UNDER-ACHIEVEMENT IN FOREIGN LANGUAGE LEARNING. FINAL REPORT.
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OHIO STATE UNIV., COLUMBUS, RESEARCH FOUNDATION
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TEACHER, STUDENT, AND CURRICULUM ARE ALL SUBJECT TO
EXAMINATION IN THIS REPORT TO DETERMINE EACH ONE'S ROLE IN
CREATING THE FOREIGN LANGUAGE UNDERACHIEVER, DEFINED AS A
STUDENT WHOSE LANGUAGE GRADES DIFFER MARKEDLY FROM HIS
OVERALL GRADE-POINT AVERAGE. THE IDEAL SETTING FOR THE
INVESTIGATION WAS KING CITY, PSEUDONYM FOR THE ACTUAL CITY,
WHERE SUBJECTS FOR EACH EXPERIMENTAL PROGRAM WERE SELECTED
FROM 12 SCHOOLS, 7 JUNIOR HIGH AND 5 HIGH, CONTAINING
TWO-THIRDS OF THE FOREIGN LANGUAGE CLASSES IN KING CITY. THE
STUDENT'S VIEWPOINT, OFTEN OVERLOOKED, IS OFFERED IN CHAPTER
TWO WITH THE FREQUENTLY STATED PROBLEMS OF ADAPTING TO
TEACHER DIFFERENCES FROM YEAR TO YEAR, ADJUSTING TO THE
GRADING POLICY OF EACH TEACHER, AND WANTING THE MOTIVATION
THAT CAN BE DERIVED FROM THE PLEASURE OF SPEAKING THE TARGET
LANGUAGE. MOTIVATION, AUDITORY ABILITY, PERSONALITY, AND
OTHER INDIVIDUAL ATTITUDES ARE DISCUSSED IN CHAPTER THREE AS
FURTHER FACTORS RESULTING IN UNDERACHIEVEMENT. THE CONCLUDING
CHAPTER IDENTIFIES STUDENT AUDITORY ABILITY (BEING EAR-MINDED
AS OPPOSED TO EYE-MINDED) AND PROGRAM ARTICULATION AS TWO
PRINCIPAL CAUSES OF UNDERACHIEVEMENT. SUGGESTIONS ARE MADE
FOR DEVELOPING TECHNIQUES SUITABLE FOR STUDENTS OF VARIOUS
LEVELS OF ABILITY, INCLUDING THOSE OF LOW AUDITORY ABILITY.
APPENDIXES INCLUDE VARIOUS TESTS ON APTITUDE, MOTIVATION,
ATTITUDE, AND PERSONALITY, TABLES OF DATA BASED ON THESE
TESTS, AND CLINICAL INTERVIEWS. (SS)
Under-Achievement in Foreign Language Learning

(Final Report)

by Paul Pimsleur, Donald M. Sundland, Ruth D. McIntyre

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UNDER-ACHIEVEMENT IN FOREIGN LANGUAGE LEARNING

(Final Report)

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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We wish to thank the administrators, teachers, and students of 'King City' for their unfailing cooperation.

P.P.
D.M.S.
R. McI.
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Chapter One

THE PROBLEM, THE APPROACH

In the years that have elapsed since World War II, America's traditional isolationism has given way to world-mindedness. This evolution began during the war when 11 million Americans in the Armed Forces were located overseas and found themselves in contact with foreign nationals. After the war, the need to maintain occupation forces in foreign countries continued to bring young Americans into contact with the people of other countries. In the political sphere, American participation in the Marshall Plan, the United Nations, NATO, and SEATO marked stages in our increasing concern with other nations of the world.

This striking tendency toward world-mindedness gradually affected attitudes toward foreign language instruction at home. When education went back to normal after World War II, attempts were made to apply to public education the methods of intensive language training developed during the war. However, it was only after the Russians launched their Sputnik in 1957 that the full tide of change reached the American secondary schools. The Conant Report (1959) called for a profound overhaul of our secondary schools, singling out three subject fields for greatest attention: mathematics, the natural sciences, and foreign languages. The former two had been the focus of public attention for some time. Now foreign languages came into the public spotlight for the first time in our educational history. The deficiencies in our foreign language instruction were quite evident. Classes were large: even choral drill in the spoken language is difficult with 40 or 45 students;
individual drill is out of the question. Teachers were all too often ill-prepared, and themselves incapable of carrying on a fluent conversation in the foreign language. The time given to foreign languages in the curriculum was inadequate: two years, or even three, is not enough for most students to attain real proficiency in speaking, reading, and writing a foreign language. Textbooks and teaching methods stressed a series of goals -- reading decipherment, stumbling translation, litanies of rules -- quite inappropriate to a shrunken world in which every American will, in his lifetime, probably have face-to-face contact with citizens of other countries.

Congress set about to correct this state of affairs through the National Defense Education Act of 1958. The NDEA began its long program of upgrading foreign language teaching in America by providing funds for area study centers, teacher training institutes, new teaching materials, new tests, exploration of the media of educational television and films, hiring supervisory personnel at state levels, and scientific research in linguistics and the psychology of language learning. This program, with its many ramifications, has reached and continues to reach into every foreign language classroom.

Foreign languages now receive regular attention in the public press and at the highest governmental and military levels. President Kennedy uses the phrase "Alianza para el progreso." The First Lady's speeches in French and Spanish receive wide public attention; they are a source of national pride. Scott Carpenter, orbiting the earth, sends a message in Spanish while passing over Mexico. Generals guarding our world-wide military interests stress the benefits both to the individual and to the nation of foreign language proficiency.
In view of the heightened awareness of the value of foreign language study, the problem posed by individuals who are unable to learn a foreign language takes on special significance. Many people who truly desire to learn a foreign language fail in this attempt, however hard they try. It is not difficult to find individuals who will readily declare that they suffer from this incapacity ("I just can't seem to learn a foreign language"). This inability is often accompanied by feelings of frustration ("I wonder what's wrong with me?").

The problem is equally apparent in our schools. In any elementary school, high school, or college, you will find a number of students having particular difficulty in foreign language study, substantially greater difficulty than they encounter in other subjects. How many individuals suffer from this difficulty? Evidence from a number of sources shows the gravity of the problem. At the college level: 100 students in elementary French and Spanish classes at The Ohio State University were asked to indicate whether language study was harder, easier, or the same for them as other subjects. Of the 100 respondents, 32 said that foreign languages were more difficult for them than their other subjects; 24 said foreign languages were easier. When asked to indicate whether they believed that they themselves had a "block" where foreign languages were concerned, 12 individuals responded affirmatively. Here, then, is an estimate of 12% linguistic difficulty in college language classes. (Apparently there is little social stigma attached to lack of linguistic ability, since college students are so willing to reveal it.) At the high school level, Morrison (1962) found that more than 20% of the foreign language students received lower grades in this subject than in their other courses.
At the elementary level, a five-year study by Dunkel and Pillet (1957, p.150) in the experimental school of the University of Chicago revealed that about 15% of the students showed special weakness in foreign language study. It appears, then, that 10 to 20% of all students now studying foreign languages are beset by a frustrating lack of ability in this area. If we consider the frequency of language disability among adults as well as among students, it is clear that the problem is due for study. In most cases, the cause of failure is simply ascribed to "lack of talent" and the matter pursued no further; no methods exist for helping these individuals.

The problem of lack of ability to learn a foreign language cannot be equated with low intelligence. The correlation between intelligence and success in foreign language study is modest, about .40. (Pimsleur, Mosberg, and Morrison, 1962; von Wittich, 1962). Moreover, the problem of lack of success in foreign language learning occurs among gifted students as well as among less bright learners, as shown by Dunkel and Pillet (1962) and by Terman (Burks, 1930, p.80) in his research of many years with gifted children. It is precisely because lack of ability in foreign languages does not seem to correlate with intelligence that the problem is such a frustrating one. For some students, the difficulty they encounter in their foreign language class is the first real problem in their school life. Failure in this area may necessitate a reevaluation of themselves and their career plans, and may have a lasting effect on the individual concerned. This study was undertaken because no body of information nor any techniques currently exist for helping these students.

The problem of under-achievement in foreign language learning (for that is the name by which we shall call it) exists at all school levels; however, its
causes can best be discovered by studying it at its origin. For this reason, the major focus of this study is upon the junior and senior high school, where, for the most part, individuals in our society begin to study a foreign language.

What is an under-achiever?

What is needed to begin is an operational definition of under-achievement, a definition which indicates how to identify an under-achiever.

A foreign language under-achiever is defined as a student whose grade in a modern foreign language is at least one grade-point lower than his average grade in other major subjects.

Some of the terms of this definition need explanation. For purposes of this study, a foreign language grade was obtained for each student by averaging his language grades for the first three marking periods (each six weeks) of the academic year 1961-1962. The major subject average was the average of his grades in English, mathematics, history and sciences for the previous year; language grades were naturally excluded. The student's grade-point average was calculated on the commonly used system, A=4, B=3, C=2, D=1, and F=0.

How do teachers in King City* arrive at the grades they give their students? Most language teachers in King City give grades for written homework almost daily; they also give periodic quizzes, and a written examination every six weeks. From these, plus an evaluation of the student's class performance, they arrive at a grade for each six-week marking period. The six six-week grades, plus a final examination grade, are then averaged to

* King City is a pseudonym for the city in which this investigation took place.
obtain the final grade for the year, which is entered on the student’s permanent record. Even though the student’s oral performance in daily class work is not translated into numbers in the grade book, it contributes to the teacher’s impression of him. Teachers may sometimes allow themselves to be swayed by such impressions, the more so since they are rarely asked to justify the grades they give.

How valid is this marking procedure? That is, how well is the student’s command of the foreign language reflected by his grade? A battle is currently being waged in America around this very point. The controversy centers on what constitutes command of a foreign language, and how it may be attained. Those who hold that command of a foreign language means the ability to speak and understand it, as well as to read and write it, would claim that a teaching method which grades students mainly on how well they translate sentences, fill in blanks, and perform written grammatical manipulations is largely beside the point (i.e., not valid). The battle, which is being fought in King City as it is elsewhere, is an important one. Perhaps the problem of foreign language under-achievement will change as the shift to audio-lingual instruction progresses. However, experience has shown that the number of under-achievers does not necessarily decrease under audio-lingual instruction, for the effort to learn solely by ear, without recourse to reading, intensifies the problem for some students. In our consideration of under-achievement, the implications of the change toward audio-lingual emphasis will not be neglected. But the study focuses upon the situation as it now exists in King City, where, as in so many other American cities, a slow transition is taking place.
By our definition, a student is called an under-achiever if his language grades differ markedly from his over-all grade-point average. This procedure implies that a student's grade-point average is a good indication of how well he "ought to do" in a foreign language. The use of the grade-point average in this fashion is not difficult to justify; studies have consistently shown it to be superior to such other measures as IQ, Stanford Achievement Test scores, and English grades, as a predictor of foreign language achievement (Morrison, 1962; von Wittich, 1962). Typically, it is found that IQ correlates with foreign language achievement to the extent of about .40, while grade-point average correlates about .60 to .70. The high degree of predictive accuracy attained by use of grade-point average is very useful; however, it leads one to reflect on the foreign language teaching methods now employed. The fact that foreign language grades can be predicted in the same way as grades in any other school subject is an indication that it is being taught like any other school subject. The more foreign languages are taught as a skill, in which oral and aural habits are the chief things to be acquired, the more the student's special abilities come into play, such as the ability to discriminate and articulate foreign sounds; these abilities presumably are not revealed by grade-point average, but require special tests to discover them. Nevertheless, given the kind of teaching and grading now in vogue, grade-point average has proven to be a good predictor of foreign language grades.
Experimental Approach

In the absence of any previous work on foreign language under-achievement, it was difficult for the investigators to predict where the causes of the problem might be found: whether in the teacher, the method of instruction, the curriculum, the student, or in a combination of these. In order to cover the wide range of possible causes, a variety of experimental procedures was employed.

Review of the literature. The investigation began with a review of the research literature to ascertain what factors had been found important to success in foreign language learning. This review (Pimsleur, Mosberg, and Morrison, 1962) yielded few substantial findings beyond the fact that intelligence and motivation play a large role. The literature of general academic under-achievement and that of under-achievement in mathematics were also reviewed, but contained little that could help explain under-achievement in foreign languages.

Record search. Four record sources were tapped for information about our subjects: current grade books, junior high school records, senior high school records, and cumulative (permanent) record cards. Each of these was used at one phase or another of the study. To match subjects, for instance, it was necessary to go to several sources to find such information about them as IQ, grade-point average, and their past and current language grades. In all, the current grades were checked for about 10,000 students, and about 3,000 permanent records were pulled and examined.
Observation of classes. During the course of the investigation, the two psychologists attended nearly 100 foreign language classes in junior and senior high schools, in both French and Spanish. They familiarized themselves with foreign language teaching methods, of which they saw a great variety, and studied the relationship of teacher-to-student and student-to-student.

Discussions with teachers. Informal talks were held with the 22 foreign language teachers involved in the study, to obtain their viewpoint on under-achievement and related matters.

Interviews with students. Interviews were held with more than 40 students, including under-, average-, and over-achievers. These interviews lasted approximately 40 minutes.

Experimental-control study. A technique of controlled experimentation was employed, using matched groups. Pairs of subjects were matched on such relevant variables as foreign language experience, sex, and IQ. One member of each pair was an under-achiever in foreign language, the other an average-achiever. These carefully matched groups were used in testing the various hypotheses discussed in Chapter 3.

Aptitude testing program. A separate phase of the investigation involved the development of an aptitude battery for predicting success in foreign language study. Two school periods were spent administering the eight-test battery to 33 classes containing over 1000 students in French and Spanish. The tests, which measure aptitude for language learning, rather than knowledge of French or Spanish, were administered in the middle of the school year. Several months later, toward the end of the school year, criterion tests of
achievement were administered to the same students; these included the Cooperative French or Spanish Test, the Pictorial Auditory Comprehension Test, the students' final language grades, and a special oral grade given by the teachers.

Clinical study. A number of individuals having a pronounced "block" against foreign languages were selected to be given clinical interviews by a psychiatrist. A psycho-diagnostician participated in this phase of the study.

Each phase of the experimental program required a different group of subjects. The subjects were selected from 12 King City schools: seven junior high schools and five high schools, containing two-thirds of the foreign language classes in King City, and attended by approximately 11,500 students, half of the city's total secondary school population.

King City

In many respects, King City afforded an ideal setting for this investigation. Its educational practices and the background of its students are sufficiently similar to those of other American cities that the results of these studies have validity for a large segment of the country.

King City is often described as "the typical American city."* It is located in the middle west, both geographically and temperamentally. It is near the center of a State whose considerable wealth comes from both

agriculture and industry. While the State is among the top 15 in per capita personal income,* its expenditures for education are very conservative; it ranks among the lowest 10 States in per capita support of education, other than higher education. Of every $1000 of personal income, about $8 is devoted to education, as compared with a U.S. average of $16.09. In higher education, the State is well endowed, having five State universities and more than sixty colleges.

King City itself has a stable and homogeneous population, consisting for the most part of white Protestants, with about 16% non-whites (as against 11.4% in the nation). Its population grew by about 25% in the period from 1950 to 1960, compared with an 18.5% increase for the U.S. as a whole. This growth reflects the increased birth rate, plus the arrival of some middle-income workers attracted by new and growing industries, and a low-income group which moved northward from the South. There are no sizeable cultural minorities, although several small religious sects (e.g. Amish, Mennonite) retain aspects of their European origin. There is a Greek Orthodox Church and several German churches, but these national groups contain few recent arrivals and are well assimilated. Only 2.3% of the population of King City is foreign born. In short, the foreign language situation in King City is not affected by the presence of any strong non-native influences, such as exist in some other large cities.

The latest census figures (1960) give a picture of the socio-economic conditions in the area from which our subjects are drawn. The 99 census

*State information source: Compendium of State Government Finances in 1961, U.S. Department of Commerce, Bureau of the Census. The assistance of the office of the State Director of Finance is gratefully acknowledged.
tracts of King City were ranked on four factors found in the census data*:
1) percent of dwellings renter-occupied; 2) percent of overcrowding per
dwelling (more than 1.01 persons per room); 3) percent of dilapidated dwellings;
4) average rent paid (in renter-occupied units). This ranking was then divided
into quartiles, the first quartile being the highest economic level, the second
next highest, and so on. In rough fashion, the four quartiles correspond to the
categories of "middle class," "lower middle class," "working class," "lower
class." There are virtually no "upper middle" and "upper" class subjects,
because these families live in suburbs and do not attend King City schools. A
summary follows of the socio-economic levels prevailing in the 12 school
districts from which our subjects were drawn:

Junior High School # 1 - high second quartile.
Junior High School # 2 - second quartile.
Junior High School # 3 - second and third quartiles, more of the latter.
Junior High School # 4 - same as # 3.
Junior High School # 5 - first quartile, some second.
Junior High School # 6 - predominantly third quartile with a few from
second and first quartile.
Junior High School # 7 - third quartile, some fourth.
High School # 1 - second and third quartiles.
High School # 2 - third and fourth quartiles.
High School # 3 - fourth quartile.
High School # 4 - first quartile, some second and third.
High School # 5 - draws from all four quartiles in nearly normal curve
distribution.

*1960 Census Tract Statistics, Research Monograph 103, Bureau of Business
Research, The Ohio State University. The assistance of sociologists Simon
Dinitz and Judson R. Landis is gratefully acknowledged.
As this information shows, our sample is heterogeneous with regard to socio-economic level. There is some selectivity operating, in that students from lower economic strata do not tend to study foreign languages as much as those at the middle and upper levels. Nevertheless, it may be said, as far as socio-economic background is concerned, that the subjects of these experiments represent a fair sample of students studying foreign languages in public junior and senior high schools.

**Foreign Language Study in King City**

Since 1957, when the launching of Sputnik touched off a period of self-criticism in American education, each city has met the challenge to improve foreign language instruction in its own way. In King City, traditional conservatism with regard to educational adventures has slowed the pace of change. Funds for the improvement of foreign language teaching have not been voted freely, nor has the city taken advantage of matching funds offered by the federal government under the National Defense Education Act. Foreign language supervisors are not given authority to put extensive revisions into effect. Consequently, programs of language instruction, while planned on a city-wide basis, are often not carried through as intended because of the degree of autonomy enjoyed by each school principal and, in practice, by each classroom teacher. Though all the schools use the same textbooks, each teacher provides a different emphasis. Thus, there is considerable unevenness in the continuity of foreign language study as a student moves from one teacher to the next; some students suffer a good deal from this lack of continuity, as we shall see.
Hiring procedures do not make for optimal foreign language teaching. A case in point is that of a King City high school which needed to hire a French teacher. A young lady was available whose French was excellent, but whose second subject was not one the school needed. A different teacher was hired; her French was considerably less fluent, but she offered a more favorable combination. The school can, of course, point to its very real budgetary limitations which necessitate hiring teachers who can teach more than one subject. At the same time, the schools complain that prospective teachers do not get good enough training at the university. They are not entirely unjustified in this, for teacher preparation is generally less adequate than one might wish, and very few of the foreign language teachers of King City are capable of conversing fluently and with a good accent in the language(s) they teach. Very few have attended NDEA Institutes. Hardly any have resided in a foreign country. These are some of the circumstances which get in the way of better foreign language teaching.

King City is on a 6-3-3 school plan; elementary – junior – senior high. Any student can elect to take a foreign language in the 9th, 10th, 11th or 12th grades. Foreign languages are also offered in the 8th grade, but a student must have approval to begin at this level. Most students who decide to take a foreign language elect to begin in the ninth grade. Although there is now some foreign language teaching in the elementary schools, mainly by radio and television, most of the subjects of this study were past the primary grades before such efforts began. In a sample of 857 junior high and high school students, only 64 (7%) had been exposed to a foreign language before the eighth
grade. Our data show that students who begin in the eighth grade are more academically able than those who begin in the ninth grade. In a random sample of 42 eighth-graders taking a foreign language, 32 had a grade-point average of B or higher, while in a sample of 62 ninth-graders, the corresponding figure was only 18, a difference which is statistically significant.

Which foreign languages are studied in King City? Here are the figures for King City, compared with those for the State and the Nation:

<table>
<thead>
<tr>
<th></th>
<th>Latin</th>
<th>Spanish</th>
<th>French</th>
<th>German</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>King City (1962)</td>
<td>10.4%</td>
<td>12.3</td>
<td>8.9</td>
<td>1.0</td>
<td>32.6</td>
</tr>
<tr>
<td>State (1960)</td>
<td>11.6</td>
<td>7.7</td>
<td>7.3</td>
<td>1.7</td>
<td>28.3</td>
</tr>
<tr>
<td>U.S.A. (1960)</td>
<td>7.6</td>
<td>10.8</td>
<td>8.6</td>
<td>1.7</td>
<td>29.3</td>
</tr>
</tbody>
</table>

King City differs little from the national averages in modern foreign language enrollment, Spanish being somewhat more popular than French. The total percentage of language enrollment is higher in King City than in the nation (32.6% versus 29.3%), but the King City figures are more recent by two years, and probably reflect a general increase in interest in foreign language study. Latin is studied by more students in this State than in the country as a whole; this is also true in King City. Some students take both Latin and a modern foreign language; in a sample of first-year French and Spanish classes, about 25% of the students had previously studied Latin. In second-year classes, the figure found was only 10%, which may indicate something of a tendency for Latin to have a detrimental effect on the subsequent student of a modern

*The King City figures were obtained from the local Board of Education; State and U.S. figures from Childers (1962).
foreign language. Teachers commented that students who have been accustomed to the analytic approach taken in most Latin classes sometimes have difficulty adjusting to the study of French or Spanish, which involves more performance and less analysis.

Another interesting feature is the drop-out rate. It is noteworthy that, of all those who begin a foreign language, only 50% continue past the first year! Only about one-tenth go into the third year! This is not exclusively a local problem, for these figures match almost exactly similar statistics for the State and for the nation as a whole.** One may wonder whether the same poor teaching which causes some students to drop the subject may cause others to under-achieve.

**Guidance in King City**

The guidance counselor should be an important person to the student who is under-achieving in a foreign language. He, the counselor, should discover the problem early, and initiate remedial action promptly. At the same time, he can learn much about the weaknesses in the foreign language program from such students, and help improve it by calling these weaknesses to the attention of the foreign language teachers. The latter, in turn, should be grateful for objective criticism given in a constructive and collegial spirit. In practice, few school systems achieve such close cooperation. In King City, there is too often a lack of understanding on the part of guidance counselors and foreign

* In King City, a student may receive credit for one year of a foreign language. There is no minimum standard for those going from FL II into FL III. No language is required for admission to the main State University.

language teachers of the advantages to be gained by mutual support.

The main reason guidance counselors do not play a larger role in dealing with foreign language under-achievement is simply that they do not have the time. In most King City schools, two or three teachers with training in guidance serve as counselors while carrying on their teaching duties on a reduced schedule. Their time as counselors is largely taken up helping students who are in serious academic difficulty, and in such duties as testing, keeping files of college requirements, and writing reports. They rarely have time to talk to students who are not actually failing. The average student sees a guidance counselor no more than once a year, often in a group rather than alone. When it is time for the student to plan his schedule for the following year, he receives some help from his homeroom teacher, and his program is then reviewed by a registration teacher. Only in cases of obvious difficulty is the student referred to a guidance counselor. Under-achievement in particular subjects is not spotted in any systematic way.
Chapter Two
UNDER-ACHIEVEMENT AND THE SCHOOLS

The voice of the student is seldom heard in the land. The opinion of others -- teachers, administrators, "educators" -- is readily sought, but that of the student is neglected. Yet there is certain information we can obtain only from him. No one but a student knows how it feels to be 15 years old, to be sitting in a French class, doing certain kinds of drills, making certain foreign noises, relating to the teacher and to fellow students. All of these have an effect upon his performance in the class, and no one can tell us about them as well as he. In connection with this study, two psychologists conducted 40-minute interviews with more than 40 students; most were under-achievers, though a few average and over-achievers* were included for comparison purposes. Those interviewed were between 14 and 18 years of age; their attitude was serious in discussing foreign language instruction as they had seen it. While their evaluations need not be taken at face value, for they are not experts in language teaching, yet the reasonableness of their appraisal compels attention. We learned much from them about the strong and weak points of foreign language instruction in King City. It was often possible to validate their opinions by empirical means.

In the interviews, certain criticisms were voiced again and again. The students frequently mentioned how difficult it is to adapt to the methods and

*An over-achiever is a student whose foreign language grade exceeds his average grade in other major subjects by at least one grade-point.
expectations of different teachers. They described the differences between last year's teacher and this year's teacher, or between a student teacher and a regular teacher, citing this contrast as a reason for their under-achievement.

A few excerpts from the interviews will illustrate their comments.*

Donald G., IQ-96, under-achiever:
Stud: First year wasn't too hard. Trouble was when I changed from one teacher to another. Since there was more than one teacher teaching it, some people had studied some things and others hadn't.

Int: What kind of change did you notice?

Stud: Now I have Mr. Smith; he teaches completely differently. He is interested in mostly verbs and the first year we didn't study too much about verbs. He makes it a lot more interesting. He thought we had studied the whole book in the first year. Of course, a lot of us hadn't.

Jane B., IQ-101, under-achiever:
Stud: Well, last year I learned absolutely nothing from Mr. Jackson. Mrs. Brown is a completely different teacher and I wasn't ready for her.

Int: How is she different?

Stud: Well, first of all she thought we had everything in the first year that we were supposed to and, of course, Mr. Jackson never taught us anything the first year. In the second year it's like starting all over again.

* Certain excerpts, like the first three, were taken verbatim from the interview, by tape recording; these use the first person. Others, like the last two, were written up after the interview from the psychologist's notes; these use the third person.
Judy L., IQ-130, over-achiever:

Stud: ... in first year I just slid along, it came easy to me because the other teacher, he didn't require hardly anything of us. I just learned it that day, like the day they were having a vocabulary test, I'd just learn it for that day and after that there wasn't much use for it. He didn't keep going on something and now, brother, because this teacher is pretty much the opposite, I've had to go back and review it; it's pretty hard.

Int: There's quite a difference between the two teachers?

Stud: Yes, pretty much. He's a lot better this year and I'm glad in a way except that I wish I could have had somebody who was a little harder on me in the first year and then I wouldn't have so many little problems that come up now.

Margaret J., IQ-98, under-achiever:

She commented the teacher must be effective. This teacher did somewhat better than the previous teacher, but not much. When she came to Bently High and took her second year of Spanish she had much difficulty. She thinks the first year is so important and it's such a handicap to try out new teachers on students unless they are really good. The students are the ones who are handicapped.... She thought her first two teachers were poorest in conversation; they followed the book and spent most of the time on grammar. The class did not converse in Spanish.

John J., IQ-138, under-achiever:

First and second years were not hard. The teacher last year did not push as hard as Miss Jenkins. There was a lot he should have learned last year but he didn't. His main difficulty is in reading .... His teacher last year was not the teacher Miss Jenkins is. The teacher last year couldn't get it across.

Statements like these, representative of many one might quote, indicate that any change of teacher is likely to produce learning difficulties for some
students. One investigator noted that all but one of the twenty-two students she interviewed mentioned the difference between teachers as a causal factor in under-achievement. Its importance is confirmed by the teachers themselves; in discussing with us the under-achieving students in their classes, they often ascribed a student's difficulty to the "poor preparation" he received from his previous teacher. The evidence suggests that there is very little standardization in King City in the teaching methods employed by various teachers, or even in the goals (reading, speaking, writing) they are striving to achieve. It appears -- this opinion was formed after sitting in on many classes -- that each teacher follows his own judgment, stressing this, passing over that, with the result that students are very unevenly prepared to move on to the class of another teacher. While there are periodic meetings of all the foreign language teachers, at which the syllabi are discussed, the agreements reached concern only which textbook is to be used, and how many lessons are to be "covered." Even these agreements are not observed by all teachers. One teacher considers, for example, that it is better to teach only the present and future tenses during the first year, but to drill those thoroughly. Meanwhile, the other teachers teach the imperfect and present-perfect tenses as well. The first teacher may be more "correct," in that mastery of a few tenses may indeed be a better route to learning to speak French than shaky knowledge of more tenses. Nevertheless, students coming from this teacher into a second-year class will be at a disadvantage.
In the matter of grading, the agreement on policy is also very imperfect. An example is the case of a teacher who gave her students high grades, averaging 3.3 (B), as against an average of 2.0 (C) for other classes. Yet the performance of her class on the Cooperative Test was among the poorest. This teacher is not necessarily in the wrong, for she may be teaching her class to speak fluently, while the Cooperative Test measures other abilities which they have not learned. But she is certainly different in her grades, whether because she is an "easy marker," or because she is pursuing different goals than her colleagues. In either event, a student coming from her class into that of another teacher is likely to be dismayed at finding that he is no longer an A or B student, but instead is a C or D student in the new class.

Statements made by teachers and students indicated that the lack of coördination is most sharply felt in the transition from junior to senior high school. It is well known, they said, that students who begin a foreign language in junior high have trouble a year or two later, when they come together in second or third-year language classes with students who began in high school. The validity of these complaints was tested by comparing the grades received in second-year language courses by three groups of students: 36 ninth-graders who had both years of the language in junior high school, 40 tenth-graders who had the first year in junior high and the second in high school, and 35 eleventh-twelfth graders who had both years in high school. The tenth graders had significantly lower foreign language grades than either of the other two groups. This finding confirms the fact that the transition from junior to senior high school occasions poorer performance. It also
suggests that less stringent standards are applied in the junior high school, that the quality of instruction may be weaker there, and that the concept of grades 7 to 9 as a time for "adjusting" and "exploring" rather than a time for serious study may still be prevalent in King City. These problems, which King City shares with many other communities, militate against a smooth foreign language sequence, thereby contributing to under-achievement.

How is it that the problem of sequencing is mentioned so prominently by teachers and students? Their insistence on this point led us to conjecture that sequencing is more important in foreign languages than in other school subjects. Common sense suggests that a student's success in French 2 depends on how well he learned the material in French 1, more than his success in this year's English course depends on his mastery of last year's English material. The opportunity presented itself to verify the importance of sequencing in various school subjects by comparing the first and second-year grades of 290 students in five subjects: foreign language, math, English, history, and science. The results are displayed in Figure 1, which is arranged so as to answer such questions as: of all the students who received an A in first-year foreign language, what percentage received a lower grade than A in the second year? In answer to this question, Figure 1 shows that more than 50% received a lower grade. The findings are more surprising for B and C students; more than 50% of these students also received a lower grade. One would not have expected that more than half the C students in first-year French or Spanish would receive a D or an F in the second year. As for those who received a D the first year, they probably should not have been
Figure 1:

SEQUENTIALITY OF VARIOUS SCHOOL SUBJECTS

(N = 290)
allowed to go on, since fully 33% failed the next year while very few improved their grade.* Compared with other major subjects, foreign languages are clearly more dependent on sequencing than any other; only math comes close to being as sequential a subject, while English, history, and science are much less so. These facts help explain why teachers and students comment so consistently on the difficulties caused by lack of coordination among various levels of foreign language instruction.

The evidence shows that lack of coordination among those teaching foreign languages contributes to under-achievement. Looking further into this finding, it becomes apparent that what is lacking is more than just coordination -- it is commitment to a foreign language program, a set of fundamental agreements as to the objectives to be attained in each foreign language course, the step-by-step means of achieving them, and the delegation of authority to ensure that the program is carried through as agreed. A strong case can be made to the effect that the lack of a unified program, agreed to and carried out by all teachers in all schools, is one of the chief causes of under-achievement in foreign language learning.

* * *

Students frequently said in the interviews that they would like more class time to be devoted to speaking the foreign language. They said that speaking is fun, that it is important, and that they are more motivated by oral than by written work. Their experience was, of course, too limited for

* The interested reader may wish to examine the full data, reproduced in Appendix B.
them to judge whether the spoken language was taught well or badly in their class. Perhaps the under-achievers merely wanted a change, since they were not doing well under the existing method. Yet, it does appear from the interviews that the pleasure of speaking the foreign language has strong motivational value for many students.

James S., IQ-125, under-achiever:

Int: How do you find studying Spanish? Is it sort of fun or is it boring?

Stud: Well, sometimes it's more boring than others, when you have to translate the whole story. I think you should speak more. If you'd just get the words and then have conversations every day about those words, you'd learn'em.

Ruth B., IQ-133, under-achiever:

Int: What is it that you find interesting about it?

Stud: I think it's mainly the way the teacher teaches you. Not just going to class to read Spanish all the time. He makes us feel actually that we speak Spanish in class.

Judy L., IQ-130, over-achiever:

Int: Do you find it's fun when you study Spanish?

Stud: I like it especially after taking Latin because this is something that you can speak and I'm trying real hard to learn better. It's kind of fun because we have conversations in class and I like it a lot better trying to speak it.

Since the desire to speak was mentioned so frequently in the interviews, it was hypothesized that the ability to speak the foreign language is more closely related to the problem of under-achievement than the other language skills: reading, writing, listening comprehension. In order to test this idea, students were asked to rate themselves separately on the four skills. Each student indicated, on a scale from 1 to 5, how well he felt he could read,
write, comprehend, and speak the foreign language. These ratings were then correlated with a measure of the degree to which the students were under- or over-achieving. (This measure consisted of taking the difference between the student’s grade-point average and his foreign language grades, GPA minus FL.) The correlations were:

- reading, \( r = -0.03 \)
- writing, \( r = -0.13 \)
- listening comprehension, \( r = -0.27 \)
- speaking, \( r = -0.36 \)

These negative correlations may be read as follows: the better a student feels he does in this skill (reading, etc), the less likely he is to be an under- or over-achiever. Of the four correlations, only the last two are statistically significant; these results mean that discrepant achievement is more closely related to the student’s perception of how well he speaks and understands than to how well he reads and writes. This finding, which corroborates a similar one by Lambert et al (1961, pp. 48, 66), indicates that some of the causes of under-achievement are to be sought in the audio-lingual domain. Of this, more will be said in Chapter III. It also suggests that the grades students receive may be heavily influenced by the impression they make when speaking in class, even though they are ostensibly marked only on their written work.

The students interviewed were frequently critical of their foreign language teacher. We listened with interest, but ascribed many of their complaints to the natural tendency of an under-achiever to find reasons for his difficulty other than his own shortcomings. Nonetheless, certain complaints recurred often enough, and were well enough corroborated by our classroom observations, to merit discussion.
Some students were concerned about their teacher's command of the foreign language. While they could not judge how well the teacher spoke it, they noticed that the language sounded differently as spoken by different teachers, and that some teachers used the foreign language more often and more fluently than others. One girl's case illustrates the confusion such variations can cause.

Charlotte M., IQ-118, under-achiever:

In the 8th grade, her teacher was a young teacher right out of college, who didn't seem to know the language very well. This teacher used one pronunciation. Then in the 9th grade she had another teacher, again right out of college. She commented that she didn't think this teacher knew the language very well either; her pronunciation was different. There was some difficulty in understanding the language as well as speaking it. Then, when she enrolled in French at Clover High School, with the demands made on conversation and her confusion in pronunciation, she knew she would be lost. Since she didn't want to make poor grades, she dropped it.

Most of the foreign language teachers in King City are not fluent in the language(s) they teach, nor do they have native-like pronunciation. A certain French teacher, to cite one example, does not distinguish [am] from [óm]. She pronounces les dames et les hommes as if she were saying les dames et les âmes. Students coming into her class, or going from her class to that of another teacher, will have difficulty at first in adjusting to the new set of French phonemes they will encounter. Difficulties are also encountered by students who go from a class where the teacher rarely speaks in the foreign language, to one where the language is frequently spoken.

Another recurrent theme in the interviews was the teacher's classroom manner. The students wanted teachers to be patient, kind, and understanding.
This is not surprising, since most of the students we spoke with were not achieving at their customary level, and were sensitive about it. However, they also wanted the teacher to push them along in their work. The teacher who gains the respect and affection of the students is not the "nice guy" who lets them do as they please, but rather the well-organized and somewhat strict teacher who keeps things moving along in class. The disorganized teacher, however patient, gains no respect. Here is how one girl expressed it:

Ruth B., IQ-133, under-achiever:
Int: How do you feel about Mr. Rogers in comparison with your other teachers?

Stud: I think he is one of the best. He is one of the two best teachers I have had in high school. They teach you everything about it -- don't leave you open to anything. They sort of force it into you. Really you don't resent it because you're learning something. He makes us speak Spanish in class. During the first year Spanish we used to dread that, but now you can't imagine speaking English in his class.

Other criticisms were expressed of teachers who are inconsistent in their discipline, who assign homework and do not follow up on it, or who use sarcasm or tear students down. Excessive use of sarcasm, found only in two out of twenty-three teachers, was the subject of especially vehement complaints. In all, it can be said that most types of behavior which would be considered anti-social outside the school (e.g., bullying, sarcastic criticism, marked moodiness) definitely influence student performance. Students do not, of course, comment directly upon it in the classroom, but loss of interest and poorer marks are the frequent results.
An attempt was made to verify empirically the relationship of the teacher's manner to under-achievement. Using Ryan's (1960) rating scale, we rated a number of classes on three dimensions of teacher behavior and one of student behavior. The teachers were rated as to how warm, organized, and stimulating they were; the students were rated on their alertness. The results suggested that the lower the rating of a given class, the more under-achievers it was likely to contain. However, there were only 22 foreign language teachers in the schools participating in this study; this number was not sufficient to obtain statistically reliable findings.

From the evidence at hand, it appears that the teacher's manner affects under-achievement in language, as it no doubt does in other subjects. An ill-disciplined, disorganized classroom is one in which students do not feel challenged to put forth the effort necessary to good achievement.

The students we interviewed did not only make critical comments; they also offered suggestions for the improvement of foreign language instruction. Without knowing how controversial these issues were, they expressed opinions on three of the most disputed points in school policy on foreign language teaching. We have already mentioned their suggestion that the spoken language should figure more prominently in the classroom. They also expressed opinions on when foreign language should begin, and on the grouping of students according to their ability.

Many students believed foreign language instruction should begin earlier than the eighth grade. Several supported this argument by citing good

*Reproduced in Appendix A.
results they had observed on younger brothers and sisters studying
language in the lower grades. Some gave the reason that a longer program
would allow for greater assimilation of the language skills. One girl
(Barbara M., IQ-105) said she "felt language should be started in the
elementary school so that you didn't have to learn everything at once; you
learn how to talk it in elementary school, then when you get into junior
high school, you learn to read it and spell it." Of course, these students
are not aware that an early beginning is no panacea, that a third-grade
program may be good or poor, just as a ninth grade program may. However,
their remarks, which coincide with the views of some members of the
language teaching profession, argue in favor of beginning language instruction
at the earliest level at which good teaching can be provided and a smoothly
coordinated, continuous sequence guaranteed.

A surprising number of students expressed the desire for homogeneous
grouping, to which the King City school system is opposed. Walter B., an
under-achiever (IQ-101), said he felt students who are equally smart in the
language and do the same kind of work should be in a class together. After
all, he explained, a student who is having difficulty with the language can't
possibly hope to keep up with an A student, and an A student doesn't like to
be slowed down by a student who is having difficulty. He thought all would
learn more if classes were so divided, and added that he would probably not
be in the top group. Sheila A., an over-achiever (IQ-114), said that last
year there was a student teacher who took most of the class, so that the
regular teacher was able to work on a more advanced level with eight of the
better students, including Sheila. She felt she profited from this lucky bit of ability grouping. The fact that the students themselves, both good and poor ones, express the desire for more homogeneous classes should be taken into account in future consideration of this issue.
Chapter Three:

UNDER-ACHIEVEMENT AND THE INDIVIDUAL

In the last chapter, it appeared that under-achievement was caused by weaknesses in King City's foreign language program. But this cannot be the sole cause. There are many students in the program, yet only certain ones -- 15 to 20 percent -- become under-achievers. How is it that these particular students cannot cope with problems, such as that of adapting to a new teacher, which others take in their stride? Clearly, some of the causes of under-achievement must reside with the student. An effort was made to find and describe these causes by examining the abilities, motivation, attitudes, and personality of under-achievers, and comparing them on these factors with average-achievers.

Predicting Foreign Language Achievement

A series of studies was performed to predict achievement in French and Spanish, and to diagnose deficiencies in the abilities of under-achievers. Eight predictive tests, which had previously been found effective*, were administered to a sample consisting of 850 first-year French and Spanish students in King City. Their scores on these tests were then correlated with their language achievement, as measured in four different ways. The predictive (aptitude) tests and achievement (criterion) measures were the following:**

* See Pimsleur, Stockwell, and Comrey, 1962; Pimsleur, 1962 a and b.

** All tests except those subject to copyright restrictions are reproduced in Appendix A.
1. **Sex.**

2. **Interest I.** A measure of motivation, in which students are asked how eager they are to study the language they are now taking.

3. **Interest II.** A measure of motivation consisting of 20 items such as:
   
   I think that lack of knowledge of foreign languages accounts for many of our political difficulties abroad.
   
   a. strongly agree
   b. agree
   c. don't know
   d. disagree
   e. strongly disagree

4. **Linguistic Analysis Test.** A 15-item test of verbal reasoning in which the students are given a number of forms in a foreign language and asked to deduce from them how other things are said in that language.

5. **Vocabulary Test.** A 40-item test, included as a rough measure of verbal IQ.

6. **Chinese Pitch Test.** A 30-item test of auditory discrimination in which the student must distinguish Chinese tones.

7. **Rhymes Test.** The student is to think up as many rhymes as possible for four given words, in the time allowed; this test measures fluency with words.

8. **Sound-Symbol Test.** A 44-item rapid-fire test in which the student hears a nonsense syllable and must match it with the correct spelling in his booklet; this test measures sound-symbol association.

9. **Criterion: Final Grades.** First-year final grades in French and Spanish.

10. **Criterion: Cooperative French (Spanish) Test,** elementary form.
11. Criterion: **Oral grades.** Grades on oral work given by the teacher at the investigators' request.

12. Criterion: **Pictorial Auditory Comprehension Test.** 75 items of the following type: The student hears (twice) an utterance in the foreign language and must decide to which of four pictures in his booklet it refers.

Achievement in the two languages was predicted by this eight-test battery. The multiple correlations* were as follows:

<table>
<thead>
<tr>
<th>Achievement measures**</th>
<th>French (N=430)</th>
<th>Spanish (N=427)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Grades</td>
<td>R=.58</td>
<td>.55</td>
</tr>
<tr>
<td>Cooperative Test</td>
<td>R=.66</td>
<td>.57</td>
</tr>
<tr>
<td>Oral Grades</td>
<td>R=.66</td>
<td>.56</td>
</tr>
</tbody>
</table>

These results compare favorably with those obtained in secondary schools by other aptitude batteries. (Prediction has usually been more successful in intensive language courses, where there are fewer extraneous variables, than in public schools.) The following table shows that this

* A correlation (r) is a measure of the extent to which two scores, say X and Y, tend to go together. Saying this another way, it is the extent to which Y may be predicted by knowing X. A multiple correlation (R) is the extent to which Y may be predicted from a number of X's, in this case, the extent to which a particular criterion may be predicted by several predictive tests together. Correlations vary between -1 and +1.

** A fourth achievement measure, the Pictorial Auditory Comprehension Test, was administered only in classes where the teacher volunteered extra time. It was omitted from several of the analyses due to insufficient data.
battery also compares well with other ways commonly used by school officials to predict success in language study, such as English grades and IQ.

Criterion: Final French and Spanish Grades (155<N<191)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>IQ</td>
<td>r=.46</td>
</tr>
<tr>
<td>English grades</td>
<td>r=.57</td>
</tr>
<tr>
<td>Grade-point average</td>
<td>r=.62</td>
</tr>
<tr>
<td>Aptitude battery</td>
<td>R=.62</td>
</tr>
</tbody>
</table>

These figures show that English grades and IQ are not only less effective predictors than the aptitude battery, they are also less effective than grade-point average. This suggests that school officials who screen students for language study, and who cannot afford the time for specialized testing, should use grade-point average for this purpose, rather than English grades or IQ. However, a still better solution, where feasible, is to combine both of these predictors. In this study, each predictor alone correlated .62 with final grades; when both were used together the correlation rose to .72, a significant increase in the accuracy of the prediction.

An interesting feature of these findings is that grade-point average was as successful as the aptitude battery in predicting language grades. This shows not only that nothing predicts future academic performance as well as past academic performance, but also that foreign languages are probably taught much like other school subjects - as a body of information to be learned, rather than a skill to be acquired. The more audio-lingual the teaching and grading become, the more it will be necessary to use a specialized battery containing audio-lingual tests to predict achievement.
So much for the problem of prediction. Readers interested in pursuing this topic are referred to Appendix B, where they will find information on various combinations of predictors and the data needed to construct predictive equations.

Abilities

Common experience suggests that there may be a special ability or "talent" for foreign language study, since people of equal intelligence and diligence often progress at very different rates in learning a language. Assuming that some people are better language learners than others, it is important to determine to which particular abilities this superiority is due. The data from the predictive study afforded the opportunity to accomplish this by comparing the abilities of under-achievers with those of average-achievers.

To provide a matched sample of under- and average-achievers, groups of subjects of the two types were chosen in the following way. First, a student who was definitely an under-achiever by our definition was selected for the Experimental group. Each such student was then matched with another student who resembled him as closely as possible, but who was achieving normally in the foreign language; the matched subject became a member of the Control group. To ensure a close match in all pertinent respects, certain standards were enforced: the Experimental and Control subjects were of the same sex; they had had the same foreign language teacher(s) in the same school(s); their grade-point averages (a better
criterion of academic ability than IQ) differed by less than three-fourths of a point. In this way, 30 pairs of subjects were selected; it happened fortuitously that there were an equal number of pairs of boys and girls. These 30 pairs were known as the E-C (Experimental - Control) sample. Numerous hypotheses about under-achievement were tested upon some or all of these pairs of subjects.

Scores on the complete aptitude battery were available for 17 pairs of E-C subjects. The under-achievers (E's) received significantly lower scores than the average-achievers (C's) on three of the eight tests; Interest I, Chinese Pitch Test, and Sound-Symbol Test*. Interest I is a measure of the student's motivation to study the foreign language; it is not surprising to find the under-achievers lacking in motivation to study a subject in which they are not doing as well as they are used to doing in other subjects. On the other hand, the significant findings on the Chinese Pitch Test and the Sound-Symbol test are of considerable interest, for these measure the student's auditory ability. Under-achievers did not perform less well than average-achievers in tests of verbal intelligence (Vocabulary), verbal reasoning (Linguistic Analysis) or word fluency (Rhymes), but they did so on the two tests of auditory ability. Such a finding appears to indicate that the so-called "talent for languages" resides principally in the domain of auditory ability, which may be described as the ability to receive and process information through the ear.

* The term "significant" is used in its technical sense, meaning: 'This finding has been tested statistically and found to be significant at the .05 level." Similarly, the term "highly significant" is used for findings which are significant at the .01 level. The data used in the statistical tests are furnished in Appendix B.
As a means of validating these findings, a study was done on a different sample of subjects to see how well one could predict under-achievement using only auditory and motivation tests. The measure to be predicted was the subject's discrepancy score (GPA-FL), that is, the extent to which he was doing better or worse in foreign languages than in other major subjects; this score measures over-achievement as well as under-achievement. The point of the study was to see whether the three tests found significant on the E-C sample (Interest I, Chinese Pitch Test, Sound-Symbol Test) would predict discrepant achievement in this new and larger sample containing students of all degrees of ability for languages. The following correlations show that these three tests alone predicted almost as well as the whole eight-test battery plus grade-point average.

Criterion: GPA-FL
(N=155)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest I, Chinese Pitch, Sound Symbol</td>
<td>R = .37</td>
</tr>
<tr>
<td>Interest I, Chinese Pitch, Sound Symbol, GPA</td>
<td>R = .39</td>
</tr>
<tr>
<td>GPA</td>
<td>r = -.01</td>
</tr>
<tr>
<td>Aptitude Battery</td>
<td>R = .40</td>
</tr>
<tr>
<td>Aptitude Battery, GPA</td>
<td>R = .43</td>
</tr>
</tbody>
</table>

The three tests which discriminated best in the E-C sample held up well on this random sample, thereby confirming the importance of auditory ability and motivation in under-achievement. The finding also suggests that those who are high in these characteristics may become over-achievers.

The finding concerning motivation is not especially exciting, since it is impossible to tell whether high motivation is the cause of good language
achievement or its effect. But the finding that auditory ability is related to success in foreign language learning suggests many fascinating research problems.

Can this ability be affected by training? What kind of training will permit someone who is poorly endowed auditorily to improve? Is it really a physiological phenomenon? Does the problem reside in the parts of the brain which process information or in the parts of the ear which receive it? What part does auditory ability play in learning to read and write one's native language? A serious research attack is called for on the role of auditory ability in foreign language learning.

**Eye-mindedness and Ear-mindedness**

Just as there seems to be an auditory ability there may also be a visual ability -- people may differ in how well they learn through one sense modality or the other. Common experience suggests that this is so, for we all know individuals who appear very eye-minded or very ear-minded, and in fact almost all of us have an opinion on which modality we ourselves favor. Yet, despite the importance of this question for foreign language instruction (indeed, for all instruction), there has been almost no research on individual differences in modality preference.

An attempt was made in this investigation to show that modality preference exists, and that it affects other variables, notably foreign language learning.

A total of 285 students in French and Spanish classes were asked to express their modality preference. An experimenter explained to the class:
"Students learn in different ways. Some prefer to use their eyes, for example, to read a lesson in the book, or study a vocabulary list. Others prefer to use their ears, for example, to listen to the teacher explain or listen to a recording. You are to write the word eye or ear on your answer sheet, depending on which way you think you learn best. If you cannot decide, you may write no preference."

The answers were distributed as follows: 143 said they were ear-minded, 96 were eye-minded, and 46 had no preference. First of all, it is noteworthy that five out of six students were able to select one of the modalities. This confirms the impression that most people believe they learn better one way or the other. Secondly, the preponderance of ear-minded responses (the ears have it 3-to-2 over the eyes) may show that ear-minded adolescent students are already aware of their propensity; perhaps they elect to take a foreign language partially for this reason. This notion was explored by asking students at the end of the first year of language study whether or not they intended to continue into the second year. The responses were these: 87% of the ear-minded, 81% of the 'no preference,' and only 67% of the eye-minded intended to go on studying the language. This finding appears to establish a connection between modality preference and foreign language study. Presumably, ear-minded individuals are more likely to enjoy studying a language, and to be successful at it.

Modality preference was further analyzed by comparing the performance of the three groups (eye, ear, no preference) on the aptitude and achievement measures. They differed significantly on one aptitude and one achievement
measure. The mean scores on the Vocabulary Test were as follows: eye 17.9, ear 19.2, no preference 21.5. Since knowledge of native-language vocabulary is known to be a good measure of verbal IQ, this finding appears to indicate that those who learn equally through both modalities are most intelligent, followed by the ear-minded and then the eye-minded. Naturally, this conclusion is offered very tentatively, and further investigation is needed.

The achievement measure on which the modality groups differed was the Pictorial Auditory Comprehension Test, a test of proficiency in understanding the spoken foreign language. The average scores on this test among Spanish students were: ear 30.7, no preference 28.4, eye 24.7; the difference is statistically highly significant. A reasonable interpretation of this finding is that a person's modality preference affects his performance on auditory tasks such as this test of aural comprehension.

What of the connection between auditory ability and under-achievement; shouldn't the under-achievers be less ear-minded? Although the question about modality preference was not asked of the E-C sample, similar information was obtained in another way. The E-C subjects responded to the two following written questions:

I would rather (check one):

______ study a lesson by reading a book.
______ study a lesson by listening to a record.

I would rather have a translation test:

______ by having the teacher say the sentences.
______ by having the teacher write the sentences on the blackboard.

These two questions formed a crude measure of modality preference, one admittedly subject to criticism as a test. (Even an ear-minded person may
prefer to have the teacher write the test sentences on the blackboard so that he does not have to remember them. This being the case, the finding takes on added interest, for the under-achievers responded in a more eye-minded fashion than the average-achievers to a degree that, while not statistically significant, is nevertheless suggestive ($t = -1.33$). If the failure to attain the significance level can be ascribed to the crudeness of the modality measure, then this finding suggests a further confirmation of the role of auditory ability in foreign language under-achievement.

Several ways have been shown in which eye-minded subjects function differently from ear-minded ones, thereby lending weight to the idea that many individuals have a modality preference which affects their learning. It is difficult to assess the potential consequences of this finding. On the one hand, there appears to be a high correlation, for most individuals, between their ability to learn visually and their ability to learn auditorily. On the other hand, it may also be the case that (1) many individuals could experience an increment in ease of learning by deliberately using the favored modality, and (2) some individuals are so handicapped in one modality or the other as to severely inhibit learning. Poor foreign language learning comes to mind as an example of auditory deficiency, difficulty in geometric or spatial relations as an example of visual deficiency. Either of these possibilities, if true, has important implications for the individuals concerned, their parents, and their teachers. While further speculation would lead too far afield in the present context, it is hoped this line of inquiry will be the subject of future research.
Motivation

A student's motivation goes hand-in-hand with his achievement -- those who are highly motivated often achieve well, which further reinforces their motivation. As nearly as can be gathered from the research of Politzer (1953-4), Lambert et al (1961), and this investigation, motivation is one of the two main determiners of success in foreign language learning, accounting for perhaps 15 or 20 percent of the variance; the other principal factor is verbal intelligence.

Both the strength of a student's motivation and the type of motivation he exhibits need to be considered. Strength of motivation was measured by two of Lambert's tests, called Motivational Intensity and Desire to Learn French (Spanish), which were given to the E-C sample of 60 students (30 matched pairs). It was found that the under-achievers did not differ on the Motivational Intensity scale, but that they differed in Desire to Learn French (Spanish) to a degree that was statistically highly significant. According to Lambert, the items on the Desire to Learn French (Spanish) Scale "differ from those in the Motivational Intensity Scale in that they reflect an attitude toward learning French (Spanish) rather than the amount of effort spent in acquiring the language." This finding, taken in conjunction with the significant difference found on our Interest I measure, points in the same direction as statements made by some students to the effect that they just don't see why they should have to study a foreign language, don't think it's useful, resent having to do it to get into college, and wish only to get through it somehow with a passing grade. This negative motivation naturally makes for under-achievement.
One wonders, of course, whether such negative feelings may not often be the result of having taken a foreign language and found it difficult, unpleasant, and unrewarding.

Student motivation may be of two types, called integrative and instrumental. The student with integrative motivation studies the language because he is curious about it, finds it fun, and wishes to communicate with others. The student whose motivation is instrumental studies it because it will help him to get into college or to obtain a better job. The 60 students in the E-C sample were given six statements (modified from Lambert et al, 1961) and asked to rate these statements as to how characteristic of themselves they were. Three of these statements were typical of an integrative orientation, the other three of an instrumental orientation. Of the six statements, one instrumental and two integrative significantly discriminated between under-achievers and normal achievers. They were:

The study of French (Spanish) will be important to me because:

1. I think it will some day be useful in getting a good job. (Instrumental)

2. It will help me better to understand the French (Spanish) people and their way of life. (Integrative)

5. It will allow me to meet and converse with more and varied people. (Integrative)

We conclude from this that what distinguishes a certain type of under-achiever is not so much that his motivation is either integrative or instrumental, but simply that he does not see the relevance of foreign language study to his life, either for practical purposes or for pleasure.
Attitudes

Since King City has no sizeable foreign minorities, the average King City child has had no direct contact with foreign people, and no opportunity to form a judgment concerning them. As for experience with foreign languages, in a sample of 857 students, only 62 (7.2%) had contact with a foreign language in their own home. Any attitudes the student may possess have come to him second-hand, through the influence of parents, TV, or the movies. Still, it is not inconceivable that negative attitudes toward some or all foreigners might be prevalent, and that these attitudes might affect achievement in language learning.

Student attitudes were probed by the project psychologists during the individual interviews. This was not a simple matter, since general questions such as "How do you feel about French people?" were likely to elicit only socially acceptable responses, and direct questions such as "Does your father ever complain about foreigners?" were ruled out for fear of parental reactions. Therefore, a number of questions were devised which could be asked with impunity and might reveal the student's true attitudes. One such question, designed to reveal attitudes about the seriousness, intelligence, and trustworthiness of foreigners, was: "Suppose two men were running for President; one was born here, the other was born in France but lived all his life here. Both are equally qualified and stand for the same principles. Which man would you vote for, and why?" Some students said they would vote for the American-born man because he would have a better grasp of our domestic problems; others, that they would vote for the foreign-born candidate.
because he would have a better understanding of international affairs. None of the students expressed vehement sentiments in either direction.

Another question was meant to bring out the student's feelings about personal proximity and intimacy with foreigners: "If you were to live in a dormitory for a year, would you prefer to live with 1) a group of friends your age from your high school, 2) a group your age from King City and other parts of the State, whom you did not know, 3) a group your age from various parts of the U.S., France, South America, India, Russia, Germany, and other foreign countries?" The students were overwhelmingly in favor of the third alternative. Only three said that they would prefer not to live with foreigners. A further question covered the possibility that an adult foreigner might be viewed with more suspicion than a teen-ager: "What kind of adult friend do you think would be most interesting, 1) a woman born in Germany who had married an American and now lives in King City with her husband and family, 2) a man from Russia who is attending the University here as a representative of his country, 3) a person who has lived in King City all his life?" The reactions clearly favored the first two alternatives; more than half the students wanted to know the man from Russia.

Several other questions probed various areas of potential prejudice concerning foreigners. On the hunch that feelings about 'dirty foreign countries' might be revealed, we asked "If you were to live in a country other than the U.S., which would you choose?" The most popular choices were England, because of the language, and Russia because they were interested in getting to know it first-hand. To explore possible personal
distaste or fear of social stigma, we asked "How would you feel when introduced to a foreigner with a heavy accent and asked to show him the points of interest around King City?" No strong negative reactions were evoked. Finally, on the score of generalized prejudice toward foreign tongues we asked "Do you think Americans in general have difficulty in learning a foreign language?" Most students did not think so; those who did ascribed the difficulty to Americans' unwillingness to study hard, rather than to any natural lack of ability.

No expressions of strong feelings about foreigners were evoked during the interviews, despite all manner of encouragement and even some prodding by the interviewers. The strongest expression was that of a girl who had lived in Arizona, and who wanted to learn Spanish so I'd know what they were saying behind my back." In general, the students' feelings about foreigners ranged from indifferent to quite positive, tinged with healthy curiosity.

Lambert et al (1961, p. 66) speaks of the influence on language learning of an "ethnocentrism syndrome," which they measured by a group of four tests. Three of these were administered to the E-C sample; the fourth, dealing with Preference for American over French Culture, would have been meaningless to students in King City, who have no inkling about Frenchmen or their culture. The three tests were:

1. F-Scale. Thirteen items adapted from Adorno et al (1950), reflecting authoritarian tendencies. Sample: "People can be divided into two distinct classes: the weak and the strong."
2. Ethnocentrism (E) scale. Seven items from Adorno et al (1950), reflecting chauvinistic attitudes. Sample: "The worst danger to real Americanism during the last 50 years has come from foreign ideas and agitators."

3. Anomie Scale. Twelve items reflecting the individual's dissatisfaction with his place in society. Sample: "In this country it's whom you know, not what you know, that makes for success."

No significant differences were found on any of the three tests. The combined evidence of the interviews plus the ethnocentrism data leads to the conclusion that there is little or no prejudice concerning foreigners such as might affect foreign language learning in this midwestern American city.

While France and Spain are too remote from King City for the students to have any strong opinions about them, there is one subject which is close to their experience -- the language they are studying, French or Spanish. An appropriate device for exploring the kinds of attitudes the students had toward the language itself was the Semantic Differential (Osgood et al, 1957). In this test, the respondent is asked to place a check mark at some point along the line between two polar adjectives (e.g. pleasant-unpleasant), thus indicating how he feels about the subject in question. The students were given as a subject the word "French" (or "Spanish"), and were asked to rate it on 20 polar-adjective scales. These data were collected for 16 pairs of students in the E-C sample.

The scales on the semantic differential are commonly grouped into three factors. These are the evaluative factor (the good-bad scale represents this
dimension), the potency factor (e.g. strong-weak), and the activity factor (e.g. active-passive). Of these only the potency factor discriminated significantly between the E and C groups; under-achievers viewed the foreign language as being more potent. Since the potency scale on which the E's and C's differed most was lenient-severe, it seems that the idea of potency may here be equated with that of difficulty. It is certainly reasonable that under-achievers see the foreign language as more difficult than normal achievers do. It is of particular interest that the under-achievers do not see the foreign language as being, in itself, any more bad or unpleasant. This suggests that hostile, negative feelings toward foreign languages, which may be part of the make-up of the adult who has a history of under-achievement, have not yet become crystallized at the time of life of our adolescent subjects. Such a finding leaves hope that the effects of a bad foreign language experience may be counteracted by those of a subsequent good one.

**Personality**

What sort of person succeeds best in learning a foreign language? Perhaps an outgoing person succeeds better because he chats easily with others, thereby getting more practice than a reticent person. Perhaps a flexible person can more easily take on new language habits than a rigid person. Nida (1957-8) tells, for example, of two missionaries who, after going through training, were sent to their post in the field; they failed in their mission and had to be sent home because they could not bring themselves to begin speaking the language with the natives, though they had studied it
diligently. Such personality variables may perhaps contribute to the difficulties of our under-achievers. A thorough study was done of personality factors in foreign language achievement; this phase of the work proved richer in speculations than in positive findings.

The acquisition of a new set of language skills seems to involve a certain amount of wrenching of cherished and deep-seated habits. One must accept the fact that things are not what they seemed, that a door is not a door, but a porte. The willingness to accept and use a new language seems to involve a degree of flexibility which most people apparently possess, but which some perhaps do not; these may be our under-achievers. Other personality features come to mind in this connection. Tolerance for ambiguity and frustration is needed to get over that annoying period when one cannot express oneself easily in the new language. Perhaps a rigid person, one who needs order and structure in everything he does, cannot bear to make a mistake in speaking and so refuses to speak. A battery of five psychological tests was employed to explore these possibilities.

1. Walk's Tolerance for Ambiguity Scale (O'Connor, 1952) - 8 items such as "There's more than one right way to do anything."

2. Rehfisch's (1958) Rigidity Scale - 12 items like "It bothers me when something unexpected interrupts my daily routine."

3. Flexibility Scale of the California Personality Inventory (Gough, 1956) 10 items like "Once I have made up my mind I seldom change it." (low score = flexibility).

schedule (PPS) - 21 items such as "I like to have my life so arranged that it runs smoothly and without much change in my plans."

5. Rokeach's (1960) Dogmatism Scale - 10 items, like "Of all the different philosophies which exist in this world there is probably only one which is correct."

The findings were entirely negative; the under-achievers (E's) did not differ from the average-achievers (C's) on any of these tests. Two interpretations come to mind. First, foreign language courses in King City are not so audio-lingual as to really challenge students to express their ideas in the new language. The teachers judge student achievement largely on written homework, written tests, and highly structured oral responses, none of which is as anxiety-provoking as the give-and-take of free conversation.

Secondly, age may be a factor; it would be interesting to administer the same tests to adults who fail at second-language learning, on the guess that such failure is more likely to involve personality factors among adults than among teenagers. In any event, such characteristics as flexibility, tolerance for ambiguity, and rigidity did not show themselves related to the problem of under-achievement in our junior and senior high school population.

*     *     *

Knowing that the E's had not achieved up to par in foreign languages, it was hypothesized that their "need for achievement" might distinguish them from the C's. This idea was tested by several means.

In one of their studies, Lambert et al (1961, p. 143) used two scales from the CPI, called Achievement via Independence and Achievement via
Conformance. They found significant correlations between these measures and the Cooperative French Test \((r = .47 \text{ and } .39, \text{ respectively})\). When these measures were administered to the E-C sample, no significant differences were found between the two groups. Moreover, the correlations were considerably lower than those found by Lambert et al \((r = -.08 \text{ and } -.03, \text{ respectively})\). In the present sample, then, the Ai and Ac scales were related neither to under-achievement nor to achievement in general. Another commonly used measure of this characteristic is the Need Achievement Scale of the Edwards Personal Preference Schedule (PPS); 22 items from this scale were administered, such as "I like to be able to do things better than other people can." No significant difference was found.

A further way of testing the need for achievement was by the Ambition Scale, devised by Sundland. This scale contained four questions like: "Would you rather be a buyer for a) a small department store, or b) a large department store?" The hypothesis here is that the person with higher ambitions is less likely to be an under-achiever. This hypothesis was not confirmed, as no significant difference was found between the E and C groups on this measure.

* * * *

It was thought that the familiar psychological variable of anxiety might discriminate between the E and C subjects. This could work in either of two ways. An under-achiever might be especially low in anxiety, reflecting a "who cares" attitude of indifference and uninvolve. Or he might be so high in anxiety that he develops a "block," becoming too tense to perform well
in the foreign language. The instrument used to examine these possibilities was the Children's Manifest Anxiety Scale (Castaneda, 1956). It was found that the E and C groups did not differ in anxiety as measured by this test, nor did the under-achieving subjects have more extreme scores than the average-achievers.

* * *

One of the things that distinguishes an under-achiever from others is that he does not succeed in coping with such problems as a change of schools or teachers. It was hypothesized that this is related to the extent to which his reinforcement is internally or externally controlled, that is, whether his satisfactions and rewards come as a result of what he himself does, or is accorded by outside forces (luck, fate, power that be.) The internally controlled person, according to this notion, is one who will meet obstacles with determination and do what is necessary, such as studying harder, to overcome them. The externally controlled person may simply ascribe his difficulties to forces at work around him, as do some under-achievers in the interviews, and give up the fight to overcome his problem. The instrument used to test this hypothesis is the Liverant I-E Scale, (Rotter et al, 1962) which consists of 20 items, such as "Most students don't realize the extent to which their grades are influenced by accidental happenings." The results of this study were negative; the variable of internal and external control does not distinguish foreign language under-achievers from average-achievers at the secondary school level.

* * *
An under-achiever is one who differs from his fellows by doing more poorly in his foreign language course than he should, while others are achieving at the level which is normal for them. In a sense, therefore, the under-achiever is a non-conformist. Following this line of thought, the hypothesis was formed that under-achievers are less conforming and less in need of social approval than average-achievers. The Social Desirability Scale (Crowne and Marlowe, 1960; Marlowe and Crowne, 1961), containing 23 items such as "I have never intensely disliked anyone," was used to test this hypothesis. The results were negative; social conformity does not appear to be a factor in under-achievement of the type studied here.

* * *

A study was done by Keimowitz and Ansbacher (1960) on the problem of under-achievement in mathematics. They administered the California Personality Inventory (CPI) to a sample of 27 math under-achievers and 29 math over-achievers. Three of the 18 scales discriminated significantly: Self-Control, Psychological-Mindedness, and Capacity for Status. These same scales were administered to our E-C sample; none of the three discriminated significantly.

* * *

One may speculate that a person's need to experience change in his daily life may be inimical to the regular study habits required in a foreign language course. On this hunch, the Need Change Scale of the Edwards PPS was administered to the E-C sample. This scale contains 20 items such as "I like to try new and different jobs rather than to continue doing the same old things." No significant difference was found.
On the notion that the person who does well in a foreign language is one who is willing to get up and talk before others, display himself, etc., we included four questions (the Performer Scale) in which the students were asked to choose between an occupation in public view and one behind the scenes. One such question was: "Would you rather be a) an actor, or b) a playwright?" No significant difference was found between the E and C subjects.

A familiar technique in counseling psychology is to infer relationships between a person's career plans and his psychological make-up. Because vocational questionnaires have often had success in discriminating among criterion groups of various sorts, a Vocational Interest Survey was devised and included among the tests given to the E-C sample. The Survey consisted of the names of 23 vocations (e.g. auctioneer, poet, watchmaker), to each of which the student responded with LIKE, DISLIKE, or INDIFFERENT. The responses were analyzed separately for boys and girls, since some of the occupations (e.g. secret service agent) might be quite different for the two sexes. None of the findings was significant for the girls, but for the boys two of the occupations, Interior Decorator and Librarian, gave significant results. The under-achievers reacted more unfavorably than the average-achievers to these two occupations, which are "arty" or "bissified." They reacted especially strongly against the occupation of Librarian.

Clinical Study

The foregoing studies of personality variables by paper and pencil tests
yielded essentially no findings. Perhaps the problem of under-achievement had not troubled our young subjects long enough or deeply enough to be anything more than a scholastic annoyance, rather than an emotionally disturbing experience. Adult cases like Nida's (1957-8) missionaires, who failed in their field work and had to be sent home because they could not bring themselves to speak the foreign language they had studied thoroughly, indicate that among mature individuals foreign language under-achievement may indeed involve such personality factors as we are discussing. To explore this, a special clinical study was conducted of 12 individuals of adult age who displayed marked difficulties in foreign language study. These individuals, who ranged up to 36 years of age, were students in beginning language classes at The Ohio State University. They presented themselves in response to a call for students who were achieving poorly despite regular and diligent study; in most of the cases, the student was actually spending an inordinate amount of time studying the foreign language, to the detriment of his other work, and receiving a very poor return for his effort. These students (8 men and 4 women) were given clinically oriented interviews by a psycho-diagnostician, Benjamin Kovitz, M.D., Clinical Director of the Columbus State Hospital. The interviews, each of which lasted between an hour and a quarter and an hour and a half, dealt with the individual's personal life, with particular focus on his language experience concerning both English and foreign languages. Dr. Kovitz found that, though several of these individuals had emotional problems, it was not possible to associate emotional
factors with poor foreign language achievement in any systematic way.*

His findings provided an independent corroboration of the results of the secondary school studies, namely, that foreign language under-achievement is related to a lack of linguistic ability, rather than to factors of attitude or personality.

* The twelve clinical interviews, and Dr. Kovitz' summary of them, are reproduced in Appendix C.
In the average King City foreign language class, six students out of 30 are under-achievers. (The names of many cities may be substituted for the anonymous 'King City.') The number of under-achievers would be higher still, except that half the students drop out of the language course after the first year; by the third year, nine-tenths of the students have dropped. Yet, no provision is made to identify under-achievers, diagnose the reason for their foreign language difficulty, and help them to overcome it.

In part, this is due to a lack of trained personnel. Guidance counselors are not usually prepared to deal with specific subject matter deficiencies. Foreign language teachers, lacking the time and training to help under-achievers, are usually content to ascribe a student's difficulties either to lack of diligence or simply to "lack of talent." But mainly, there is a paucity of information about foreign language under-achievement. In the absence of diagnostic and remedial techniques, under-achievers continue to be a source of frustration to themselves and their teachers, and to retard the pace of learning in the language class. This investigation attempted to describe the causes of under-achievement and to develop diagnostic tools for identifying under-achievers.

* * *

One of the principal causes of foreign language under-achievement is the schools' failure to provide a well-planned foreign language program. There
is little agreement among King City language teachers as to what elements of the foreign language they will teach and by what methods. Consequently, a student has to make many adjustments as he moves on from one teacher to another; when the adjustments become too difficult, the student is likely to drop the course or else to become an under-achiever.

Coordination is important in any subject, but it is particularly important in foreign languages. A study of the performance of 290 students in five major subjects showed that foreign languages are more sequential -- that is, future learning depends more on previous learning -- than mathematics, English, history, or science. Therefore, foreign languages, more than any other subject, require a coordinated program to ensure orderly progress through successive stages of learning.

Whenever students go from one language teacher to another, some become under-achievers. However, the transition is especially difficult from junior high school to high school. A study of second-year grades showed that students who made this transition received poorer grades than those who remained in the same school for both years of the language, whether in a junior or a senior high. Evidently, the need is acute for coordination between junior and senior high schools.

The students we interviewed expressed views on how language learning could be improved, based on their own learning experience. Their opinions are well worth the consideration of those planning language programs. First, and mainly, they wish the foreign language were spoken more in the classroom. In this connection, one of our studies showed that the speaking skill is more
closely related to under-achievement than the other three skills: aural comprehension, reading, writing. Second, they wanted the foreign language program to begin earlier and last longer, so that mastery of the language could be acquired gradually and from an early age. Third, a number of students expressed a desire for homogeneous (ability) grouping; this wish was at least as strong on the part of slow language learners as of those achieving well. Finally, on the subject of teachers, students were most favorable toward teachers who expected a good deal of them but who remained fair and patient.

* * *

Weaknesses in a foreign language program may set the stage for under-achievement, but they cannot make a student under-achieve. Part of the problem resides within the individual student, in his ability or 'talent' for foreign language study.

According to this investigation, there does exist a 'talent' for learning foreign languages -- that is, a special factor beyond intelligence and industriousness which accounts for how well an individual succeeds in a language course. Our evidence indicates that this special factor is auditory ability, which may be defined as the ability to receive and process information through the ear. Several studies showed that auditory ability is related to language learning achievement, and consequently to under-achievement. Under-achievers scored significantly lower on two tests of auditory ability than average achievers. Students who expressed a preference for learning through listening (ear-minded) rather than reading (eye-minded) had better
aural comprehension in the foreign language, and a significantly greater number of the ear-minded intended to continue studying the foreign language. Low auditory ability is apparently an important factor both in foreign under-achievement and in the dropout problem.

Auditory ability includes at least two components: sound discrimination and sound-symbol association. The former, measured by the Chinese Pitch Test, is the ability to remember sounds and their significance. The latter, measured by the Sound-Symbol Test, is the ability to associate sounds with their written forms accurately and rapidly. It is clear that auditory ability, reflected in these two tests, influences a student’s success in foreign language learning. But beyond this, little can be said with assurance. However, important questions come to mind. How is speaking related to auditory ability? How strongly does modality preference (eye or ear-mindedness) affect learning in languages -- in other subjects? How can low auditory ability be improved? Such questions need and merit a good deal of research in the future.

An aptitude battery which contains auditory tests can predict with considerable accuracy a student’s probable success in language learning. Schools wishing to screen or section foreign language students can obtain best results by using such a battery, in combination with a general academic measure such as grade-point average. Predictive accuracy above .70 was obtained in this manner on a large King City sample.

Motivation, attitudes, and personality were investigated as possible factors in foreign language learning. It was concluded that the factor of
motivation is an important one, but it was not clear whether motivation was a cause or an effect of the students' experiences in the language class. No evidence was found to attest the influence of attitudes or personality factors on language learning in King City.

* * *

Two principal causes of foreign language under-achievement have been identified -- lack of a coordinated foreign language program in the schools, and low auditory ability on the part of the student. Improvements in these two areas go hand in hand; individuals do differ in their aptitude for language study, and a good language program must take account of these differences. Schools wishing to strengthen their language program may obtain information and assistance from the U.S. Office of Education, as well as from such recent books on the subject as Brooks (1959). As for dealing with students of low language aptitude (under-achievers and potential dropouts), these are some of the provisions a school can make:

a) Students of low auditory ability should be identified early, before they build up resistance to language learning. An aptitude battery containing auditory tests, or other more informal tests devised by the teacher (e.g., mimicry tests), can be used to identify problem learners even before the language course begins. While the course is in progress, teachers should spot under-achievers and begin special treatment as soon as possible. Two of the earmarks of the under-achiever are that his language grades are below his other grades, and that he spends too much time on his language homework with too little result.
b) Although there are as yet no proven methods of improving auditory ability, teachers can be guided in their work with under-achievers by recently developed materials which stress the auditory aspect of language learning. Sound discrimination in Spanish has been emphasized in self-instructional programs by Sapon (1962) and Morton (1962); in French, experimental material may be found in Pimsleur, Mace, & Keislar (1961). Sound-symbol association has been treated by Hayes (1962) in separate booklets for French, Spanish, German and Russian; these offer a large number of exercises which, though designed for average learners, may also have remedial value. Under-achievers can profit from extra listening time in the language laboratory. They should also be advised to do their language homework together with other students of higher auditory ability.

c) Homogeneous (ability) grouping may be one of the best solutions for under-achievement, as well as for the dropout problem. Though not without drawbacks (grading problems, parental pressures), homogeneous grouping offers considerable advantages both for quick and slow learners. Evidence from research in programmed instruction indicates that students with low auditory ability are capable of learning a foreign language, but that they do so more slowly than others. In view of this evidence, it appears that a school would do better to give these students the experience of learning a language, by grouping the student of medium or low ability together, than to counsel them against taking a language at all.

d) The assistance of the guidance counselor should be enlisted to help identify under-achievers early, and to bring weaknesses in the foreign
language program to the attention of the teachers.

e) A program of periodic, school-wide (or system-wide) testing will help ensure uniform standards in all classes. It will also provide local norms for later use in placing transfer students. Schools may even wish to experiment with the use of competence levels as a basis for promotion in foreign languages. (Evidence from this study indicates that students below a certain level of achievement, perhaps C, should not be advanced, since they have much more chance of receiving a poorer grade in the next class than they have of receiving a better one.)

This research was concerned with diagnosing under-achievement and describing its causes. Future research should concern itself with the improvement of foreign language programs and with the development of teaching techniques suitable for students of various levels of ability, including those of low auditory ability. The answer to under-achievement does not lie in getting rid of the under-achiever, but in learning how to teach him. The objective is to provide for every student a rewarding foreign language experience, one which equips him with a serviceable degree of competence in the foreign language.
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Appendix A

TESTS
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## Aptitude and Achievement Tests

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<tr>
<td>Cooperative French (Spanish) Test</td>
<td>*</td>
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<tr>
<td>Pictorial Auditory Comprehension Test</td>
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</tbody>
</table>

* not reproduced due to copyright restrictions.
PERSONAL DATA SHEET

NAME_____________________________

LANGUAGE and SECTION_____________________________

DATE of BIRTH___________________________SEX_____________________

(month) (day) (year)

(Please write legibly)

IS A LANGUAGE OTHER THAN ENGLISH SPOKEN IN YOUR HOME?_________.

IF SO, WHICH LANGUAGE?______________________________________________.

DO YOU NOW, OR DID YOU IN THE PAST, SPEAK ANOTHER LANGUAGE
BETTER THAN ENGLISH?_____. IF SO, PLEASE NAME THE OTHER
LANGUAGE:__________________________________________________________.

IS ENGLISH THE LANGUAGE YOU NOW SPEAK BEST?______________________.

IF SO, AT ABOUT WHAT AGE DID YOU START SPEAKING ENGLISH BETTER
THAN THE OTHER LANGUAGE?__________________________________________.

HAVE YOU HAD ANY LEARNING EXPERIENCES WITH LANGUAGES?_______.

IF YES, PLEASE FILL OUT THE FOLLOWING:

<table>
<thead>
<tr>
<th>NAME of LANGUAGE</th>
<th>WHERE</th>
<th>HOW</th>
<th>HOW LONG</th>
<th>WHEN</th>
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<td>(French, Spanish, etc.)</td>
<td>(Home, school)</td>
<td>(Radio, TV, records)</td>
<td>(No. of months)</td>
<td>(19__)</td>
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[Interest 1]

We would like you to indicate below an honest estimate of how much you are interested in studying a foreign language. In making this estimate keep in mind such considerations as these: How useful will the language be to you; How much fun will you derive from it; How interested are you in foreign languages as compared with other subjects?

Take time to think over your answer, then CIRCLE the letter below which best describes your degree of interest in studying a foreign language. Of course, we need an honest answer. Your teacher will not be told of your answer and it will have no bearing on your grade.

a. rather uninterested    d. quite interested
b. more or less indifferent    e. strongly interested
c. mildly interested
INTEREST INVENTORY

Please consider each of the following questions carefully and answer as honestly as you can. Indicate your answers on the separate answer sheet as instructed.

1. I expect to use a foreign language in my regular activities (professional, social, or intellectual).
   a. definitely
   b. probably
   c. possibly
   d. probably not
   e. definitely not

2. The study of another language helps me express myself and my ideas better in my own language.
   a. agree strongly
   b. agree
   c. doubtful
   d. disagree
   e. disagree strongly

3. I would study a foreign language in school even if it were not required.
   a. definitely
   b. probably
   c. possibly
   d. probably not
   e. definitely not

4. I enjoy thinking of different ways to say the same thing.
   a. a great deal
   b. quite a bit
   c. doubtful
   d. not much
   e. not at all

5. I enjoy going to see foreign films in the original language.
   a. a great deal
   b. quite a bit
   c. some
   d. not much
   e. not at all

6. Our lack of knowledge of foreign languages accounts for many of our political difficulties abroad.
   a. agree strongly
   b. agree
   c. doubtful
   d. disagree
   e. strongly disagree

7. I want to read the literature of a foreign language in the original.
   a. agree strongly
   b. agree
   c. doubtful
   d. disagree
   e. strongly disagree

8. I feel I have a particularly good ability to learn foreign languages.
   a. agree strongly
   b. agree
   c. doubtful
   d. disagree
   e. disagree strongly
INTEREST INVENTORY (con’t.)

9. I would like to speak another language regularly at home.
   a. a great deal
   b. quite a bit
   c. some
   d. not much
   e. not at all

10. I wish I could speak another language perfectly.
    a. a great deal
    b. quite a bit
    c. some
    d. not much
    e. not at all

11. If I had the opportunity, I would be willing to spend time learning the rudiments of Swahili (an African language).
    a. very definitely
    b. definitely
    c. possibly
    d. probably not
    e. definitely not

12. If I married a person whose native language was not English, I would learn his (her) language even if we both knew English.
    a. definitely
    b. probably
    c. possibly
    d. probably not
    e. definitely not

13. I enjoy discussions about shades of meanings of words.
    a. a great deal
    b. quite a bit
    c. some
    d. not much
    e. not at all

14. If I had a free week-day evening every week, I'd be willing to spend it learning Russian.
    a. agree strongly
    b. agree
    c. doubtful
    d. disagree
    e. disagree strongly

15. If I planned to stay one year in a foreign country, I would make a great effort to learn the language even though I could get along in English.
    a. agree strongly
    b. agree
    c. doubtful
    d. disagree
    e. disagree strongly

16. No matter what the language, I would rather see a film in the original language than dubbed in English.
    a. agree strongly
    b. agree
    c. doubtful
    d. disagree
    e. disagree strongly

17. Even though America is relatively far from countries speaking other languages, I still think it is important for Americans to learn foreign languages.
    a. agree strongly
    b. agree
    c. doubtful
    d. disagree
    e. disagree strongly
18. I enjoy comparing differences in meaning between English words and foreign words of similar meaning.
   a. a great deal
   b. quite a bit
   c. some
   d. not much
   e. not at all

19. If I lived in a foreign country for a year, I think I would acquire excellent command of the language spoken there.
   a. definitely
   b. probably
   c. possibly
   d. probably not
   e. definitely not

20. If I were with a foreign person whose language I had studied, I would converse with him in his own language if he were willing.
   a. definitely
   b. probably
   c. possibly
   d. probably not
   e. definitely not
LINGUISTIC ANALYSIS TEST
(Elementary Form A)

Directions:
In this test, you are given a list of words and phrases in a foreign language (Kabardian). By referring attentively to this list, you should be able to draw conclusions as to how to say other things in this language.

Here is an EXAMPLE.

gade father, a father
shi horse, a horse
gade shir le father sees a horse

Using this information how would you say in this language,

A horse sees father.

Don't read any further until you have figured out an answer for yourself.

Have you figured out an answer? The correct answer is: shi gader le. Notice particularly the final r is added to whichever word receives the action in the sentence. If you did not get the item correct, go back and figure it out. You may NOT ask questions.

There will be 15 items like this on the test. Give your answers on the separate answer sheet, as instructed.

DO NOT TURN THE PAGE UNTIL YOU ARE TOLD TO DO SO.

gade father, a father
shi horse, a horse
gade shir le father sees a horse
gade shir la father saw a horse
be carries

How would you say in this language:

1) father carries a horse
   a) gade shir be   b) gade shir ba   c) shi gader be   d) shi gader ba
2) father carried a horse
   a) gade shir be   b) gade shir ba   c) shi gader be   d) shi gader ba
3) a horse carried father
   a) gade shir be   b) gade shir ba   c) shi gader be   d) shi gader ba
4) a horse carries father
   a) gade shir be   b) gade shir be   c) shi gader be   d) shi gader ba
LINGUISTIC ANALYSIS TEST (con't.)

Here is the same list with some additional information. Answer the following questions on the basis of this list.

- gade: father, a father
- shi: horse, a horse
- gade shir: father sees a horse
- gade shir la: father saw a horse
- be: carries
- so: I, me
- wo: you
- so shir le: I see a horse
- sole: I see you
- so shir lem: I don't see a horse

5) **You carry me.**
   a) sowle
   b) sowbe
   c) wosle
   d) wosbe

6) **You saw father.**
   a) wo gader le
   b) so gader le
   c) so gader la
   d) wo gader la

7) **I carried you.**
   a) wosba
   b) sowbe
   c) sowla
   d) sowba

8) **You carried father.**
   a) wo gader ba
   b) wo gader be
   c) wo gade ba
   d) so gade be

9) **You saw me.**
   a) sowla
   b) wosba
   c) wosla
   d) wosle

10) **You don't carry a horse.**
    a) wo shir lem
    b) wo shir bem
    c) wo shir bam
    d) wo shi bem

11) **You don't see me.**
    a) sowlem
    b) wosle
    c) woslem
    d) woslem

12) **I didn't carry father.**
    a) so gader bam
    b) so gade bam
    c) so gader bem
    d) so gader lam

13) **You saw a horse.**
    a) wo shir le
    b) wo shir la
    c) wo shir be
    d) wo shir ba

14) **I didn't see you.**
    a) woslam
    b) sowlam
    c) sowlem
    d) woslem

15) **Father doesn't carry a horse.**
    a) gade shir bem
    b) shir gader bem
    c) gade shi bem
    d) gade shir bam
CHINESE PITCH PERCEPTION TEST
by P. Pimsleur

Part I.

1. horse  mother
2. horse  mother
3. horse  mother
4. horse  mother
5. horse  mother
6. horse  mother
7. horse  mother
8. horse  mother
9. horse  mother
10. horse  mother

Part II.

1. mother  to scold
2. mother  to scold
3. mother  to scold
4. mother  to scold
5. mother  to scold
6. mother  to scold
7. mother  to scold
8. mother  to scold
9. mother  to scold
10. mother  to scold

Part III.

1. horse  mother  to scold
2. horse  mother  to scold
3. horse  mother  to scold
4. horse  mother  to scold
5. horse  mother  to scold
6. horse  mother  to scold
7. horse  mother  to scold
8. horse  mother  to scold
9. horse  mother  to scold
10. horse  mother  to scold
RHYMES

Under each word below, write as many words as you can which rhyme with it. Work in any order. Work quickly.

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Motivation Tests

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LAMBERT - MOTIVATION INTENSITY SCALE

Answer the following questions by placing a check-mark (√) to the left of the statement which appears most applicable to you. Try at all times to answer as accurately as possible.

(Remember that this questionnaire will not be seen by anyone in this school or by any of the school authorities. Only the directors of the research project will have access to your answer).

PLEASE BE AS ACCURATE AS POSSIBLE

1. Compared to the others in my Spanish class, I think I:
   (2) a. do more studying than most of them.
   (0) b. do less studying than most of them.
   (1) c. study about as much as most of them.

2. I think about the words and ideas which I learn about in my Spanish classes:
   (1) a. once in a while.
   (0) b. hardly ever.
   (2) c. very frequently.

3. If Spanish was not taught in this school, I would probably:
   (0) a. not bother learning French at all.
   (2) b. try to obtain lessons in French somewhere else.

4. On the average, I spend about the following amount of time doing home study in Spanish: (include all Spanish homework)
   _____ a. one hour per week
   _____ b. four hours per week.
   _____ c. seven hours per week.

5. Considering how I go about studying for Spanish, I can honestly say that I:
   (1) a. do just enough work to get along.
   (2) b. will pass on the basis of sheer luck or intelligence because I do very little work.
   (2) c. really try to learn Spanish.
   (0) d. none of these (explain) _____________________________

6. After I finish High School, I will probably:
   (2) a. try to use my Spanish as much as possible.
   (0) b. make no attempt to remember my Spanish.
   (2) c. continue to improve my Spanish (e.g. daily practice, night school, etc.)
   (____) d. none of these (explain) _____________________________
LAMBERT - DESIRE TO LEARN SCALE

7. Place a check mark (√) anywhere along the line below to indicate how much you like Spanish compared to all your other courses.

Spanish is my least preferred course (0) : (0) : (1) : (2) : Spanish is my most preferred course

8. When you have an assignment to do in Spanish, do you:
   (2) a. do it immediately when you start your homework.
   (0) b. try to get away without doing the assignment yourself.
   (1) c. put it off until some of your other homework is finished.

9. During Spanish classes, I:
   (1) a. have a tendency to daydream about other things.
   (0) b. become completely bored.
   (0) c. have to force myself to keep listening to the teacher.
   (2) d. become wholly absorbed in the subject matter.

10. If I had the opportunity and knew enough Spanish, I would read Spanish newspapers and magazines:
    (2) a. as often as I could.
    (1) b. fairly regularly.
    (0) c. probably not very often.
    (0) d. never.

11. After I have been studying Spanish for a short time, I find that I:
    (0) a. have a tendency to think about other things.
    (1) b. am interested enough to get the assignment done.
    (2) c. become very interested in what I am studying.

12. If I had the opportunity to change the way Spanish is taught in our school, I would:
    (2) a. increase the amount of training required for each student.
    (1) b. keep the amount of training as it is.
    (0) c. decrease the amount of training required for each student.

13. I believe Spanish should be:
    (2) a. taught to all high school students.
    (1) b. taught only to those students who wish to study it.
    (0) c. omitted from the school curriculum.

14. I find studying Spanish:
    (2) a. very interesting
    (1) b. no more interesting than most subjects.
    (0) c. not interesting at all.
LAMBERT - ORIENTATION INDEX: Integrative (items 2, 3, 5), Instrumental (items 1, 4, 6)

Below are six reasons students frequently give for studying French. Please read each reason carefully and rate it, indicating the extent to which it is descriptive of your own case. Circle the letter in front of the answer that best represents your feeling.

THE STUDY OF FRENCH CAN BE IMPORTANT TO ME BECAUSE:

1. I think it will someday be useful in getting a good job.
   A. definitely my feeling.
   B. pretty much my feeling.
   C. slightly my feeling.
   D. not very much my feeling.
   E. definitely not my feeling.

2. It will help me better understand the French people and their way of life.
   A. definitely my feeling.
   B. pretty much my feeling.
   C. slightly my feeling.
   D. not very much my feeling.
   E. definitely not my feeling.

3. One needs a good knowledge of at least one foreign language to merit social recognition.
   A. definitely my feeling.
   B. pretty much my feeling.
   C. slightly my feeling.
   D. not very much my feeling.
   E. definitely not my feeling.

4. I need it in order to finish high school.
   A. definitely my feeling.
   B. pretty much my feeling.
   C. slightly my feeling.
   D. not very much my feeling.
   E. definitely not my feeling.

5. It will allow me to meet and converse with more and varied people.
   A. definitely my feeling.
   B. pretty much my feeling.
   C. slightly my feeling.
   D. not very much my feeling.
   E. definitely not my feeling.

6. I need it in order to be admitted into college.
   A. definitely my feeling.
   B. pretty much my feeling.
   C. slightly my feeling.
   D. not very much my feeling.
   E. definitely not my feeling.

A=5; B=4; C=3; D=2; E=1
Attitude Tests

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E-Scale (Ethnocentrism) .................................................... 18
A-Scale (Anomie) ............................................................. 19
Semantic Differential ......................................................... 21

Note:
The F-Scale, E-Scale, and A-Scale were given as a single test with the following instructions:

The following is a study of what students think and feel about a number of questions. The best answer to each statement below is your personal opinion. We agree strongly with some of the statements, disagree just as strongly with others, and perhaps are uncertain about others; whether you agree or disagree with any statement, you can be sure that many students feel the same as you do.

After each statement there are six answers. Circle the letter in front of the answer which best represents your opinion.
F-Scale (Authoritarianism)

4. Obedience and respect for authority are the most important virtues children should learn.
   A. I agree a little.  D. I disagree a little.
   B. I agree.          E. I disagree.
   C. I agree very much. F. I disagree very much.

5. What the youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country.
   A. I agree a little.  D. I disagree a little.
   B. I agree.          E. I disagree.
   C. I agree very much. F. I disagree very much.

8. Nowadays when so many different kinds of people move around and mix together so much, a person has to protect himself especially carefully against catching an infection or disease from them.
   A. I agree a little.  D. I disagree a little.
   B. I agree.          E. I disagree.
   C. I agree very much. F. I disagree very much.

9. What this country needs most, more than laws and political programs, is a few courageous, tireless, devoted leaders in whom the people can put their faith.
   A. I agree a little.  D. I disagree a little.
   B. I agree.          E. I disagree.
   C. I agree very much. F. I disagree very much.

14. No weakness or difficulty can hold us back if we have enough will power.
   A. I agree a little.  D. I disagree a little.
   B. I agree.          E. I disagree.
   C. I agree very much. F. I disagree very much.

15. Human nature being what it is, there will always be war and conflict.
   A. I agree a little.  D. I disagree a little.
   B. I agree.          E. I disagree.
   C. I agree very much. F. I disagree very much.

19. A person who has bad manners, habits, and breeding can hardly expect to get along with decent people.
   A. I agree a little.  D. I disagree a little.
   B. I agree.          E. I disagree.
   C. I agree very much. F. I disagree very much.

21. People can be divided into two distinct classes: the weak and the strong.
   A. I agree a little.  D. I disagree a little.
   B. I agree.          E. I disagree.
   C. I agree very much. F. I disagree very much.
22. There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents.
A. I agree a little.
B. I agree.
C. I agree very much.
D. I disagree a little.
E. I disagree.
F. I disagree very much.

25. The true American way of life is disappearing so fast that force may be necessary to preserve it.
A. I agree a little.
B. I agree.
C. I agree very much.
D. I disagree a little.
E. I disagree.
F. I disagree very much.

26. Nowadays more and more people are prying into matters that should remain personal and private.
A. I agree a little.
B. I agree.
C. I agree very much.
D. I disagree a little.
E. I disagree.
F. I disagree very much.

29. If people would talk less and work more, everybody would be better off.
A. I agree a little.
B. I agree.
C. I agree very much.
D. I disagree a little.
E. I disagree.
F. I disagree very much.

32. Most people don’t realize how much our lives are controlled by plots hatched in secret places.
A. I agree a little.
B. I agree.
C. I agree very much.
D. I disagree a little.
E. I disagree.
F. I disagree very much.
### E-Scale (Ethnocentrism)

3. The worst danger to real Americanism during the last 50 years has come from foreign ideas and agitators.
   - A. I agree a little.
   - B. I agree.
   - C. I agree very much.
   - D. I disagree a little.
   - E. I disagree.
   - F. I disagree very much.

7. Now that a new world organization is set up, America must be sure that she loses none of her independence and complete power as a sovereign nation.
   - A. I agree a little.
   - B. I agree.
   - C. I agree very much.
   - D. I disagree a little.
   - E. I disagree.
   - F. I disagree very much.

13. Foreigners are all right in their place, but they carry it too far when they get too familiar with us.
   - A. I agree a little.
   - B. I agree.
   - C. I agree very much.
   - D. I disagree a little.
   - E. I disagree.
   - F. I disagree very much.

18. America may not be perfect, but the American way has brought us about as close as human beings can get to a perfect society.
   - A. I agree a little.
   - B. I agree.
   - C. I agree very much.
   - D. I disagree a little.
   - E. I disagree.
   - F. I disagree very much.

24. It is only natural and right for each person to think that his family is better than any other.
   - A. I agree a little.
   - B. I agree.
   - C. I agree very much.
   - D. I disagree a little.
   - E. I disagree.
   - F. I disagree very much.

27. The best guarantee of our national security is for America to keep the secret of the nuclear bomb.
   - A. I agree a little.
   - B. I agree.
   - C. I agree very much.
   - D. I disagree a little.
   - E. I disagree.
   - F. I disagree very much.
A-Scale (Anomie)

1. In the U.S. today, public officials aren't really very interested in the problems of the average man.
   A. I agree a little.  
   B. I agree.  
   C. I agree very much.  
   D. I disagree a little.  
   E. I disagree.  
   F. I disagree very much.

2. Our country is by far the best country in which to live.
   A. I agree a little.  
   B. I agree.  
   C. I agree very much.  
   D. I disagree a little.  
   E. I disagree.  
   F. I disagree very much.

6. The state of the world being what it is, it is very difficult for the student to plan for his career.
   A. I agree a little.  
   B. I agree.  
   C. I agree very much.  
   D. I disagree a little.  
   E. I disagree.  
   F. I disagree very much.

11. In spite of what some people say, the lot of the average man is getting worse, not better.
    A. I agree a little.  
    B. I agree.  
    C. I agree very much.  
    D. I disagree a little.  
    E. I disagree.  
    F. I disagree very much.

12. These days a person doesn't really know whom he can count on.
    A. I agree a little.  
    B. I agree.  
    C. I agree very much.  
    D. I disagree a little.  
    E. I disagree.  
    F. I disagree very much.

16. It is hardly fair to bring children into the world with the way things look for the future.
    A. I agree a little.  
    B. I agree.  
    C. I agree very much.  
    D. I disagree a little.  
    E. I disagree.  
    F. I disagree very much.

17. No matter how hard I try, I seem to get a "raw deal" in school.
    A. I agree a little.  
    B. I agree.  
    C. I agree very much.  
    D. I disagree a little.  
    E. I disagree.  
    F. I disagree very much.

20. The opportunities offered young people in the U.S. are far greater than in any other country.
    A. I agree a little.  
    B. I agree.  
    C. I agree very much.  
    D. I disagree a little.  
    E. I disagree.  
    F. I disagree very much.
23. Having lived this long in this culture, I'd be happier moving to some other country now.
   A. I agree a little.  D. I disagree a little.
   B. I agree.            E. I disagree.
   C. I agree very much.  F. I disagree very much.

28. In this country, it's whom you know, not what you know that makes for success.
   A. I agree a little.  D. I disagree a little.
   B. I agree.            E. I disagree.
   C. I agree very much.  F. I disagree very much.

30. The big trouble with our country is that it relies, for the most part, on the law of the jungle; "get him before he gets you."
   A. I agree a little.  D. I disagree a little.
   B. I agree.            E. I disagree.
   C. I agree very much.  F. I disagree very much.

31. Sometimes I can't see much sense in putting so much time into education and learning.
   A. I agree a little.  D. I disagree a little.
   B. I agree.            E. I disagree.
   C. I agree very much.  F. I disagree very much.
Semantic Differential*

Indicate by checking on the line how a particular adjective-pair is related to the concept you are describing.

EXAMPLE: ELEPHANT

heavy  
white
strong

light
black
weak

Now you are to describe French - (Spanish) by using the following sets of adjectives. Work as rapidly as you can. It is your first impressions, the immediate "feelings," that are of interest. On the other hand, please do not be careless, because we are very interested in your true impressions.

Remember that these answers will not be seen by anyone in the school but only by the directors of the research project.

FRENCH - (SPANISH)

1. interesting
2. cowardly
3. unpleasant
4. colorful
5. hard
6. active
7. complete
8. hot
9. reasonable
10. bad
11. lenient
12. beautiful
13. complex
14. strong
15. graceful
16. sad
17. meaningful
18. relaxed
19. masculine
20. sour

boring
brave
pleasant
colorless
soft
passive
incomplete
cold
unreasonable
good
severe
ugly
simple
weak
awkward
happy
meaningless
tense
feminine
sweet

*adapted from Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. (1957)
## Personality Tests

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<td>Cs (capacity for status)</td>
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* These tests were combined for ease of administration and to disguise their intent. Their original numbering is given.

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Walk Tolerance for Ambiguity Scale

Directions*

On the following sheets are a series of statements. Read each one and decide how you feel about it. If you agree with a statement, or feel that it is true about you, circle T. (True). If you disagree with a statement, or feel it is not true about you, circle F. (False).

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<tr>
<th></th>
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<th>17. There is more than one right way to do anything.</th>
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<tr>
<td>T</td>
<td>F</td>
<td>20. It is always better to have a definite course of action than to be vacillating between several possibilities.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>26. The best leaders give specific enough instructions to those under them, so that those under them have nothing to worry about.</td>
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<tr>
<td>T</td>
<td>F</td>
<td>32. A smart person gets his life into a routine, so that he is not always being bothered by petty details.</td>
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<tr>
<td>T</td>
<td>F</td>
<td>35. Nobody can have feelings of love and hate toward the same person.</td>
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<tr>
<td>T</td>
<td>F</td>
<td>38. It is better to keep on with the present method of doing things than to take a way that might lead to chaos.</td>
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<tr>
<td>T</td>
<td>F</td>
<td>41. A man can be well informed even if there are many subjects upon which he does not have a definite opinion.</td>
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<tr>
<td>T</td>
<td>F</td>
<td>44. It is better to take a chance on being a failure than to let your life get into a rut.</td>
</tr>
</tbody>
</table>

*These were the directions for all the true-false tests. They were given at the top of the first page of the combined questionnaire.
Rehfisch Rigidity Scale

T  F  3. I get very tense and anxious when I think other people are disapproving of me.

T  F  9. I am against giving money to beggars.

T  F  12. I always follow the rule; business before pleasure.

T  F  69. I usually don't like to talk much unless I'm with people I know very well.

T  F  75. I like to talk before groups of people.

T  F  81. It is hard for me to start a conversation with strangers.

T  F  87. I would like to be an actor on the stage or in the movies.

T  F  93. A strong person doesn't show his emotions and feelings.

T  F  99. It bothers me when something unexpected interrupts my daily routine.

T  F  105. I don't like things to be uncertain and unpredictable.

T  F  111. I am very slow in making up my mind.

T  F  116. I would like the job of a foreign correspondent for a newspaper.
The Rokeach

Dogmatism Scale

All items are positive and scored the same way, namely: (C=6; B=5; A=4; D=3; E=2; F=1). The score is the total of all the item scores.

The following is a study of what students think and feel about a number of questions. The best answer to each statement below is your personal opinion. We have tried to cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others; whether you agree or disagree with any statement, you can be sure that many students feel the same as you do.

After each statement there are six answers. Circle the letter in front of the answer which best represents your opinion.

1. Fundamentally, the world we live in is a pretty lonesome place.
   A. I agree a little.
   B. I agree.
   C. I agree very much.
   D. I disagree a little.
   E. I disagree.
   F. I disagree very much.

2. It is only natural for a person to be rather fearful of the future.
   A. I agree a little.
   B. I agree.
   C. I agree very much.
   D. I disagree a little.
   E. I disagree.
   F. I disagree very much.

3. In a discussion I often find it necessary to repeat myself several times to make sure I am being understood.
   A. I agree a little.
   B. I agree.
   C. I agree very much.
   D. I disagree a little.
   E. I disagree.
   F. I disagree very much.

4. It is only when a person devotes himself to an ideal or cause that life becomes meaningful.
   A. I agree a little.
   B. I agree.
   C. I agree very much.
   D. I disagree a little.
   E. I disagree.
   F. I disagree very much.

5. Of all the different philosophies which exist in this world there is probably only one which is correct.
   A. I agree a little.
   B. I agree.
   C. I agree very much.
   D. I disagree a little.
   E. I disagree.
   F. I disagree very much.

6. Most of the ideas which get printed nowadays aren't worth the paper they are printed on.
   A. I agree a little.
   B. I agree.
   C. I agree very much.
   D. I disagree a little.
   E. I disagree.
   F. I disagree very much.
7. In this complicated world of ours the only way we can know what's going on is to rely on leaders or experts who can be trusted.
   A. I agree a little.  
   B. I agree.  
   C. I agree very much.  
   D. I disagree a little.  
   E. I disagree.  
   F. I disagree very much.

8. In the long run the best way to live is to pick friends and associates whose tastes and beliefs are the same as one's own.
   A. I agree a little.  
   B. I agree.  
   C. I agree very much.  
   D. I disagree a little.  
   E. I disagree.  
   F. I disagree very much.
Children's Manifest Anxiety Scale

T  F  1. It is hard for me to keep my mind on anything.
T  F  7. I get nervous when someone watches me work.
T  F  13. I blush easily.
T  F  18. I am secretly afraid of a lot of things.
T  F  24. I feel that others do not like the way I do things.
T  F  30. I get nervous when things do not go the right way for me.
T  F  36. Other children are happier than I.
T  F  42. I worry about what other people think about me.
T  F  48. My feelings get hurt easily.
T  F  54. I worry about doing the right things.
T  F  60. I worry about what is going to happen.
T  F  66. It is hard for me to go to sleep at night.
T  F  72. I worry about how well I am doing in school.
T  F  78. It is hard for me to keep my mind on my school work.
T  F  84. Often I feel sick in my stomach.
T  F  90. I worry when I go to bed at night.
T  F  96. I get tired easily.
T  F  102. I have bad dreams.
T  F  108. I am nervous.
T  F  114. I often worry about something bad happening to me.
"Faking" Scale

T  F  4. I like everyone I know.
T  F  10. I would rather win than lose in a game.
T  F  15. I am always kind.
T  F  21. I always have good manners.
T  F  27. I am always good.
T  F  33. I am always nice to everyone.
T  F  39. I tell the truth every single time.
T  F  45. I never get angry.
T  F  51. I never say things I shouldn't.
T  F  57. It is good to get high grades in school.
T  F  63. I never lie.
Liverant Internal - External Scale

Social Reaction Inventory

This is a questionnaire to find out the way in which certain important events in our society affect different people. Each item consists of a pair of alternatives lettered a or b. Please select the one statement of each pair (and only one) which you more strongly believe to be the case as far as you're concerned. Be sure to select the one you actually believe to be more true rather than the one you think you should choose or the one you would like to be true. This is a measure of personal belief; obviously there are no right or wrong answers.

Please answer these items carefully but do not spend too much time on any one item. Be sure to find an answer for every choice. Circle the letter of each item which you think to be most true.

In some instances you may discover that you believe both statements or neither one. In such cases, be sure to select the one you more strongly believe to be the case as far as you're concerned. Also try to respond to each item independently when making your choice; do not be influenced by your previous choices.

REMEMBER

Select that alternative which you personally believe to be more true.

I more strongly believe that:

1. (0) a. Children get into trouble because their parents punish them too much.
   (0) b. The trouble with most children nowadays is that their parents are too easy with them.

2. (0) a. Many of the unhappy things in people's lives are partly due to bad luck.
   (1) b. People's misfortunes result from the mistakes they make.

3. (1) a. One of the major reasons why we have wars is because people don't take enough interest in politics.
   (0) b. There will always be wars, no matter how hard people try to prevent them.

4. (1) a. In the long run people get the respect they deserve in this world.
   (0) b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.

5. (1) a. The idea that teachers are unfair to students is nonsense.
   (0) b. Most students don't realize the extent to which their grades are influenced by accidental happenings.

6. (0) a. Without the right breaks one cannot be an effective leader.
   (1) b. Capable people who fail to become leaders have not taken advantage of their opportunities.
Social Reaction Inventory (con't.)

I more strongly believe that:

7. (0) a. No matter how hard you try some people just don't like you.
   (1) b. People who can't get others to like them, don't understand how to get along with others.

8. (0) a. Heredity plays the major role in determining one's personality.
   (0) b. It is one's experiences in life which determine what they're like.

9. (0) a. I have often found that what is going to happen will happen.
   (1) b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

10. (1) a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
    (0) b. Many times exam questions tend to be so unrelated to course work, that studying is really useless.

11. (1) a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.
    (0) b. Getting a good job depends mainly on being in the right place at the right time.

12. (1) a. The average citizen can have an influence in government decisions.
    (0) b. This world is run by the few people in power, and there is not much the little guy can do about it.

13. (1) a. When I make plans, I am almost certain that I can make them work.
    (0) b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.

14. (0) a. There are certain people who are just no good.
    (0) b. There is some good in everybody.

15. (1) a. In my case getting what I want has little or nothing to do with luck.
    (0) b. Many times we might just as well decide what to do by flipping a coin.

16 (0) a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
    (1) b. Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.

17. (0) a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
    (1) b. By taking an active part in political and social affairs the people can control world events.
Social Reaction Inventory (con't)

I more strongly believe that:

18. (0) a. Most people don't realize the extent to which their lives are controlled by accidental happenings.
   (1) b. There really is no such thing as "luck."

19. (0) a. One should always be willing to admit his mistakes.
   (0) b. It is usually best to cover up one's mistakes.

20. (0) a. It is hard to know whether or not a person really likes you.
   (1) b. How many friends you have depends upon how nice a person you are.

21. (0) a. In the long run the bad things that happen to us are balanced by the good ones.
   (1) b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

22. (1) a. With enough effort we can wipe out political corruption.
   (0) b. It is difficult for people to have much control over the things politicians do in office.

23. (0) a. Sometimes I can't understand how teachers arrive at the grades they give.
   (1) b. There is a direct connection between how hard I study and the grades I get.

24. (0) a. A good leader expects people to decide for themselves what they should do.
   (0) b. A good leader makes it clear to everybody what their jobs are.

25. (0) a. Many times I feel that I have little influence over the things that happen to me.
   (1) b. It is impossible for me to believe that chance or luck plays an important role in my life.

26. (1) a. People are lonely because they don't try to be friendly.
   (0) b. There's not much use in trying too hard to please people, if they like you, they like you.

27. (0) a. There is too much emphasis on athletics in high school.
   (0) b. Team sports are an excellent way to build character.

28. (1) a. What happens to me is my own doing.
   (0) b. Sometimes I feel that I don't have enough control over the direction my life is taking.

29. (0) a. Most of the time I can't understand why politicians behave the way they do.
   (1) b. In the long run the people are responsible for bad government on a national as well as on a local level.
Marlowe - Crowne Social Desirability Scale

Personal Reaction Inventory

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally. Put T or F next to the item. Remember: Answer each item as it pertains to you personally.

(T) 1. Before voting I believe I would thoroughly investigate the qualifications of all the candidates.

(T) 2. I never hesitate to go out of my way to help someone in trouble.

(F) 3. It is sometimes hard for me to go on with my work if I am not encouraged.

(T) 4. I have never intensely disliked anyone.

(F) 5. On occasion I have had doubts about my ability to succeed in life.

(F) 6. I sometimes feel resentful when I don't get my way.

(T) 7. I am always careful about my manner of dress.

(T) 8. My table manners at home are as good as when I eat out in a restaurant.

(F) 9. If I could get into a movie without paying and be sure I was not seen I would probably do it.

(F) 10. On a few occasions, I have given up doing something because I thought too little of my ability.

(F) 11. I like to gossip at times.

(F) 12. There have been times when I felt like rebelling against people in authority even though I knew they were right.

(T) 13. No matter who I'm talking to, I'm always a good listener.

(F) 14. I can remember "playing sick" to get out of something.

(F) 15. There have been occasions when I took advantage of someone.

(T) 16. I'm always willing to admit it when I make a mistake.

(T) 17. I always try to practice what I preach.

(T) 18. I don't find it particularly difficult to get along with loud mouthed, obnoxious people.

(F) 19. I sometimes try to get even rather than forgive and forget.

(T) 20. When I don't know something I don't at all mind admitting it.
Circle either a or b for each item

**Performer Scale**

1. I would rather be  
   a. an actor or actress  
   b. a playwright

2. I would rather be  
   a. an auto salesman  
   b. an auto designer

3. I would rather be  
   a. a composer of music  
   b. a performer of music

4. I would rather be  
   a. a politician  
   b. the politician's private adviser

**Extroversion Scale**

5. I would rather  
   a. collect postage stamps  
   b. play a card game with friends.

**Ambition Scale**

6. I would rather be  
   a. the leader of an exploration  
   b. an assistant to the leader

7. Assuming I was paid the same for both jobs, I would rather be  
   a. the buyer for a very large store  
   b. for a fairly small store

8. I would rather have  
   a. a job where you were responsible for making decisions  
   b. one where you were responsible for following the decisions of someone else.

9. I would rather  
   a. sell a fairly expensive item  
   b. one not so expensive
### Miscellaneous Tests

<table>
<thead>
<tr>
<th>Test</th>
<th>Page</th>
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<tbody>
<tr>
<td>Parental Encouragement</td>
<td>35</td>
</tr>
<tr>
<td>Self-Rating of Language Skills</td>
<td>35</td>
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<tr>
<td>Eye-Ear-Mindedness</td>
<td>35</td>
</tr>
<tr>
<td>Vocational Interest Survey</td>
<td>36</td>
</tr>
<tr>
<td>Classroom Observation Record</td>
<td>37</td>
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</tbody>
</table>
Parental Encouragement (item 1)
Self-Rating of Language Skills (item 2)
Eye-ear-mindedness (items 3 and 4)

1. How much do your parents encourage you to study French-Spanish?
   
   not
   at all: __________: __________: __________: __________: __________: ______:_ very much

2. Skill in French-Spanish:

   I speak it          not at all: a little: fairly well: fluently
   I read it           not at all: a little: fairly well: fluently
   I write it          not at all: a little: fairly well: fluently
   I understand it     not at all: a little: fairly well: fluently
   when I hear it      not at all: a little: fairly well: fluently

3. I would rather (check one √):

   ______ study a lesson by reading in a book.
   ______ study a lesson by listening to a record.

4. I would rather have a translation test (check one √)

   ______ by having the teacher say the sentences.
   ______ by having the teacher write the sentences on the blackboard.
VOCATIONAL INTEREST SURVEY

Indicate whether you would like (L), dislike (D), or are indifferent (I) to the following kinds of work. Circle the letter L, D, or I.  L=2; D=0; I=1

1. Auctioneer
2. Aviator
3. Bookkeeper
4. Cartoonist
5. Certified Public Accountant
6. Chemist
7. Editor
8. Engineer
9. Factory manager
10. Factory worker
11. Florist
12. Interior decorator
13. Judge
14. Librarian
15. Mathematician
16. Minister or Church worker
17. Poet
18. Rancher
19. School teacher
20. Secret Service Agent
21. Social worker
22. Typist
23. Watchmaker
## CLASSROOM OBSERVATION RECORD

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## TEACHER BEHAVIOR

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<td>4</td>
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<td>6</td>
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Table 1

Distribution of Under-Achievers and Over-Achievers in a Random Sample

| School | Spanish I | | | Spanish II | | | Spanish III-IV | | | Spanish I-IV | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | #UA | #OA | N | #UA | #OA | N | #UA | #OA | N | #UA | #OA |
| A | 10 | 1 | 3 | 5 | 1 | 1 | -- | -- | -- | 15 | 2 | 4 |
| B | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| C | 20 | 0 | 0 | 40 | 9 | 2 | 26 | 4 | 3 | 86 | 13 | 5 |
| D | 21 | 5 | 2 | 40 | 19 | 0 | 19 | 3 | 0 | 80 | 27 | 2 |
| E | 13 | 3 | 2 | 5 | 0 | 1 | -- | -- | -- | 18 | 3 | 3 |
| F | 10 | 2 | 0 | 5 | 0 | 0 | -- | -- | -- | 15 | 2 | 0 |
| G | 15 | 1 | 7 | 28 | 4 | 1 | 48 | 1 | 6 | 91 | 6 | 14 |
| H | 5 | 0 | 1 | 5 | 2 | 0 | -- | -- | -- | 10 | 2 | 1 |
| I | 8 | 0 | 5 | 29 | 0 | 18 | -- | -- | -- | 37 | 0 | 23 |
| J | 5 | 2 | 1 | -- | -- | -- | -- | -- | -- | 5 | 2 | 1 |

| Spanish total | 107 | 14 | 21 | 157 | 35 | 23 | 93 | 8 | 9 | 357 | 57 | 53 |
| Percent | 13 | 20 | 22 | 15 | 9 | 10 | 16 | 15 |

| School | French I | | | French II | | | French III-IV | | | French I-IV | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | #UA | #OA | N | #UA | #OA | N | #UA | #OA | N | #UA | #OA |
| A | 10 | 0 | 1 | 5 | 3 | 0 | -- | -- | -- | 15 | 3 | 1 |
| B | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| C | 15 | 3 | 3 | 43 | 13 | 4 | 20 | 1 | 0 | 78 | 17 | 7 |
| D | 16 | 1 | 3 | 35 | 17 | 1 | 5 | 1 | 0 | 56 | 19 | 4 |
| E | 7 | 2 | 0 | 5 | 0 | 0 | -- | -- | -- | 12 | 2 | 0 |
| F | 11 | 3 | 0 | 4 | 3 | 0 | -- | -- | -- | 15 | 6 | 0 |
| G | 15 | 3 | 1 | 29 | 7 | 1 | 9 | 0 | 1 | 53 | 10 | 3 |
| H | 10 | 5 | 0 | 4 | 2 | 0 | -- | -- | -- | 14 | 7 | 0 |
| I | 11 | 6 | 1 | 16 | 9 | 0 | 10 | 4 | 1 | 37 | 19 | 2 |
| J | 5 | 0 | 0 | -- | -- | -- | 17 | 3 | 0 | 22 | 3 | 0 |

| French total | 100 | 23 | 9 | 141 | 54 | 6 | 61 | 9 | 2 | 302 | 86 | 17 |
| Percent | 23 | 9 | 38 | 4 | 15 | 3 | 28 | 6 |

| School | Overall | | | Overall | | | Overall | | | Overall | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | #UA | #OA | N | #UA | #OA | N | #UA | #OA | N | #UA | #OA |
| | 107 | 14 | 21 | 157 | 35 | 23 | 93 | 8 | 9 | 357 | 57 | 53 |
| Percent | 13 | 20 | 22 | 15 | 9 | 10 | 16 | 15 | 18 | 14 | 29 | 7 |

| | 207 | 37 | 30 | 298 | 87 | 29 | 154 | 17 | 11 | 659 | 143 | 70 |
| Percent | 18 | 14 | 29 | 10 | 11 | 7 | 22 | 11 |
Table 2
Relation between Previous Year's Grade and Current Year's Grade in Modern Foreign Language, Mathematics, English, History, and Science

(N = 290)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Prev Yr's Grade</th>
<th>Current year's grade (per cent)</th>
<th>Per Cent Achieving</th>
<th>Per Cent Achieving</th>
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<tr>
<td>Modern</td>
<td>A</td>
<td>42% 47% 10% 1% 0%</td>
<td>0</td>
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<tr>
<td>Foreign Language</td>
<td>B</td>
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<td>D</td>
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Table 3

Reliabilities of the Battery Tests

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<td>Chinese Pitch</td>
<td>.73</td>
</tr>
<tr>
<td>Rhymes</td>
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<td>Sound-Symbol</td>
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* A re-test would be required to obtain an estimate of reliability.
Table 4

Students' Self-Ratings of Their Foreign Language Skills in Relation to Under-Achievement, Intention to take FL II, and GPA-FL

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<td>SD</td>
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<td>1.50</td>
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<td>1.23</td>
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<td>.56</td>
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<table>
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<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Will not take FL II</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
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<td>3.84**</td>
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<td>.79</td>
<td>73</td>
<td>2.70</td>
<td>0.92</td>
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<td>4.39**</td>
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<td>.67</td>
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<td>0.90</td>
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<td>7.51**</td>
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Correlation with GPA-FL

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<td>Writing</td>
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<td>Speaking</td>
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*p < .05     **p < .01
Table 5

Means, Standard Deviations, and Intercorrelations of Predictor and Criterion Variables (N=155)

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<td>.41</td>
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<td>.07</td>
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<td>3.86</td>
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Significance levels:

- $r = .16, p < .05$
- $r = .21, p < .01$
### Table 6

Beta Weights for Total Predictive Battery and Best Short Forms

<table>
<thead>
<tr>
<th>Criterion</th>
<th>R</th>
<th>Sex</th>
<th>Int. I</th>
<th>Int. II</th>
<th>LA</th>
<th>VC</th>
<th>CP</th>
<th>Rhy</th>
<th>SS</th>
<th>GPA</th>
<th>Ao</th>
<th>Battery</th>
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<tr>
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<td>.60</td>
<td>.046</td>
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<td>.31</td>
<td>.068</td>
<td>.14</td>
<td>.20</td>
<td>1.30</td>
<td>13.58</td>
<td>All 9 tests</td>
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<tr>
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<td>0.12</td>
<td>.23</td>
<td>.001</td>
<td>.030</td>
<td>.029</td>
<td>.049</td>
<td>-.013</td>
<td>.031</td>
<td>.59</td>
<td>-2.46</td>
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<tr>
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<td>.25</td>
<td>.007</td>
<td>.041</td>
<td>.018</td>
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<td>.015</td>
<td>.037</td>
<td>.51</td>
<td>-2.95</td>
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<td>-0.15</td>
<td>.31</td>
<td>.011</td>
<td>-.009</td>
<td>-.009</td>
<td>-.048</td>
<td>.019</td>
<td>-.025</td>
<td>.16</td>
<td>1.86</td>
<td></td>
</tr>
</tbody>
</table>

| Coop      | .631 | .99 | .15    | .30     | .24 | 1.52| 17.18|
| Final     | .706 | .23 | .037   | .027    | .031| .60 | -1.76|
| Oral      | .677 | .27 | .048   | .016    | .045| .53 | -2.08|
| GPA-FL    | .341 | -.27| -.016  | -.007   | -.023| .15 | 1.58 |

| Coop      | .556 | 1.06| .11    | .38     | 2.15| 16.20|
| Final     | .699 | .25 | .052   | .042    | .67 | -2.44|
| Oral      | .669 | .29 | .043   | .053    | .59 | -2.64|
| GPA-FL    | .388 | -.29| -.046  | -.024   | .13 | 2.26 |

Note: The table entries include: Beta weights for Int. and Int. II, LA, VC, CP, Rhy, SS, GPA, Ao, Coop, Final, Oral, GPA-FL, and Battery. The battery is determined based on the number of tests included: All 9 tests, 5 tests, and 4 tests.
## Table 7

Multiple Correlation Coefficients (R) for Selected Predictive Batteries

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<th>Factor</th>
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<th>Final</th>
<th>Oral</th>
<th>GPA-FL</th>
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<td>.575</td>
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<tr>
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<td>.450</td>
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<td>.353</td>
<td>-.275</td>
</tr>
<tr>
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<td>Chin Pitch &amp; Sound Symbol</td>
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<td>.456</td>
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<td>.263</td>
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<tr>
<td>(AB)</td>
<td>LA, VC, GPA</td>
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<td>.674</td>
<td>.622</td>
<td>.149</td>
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<tr>
<td>(AC)</td>
<td>Int I, GPA</td>
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<td>.646</td>
<td>.602</td>
<td>.287</td>
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<td>(AD)</td>
<td>CP, SS, GPA</td>
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<td>.678</td>
<td>.641</td>
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<tr>
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<td>Int I, LA, VC</td>
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<td>.550</td>
<td>.534</td>
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<td>.545</td>
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<td>Total Battery &amp; GPA</td>
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Table 8

The Experimental - Control Study: Means, Standard Deviations, t tests.

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<th>Under-Achievers (E)</th>
<th>tDM ¹</th>
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<td>Mean</td>
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Appendix C

CLINICAL INTERVIEWS
Twelve clinical interviews with egregious adult under-achievers are reproduced in this Appendix. They were summarized by the interviewer in the following letter.

February 1, 1963

Dr. Paul Pimsleur
Listening Center
Denney Hall
164 West 17th Avenue
Ohio State University
Columbus 10, Ohio

Dear Dr. Pimsleur:

This letter summarizes the impressions gained from psychiatrically oriented interviews with twelve Ohio State University students (four women and eight men) who reported difficulty in mastering a foreign language. Each student was seen once, in a session lasting from 75 to 90 minutes. The interviews were conducted in an informal, exploratory style and were not standardized. Most of the students were examined briefly both in the foreign language and in the reading of an English passage. In a few instances the interview was devoted largely to the emotional problems which came to attention. The impressions gained must be presented as tentative, because of the small number of cases, the lack of standardized procedure and the lack of control series.

Of the twelve students, three revealed obvious neurotic problems. One was pursuing college education with a compulsive ambition not truly consonant with his natural capacity. The second was a girl with obsessive-compulsive characteristics who has suffered throughout life from rivalry with a superior twin. The third was a highly sensitive, anxious, perfectionistic girl oppressed by a dread of failure or error. Two others showed less intense character problems or adolescent emotional preoccupation.

All twelve, however, demonstrated a detectable degree of tense self-conscious preoccupation with their lack of success in language mastery despite more than average application. The group averaged about 3 hours of study a day on the language in question. The languages in question were French (1), German (1), and Spanish (10). It appeared that as soon as the students recognized their inadequate performance, they became even more tense and self-conscious in the effort to master the difficulty.

All students emphasized the difficulty of taking dictations and grasping a continuous stream of heard language. They dropped behind or felt lost in class almost from the start, and frequently expressed a need for slower progress and more repetition and review. Even unsystematic
sampling of their linguistic skill indicated that most of these people were struggling with multiple or complex linguistic problems. They read slowly, haltingly, sometimes with gross errors, transpositions of sounds, and imperfect comprehension. It became particularly striking that almost without exception these people also had subtle to conspicuous difficulties with English. Some spelled poorly; many read with slips and stumbling; many demonstrated occasional lapses, distortions and confusions in pronunciation. It also seemed noteworthy that while some of them grasped mathematical or mechanical relations, they did not readily perceive patterns of linguistic structure.

These students exhibited fear of trusting themselves to the new language. Instead of simply listening, they anxiously struggled to translate mentally into English as they went, thereby losing large segments of the aural material. One said "I don't like to go on until I know what this word is." Another described how he attempted to solve linguistic problems by a conscious process of systematic visualization of tabular material, which necessarily delayed his response time. All these students engaged in the study with deadly seriousness and no sense of pleasure or free play.

Although they were undoubtedly handicapped by conscious fear of error and embarrassment and by an anxious urgency to deal prematurely with small instead of large auditory units, these students as a group seemed to demonstrate what may very well be an organic level of linguistic disability, detectable to some extent even in the use of their native language. Their anxious perfectionism aggravated but did not create the primary defect. Their tensely self-conscious and intellectual approach, however, may have served to block the unself-conscious plunge into direct play with language which might have tapped whatever potential resources they possessed. In sum, let me offer the following provisional hypotheses about this group:

1. Primary (neural?) defect in linguistic capacity, nature and origin uncertain.
2. Secondary anxiety based on fear of failure and humiliation.
3. Efforts to compensate by intellectual, self-conscious processes which further thwart the natural process of language learning.

Thank you for the opportunity to make these observations. I hope this work can be pursued further.

Sincerely yours,

Benjamin Kovitz, M.D.
Clinical Director
Columbus State Hospital
Columbus 15, Ohio
INTERVIEWS

Interview with Richard F. 7/3/62.

Mr. F. is a tall, slender, informally dressed man of 32 who came with an eagerly cooperative, curious attitude. His complaint about learning Spanish is that he has difficulty "hearing" it, (not that his hearing is impaired; it was normal by test in 1960 and he hears well in the woods), but that "something bypasses" him. He got a D, and this was the first course he has ever repeated. It is becoming easier with repetition. He also reports that his pronunciation was "horrible." He became worried and befuddled by his difficulty with the language and began to spend 3 to 4 hours an evening on it, at the expense of his other work.

He has never studied a foreign language before. He had looked forward with positive anticipation to knowing Spanish. He had been stimulated by meeting people of foreign birth in the glassblowing industry in Pennsylvania, and on his job at Timkens.

He reports that he memorizes words easily but cannot "think" in Spanish or combine words to express anything new. He becomes very tense when given oral dictation. He says the "forms" are not too difficult to learn. He prepares and even memorizes his "composition" work in advance. He feels hesitant about going to class, and contrasts his work unfavorably with that of the better students. He stumbles in class, which leads to reciting even less. He has rearranged working hours so that he could study more, and employed a Cuban tutor. He resents the failure of the tutor to help him appreciably.

The interviewer, who has an elementary knowledge of Spanish, tested the student on simple reading and pronunciation. The student demonstrates an inadequate knowledge of word forms, pronunciation and grammatical rules.

The student is married, has one child of 13 months, works 60 hours a week to meet his financial obligations. He finds his personal life satisfactory. Childhood was happy, although the father was a perfectionist who lacked self-confidence, had a temper, and administered occasional beatings. The student likes to work with his hands, claims he is good at "figures" and math. He has been ambitious and a "driver" since 17. He wants a degree because it will bring economic advancement. He was shy and often teased as a boy, but is a "plugger." He does not like to owe money, refused to give up on anything, and "worked like a darn fool" at his job at Timkens. Because of his relative maturity and application to work, he has apparently more than held his own with other students in most courses. He is not, however, linguistically oriented or skilled. In English he made C in 400, B in 416, C+ in 417 and C+ in 418. He describes himself intellectually as "shallow .... I want things black and white." He is not inclined to puzzle about implications, ambiguities and philosophical or linguistic subtleties.
Initial Impression:

This is a young man who has managed to overcome adolescent shyness and is moderately perfectionistic and ambitious. He recognizes some of his limitations but has not faced fully the discrepancy between his perfectionism and his capacities. The language disability does not seem to the interviewer to be exclusively emotional. Secondary anxiety was aroused when the primary language inadequacy led to embarrassment and threat to his ambitions. The student was painfully unprepared for the degree of linguistic failure he experienced.

Interview with Carlton R. 7/26/62

The student, who is 36 years of age, is neat in appearance, polite, interested, slightly tense, talks freely and willingly. He reports that he is deeply disappointed by his trouble with French 401. This is the first language he has ever studied. He complains that he is getting further behind all the time, and devoting so much time to French that he is flunking in everything else. He studies 4 hours a day and spends a half hour daily in the listening lab. In addition, he is working a 40-hour week.

He feels that students in 401 who had high school French have a noticeable advantage over him. He stresses his desire to learn and denies that he is blocking (which does not rule it out, of course), but wants the class to move at a slower pace. The first day he felt he was "in the wrong place." The amount of material and the use of spoken French were enough to "confuse" him. The second day in class, with French composition in one's own words, dictation, and pronunciation, was too much for him. He iterates his need for a slower tempo, his feeling that so far the course has been a total loss, and that things move like a machine, with new material every day. He finds it easier to "interpret from French to English" but "English to French" is "rough" and so is the spelling. He has no confidence in his spelling or grammar. Even when he has done his homework rather easily the night before, he cannot put the work on the board in class without the book, and finds this "the most frustrating thing in the world." Dictation moved so fast he "didn't have time to hear the word." It included words he "had never heard pronounced" etc.

The student is in his junior year. This is his third attempt at college. He took one year after the war and "couldn't declare a major." He tried again in commerce and business administration, then went to work for 12 years. He has 3 children, had a nice job, but "no stimulation." He held a specialized position in the transportation and trucking industry, worked his way up, and had a handsome office and a secretary when he quit. ...But he was dissatisfied; there was "no challenge." He wants to be of service, "not a blob," to leave
Carlton R. (con't.)

ideas to others, to "motivate people." Upon returning to college, he tried psychology, but has just switched to Education, majoring in English. He made C's in psychology, B's in literature and math, C in English. He enjoys the "stimulation" more than the "beauty" of literature.

Asked to describe himself, he said impulsively 'I'm not a very nice person... I'm pretty critical." Later he forgot his own spontaneous self-characterization and was surprised when reminded of it. He portrays himself under questioning as impatient, emotional, critical and tactless. He has to fight these tendencies in his work with people. He is never completely satisfied with his own work. He used to have "migraines" the last 3 years on his job. He is still trying to find himself in some sense, and alleges a variety of intellectual and esthetic interests, no one of which is outstanding. He has had his "worst struggle with the English language." Hence he wants to teach it! In grade school he was a ball-playing, "snot-nosed kid", not a student. The father was domineering and always inhibited in showing affection. The mother became less demonstrative as the boys grew older. An uncle was the one person who showed active interest in him, but the uncle was also ruthlessly critical and stern.

It was learned, when he commented that his friends all have degrees, that one of them is a psychologist at Columbus State Hospital. The choice of psychology as a major was in part an expression of admiration for this person. The student mentioned that the bright younger brother turned out to be a disappointment; he is only a machinist!

Impression:

This young man is discontented with himself and probably aiming beyond his genuine native potentialities toward prestige and "culture." He is not yet able to understand or face the conflict between his neurotic ambition and his spontaneous nature.

Interview with Donald T. 8/2/62

Mr. T. has never studied a foreign language before. He describes his difficulties with learning language in the following way. He is 'weak in English." In Spanish he finds it "difficult to understand certain words or phrases ... new words, how they are put together ... Are six syllables six different words or one word or two words?" He feels there was insufficient repetition in class, especially at the beginning. During the first 4 or 5 lessons he felt completely at a loss. Matters were made worse by the presence of some people in the class whom he considered "quite versed in Spanish."
What he experiences as most difficult is "the listening. The hearing of the language. I can read the language if it is printed. I seem to have a visual contact rather than an audio. Many times I can't understand what my teacher says on the tape. I haven't learned to distinguish... to do as I have in English... my mind automatically stops (at a strange word). I don't like to go on until I know what this word is." He asks himself "How do I spell this word? How am I going to write this down?... The new and the strange and the different are difficult... When they use words I don't know, it's just a complete helplessness... I would like to be able to write something down, but I have no idea what to put down."

He is slowest in the class in the number of words he can write on the board at dictation. Tapes are not always helpful because he says, There is "no chance for correction." He is reluctant to read or speak aloud in class because he knows his pronunciation would be criticized. Rather than grasp a group of words as a totality in a context, he would "rather know exactly what each word means."

He has trouble with forms distinguished by an added letter, and gives the example of pregunta and preguntar. He emphasizes "I have to connect myself to seeing the word rather than hearing it." The printed word, as he says, "is there, and it's going to be there for a while." He is keenly aware of the fugitive nature of the spoken word, and wants it repeated "over and over again." If he asks a question, he discovers he is the only person in the class who didn't know the answer. He thought after one or two days in class that the others already knew Spanish. He believes the class moves too rapidly for him. When asked to read some simple Spanish words and names he mispronounces grossly (paldar for pradal, guilerano for guillermo). He claims he mistakes one word for another and "never could spell."

The student reports that he has done better in math, making A's and B's in the past. He is now taking calculus and analytic geometry and says he ranks 4th or 5th in a class of 22.

He is a man of 30, married for three years, who quit a job as Food Service Manager at the Columbus General Depot to go back to school. He remembers having to repeat the second grade, because of reading difficulty, according to the teacher. He thinks school work may have been more difficult at that time because the family moved, but he recalls nothing about the family's reaction to his school problems.

He graduated from Michigan State in 1954 with a B.A. in Hotel and Restaurant Management. His older brother was successful in the same field and the student idolized him. He got B's and C's in college without applying himself. He describes himself as "very laxadaisical," and not interested in high grades. The parents, on the other hand, were graduates of Ohio Wesleyan and had records of "practically straight A." The father was chief of vocational
Donald T. (con't.)

education for the State of Michigan. He was forceful, had a temper, was the "boss," but not close to the sons. The mother was sweet and kind and gently protective of the three boys, but also not truly close. The student felt that the parents always thought we could "do better."

The student's wife is an elementary school teacher who has evidently been prodding him. "She made me realize there's more in life than just a job." He is not sure of his goal, however, but wants to master "fundamentals." He enjoys math most of his school subjects, but finds it difficult. He reads with a cultural aim. He mentioned a book title with the noticeable mispronunciation, "The Rise and Fall of the Third Rite." The student reports that his marriage is congenial although he and his wife are "complete opposites." He has been a shy person with limited social contacts. His wife is helping him "develop" his "personality."

Impression:

Ambition ahead of linguistic skill. Possibility of innate or early acquired (organic?) language handicap, with consequent focusing of anxiety in the language area. Compulsive "pushing" against the blocking effect of anxiety creates a vicious circle.

Interview with Edward D. 11/13/62

Mr. D. is a tall, slim, rather shy young man who is cooperative but not fluent in conversation. He says he is in the fourth quarter of his Freshman year. Spanish is his first foreign language. As usual, he feels that others in the class have the advantage of having already had Spanish in high school. His grades are mostly C in other subjects, except for D in English and B in Math 416. He started slowly in math but is finally "eating it up."

He claims that he gets the words but not the thought as he listens to spoken Spanish. He thought he was getting to it until his first examination paper came back. The interview had the student read material from his textbook which he had covered during the course. The student's performance is truly pathetic. He makes errors such as the following: reads cadasas for casadas, vida for viuda, pronounces (vidzas) for vieja, (hodza) for hoja, (indos) for indios, (cree) for creer, and (meslisa) for mezcla. He guesses the word for mother as manana. He pronounces interesante repeatedly as interesante. He pronounces civilizacion as civiliznacion and civiliznacion. It is evident that he cannot exclude interfering English word patterns and is admittedly uncomfortable about even pronouncing foreign sounds. He clings to an Americanized pronunciation. He also dislikes learning inductively and wants rules and generalizations presented to him, yet he does not readily see or look for the general pattern in a collection of verbal items.
Edward D. (con't.)

Psychologically the student appears to be of a so-called "introverted," "intuitive" type. He is left-handed. He is more tense than the average person, and reports that he is consciously ill-at-ease in class. He has difficulty in grasping complex verbal formulations and, despite his mathematical interest, cannot easily define a "factor" although he demonstrates it at once.

He likes sports, such as bowling and basketball. He is enthusiastic about a subject like mathematics where he works towards the sudden insightful solution. He shows no great interest in language or literature. He does not make himself repeat or review sufficiently in studying language material. Although he is unhappy about doing poorly in Spanish, he seems to lack the capacity for incisive, corrective self-criticism.

He is the second of two sons, and the only person in the family to attempt college. He is interested in a business or office career. Although on the shy side, he gradually warms up during the interview, and denies social difficulties. He is unmarried. He denies any serious childhood illness or injury.

Impression:

Serious disability in reading, recalling and interpreting foreign language material. Mildly schizoid personality type. Language handicap appears disproportionate to his moderate tension and shyness.

Interview with Peter C. 11/14/62

The student is a stocky youth of 22. He talks readily in a direct, serious manner. He is now a junior who transferred from Ohio University. He is having difficulty with French 401, thinks his work averages at a C- level, (D in dictation and B in grammar). He found the class easy only on the first day. After that it all seemed new although he had 2 years of French in high school. His poorest high school grades were in French.

The student believes he is holding his own with the average of the class. He works hard and sometimes experiences satisfaction in seeing progress. He reports trouble with the "little words." He can't get his tenses right and can't always tell if a word is singular or plural. His feeling about the course is not negative or hopeless. "Every once in a while I'm glad I'm taking it." He was frightened before taking the course, by hearsay alarms. He feels tense in class. In dictation, he gets the first couple words and the last couple and is lost in between. Just before the instructor starts to dictate he feels as if he is going to jump off a cliff. "She says a couple words and you're on your way down." Distracting thoughts come to him when the dictation starts.
He admits a feeling of awkwardness and embarrassment about uttering foreign sounds. He finds the class repetitious, yet is not too bored because he has trouble keeping up with everything. He prefers to listen to tapes after studying the lesson, claiming that he gets nothing out of them otherwise. He studies French 2 1/2 to 3 hours a day or more.

The student was asked to read passages in English and French. He felt under tension reading, and made simple errors such as reading call for can and was for has. He does not find English composition easy, and has to make at least a second draft of a theme to get C's instead of D's.

The student readily discussed his personality and life story. He does not feel close to his parents. He has always been in good physical health. He finished high school at 18 (1959), liked the sciences and is still most interested in them. He started O, U, in 1959 and flunked out after 2 years, "disillusioned." The climate was one where obvious studying was despised, and he took this social attitude seriously. He was unhappy and lonely. He has been preoccupied with the need to be liked. He considers himself shy but his friends do not. He does little dating, does not see himself as the fraternity type.

The student feels discontented with his achievement so far, but believes that he has underlying abilities which will come through in time. His dreams of fires, bombs, and gruesome insects suggest tensions probably originating in his unsatisfactory relation to his parents. He is moody and used to lose his temper. He has wanted to be creative, perhaps to write. "Catcher in the Rye" reminded him of himself. He recognizes difficulties in getting along intimately with people.

He is practical-minded, mildly obsessive, and feels he is more sensitive than others realize. Despite his emotional problems, this student appears to be doing better with his language difficulty than the rest of the group interviewed so far. He has some verbal facility. He has difficulty copying a cross accurately, however, and misspells the word foreign when writing English from dictation.

Interview with Arthur C. 1/23/63

Mr. C. is a Lt. Commander in the Navy who has entered school with advanced standing as a sophomore. He has been in the Navy 14 years and has achieved a department head level. He is a tall, pleasant, straightforward man of 30 who creates an impression of competence, self-assurance and reliability. He is majoring in political science and needs a degree to advance his career. He has a sincere interest in becoming proficient in a foreign language. Spanish is proving difficult, and he spends more time on it than on any other course, about 3 hours of preparation for every hour in class. He has adequate mechanical
Arthur C. (cont.)

and mathematical ability. He feels he has no difficulty with English except for grammar. He reads an English passage well, yet stumbles over the word analogy.

He reports extreme difficulty in keeping up with continuous play tapes. "My main trouble is not being able to hold a thought."

"If they speak of a long sentence... give a long sentence, I change it to English and try to hold it there. Then when I get back, I've lost the rest of the Spanish." When he reviews older tapes, however, they make sense. He has the feeling of being 2-3 days behind the rest of the class. It is evident that he is handicapped by the need to translate each part of a sentence mentally before going ahead.

There is some secondary disappointment and irritation about his slow progress, but he consciously tries to 'adopt a different frame of mind... not to get mad at it or give up." The study presents a challenge and he doesn't want to fail.

He illustrated his approach as follows:

When given the words usted and ustedes and a series of infinitives from which to fill in the correct verb form, he finds that the other class members are filling verbs in faster than he can think of them. He first visualizes the table of conjugations in the book, then he mentally goes down the list until he finds the proper number and person. "First I think of usted and what it means, meaning you. Then I think, tener. er. the er chart. Then I drop down till I come up with vous.. change to e...tene." The student has difficulty reproducing the paradigms accurately from memory, however.

In contrast to his classroom experience is the student's report of his two-week honeymoon in Mexico. At that time he was unconcerned about mechanics, grammar or correctness, and just trying unselfconsciously to get along. He felt no great embarrassment about trying to speak Spanish and found he grasped meanings and was able to make himself understood.

This man shows no primary emotional problem. He is generally capable and ambitious, and has reached a point in his career where his innate linguistic limitations are handicapping him. It seems that conscious preoccupation with a grammatical system slows him up because he tries to think of the system first rather than instinctively making a concrete response.

Interview with Jane W. 1/24/63

This student, a sophomore, has a lisping type of speech defect. She appears to be serious, more sensitive than the average student, and demonstrates a latent infantile dependent attitude. She had Latin in high school, is doing well
Jane W. (con’t.)

in Spanish 401, but is discontented with her progress in German. She has had the first three quarters of German, and is now taking 404 and 409. She complains freely about the lack of spoken German in the class, and about needing much more active practice in using the language than she is getting. She denies difficulty with grammar; her trouble is with "hearing it" and translation. "It doesn't seem like the right things are being emphasized." She translates from German to English and vice versa slowly and with errors. She confuses jener with jeder and thinks that gleichen means to like.

She wants to teach foreign language. In view of her difficulty, this suggests unrealistic ambition. She tends to be critical and demanding of her instructors and in a revealing remark calls the students in the class "children." She is tense in class about oral questions. The student shows little spontaneous enthusiasm or active interest in the material, and perhaps expects that more should emanate from the teacher.

Interview with Grant B. 1/23/63

This student is 20, taking Spanish 401. He made D in beginning Latin in high school. He has done better in math, history and chemistry than in English and Spanish. He has given from 3-5 hours a day to studying Spanish, and finds it harder than all the rest of the class. He reports trouble with spelling and putting down his thoughts on paper even in English.

In Spanish, the words "all run together." He can't "keep the train of thought in a sentence." He concentrates on spelling in taking dictation and then forgets the sentence. He feels disturbed because never before has he found a subject that he could not master by "putting in time."

Sample testing reveals difficulty with English as well as Spanish. He reads direction for discretion, imitate for intimate, etc. He stumbles in reading the word syllabification.

In Spanish, he reads tempio for tiempo, pronounces dias as dayas, uses somos instead of son, hay instead of tiene, etc.

The student had nephritis at 6 and lost several weeks of school. He never learned to read by phrases, but reads word for word. He cannot scan a page.

Emotionally, although he has an intolerant, religiously fanatical father, the student appears stable and balanced. He faces his family problems and himself with honest directness. He has always been action oriented rather than language oriented. He handles mathematical material more comfortably than linguistic.
Interview with Shirley P.  1/24/63

This girl, a major in medical dietetics, has had 2 years of high school French. She did well, the emphasis being on written work and grammar. She has trouble chiefly with Spanish dictation.

"I try to translate and I can't think in the language. I try to translate and translate back and there's not enough time to do that." In conversation, she must make a mental translation into English, think of an English reply, then turn the English into Spanish. She does not work directly with the Spanish unless the words are extremely familiar.

When tested, she actually reads and translates simple Spanish correctly. She reads English with minute errors which seem in part due to tension. She says pronunciation instead of pronunciation.

An emotional problem is present. The student is a serious-minded, highly sensitive, perfectionistic girl. She is physically tense (voice quivering, hands cold, heart fluttering) when she has to speak. She is always afraid of being called on in class, for fear of being embarrassed if she cannot understand and reply correctly. There is profound dread of "hurting" or disappointing her parents by low grades. The student has a strong anxiety reaction to error or failure; she views mistakes as an absolute disaster rather than an opportunity for learning. She should benefit by a change in attitude; more willingness to endure the pain of error could in time increase her confidence and efficiency.

Interview with Clara B.  1/21/63

The student is a girl of sturdy physique with a serious, cooperative attitude. The discussion of her difficulties with Spanish led rather rapidly into her major personality problem, consideration of which occupied most of the available time. Less objective data were obtained but perhaps more insight was gained into her emotional life.

She has had French in high school. In Spanish, she gets A or B in grammar but D's in dictation. When given simple Spanish to read aloud, she lapsed repeatedly into an English pronunciation and showed moments of confusion. In translation she made obvious errors, guessed at words badly, could not remember words she had studied and confused similar words such as tener and venir. She reported trouble associating spelling with sound. She cannot grasp the spoken word unless she can follow it with the text. She translated as follows:

1. Doy el dinero a mi amigo.
   "That's to give a friend...something." She finally translated it correctly with added time and effort.

2. Please tell me where is the school.
   (oral) Per for...favor...dece usted a mi
   $ encuentre la escucha...wait a minute...es...something...
Clara B. 1/21/63

She reports feeling the "pressure" as she enters the classroom. She feels "very sensitive" and uncomfortable when called upon to recite. "I get embarrassed quite easily," becoming "flustered," with cold hands and a feeling of "butterflies" in the stomach. After such a stress period, she is in a "bad mood."

In reviewing possible sources of her tension, she remarked that her father had a Ph.D. but "that doesn't have anything to do with it." She also reports that people tell her she is "too idealistic." Finally, she remarked, "Maybe I want to do better than my ability goes," and goes on to state that she does not like an "indifference" attitude.

Almost incidentally she mentioned the existence of a twin sister and hastened to add "but we haven't been compare." The twin, although "identical," is actually slightly taller. At birth, the twin weighed 5 lb. 1/2 oz., the student only 4 lb. 1 0z. It soon became clear that the twin had the edge biologically from the first, and that the student has herself suffered secretly all her life because of her constant self-comparison with the sibling.

The twin has always been more "relaxed," the student more "nervous." The twin got a B in Spanish, our student only a C. Throughout their lives the twin has achieved slightly better grades with less effort. "I'd try harder, but she'd get a better grade"..."I do lack self-confidence. I've looked up to her."

The student demonstrated an earnest and determined struggle to deny and escape the pain of the constant invidious comparison. It is evident, too, that the family's conscious emphasis on equality of treatment has actually made it much harder for the girl to deal with the problem. The anxiety about her relative inferiority is a pervasive force in her life and has created a distinctly compulsive character, an uncomfortable pseudo-virtue and a hyper-sensitive reaction to competitive situations.

The student reports that she is not comfortable in the listening center because she needs complete privacy. She is too easily embarrassed. She has a neurotic shyness about discussing her grade and her feelings toward her instructor in English composition. She makes rare minor errors in reading English aloud.

Interview with Janet S. 1/21/63

The student is a small girl with a smiling friendly attitude. The interviewer was struck at once by her accent, which had an almost artificial "eastern" quality. She acquired her accent at St. Mary of the Springs, where she states this style of speech is taught. She reports doing poorly in English grammar and spelling but uses a more rich and elegant vocabulary than the average OSU student.
Janet S. (con't.)

She flunked in Spanish at St. Mary of the Springs. At OSU she got B in Spanish 401 but is doing poorly on dictations in 402. She does a lot of work with little result. Last quarter she had a non-native instructor whom she understood more readily. This quarter she has a native speaker and cannot distinguish words in the continuous flow of speech.

In translating a simple Spanish passage, she translated all the verbs as past although she realized they were in the present tense when questioned. She also reports trouble memorizing word forms.

In history, zoology and math 400 she made B's. She did poorly in more abstract mathematics. She is interested in speech and hearing therapy. The student appears to have no more than average self-consciousness or inferiority feelings. She found the change from the Catholic School to OSU "traumatic" at first, but seems to be handling it successfully.

She feels the need of more conversational practice with instructors rather than students. She also wants more frequent and intensive review and explanation of grammar. She spells English poorly (notice her struggle with technical). She draws the design from memory inaccurately -- the only student so far to do this.

Interview with James K. 1/17/63

The student is a neatly dressed slender youth of 21. His attitude is one of tense politeness. His speech reveals a slight halt or momentary inhibition which may be a mannerism. He also demonstrates minor mouth mannerisms, consistent with a state of tension.

The parents are in their 50's. He is the oldest child, with two younger brothers and two younger sisters. He describes the family as happy. He is interested in politics and feels he has some ability to work in this field. He has many male friends, dates girls infrequently and has no girl friend. He does not always find his dates a complete success and feels that he lacks the glibness about trivialities necessary to amuse the girls. He is ambitious and is paying more than half the cost of his schooling. He is active in the Democratic Club and is the Religion and Culture Chairman of Stradley Hall. He likes gardening and has won prizes for his chrysanthemums. He also enjoys organizing and supervising clerical or office work.

The student is moderately obsessional and perfectionistic. His statements tend to be complex. He occasionally alters or distorts words (pronunciating, potentiality!) He did not pass the written drivers' test the first time he took it. He passed it the second time, but he never took the practical part of the test although he says he can drive.
James K. (con't.)

In high school he reports a high C average. He started college in 1959 and is now a junior, majoring in political science. He did poorly in the first two years at OSU, and feels he did not apply himself. His grades in Freshman English were C, D, D. His point hour average has risen to 2.6 or 3.0 in the last year. He is doing B work in a course on public administration and policy development. He has improved greatly in speaking English in the past 2 years.

The student is taking Spanish 402. He got D in 401 and repeated it after a quarter interval, getting a B the second time. His only previous contact with foreign language was learning to understand the Latin words of the mass as a "server." This took him time.

His problem with Spanish: "I find it hard to understand the teacher when she talks a little too fast." He can't understand a new word the first time. "I have to go through a sort of process of time...before I can understand the word in dictation." He requires a "second or two" of what he calls a "time lap," during which he spells the word and sees it in his mind. It appears that his aural recognition of a word goes through 3 stages:

1. hearing the sound
2. spelling and visualizing it mentally
3. recognizing the meaning

Translation:

1. (The teacher writes with a pen.) (15 seconds delay) La maestro escribe con... I don't know the word for pen... La maestro escribe con... una or un... penna? or whatever pen is.

2. El estudiante ha leído muchos libros (10 seconds delay) The student... I didn't get the last part. (The sentence is repeated). Ha... well, that's hard to translate le... probably reflexive. ido... somehow, I can't understand the word I would have to see it in writing... (can you spell it?)... It could be 'ideal?" It could also be... I think I get it now. A student had... read a book. (Finally recognizes participle of leer)

3. The man sees the horse. (written) El hombre ve el caballo.

In reading English aloud he makes several errors:
- anecdotes is read as antecedents.
- hoax is mispronounced.

Prepositions are misread. The phrase false alarm is read as false alarming.

He tries to read rapidly and explains that he concentrates on the idea and loses the details in reading aloud.