
1

Not Living in the U.S.A.
Deceased
TOTAL
25
25

The data seems to suggest that the parents of bilingual students are occupationally and economically worse off than their counterparts among the E.S.L. group, regardless of their ethnic, linguistic or racial background. This situation appears to be accentuated by the fact that many parents $24 \%$ of fathers and $40 \%$ of mothers) are not gainfully employed.

## Household Characteristics

Among E.S.L. students, the entire sample reported that they were living with both parents. None of the students was a member of a single-parent household. It appears that a positive relationship exists between family stability and performance in school.

Among bilingual students, however, only 68\% come from homes headed by both parents, whereas $28 \%$ of them come from homes headed by a single parent. There is one student who has no family because he is a political refugee from one of the countries of Central America. Table 8 illustrates the household characteristics of the bilingual students in this study.

Table 8
Household Characteristics: Bilingual Students
Both Parents Neither One Single Parent Household
at Home
at Home

17
(68\%)
at Home

1
(4\%)

Single Parent Household Father Only Mother Only

5
(20\%)

2
(8\%)

Lanquage Spoken at Home
One-hundred percent of the E.S.L. students use both English and their native tongues at home. Twenty percent of them (students from India and the Philippines) claim proficiency in English as well, but the other $80 \%$ do not feel they are quite in command of their host country's language. Similarly, the majority of bilingual students (96\%) prefer to speak their native language at home and only one student (4\%) speaks both. On the other hand, $20 \%$ of them feel comfortable speaking English whereas the remaining 80\% do not. Thus the two groups seem to be quite similar in terms of language preference at home.


## Correlations Between Variables

The data were analyzed using the SPSS to perform procedures corresponding to the questions posed by the researcher. A series of analyses were done to address the hypotheses on pp. 79-80. The results revealed an interesting pattern of interrelationships among three groups of variables: certain family background factors; Scholastic Aptitude Tests and Achievement Test Scores; and other educational variations between E.S.L. and Bilingual students at C.R.L.S. The strong relationships observed reflect the validity of these measures.

Table 10
Crosstabulation of Level of English Taken Last Year
E.S.L.
Bilingual
Total

English Level

| Advanced | 8 |  | 8 |
| :--- | :---: | :---: | ---: |
|  | $32 \%$ |  |  |
| Intermediate | 9 | 2 | 11 |
|  | $36 \%$ | $8 \%$ |  |
| Basic | 1 | 4 | 5 |
|  | $4 \%$ | $16 \%$ | 26 |
| Bilingual | 7 | 19 |  |
|  | $28 \%$ | $76 \%$ | 50 |
|  |  |  |  |
|  |  | 25 | $50 \%$ |
| TOTAL | $50 \%$ |  | $100 \%$ |

As illustrated in Table 10, the survey showed that $70 \%$ of E.S.L. seniors this year have taken English classes of college preparatory quality, compared to the $76 \%$ of bilingual seniors who took bilingual courses.

| M | Table 11 |  | Year |
| :---: | :---: | :---: | :---: |
|  | E.S.L. | Bilingual | Total |
| Level |  |  |  |
| Not Taken | 5 | 7 | 12 |
|  | 20\% | 28\% |  |
| Advanced | 14 | 1 | 15 |
|  | 56\% | 4\% |  |
| Intermediate | 4 | 3 | 7 |
|  | 16\% | 12\% |  |
| Basic | 2 | 14 | 16 |
|  | 8\% | 56\% |  |
| TOTALS | 25 | 25 | 50 |
|  | 50\% | 50\% | 100\% |

As Table 11 shows, in addition to their other
courses, $72 \%$ of E.S.L. students took more courses in such demanding subjects as Algebra, Geometry, Trigonometry, Calculus, and Advanced Placement Math.

> Crosstabulation of Foreign Language Enrollment

| Foreign Language Taken | E.S.L. | Bilingual | Total |
| :---: | :---: | :---: | :---: |
| No | $\begin{aligned} & 17 \\ & 68 \% \end{aligned}$ | $\begin{array}{r} 25 \\ 100 \% \end{array}$ | 42 |
| Yes | $\begin{gathered} 8 \\ 32 \% \end{gathered}$ |  | 8 |
| TOTAL | $\begin{aligned} & 25 \\ & 50 \% \end{aligned}$ | $\begin{aligned} & 25 \\ & 50 \end{aligned}$ | $\begin{array}{r} 50 \\ 100 \end{array}$ |

```
As Table 12 shows, \(32 \%\) of E.S.L. students took a foreign language and none of the Bilingual students took a foreign language.
```

Table 13
Crosstabulation of Level of Science Taken Last Year
E.S.L.
Bilingual
Total

Science
Level

| Not taken | 7 | 10 | 17 |
| :--- | ---: | ---: | ---: |
| Advanced | $28 \%$ | $40 \%$ |  |
|  | $9 \%$ |  | 9 |
| Intermediate | $36 \%$ | 1 | 6 |
|  | 5 | $4 \%$ |  |
| Basic | $20 \%$ | 14 | 18 |
|  | 4 | $56 \%$ |  |
| TOTALS | $16 \%$ | 25 | 50 |
|  |  | 25 | $50 \%$ |
|  | $50 \%$ | $100 \%$ |  |

As Table 13 shows, high school E.S.L. seniors took more courses in the demanding academic subjects such as Biology, Chemistry, and Physics. While $40 \%$ of the bilingual students did not take any science course, $28 \%$ of E.S.L. students did not take science. Eighteen E.S.L. students took science, compared to 15 bilingual students. Four percent took an intermediate science and 56\% took a basic course in science.

## Table 14

Crosstabulation of Educational Plan After High School
E.S.L.
Bilingual
Total

4-year private college 9 . 9 100\%

4-year public college 1 12. 5\%

Junior college 3 37. 5\%

Trade school 3 $37.5 \%$

Work

TOTALS
Column total
$9 \quad 8$
17

Percentage of sample
52.9
47.1
100.0

Among the E.S.L. students in the sample, 100\% were admitted to private, highly competitive four-year colleges. The bilingual students planned to attend public four-year colleges (12\%), junior colleges (38\%), or trade schools $(38 \%)$, or to seek work on graduation $(12 \%)$.

Table 15
ESL and Bilingual Students Compared on Other Factors

| Grade Point Average Last Year |  |
| :---: | :---: |
| E.S.L. | 86.4 |
| Bilingual | 68.5 |
| Days Absent Last Year |  |
| E.S.L. | 4.7 |
| Bilingual | 15.4 |

Father's Education in Years
E.S.L. $\quad 17.5$

Bilingual $\quad 10.5$

Mother's Education in Years
E.S.L. $\quad 14.4$

Bilingual 8.8

As shown in Table 15, although E.S.L. students are enrolled in more difficult and more demanding collegepreparatory subjects than bilingual students, they have a higher G.P.A. ( 86.47 ) versus the 68.52 of the bilingual students. In addition, E.S.L. graduating students have a better school attendance record than bilingual students.

The study also illustrated the very high educational attainment level of this group of parents (Father, 17.5 years and Mother, 14.4 years of schooling). The findings suggest that the educational attainment level of the bilingual students' parents are lower than those of the E.S.L. students' parents, which were found to be 10.5 years for the fathers and 8.8 years for the mothers. Only a few of the latter group have a high school diploma and two hold a bachelor's degree.

A very high proportion of E.S.L. seniors took the SAT: eight of the nine. The average English-as-a-Second Language student's scores on the 1986 Scholastic Aptitude Test were 404 on the verbal test and 534 on the math test, out of a possible 800 on each section. Table 16 illustrates these data.

As has been the pattern for years, in 1986 males outpaced females in SAT scores. Following this trend the E.S.L. male graduates at C.R.L.S. scored higher than their female counterparts. Nationally on the SAT, males scored an average of 437 for verbal, 501 for math. Females averaged 426 for verbal, 451 for math. The female difference in SAT scores was an average of 286 for SAT repeat takers.
TABLE 16
Scholastic Aptitude Test (S.A.T.) Average Scores 1986 for E.S.L. Students Selected Tests.

| \# of Students | C.R.L.S. SAT AVG.* |  | C.R.L.S. SAT AVG.* |  | MASS. AVG.** |  | NATIONAL AVG.** |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st Time Takers |  | 2nd Time Takers |  | Verbal | Math | Verbal | Math |  |
|  | Verbal | Math | Verbal | Math |  |  |  |  |  |
| 8 | 404 | 534 | - | - | 436 | 473 | 431 | 475 |  |
| 5(8) | - | - | 438 | 580 | - | - | - | - |  |
| 3 (M) | 410 | 730 | 500 | 705 | - | - | 437 | 501 |  |
| 5(F) | 398 | 444 | 397 | 477 | - | - | 426 | 451 |  |

**College Entrance Examination Board, College Board, Scholastic Aptitude Test, SAT, Copyright
1986, pp. 3-7.

Five out of eight E.S.L. graduating students took the SAT more than once. These SAT repeaters increased their verbal scores an average of 34 points and increased their math scores an average of 46 points. Hence, the school figures suggest that increases in scores are expected for repeat takers. The three male SAT repeaters increased their verbal scores an average of 90 points and decreased their math scores an average of 25 points. Female SAT repeaters decreased their verbal scores an average of 1 point and increased their math SAT scores an average of 33 points.

A lower proportion of seniors (three out of four) in the Bilingual Program took the SAT. All three students were females. In fact, bilingual graduating seniors taking the SAT made up only a very small part of the SAT takers under study. Both the Verbal and the Math SAT averages of these bilingual students were considerably lower than the averages of all seniors who took the SAT whether they were E.S.L. students from C.R.L.S., or students from other Massachusetts communities, or came from across the nation's schools.

There were no repeat SAT takers among the bilingual students under the study. Many reasons may exist for this including lack of money, fear of tests, or lack of information.

The differences between the Verbal and Math SAT averages of bilingual students versus the SAT averages of students from both Massachusetts' schools as well as from across the nation were very dramatic. Indeed, there is a difference of 200 points in the Verbal as well as in Math.

Table 17
Scholastic Aptitude Test (S.A.T.)
Combined Math and Verbal Scores for E.S.L. Students on Selected Tests.
Maximum Score 1600 ( 800 on either section)

| School | $1985-86$ | 1st Time Takers 2nd Time Takers <br> Year |
| :--- | :--- | :--- |
|  |  | Rate of Change Rate of Change |

E.S.L.
C.R.L.S. $(404+534) * \quad(1018-938)$

1st Time
Takers $938+80$
E.S.L.
C.R.L.S.
$(438+580)$ *
(1018-938)
2nd Time Takers

1018
$-80$

| Massachu- <br> setts <br> Average | $(436+473) * *$ | $(938-909)$ | $(1018-909)$ |
| :--- | :---: | :---: | :---: |
| National $(431+475) * *$ $(938-906)$ <br> Average 906 +29 | $(1018-906)$ |  |  |

*Students' Individual Cum-Folder.
**Climbing the Grades," TAB, 17 February 1987, p. 1.

As Table 17 shows, last year's combined Math and Verbal scores for C.R.L.S.-E.S.L. first-time takers decreased by 80 points when compared with second-time SAT takers but topped the combined Massachusetts average by 29 points and the combined national average by 23 points.

Conversely, the combined Math and Verbal scores for C.R.L.S.-E.S.L. second-time takers had increased 80 points when compared to combined C.R.L.S.-E.S.L. first-time takers, 109 and 112 respectively for combined Massachusetts average and national average.

However, as is shown in Table 18, the combined Math and Verbal scores for C.R.L.S. bilingual students still lagged considerably behind the Massachusetts average, by 432 points, and by 429 points below the national average.

In fact, the average C.R.L.S. bilingual scores on the Verbal and Math sections in $1985-86$ were respectively 200 and 277 for a combined total of 477 . The average Massachusetts scores were respectively 436 and 473 for a combined total of 909. The average national scores were respectively 431 and 475 for a combined total of 906 . As a whole, Cambridge Rindge and Latin School bilingual students scored below the Massachusetts norm (909-477 = 432) and the national norm (906-477 = 429) on both the Verbal and Math sections.

Table 18
Scholastic Aptitude Test (S.A.T.) Combined Math and Verbal Scores for Bilingual Students on Selected Tests Maximum Score 1600 ( 800 on either section)

| School $1985-86$ | 1st Time Takers 2nd Time Takers <br> Year |
| :--- | :--- |
|  |  |

Bilingual
C.R.L.S. $(200+277)$ *

1st Time Takers 477

Bilingual
C.R.L.S

2nd Time
Takers

Massachusetts

Average
$(436+473) * * \quad(909-477)$
909
$-432$

National $(431+475) * * \quad(906-477)$
$\begin{array}{ll}\text { Average } & 906\end{array}$

> *Students" Individual Cum-Folder. **"Climbing the Grades," TAB, 17 February 1987, p. 1.

All the English-as-a-Second Language seniors who took the SAT also took one or more Achievement Tests. Those students who took the Achievement Tests on average scored higher on the SAT than those who did not take the ACH. This fact makes a great deal of sense because in general
TABLE 19.
Achievement Tests (ACH) Average Scores 1985-86 for E.S.L. Students Selected Tests. Maximum Score $=A C H=800$.

| E.S.L. <br> Students | English <br> Comp. | English <br> Lit. | A.H. | Math 1 | Math 2 | Biology | Chemistry | Physics | French | Latin |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E.S.L. <br> Average* | 450 <br> $(6)$ | 670 <br> $(1)$ | 540 <br> $(2)$ | 670 <br> $(5)$ | 717 <br> $(3)$ | 540 <br> $(1)$ | 620 <br> $(1)$ | 450 <br> $(1)$ | 690 <br> $(1)$ | 750 |
| $(1)$ |  |  |  |  |  |  |  |  |  |  |$|$| C.R.L.S. |
| :--- |
| Average* <br> (1985 Academic <br> Year) |
| 442 |

No bilingual students took any Achievement Tesțs.
*Students' Individual Cum-Folder.
**College Entrance Examination Board, College Board, Scholastic Aptitude Test, SAT, Copyright 1986,
these same students would be applying to more competitive colleges which require Achievement Tests.

The E.S.L. students at Cambridge Rindge and Latin School rank among the leaders in the state of Massachusetts as well as in the nation on the following Achievement Tests: Latin (750), Math 2 (717), French (690), Math 1 (670), English Literature (670), and Chemistry (620). Table 19 summarizes some of these data.

These E.S.L. seniors scored above the averages for C.R.L.S., for Massachusetts, and for the nation in six of fourteen areas. It should be noted that the city, state and national averages also include students from private and parochial schools.

Here are descriptions of the C.R.L.S. E.S.L. students' performances on the ACH. The one student who took the Latin test scored 750 and the one who took the French test scored 690. These compare to the national averages of 545 and 541 , respectively.

Three E.S.L. members of the class of 1985-86 took the Math Level 2 Achievement Test, scoring an average of 717 . Three students also took the Math Level 1 test, scoring an average of 670. It is interesting to observe that the Math Level 1 and Math Level 2 Achievement Test scores correlated very closely with scores on the Math portions
of the SAT. One student took the Chemistry Achievement Test, scoring 620.

One E.S.L. student took the Literature Achievement Test, and achieved a score much higher than the E.S.L. average for the Verbal portions of the SAT. Six E.S.L. students took the English Composition Tests, a larger number than took any other ACH Test. These six graduates had an average scores of 450 which correlates highly with their scores on the Verbal portions of the SAT. Finally, two students took the American History Test, scoring an average of 540 ; one took the Physics Test, scoring 450 . Conclusions

Because there were statistically significant differences at the .001 level of confidence between the two population means from which the sample was drawn, and because these differences did not occur by chance or sampling errors, this researcher is prepared to reject the "Null Hypothesis." This researcher concludes, moreover, that the differences in question were due to real differences between the two groups.

## CHAPTER VI <br> CONCLUSIONS AND RECOMMENDATIONS

This researcher is now ready to make the following recommendations.

First of all, in evaluating any bilingual education program we must begin by defining its terminology. The plethora of terms and labels used--"transitional," "English-as-a-Second Language," "Sink-or-Swim," "Submerged," etc.--are very impractical and carry very little meaning. In fact, one expert's transitional bilingual program is another expert's something else.

Second, it is imperative that we educators investigate the feasibility of alternative approaches to teaching a minority group's language.

Third, we must devise a bilingual education program that guarantees English fluency to the language-minority children but will not at the same time create an unassimilated language-minority island within the Englishspeaking ocean of the city of Cambridge.

Fourth, we must convert the present monolithic system of bilingual education into a diverse series of options for bilingual students. Each program should be tailored to the character and local exigencies of the community it serves. Such new pedagogical methods, for obvious
reasons, should not only be accepted by the people that they will eventually serve but should also actively involve parents, educators, researchers, the community, and governmental agencies at various levels.

Fifth, this researcher believes that we must search for a pedagogical method which takes into account the language and culture of those served, as well as the many unresolved conflicts over educational and political policies. This educational program must balance the need between fluency in the majority language (English) and the parental demands for cultural and linguistic preservation. It must defuse conflicting demands without creating social unrest and without damaging the children's academic future. It must teach the students with limited English skills most of the task subjects in their native tongue, gradually increasing the amount of instruction in English on a grade-by-grade basis until the students can take their native language (Spanish, Portuguese, etc.) as a second language in supplementary courses such as those for "home speakers" already offered at Cambridge Rindge and Latin School, for example. There, "home speakers" language courses emphasize, as a matter of course, the four basic skills of foreign language study: speaking, listening, reading, and writing at all levels as well as
introducing the history, the art and the culture of that particular language-nation.

Sixth, this new pedagogical approach should promote educational experiences that will allow the new arrivals to develop the knowledge, skills, and attitudes they need to interact and pursue a career in a multicultural and multiracial society.

Seventh, it should promote multicultural, multilingual and ethnic pluralism and forge important relationships with other minorities.

Eighth, this method should recognize the importance of the educational process as a means of personal realization and affirmation within the texture of American society.

All of us in Cambridge--students, parents, educators, community, and school officials--must share in the problems and, at the same time, create essential strategies for a solution. Perhaps a total restructuring of the Bilingual Education Program is called for as well as an intensive emphasis on education in the traditional sense.

In addition, this researcher recommends the establishment of a Bilingual Education Task Force, comprised of political community leaders, educators from local universities, researchers, representatives from the
world of work, school administrators, teachers, staffs, parents, students, and other interested and concerned people who know the plight and problems of bilingual students and would like to extend a hand in trying to solve them.

To begin its work, this task force should do a certain amount of missionary work in educating ethnic community leaders and their constituencies on the theme of "Speak English," a theme which is intended neither as an attack against minority rights nor as an intentional or misguided form of racism. This movement is not a battle against "bilingualism" or "biculturalism" per se. Rather, we are making the teaching and the learning of English the top priority in education, because without English fluency and an appreciation for its importance, many students will be condemned to lifelong disadvantage, good intentions notwithstanding.

This task force should appoint a committee of experts to assess the feasibility of adopting proven pedagogical methods that would help us in educating our local "melting pot." It should examine the various approaches and methods of instruction employed by public schools in the U.S. and Canada to educate foreign-born students, including those listed below.

Most children of recent immigrants (Spanish, Portuguese, Haitian, Vietnamese-speaking, etc.) are enrolled in bilingual education courses that avoid English and are taught primarily in the student's native tongue. One of the ideas behind this pedagogical technique is that nervous, faltering immigrants might drop out or fail if they had to learn English from scratch. Frequently, however, the end result is a de facto segregation of linguistic minority children from native born. Supporters of bilingual classes, however, regard this approach not only as an avenue easing students into the mainstream of American classrooms but as a way to preserve, the student's 67 native language and culture. The critics, on the other hand, question the role of the federal government in favoring any particular method of teaching, much less 68 sponsoring cultural-maintenance studies.

This researcher wholeheartedly agrees with the notion of Cuban-born Carol Penzdas Whitten, head of the Department of Education's Office of Bilingual Education. She contends that "If parents want to preserve native language that is fine, but $I$ do not think it should be the role of the schoo;...neither should bilingual instruction be used as a cultural isolation program...but as a
transitional program only."

English-as-a-Second Language is one method of instruction endorsed by Secretary of Education William Bennett because of its strong emphasis on English. The goal is to teach everything in English so students learn to use English to express themselves. The emphasis is on listening, then speaking to help children absorb the rhythm of English.

The English Immersion Method has its historical roots in the French-Canadian Immersion Program. Pupils are taught all subjects in English by teachers who know their native language but use it only when students do not understand. Students with problems can ask questions in 71 their language, which will be answered.

The "Sink or Swim" learning environments became known as "Submersion." These programs are defined as a curriculum designed for native speakers of a language, but often used inappropriately with language minority students. This old-fashioned method entails going coldturkey into regular classrooms where only English is spoken. Students are, in fact, punished for speaking another language and are expected to pick up English 72 simply by being with English-speaking people.

Having studied these and other approaches, the bilingual education task force should appoint an ad hoc committee to study and make necessary
recommendations. Some of the issues they should consider include those listed below.

1. No one single teaching method should be accepted in toto.
2. Any new plan that proposes change will provoke reactions from teachers, administrators, community, colleges, etc. Therefore, it is extremely important that changes be educationally sound, not just politically expedient.
3. Some of the approaches mentioned above may be adaptable enough to serve the minority bilingual populations in the Cambridge Schools. Others may not.
4. It is important to ensure solid academic achievement as well as cognitive development. For example, the committee could look at psycholinguistic theories that predict that cognitive-academic language skills learned in one language support the acquisition of these skills in a second language.
5. The language of home and family should be made a central aspect of sociocultural identity and self-esteem.
6. Strong English proficiency in all domains is essential.
7. The goal of any teaching method adopted in Cambridge should be to get students into the mainstream of academic work.
8. Each school and parent should be given options, recognizing that different language groups have different priorities.
9. Some state funding should be provided for these special programs.
10. Finally, an effort must be made to monitor student progress and require local and statewide testing.

The bilingual education task force should establish an in-service testing center under the leadership of the Director of Personnel for testing teacher competence and verifying foreign academic degrees. In addition to showing ability in written English, the teachers must also possess high enough skill levels to be able to obtain certification in both majority and minority language and culture. This process should include interviews, performance tests, an appraisal of records, and medical and physical examinations.

Obviously, questions of cultural bias and other flaws should be avoided at all costs, and provisions for an extensive appeals process and exemplary due process should be incorporated into the hiring process. The various committees must also recognize, at all times; that with
some teaching methods in use for bilingual students--and strong advocates for each--the question of which is best promises to spark continuous debate.

Perhaps these people should keep in mind that the key to success may not be the methods but the caring and commitment given to the progress of every student. They must equally understand that school is a static institution, deaf to external changes, but in a continuous and constant relationship to new social, cultural, linguistic, and educational realities.

Only through additional experimentation at the local level will it be possible to determine just what approach works best in any given situation. This experimentation, in fact, will provide the various committee members with information on pedagogical methods that will enable them to make informed choices, adopting methods to their needs.

Having found that the general quality of bilingual research and evaluation is very poor, I propose the following:

1. More and better research on the subject should be undertaken.
2. Future research should be focused on the study of multiple variables rather than on the study of one.
3. Future research should look at different teaching styles, the improvement of program evaluation, and the physical or psychological factors affecting learning among non-English-speaking students.
4. Perhaps we should be looking more closely at the work of linguists and child psychologists to better understand what techniques work best with children, how children actually learn two languages, and how the brain masters foreign subject matter.

The author of this investigation also recommends research in language proficiency and language background. The influence of language proficiency and background factors on the academic attainment of bilingual students is a very important and practical area of research. Such research is critical because both admissions testing programs (SAT and ACH) and behavior in school may be affected by the bilingual students' familiarity with English and communicative skills in English. A logical corollary of such research would be a study to determine the effects of intervention to improve bilingual students' test performance.

Because the literature at hand seems to suggest that historically most complaints about the Scholastic Aptitude Tests have to do with racial and cultural bias, a wider array of talents (students' background, language, etc.)
should be assessed for college entrance and reported as a profile to the colleges. Hence, bilingual students and other minority groups should be evaluated differently than should native English speaking students and E.S.L. students, if we are genuinely interested in measuring cognitive development, competency, and ultimately, their potential for educational attainment.

Admissions personnel, for example, should take note as to whether a student is coming from a noncollege/immigrant family background in which he/she would not have been exposed to a variety of opinions. Thus, admissions personnel should evaluate each applicant on the basis of how much he/she has achieved in relation to his/her background and opportunities. The admissions staffs should also look at other issues such as family, community, ethnic group identification, style of relating, and religious ideology in weighing admissions decisions.

Because of these considerations, there is an urgent
need for the development of more discriminating predictors of college academic achievement among bilingual students. Such an accommodation, for example, could be brought about by simplifying the instructions on the SAT. This small change, I am certain, will make test results less
dependent on the student's experience of understanding instructions.

Moreover, if we at Cambridge Rindge and Latin School are to be successful in getting more bilingual students into college, we must also consider a number of other strategies.

1. First, enrollment in each house and program could be controlled to ensure a mix of racial as well as linguistic minorities. This plan would give parents greater control over what house or program their children attend.
2. We must always stress a strong academic curriculum, and high expectations from students by classroom teachers.
3. Early identification of college-bound bilingual students would enhance their preparation without tracking them.
4. A well-developed and centrally located information system for bilingual students would be helpful. They especially need to be alerted to visits from college recruiters, test deadines, college days/nights, college fairs, college orientation days, scholarship deadlines, etc.
5. A very well organized and orchestrated effort to prepare students for standardized testing, college admissions, and financial aid applications is essential.
6. Because the SAT and ACH are often perceived by bilingual students as being formidable barriers to college entrance, it seems that a disproportionately small percentage of bilingual high school students enter the four-year private, highly competitive colleges. A number of educational programs could be geared to the special needs of the bilingual students at Cambridge Rindge and Latin school in order to encourage them to enter the higher education pipeline.

Also, we should aim to increase the pool of bilingual applicants who have traditionally been underrepresented in higher education. These educational programs should be designed so that they will motivate the bilingual students to take college-preparatory courses in high school. At the same time, they should provide a comprehensive curriculum of test-taking skills, with lesson plans covering verbal and mathematical questions as well as problem-solving and basic skills.

These educational programs should encourage bilingual students to take the PSAT in the eleventh grade and the SAT as well as the test of English as a Foreign Language in their senior year.
7. It appears that the Bilingual Education program has gradually lost its primary role as a transition to learning English. As a result, the program has failed to provide minority children with the positive incentives they need to learn the majority language. This has meant that both the English acquisition approach and the students' language and cultural maintenance process have maximized short-term advantages, instead of seeking longterm advantages enhancing productivity through transitional bilingual programs.

Therefore, this researcher proposes a transitional bilingual program which would insure that students are able to achieve their immediate graduation goals in terms of both the job market and the college market.
8. The Transitional Bilingual Education law requires a local school district to provide a minimum of three years in the program and allows a student to transfer to a mainstream program when he/she achieves a level of classroom English which enables him/her to function successfully in our all-English classroom, provided that the parent approves the transfer. At C.R.L.S., however, we do not know whether the length that students stay in the Transitional Bilingual Program meets or exceeds the mandated three-year period. Therefore, this writer
suggests that the Cambridge Bilingual Department monitor these students' efforts very closely and require an annual accounting of the number of students remaining in the program for more than three years and the reasons why they remain.
9. I believe there is a need at Cambridge Rindge and Latin School to initiate a controlled study on the Transitional Bilingual Program to assess the progress of bilingual students who enter the transitional bilingual program and are transferred or mainstreamed after an average of three years. Do these students do better academically than bilingual students who are prematurely mainstreamed? Do they do better than those who never participated in the transitional bilingual program at C.R.L.S.?
10. In order to continue to measure the success or failure of the bilingual students at Cambridge Rindge and Latin School, we need to address and examine their dropout rates in the context of the transitional bilingual program as well as of the total enrollment of the high school student population. Therefore, this author proposes an in-depth analysis and an ongoing study to estimate the numbers, the reasons, the grade levels and the social make up of those bilingual students who have been removed from school rolls.

It would be helpful if the findings from this study and the recommendations based on these findings could be made available to guidance counselors, teachers and all levels of administrators at C.R.L.S. These documents should also be made part of a drop-out prevention program targeted to the bilingual students at C.R.L.S.
11. Guidance counselors, administrators, teachers, and other staff need to be sensitive to the community's language preference--and to accept the fact that some information needs to be given in both the student's language and English.

This researcher urges the Cambridge School
Superintendent and the Cambridge School Committee to endorse and adopt this proposal to reform the present system (bilingual education) to include more varied pedagogical approaches of instruction to educate our bilingual student population.

This researcher also urges the parents of the students in the bilingual program not to fear this proposal because it would ultimately strengthen and raise the standards for our bilingual students based upon a clear vision of what constitutes an educated person in the tradition of Plato and Aristotle.

Finally, the author does not intend to prove or disprove the quality, or effectiveness of the bilingual program and its representatives at Cambridge Rindge and Latin School. Rather, it is the author's intention to raise some questions and focus his attention on the modus operandi of the program and how we can come up with improved approaches and strategies to better educate the future generations of immigrant students.

Hopefully, this improved and expanded pedagogical approach to educate our bilingual students should provide a curriculum studiorum which will work toward a better educational system, a system that stresses the worth of all individuals as human beings including human relations skills, a scholarly approach to subject areas, and the necessary values of tolerance, patience, and honesty. In such a new educational approach, the bilingual students, not the system, would become the center of attention.

The researcher further favors an institutionalized role for parents in the Cambridge School System and would also devise a minority language-based desegregation plan to assign bilingual students on the basis of language as well as to the various houses and programs at Cambridge Rindge and Latin School.

NOTES

1. "Educating the Melting Pot," U.S. News, 31 March, 1986, pp. 20-21.
2. Ibid.
3. "Proposed Cuts in U.S. Student Aid Outline," The Boston Globe: 12 January 1986 , p. 13.
4. Ibid.
5. Ibid.
6. Ibid.
7. "Rewards of Gramm-Rudman," NEA Today, April 1986, p. 6.
8. "Language Debate," The TAB, 22 October, 1985, p. 22.
9. Ibid.
10. Ibid.
11. "Educating the Melting Pot," U.S. News. 31 March 1986 pp. 20-21.
12. "Proposed Cuts in the Student Aid Outline," The Boston Globe, 12 January 1986 , p. 13.
13. "Measuring Progress:" The TAB, 24 September 1985, p. 21.
14. "Parting Words from Spillane," The Boston Globe, 28 June 1985, p. 42.
15. "English Spoken Here, O.K.?", Time, 25 August: 1986 , p. 27.
16. Ibid.
17. Ibid.
18. Ibid.
19. Ibid.
20. Ibid.
21. Ibid.
22. Cambridge Rindge and Latin School. The Student Handbook, 5 September 1976 , p. 1-5.
23. Ibid.
24. Interview with John R. McCarthy, Provisional Secretary of the School Committee, and A. Giroux, Director of Public School System, Cambridge, MA, 1 February 1985.
25. "For Learning or Ethnic Pride?" Time, 8 July 1985, pp.
$80-81$.
26. U.S. Department of Education, Address by William J. Bennett, U.S. Secretary of Education (Washington, D.C.: Government Printing office, 1985), p. 14.
27. Interview with Richard Pavo, Director of Bilingual Education, Fall River Public Schools, Fall River, Massachusetts, November 23, 1987.
28. Interview with Mario Teixeira, Director of the Transitional Bilingual Program, New Bedford Public Schools, New Bedford, Massachusetts, November 23, 1987.
29. David C. McClelland, "What Should Testers Be Measuring?" American Psvchologist, 1973, p. 12.
30. See Appendix A.
31. Encyclopedia Americana, 1982 Ed., S.V. "Colleges and
32. Norman H. Nie, et al., SPSS, Second Edition, Copyright 1975, 1970 by McGrath-Hill, Inc., pp. 1-20.
33. Charles A. Ferguson, "Bilingual Education - An International Perspective," in Bernard Spolsky and Robert Cooper, Eds., Frontiers of Bilingual Education, (Rowley, MA: Newbury House Publishers, 1977), pp. 159-174.
34. Ibid.
35. U.S. Department of Education, Address by William J. Bennett, U.S. Secretary of Education (Washington, D.C.: Government Printing Office, 1985), p. 4.
36. W.J. Lederer and E. Burdick, The Ugly American (New York: Norton, 1958), p. 23. P. Simon, The Tongue Tied American: Confronting the Foreign Language Crisis (New York: 1980), p. 2. President's Commission of Foreign Language and International Studies, A Report to the President, Strength Through Wisdon: A Critique of U.S. Capacity (Washington, D.C.: U.S. Government Printing Office, 1979).
37. Massachusetts Department of Education, The Massachusetts Bilingual Reporter, Spring, 1983.
38. W. Lambert, Faces and Facts of Bilingualism. Bilingual Education Series 10 , Papers in Applied Linguistics (Washington, D.C.: National Clearing House for Bilingual Education, 1981), pp. 4-5.
39. E. Glyn Lewis, "Bilingualism and Bilingual Education-The Ancient World to the Renaissance," in Bernard Spolsky and Robert Cooper, Eds., Frontiers of Bilingual Education (Rowley, MA: Newbury House Publishers, 1977), pp. 22-93.
40. Ibid.
41. Ibid.
42. Ibid.
43. James R. Smith, Ramiro D. Reyes, and Guillermo Lopez, Studies on Immersion Education California State Department of Education, 1984).
44. Ibid.
45. Heinz Klos, The American Bilingual Tradition (Rowley, MA: Newbury House Publishers, p. 37).
46. Interview with Richard Pavo, Director of Bilingual Education, Fall River Public schools, Fall River, Massachusetts, November 1987.
47. Ibid.

November 1985, pp. 45-47.
49. Ibid.
50. W.V. Slack and D. Porter, "The Scholastic Aptitude Test: A Critical Appraisal." Harvard Educational Review, 1980, pp. 154-172.
51. Ibid.
52. Ibid.
53. Ezra Bowen, "Cracking the SAT Code," Time: April 1985, p. 61.
54. Ibid.
55. Ibid.
56. Ibid.
57. "SATs: Do They Make the Grade?" Boston Globe, 7 November 1985, pp. 45-47.
58. Ibid.
59. Ibid.
60. Ibid.
61. Ibid.
62. Ibid.
63. Ibid.
64. College Entrance Examination Board, SAT and Achievement Tests, Copyright 1985, p. 4.
65. See Appendix B.
66. See Appendix C.
67. "For Learning or Ethnic Pride?" Time, 8 July 1985, pp. 80-81.
68. Ibid.
69. Ibid.
70. "Educating the Melting Pot," U.S. News: 31 March 1986. pp. 20-21.
71. Ibid.
72. Ibid.

## Appendix A

Senior Survey and
Questionnaires

ANNUAL SENIOR SURVEY
May 17, 1988
Dear Seniors:
Please take the time to identify your future plans. Thank you. A very happy graduation to all.

Sincerely,
Samuel Framondi

College Name Major Full/Part-time

I will attend in September:

1. 4-year private
2. 4-year public
3. Junior College $\qquad$
$\qquad$
4. Trade School/ Post-grad training
5. Work
6. Don't know.

Date: $\qquad$

Dear Student:
Thank you for taking the time to fill out this questionnaire. Your answers, I am sure, will be of great help and assistance in my attempt to write a doctoral thesis at the University of Massachusetts at Amherst.

Needless to say, the information given to me via this questionnaire will be treated in a highly confidential way and your anonymity will be protected at all costs.

Sincerely,

Mr. Samuel R. Framondi Doctoral Candidate U. of Mass. at Amherst

Today's Date:

1. Student Last Name: $\qquad$ 2. First Name: $\qquad$ 3. M.I. $\qquad$ 4. Address: $\qquad$ 5. City: $\qquad$
2. State: $\qquad$ Tel. \# $\qquad$ 8. Sex: M. F. $\qquad$
3. Place of Birth: $\qquad$ 10. Date of Birth: $\qquad$
4. How Do You Describe Yourself?
a. American Indian
e. Spanish
b. Black/Afro-American/Negro
c. Mexican/American
d. Oriental/Asian-American
f. White/Caucasian
g. Other
5. Place of Employment: $\qquad$
6. Father's Name: $\qquad$ 14. Place of Employment: $\qquad$
7. Father's Place of Birth: $\qquad$
8. Indicate the Highest Level of Education Completed by Your Father:
a. Elementary School f. Bachelor's Degree
b. Some High School
g. Some Graduate Work
c. High School Diploma
h. Graduate Work
d. Business/Trade School
e. Some College
i. Doctor/Ph.D.
j. Other
9. Mother's Name: $\qquad$ 18. Place of Employment: $\qquad$
10. Mother's Place of Birth: $\qquad$
11. Indicate the Highest Level of Education Completed by Your Mother:
a. Elementary School
b. Some High School
c. High School Diploma
d. Business/Trade School
e. Some College
f. Bachelor's Degree
g. Some Graduate Work
h. Graduate Work
i. Doctor/Ph.D.
j. Other
12. Language Spoken at Home:
13. Is English Your Best Language?

Yes
No
23. Student:
a) E.S.L.
b) Bilingual
24. Elementary School Attended: $\qquad$
25. High School: $\qquad$ 26. Did you Attend? Yes No
27. Year You Left School: $\qquad$ Reason: $\qquad$
a. Freshman
c. Junior
b. Sophomore
d. Senior
28. Reason:
29. G.E.D.: Yes No Date Taken: $\qquad$
30. Reasons for Taking the General Educational Develop\}ent Test:
a. To better your job situation.
b. To meet an admission requirement for college.
c. To meet an admission requirement for vocational job.
d. Taken for personal reasons.
e. Other.
31. Adult Diploma Program: Yes No
32. Reasons for Enrolling in the Adult Diploma Program:
a. To better your job situation.
b. To meet an admission requirement for college.
c. To meet an admission requirement for vocational job.
d. Taken for personal reasons.
33. Marital Status: $\qquad$
34. Number of Children: $\qquad$
35. Were you a Part of the Adolescent Parenting Program: Yes No
36. Did Your Parents: a
Your Leaving School:
A. 1. Family Obligation
B. 2. Lack of good place to study at home.
C. 3. Parents aren't interested in my education.
D. 4. Teachers don't help me enough.
E. 5. School doesn't offer the courses that meet my needs.
F. 6. Find it hard to adjust to school.
G. 7. My job takes too much time.
H. 8. Marriage or marriage plans.

## Appendix B

1. Permission letter to Dr. Robert Peterkin, Superintendent, Cambridge School Department, 159 Thorndike Street, Cambridge, MA 02139.
2. Research Application Information.

April 1, 1986

Dr. Robert Peterkin
Superintendent, Cambridge School Department 159 Thorndike Street
Cambridge, MA
Dear Dr. Peterkin:

As you very well know, I am presently enrolled in a Doctoral Program at the University of Massachusetts at Amherst: and, therefore, I am taking the liberty of writing to you in order to inform you that $I$ am in the process of writing a Doctoral Dissertation entitled: "An Historical Comparison and Analysis of Test Scores and Background Characteristics of E.S.L. and Bilingual Students at Cambridge Rindge and Latin School."

I would therefore appreciate it very much, at this time, if you could kindly grant me permission to do what $I$ have forthwith respectfully requested.

Needless to say, Dear Dr. Robert Peterkin, the abovementioned information pertaining to our students will be handled with professionalism and confidentiality; and, of course, the rights and welfare of our human subjects or participants will be protected always and at all costs.

Dear Dr. Robert Peterkin, allow me at this time to formulate and extend to you my deepest appreciation and thankfulness for your kind consideration on this matter.

Very truly yours,
Mr. Samuel R. Framondi Doctoral Candidate University of Massachusetts at Amherst Amherst, Massachusetts

Dr. Diane Tabor, Assistant Principal
Mr. Henry Lukas, Assistant Principal
Dr. Ray Shurtleff, Dean, Pilot School
Dr. Theresa Yeldell, Youse B. Administrator
Dr. Paula Hogan, House C. Administrator
Mr. Ruben Cabral, House D. Administrator

> Office of the
> SUPERINTENDENT of SCHOOLS
> 1702 Cambridge Street Cambridge, Massachusetts 02138

ALBERT H. GIROUX Director of Public Relations

## RESEARCH APPLICATION INFORMATION

NAME OF RESEARCHER: Samuel Framondi TELEPHONE \# 864-4163
ADDRESS: 74 Kirkland St. Apt. 1
CITY: Cambridge, Mass. $\quad$ ZIP: 02138 DATE: $9 / 20 / 84$
COLLEGE/UNIVERSITY: University of Mass. at Amherst

1. TITLE OF RESEARCH PROJECT: A pedagogical analysis of foreign students - a comparative study.
2. PURPOSE OF PROJECT: a study of bilingual program of present and future.
3. BRIEF DESCRIPTION OF METHODOLOGY: Computer search of source materials and personal interviewing of students.
4. DATE PROJECT IS TO BEGIN IN SCHOOL(S): October 1985
5. ESTIMATED COMPLETION DATE: 1987
6. STUDENT'S AGE OR GRADE LEVEL: 9-12
7. WILL RESEARCH BE CONDUCTED DURING SCHOOL HOURS? YES NO $\underline{X}$
8. ESTIMATE TIME CHILD WILL BE REQUIRED TO TAKE PART IN EACH SESSION OF THE PROJECT: 2 hours
9. TOTAL PARTICIPATION TIME REQUIRED OF EACH STUDENT: 2 hours
10. WILL TEACHER(S) BE REQUESTED TO PARTICIPATE? YES NO $\underline{X}$ A. ESTIMATED PARTICIPATION TIME:
11. WILL PARENT (S) BE REQUIRED TO PARTICIPATE? YES NO $\underline{X}$ A. ESTIMATED PARTICIPATION TIME:
12. WILL SCHOOL ADMINISTRATOR(S) BE REQUESTED TO PARTICIPATE?
13. HOW WILL CAMBRIDGE STUDENTS/FACULTY BENEFIT FROM THIS PROJECT? see attached letter.

The project will be done with information on the computer - no name will be used, just statistical information. If the need arises, I will speak to individual students, parents, teachers, guidance counselors and administrators at the time. I will secure a release form from these people. I feel that the students and faculties of the Cambridge Rindge and Latin School will benefit from this project in the following ways:

1) Cambridge has had as one of its goals multi cultural education. What better way to understand their cultures than to study them.
2) As a service to these new American residents we can give them help in coping with life in Cambridge if we know what they must face.
3) We can assist students in dealing with formalized testing programs if we can understand what problems they must face.
4) As staff we must be alert to the major problems faced by limited English speaking youths.
5) Lastly, we at CRLS must be sensitive to the peculiar needs of bilingual students.

ADDENDUM: If the need should arise I would like to interview discretely and in confidence selected pupils, and, at the same time, retrieve from school records and school computer all material pertaining to the individual students relative to my project for a doctoral thesis at the University of Mass. at Amherst.

Furthermore, my examination of the different phases of comparing contrasting individuals and group records of achievement of lack thereof, including high risk students should result in a hands-on tool for use in helping students.

Awaiting a favorable response from you in order that I may proceed as expeditiously as possible, I am

Bowen, E. "Cracking the SAT code." Time, Anril 1985. p.
California State Department of Education. Studies on Immersion Education. 1984 .

Castellano, D. The Best of Two Worlds. New Jersey State Department of Education CH 5001983.
"Climbing the Grades." TAB: 17 February 1987.
Cohen, M. "Court Should Leave Boston Schools. Board Says." The Boston Globe, June 1985, p. 28.

College Entrance Examination Board. Taking the Achievement Tests. 1985.

College Entrance Examination Board. SAT and Achievement Tests. 1985.

College Entrance Examination Board. Taking the SAT. 1985.
College Entrance Examination Board. Scholastic Aptitude Test, SAT. 1986.

Comras, J. "The SAT--What does it Measure and Does it Still Work?" Mass. Bulletin, April 1984.

Crouse, J. "Does the SAT Help Colleges Make Better Selection Decisions?" Harvard Educational Review, 1985.

Dulay, H.C. and Burt, M.K. Why Bilingual Education? $A$ Summary of Research Findings. (2nd ed.). San Francisco: Bloomsbury West, 1978.

Duran, R.P. Hispanics' Education and Background. New York: College Board Publications.
"Educating the Melting Pot." U.S. News, 31 March 1986.
Educational Testing Service. "Test of English as a Foreign Language." 1985-86 Bulletin of Information and International Student Identification Service. 1985.

Encyclopedia Americana, 1982 ed. S.V. "Colleges and Universities."

Femminella, F.X and Quadaque, J.S. "The Italian American Family." In C.H. Mindel and R.W. Habenstein (Eds.), Ethnic Families in America. New York: Elsevier, 1976.
"For Learning or Ethnic Pride?" Time, 8 July 1985.
Grove, L. Cross-cultural and Other Problems Affecting the Education of Immigrant Portuguese Students in a Program of Transitional Bilingual Education. Doctoral dissertation, Columbia University, 1977. Ann Arbor, Michigan: University Microfilms, No. 7714.

Healy, R.H. Neighborhood Budgets. 1987.
Henry, W.A. III. "Against a Confusion of Tongues." Time. June 1983, p. 30.

Hernandez, P. "Wilson Alters Bilingual Hand." The Boston Globe, March 1986, p. 13.

Hernandez. P. "Bennett Urges Effort to Boost Schools." The Boston Globe, April 1986, p. 18.

Kloss, H. The American Bilingual Tradition. Rowley, MA: Newbury House Publishers, 1977.

Lambert, W. Faces and Facets of Bilingualism: Bilingual Education Series 10, Papers in Applied Linguistics, Washington, D.C.: National Clearing House for Bilingual Education, 1981.

Lederer, J. W. and Burdick. E. The Ugly American. New York: Norton, 1958.
"Legislators Say No to Bilingual Bills." The Boston Globe, March 1986, p. 40.

Lewis, E. Glyn. "Bilingualism and Bilingual Education-The Ancient World to the Renaissance." In Spolsky, B. and Cooper, R. (Eds.), Frontiers of Bilinaual Education. Rowley, MA: Newbury House Publishers. 1977, pp. 22-93.

Mackey, W.F. Bilingual Education in a Bilingual School. Rowley, MA: Newbury House Publishers.

Maher, M.E. "Sociocultural Origins of Achievement Motivation." In: D. Bar-tae and L. Sax (Eds.), Social Psychology of Education. Washington, D.C.: Hemisphere Publishing, 1978.

McCarthy, J.R. and Giroux, A., Cambridge School System, Cambridge, MA. Interview, 1985.

McClelland, D.C. "What Should Tests be Measuring?" American Psuchologist, 1973.

Morrow, L. "Immigrants." Time, July 1985, pp. 24, 101.
National Council on Foreign Language and International Studies. Report of the Task Force on National Manpower Targets for Advanced Research on Foreion Areas: New York: National Endowment for the Humanities, 1982.

National Commission on Excellence in Education. A Nation at Risk: The Imperative for Educational Reform. Washington, D.C.: U.S. Government Printing office, 1983.

NEA Today, 1 April 1986.
Pavo, R., Director of Bilingual Education, Fall River Public Schools, Fall River, MA. Interview, November 23, 1987.

Powell, B., and Steelman, L.C. "Variations in State SAT Performance: Meaningful or Misleading?" Harvard Educational Review, 1984.

President's Commission on Foreign Language and International Studies. A Report to the President, Strength Through Wisdom: A Critique of U.S. Capacity. Washington, D.C.: U.S. Government Printing office, November, 1979.
"Proposed Cuts in U.S. Student Aid Outlined." The Boston Globe, January 1986, p. 13.

Ramist, L. and Arbeiter, S. Profiles, College-Bound Seniors. New York: College Entrance Examination Board, 1983, 1984, 1985, 1986.
"SATs: Do They Make the Grade?" Boston Globe, 7 November 1985, pp. 45-47.

Sege, I. "Parting Words from Spillane." The Boston Globe, June 1985, pp. 41-42.

Sheeler, W. "Welcome to English Placement Tests." Form B, English Service, Inc., Copyright 1980, pp. 1-28.

Simon, $P$. The Tongue-Tied American: Confronting the Foreign Language Crisis. New York: Continuum, 1980.

Slack, W.V. and Porter, D. "The Scholastic Aptitude Test: A Critical Appraisal." Harvard Educational Review, 1980.

Smith, J.R., Reyes, R.D., and Lopez, G. Studies on Immersion Education. California State Department of Education, 1984.

TAB, 24 September 1985.
Teixiera, M., Director of Bilingual Education, Fall River Public Schools, Fall River, MA. Interview, November 23, 1987.

Troike, R.C. "Research Evidence for the Effectiveness of Bilingual Education." National Association of Bilingual Education Journal, 1978.
U.S. Department of Education. Address by William J. Bennett, U.S. Secretary of Education. Washington, D.C.: Government Printing Office, 1985.

