

A STUDY OF BEHAVIOR MODIFICATION
THROUGH PRESCRIPTIVE TEACHING

by

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Chapter 1

INTRODUCTION

General Background

Many young people enter junior high school with its required classes without the experience of previous satisfactory accomplishment of the required courses of study. Unless schools can help these students acquire a degree of accomplishment, some students will continue to drop out of school as soon as legally possible and some will be no better prepared than when they entered. The most important single aspect of the junior high school curriculum may be prescribed instruction for students with learning difficulties. Many junior high school students need a prescribed course of study; yet many are neglected because no provisions have been made to help them overcome their difficulty.

Teachers and counselors alike can detect the non-functional student. A series of ego deflating experiences have taught the non-functional student he need expect only failure when placed in a competitive situation with his classmates.

Educators are aware that nothing motivates people more than success. To accomplish this the non-achieving student needs to be placed in an environment other than the traditional, competitive classroom. It is desirable that he be placed in a situation where he can succeed at his own rate and level.

To enable a student such as this to achieve successfully in school, the teacher must help him change either his self-image or his

behavior, for until he can visualize himself succeeding, all the teaching effort in the world will be in vain.

What can educators do to enhance the self esteem of students and make it possible for them to learn? Can a teacher challenge a child in order to help him gain self-confidence? "Children vary greatly but each child should be challenged so that he can achieve success by stretching his abilities."¹ If success comes too easily, it's importance is diminished. A child should be pushed to work hard, to achieve, to take pride in the fact that success comes because of his personal effort. Thus he becomes aware of his own powers.

Every teacher has encountered a child who is unable to achieve some measure of self-esteem by academic or other constructive methods, and who often turns to negative behavior. He finds it easiest to withdraw into day dreaming or turn to misbehavior in the classroom. Whether child or adult, he will use whatever means available to maintain or enhance his self image. Jan Silverman, co-author for Today's Education, said "Self-esteem is a better predictor of a child's future success in school than intelligence."²

Flora Fennimore, author in English Journal, quotes Carl Rogers:

To develop into an adequate person an individual must be characterized by the following four factors: a positive view of self, identification with others, openness to experience, and available perceptual field. These means of perceiving, though

¹Stanley Coppersmith and Jan Silverman, "How to Enhance Self Esteem," Today's Education, Vol. 58 (April, 1969), p. 28.

²Ibid., p. 29.

circular in their dependence upon each other are learned; thus it follows that these means can be taught if parents and teachers can provide the necessary experiences.³

Objective of the Study

The objective of the study was to determine the academic and social improvement of non-functioning, underachieving students through utilizing high-interest, low vocabulary materials with a small group of selected seventh grade students.

Limitations of the Study

The sample was limited to the original students selected for the prescriptive class. Time was limited to a normal school term; August 26, 1970 through May 29, 1971. The tests were limited to standardized tests conducted in a classroom setting under qualified supervision.

Definition of Terms

The following list of terms was defined for clarification of the problem:

1. Prescriptive teaching--consists of those modifications of instruction and other school variables which are based upon individual diagnosis in the direction of assisting the child's learning.⁴
2. Behavior modification--altering or shaping the child's overt behavior in such a way as to condition him for intellectual training.⁵

³Flora Fennimore, "Developing the Adolescent's Self Concept with Literature," English Journal, Vol. 59 (December, 1970), p. 1272.

⁴Laurence J. Peter, Prescriptive Teaching (New York: McGraw-Hill Book Co., 1965), p. 1.

⁵Joseph Stocker, "Help For Hang Ups," American Education (June, 1969), p. 5.

3. Self-concept--as defined by Rogers:

Self concept is the organized consistent conceptual gestalt composed of perceptions of the characteristics of the 'I' or 'me' and the perceptions of the relationships of the 'I' or 'me' to others and to various aspects of life, together with the values attached to these perceptions. It is a fluid and changing gestalt, a process.⁶

4. Underachiever--is an individual whose academic achievement, as evidenced by teachers' grades or achievement test scores, is thirty-five percentile points or more below his intelligence test score.⁷

5. Warm teacher--is a teacher who in his human relationships, is accepting, understanding, empathic, respectful, interested in others, likes people, is trustworthy, dependable, consistent, non-threatening and does not interfere with the freedom of others.⁸

6. Non-functional student--is an individual with below normal intelligence whose personal experiences have taught him he can expect only failure when placed in a competitive academic position with his peers.

⁶Carl Rogers, "A Theory of Therapy, Personality, and Interpersonal Relationships, as Developed in the Client-Centered Framework," Psychology: A Study of a Science, Vol. III, Sigmund Koch, Ed. (New York: McGraw-Hill Book Co., 1959), p. 200.

⁷Kenneth B. Engle, "A Demonstration Study of Significant Others in Producing Change in Self-Concept and Achievement in Kalamazoo Secondary Schools," U.S. Department of Health, Education and Welfare, Office of Education, June 30, 1965, p. 4.

⁸Ibid.

Chapter 2

REVIEW OF LITERATURE

Identifying the Under-Achieving Student

Studies conducted by the Union County Regional High School, Berkley Heights, New Jersey, found that about fifteen percent of a student body could be classified as educationally disadvantaged. The characteristic most frequently mentioned of these were: three or more years below grade level in reading; language arts skills below expectations; a negative self image; a short attention span; and the lack of ability to grasp abstract ideas or symbols.⁹

The non-functioning student is frequently given a diluted form of the academic program or selected materials which have little relevance for or do not meet the needs of these students. The result is lack of interest and motivation which many times leads to school dropouts.

Even with the most able consultation and highly skilled teaching it may not be possible to help a child in the regular school setting and unless he can be helped--not merely contained--in the classroom he should not be there. The teacher's survival and the other children's welfare, as well as his own, are at stake.

How early can we recognize underachievement in school? What factors are involved in underachievement? Academic underachievement

⁹David L. Carl, "A Suburban Community's Concern for its Disadvantaged Students," The Clearing House, Vol. 44 (May, 1970), p. 519.

is now regarded as a recognizable entity by the third, fourth, or fifth grade level, and is considered to be a "set" and relatively inaccessible pattern of behavior by the time the student enters high school. It is not known how early underachievement begins, but it would appear that in many cases its roots lie outside the schools, in early home and environmental influence.¹⁰

For children who still fail to respond in the regular classroom after everything feasible has been done, the next step is the special class. Such classes provide relief for the whole school system and, generally speaking, they offer the non-functioning student more individualized planning, with the result that pupil behavior and achievement improve.¹¹

Investigators have identified some underachieving students with conflicts which cause them to seek academic failure as a means of rebellion against parents toward whom they feel a strong, unconscious hostility.¹² Comparable results were found with other underachievers, for non-aggressiveness in academic work has become associated with the expression of repressed anger. For some students apathy--their defense against a display of hostility--was the overt symptom of adjustment.

¹⁰Elizabeth M. Drews and J. E. Tehan, "Parental Attitudes and Academic Achievement," Journal of Clinical Psychology, Vol. 13 (October, 1957), pp. 328-332.

¹¹William C. Morse, "Disturbed Youngsters in the Classroom," Today's Education, Vol. 58 (April, 1969), p. 30.

¹²C. B. Blaine, Jr., and C. C. McArthur (eds.), Emotional Problems of the Student (New York: Appleton-Century-Crofts, 1961), p. 84.

Wiener found that tensions and defensive reactions tend to lower intelligence test scores.¹³

If a student cannot learn arithmetic it could be because it is inconsistent for him to do so, resulting from the fact that his self-concept entertains the idea that he is incapable in arithmetic. He perceives himself as generally inadequate or as incapable in certain subject matter areas, and then proceeds to behave in ways consistent with those beliefs so that he in fact becomes an inadequate achiever.¹⁴

Head Start, a program which takes the culturally deprived child and exposes him to an intensive preschool program, has demonstrated that children from deprived cultural environments can improve markedly in motivation and educational experiences.¹⁵ Prescriptive teaching is similar in intent to the Head Start program except the program is concerned about school age children rather than at the preschool level.

An experiment was conducted which was specifically designed to test the proposition that within a given classroom those children from whom the teacher expected greater intellectual growth would show greater growth. Those children from whom their teachers were led to expect greater intellectual gains showed greater intellectual gains than did the children for whom teachers were given no special expectations.

¹³Gerald Wiener, "The Effect of Distrust on Some Aspects of Intelligence Test Behavior," Journal of Consulting Psychology (April, 1957), p. 127.

¹⁴Charles P. Bartl, "The Academic Underachiever in an Industrialized World," School and Society, Vol. 43 (January, 1971), p. 24.

¹⁵James S. Coleman, Equality of Educational Opportunity (Washington: U.S. Government Printing Office, 1966), p. 523.

The large gain in IQ during the basic year of the experiment, shown by the children of the experimental group, reported a ten point IQ gain by 38 percent of the children. First and second grades, 49 percent, showed a ten point gain after only one year. Among the first and second grades, 19 percent gained twenty or more IQ points. The gains in IQ of the experimental group children appeared to be large enough to have been the result of some program of educational innovation.¹⁶

In April and May 1962 all seventh, eighth, ninth and tenth grades in the Kalamazoo Public School System were administered the California Test of Mental Maturity and the California Achievement Test. The achievement scores for reading, mathematics, and language were averaged and converted to standard scores. Teacher grades for English, mathematics and social studies were averaged and converted to standard scores. Students were determined to be underachievers if their teacher grades were 35 percentile points or more below their intelligence test scores. Then 440 students classified as underachievers were randomly assigned to four control and four experimental groups to determine if individual counseling, group counseling and warm teachers could prove to be statistically beneficial to the control group as compared to the experimental group.¹⁷

Statistically, most of the objectives of the study were not realized. The experimental group did not achieve significantly more

¹⁶Robert Rosenthal and Lenore Jacobson, Pygmalion in the Classroom (New York: Holt, Rinehart and Winston, Inc., 1968), p. 61.

¹⁷Engle, op. cit., p. 11.

than the control groups with respect to teacher's grades, nor did they become more open-minded or less anxious. There were fewer disciplinary referrals in the experimental counseling group; conversely, the warm teacher control group had fewer tardies.

Statistical treatment of group data tends to have a cancelling effect. Many in each group do make significant gains academically, while others regress, and still others remain unaffected. However, Engle points out that it is important not to become discouraged when results of this kind show little or no difference. It is important to keep trying to do something about the particular individual with whom one is working. There will be differences which may not show up immediately or statistically, but the individual will be helped.¹⁸

Behavior Modification of the Under-Achieving Student

A key element in an experiment referred to as the Alhambra program is the Illinois Test of Psycholo-Linguistic Abilities (I.T.P.A.). It is designed to measure a child's intake of written and oral language, his interpretation of the information, and his expression of it verbally, visually and through motor skills.

The approach to the problem is called "behavior modification," altering or shaping the child's overt behavior in such a way as to condition him for intellectual training. Such standards may include development of an adequate attention span; orderly response in the classroom; the ability to follow directions; tolerance for limits of time;

¹⁸Ibid., p. 19.

space and activity; and appreciation for social approval and avoidance of disapproval.

Important ingredients of the Alhambra program are approval, success, and reward. The reward process can be as rudimentary as chocolate drops, given to a poor reader for successfully negotiating a page of third grade prose. He reads a line and the teacher drops a chocolate into his paper cup, another line, another piece of candy.¹⁹

To combat limited attention spans, the teacher changed techniques two or three times each class period, using audio-visuals in one segment, a demonstration in another segment, and student participation in a third. During the course, students were taken on field trips to local business--banks, manufacturing plants, utilities--for a firsthand look at how the skills they were learning could be applied.²⁰

Methods of Teaching the Prescriptive Student

Prescribe is to write beforehand; prescriptive is to set down the direction. Prescriptive teaching consists of the modification of instruction and other school variables which are based upon individual diagnosis in the direction of assisting the child's learning.

An adequate educational program is based on evaluation of the child and his total dynamics, not simply in relation to his problems but also in relation to whatever conflict-free areas of response he has.

¹⁹Stocker, op. cit., p. 5.

²⁰Bill Lewis, "Underachievers Measure Up," American Education, Vol. 5 (February, 1967), p. 9.

They include every interest, desire or need which can motivate a positive, active response in the educational setting.

Prescriptive teaching emphasizes development of the areas of major deficits found in the child's profile. Although the child may have a biological, developmental, or emotional factor inhibiting him, a part of the deficit is the result of psychological withdrawal from the activities requiring use of the deficient skills. During growing states the child avoids activities in which he faces failure and later shows marked deficits.

Cumming and Cumming showed that a controlled environment can bring about changes in behavior, learning, and personality. Behavior is controlled by its environmental consequence that produces the desired responses. The essence of prescriptive teaching is that the environment is manipulated to allow reinforcing consequences to become attached to the learning that is desired.²¹

Mr. Laurence J. Peter, author of Prescriptive Teaching, suggests readily available instructional materials that can be utilized for prescriptive classes; such as; (1) an emotionally disturbed child will work well with finger paints on large sheets of paper, this fulfills a need to manipulate; (2) craft supplies such as clay, wood, nails, or weaving materials provide creative expression and visual motor development; (3) workbooks are fine tools to aid in development of vocabulary;

²¹J. Cumming and Elaine Cumming, Ego and Milieu (New York: Atherton Press, 1962).

and (4) use of achievement tests are useful aids in working with remedial problems.²²

The task of helping to build a child's self-esteem is not easy--for the teacher or the student, but it is one that must be undertaken for it is crucial for the healthy development of every child.

²²Peter, op. cit., pp. 95-96.

Chapter 3

METHODS AND PROCEDURES

Selection of Students

It was not intended to create additional "special education" classes but rather to selectively prescribe an individual curriculum in the areas of language arts, mathematics, social studies, and science for selected students. These students, having specified handicaps, were grouped into one small class of fifteen students and were presented with slightly modified subject matter commensurate with their abilities. Instructors of these classes received additional assistance in the location, choice and preparation of selected curricular materials to enhance the effectiveness of this individualized prescribed curriculum program.

It was decided to include a minimum of fifteen and a maximum of twenty students. The class members were selected through a cooperative effort of sixth grade teachers, principals, school psychologists and counselors. Members had psychological evaluation previous to selection and parental approval was obtained prior to selection.

A primary and secondary list of names was presented to the counselors and teachers. The list of names was not the same for all subjects. The final class membership was then coordinated with the lists and the scheduling concluded.

Recommendations for the prescriptive class were made by the sixth grade teachers and final selection was made with the help of

the school psychologist. Students who were unable to function in the regular classroom and were achieving below grade level, approximately two to three years, were recommended. It was a necessity that students selected be able to function in a group setting. Materials used in the classrooms were recommended as high-interest, low-vocabulary in nature, activity orientated, and a learning experience approach in so far as possible.

The following traits were noted within the group of the fifteen students selected: (1) short attention span, (2) auditory problems, (3) bilingual background, (4) weak comprehension, (5) cultural deprivation, (6) lack of motivation, (7) neurological symptoms, (8) parent conflict, (9) repetition of a grade, (10) sight reversal, (11) weak sight vocabulary, (12) weak verbal vocabulary, (13) poor vision, and (14) an IQ range from a low of 74 to a high of 105.

Procedure

Because of a wide range of abilities among the group, teachers needed to identify problem areas to effect a prescribed program of learning. To establish a point of beginning the Stanford Achievement Test administered at the conclusion of the sixth grade served as this instrument.²³

The Stanford Achievement Test Battery indicated grade level achievement in four basic skills; language arts, mathematics, social

²³Truman L. Kelley and others, Stanford Achievement Test (New York: Harcourt, Brace and World, Inc., 1964), p. 2.

studies and science. The Stanford Achievement Test Battery (SAT) was developed to measure the important knowledge, skills, and understandings commonly accepted as desirable outcomes of the major branches of elementary curriculums. "The tests were intended to provide dependable measures of these outcomes, comparable from subject to subject and grade to grade, for use in connection with improvement of instructing pupil guidance, an evaluation process."²⁴ The scores obtained from the SAT, given in October following a summer and two months of junior high school experience, were compared to the achievement scores of the conclusion of the sixth grade.

In May 1971, a final evaluation was obtained on the progress of the full school year using the scores obtained by administering the Stanford Achievement Test Battery the third time.

During the month of January a new and different testing instrument was introduced to all of the seventh grade students. The Iowa Test of Basic Skills (ITBS)²⁵ had been chosen by the administration to replace the SAT. The prescriptive class completed this test over a three day period in a normal classroom setting. Results from the ITBS and the SAT, were compared in consistency of achievement rate.

To measure the students' interest in school and their application and efficiency toward productive results, a comparison of the grades these students received during the fourth, fifth and sixth grades were

²⁴Ibid.

²⁵E. F. Lindquist and N. N. Hieronymus, Iowa Test of Basic Skills (Boston: Houghton Mifflin Co., 1964), p. 3.

compated to grades received from teachers in the seventh grade. The same procedure was used to compare the number of days absent in the fourth, fifth and sixth grades to days absent in the seventh grade.

The academic development of a student is important; however, the teacher can equally be concerned with the social development of the student toward his school, his class, and toward his peers. Social development is intangible, thus subjective, and when measured does not lend itself to pinpoint accuracy. A survey of the selected teachers' personal opinion of where the student started and the progress made concerning attitude and social development during the seventh grade was taken to determine rate of maturity in these areas.

Materials and Methods

A review of the special materials and methods used by teachers for this selected group will be presented by departments.

The language arts department stressed primary importance on vocabulary improvement, spelling skills, and reading comprehension. Building individual vocabulary skills was improved through extensive use of materials secured from Science Research Associates, such as "Reading Laboratory II: A Power and Rate Builder."²⁶ Spelling skills were enhanced by utilizing Dr. Spello,²⁷ a low level reading and

²⁶Don H. Parker, "Reading Laboratory II: A Power and Rate Builder," Science Research Associates (Chicago: Field Enterprises, 1969).

²⁷William Kottmeyer, Dr. Spello (St. Louis, Missouri: McGraw-Hill Book Co., 1968).

spelling skills workbook. Reading for Understanding,²⁸ Junior Scholastic,²⁹ and Classics Illustrated³⁰ were contemporary tools to aid in improving reading skills.

A novel approach toward making writing assignments more relevant was scheduling field trips in conjunction with a writing assignment. One very successful writing assignment and field trip experience was combining an excursion and sack lunch to the zoo with the written assignment entitled, "My Favorite Animal."

The instructor employed a program of individual contacts with the students, allowing each to progress as far and as fast as his ability and motivation allowed. To reach the full scope of the abilities of the prescriptive class, it was necessary to use three different workbooks: Programmed Math,³¹ Guidebook to Mathematics,³² and Individualizing Mathematics.³³

Social Studies is a course that demands extensive reading for class and reviewing newspapers and magazines at home. Because many

²⁸Thelma Thurston, Reading for Understanding (Chicago: Field Enterprises, 1963).

²⁹Katherine Robinson (ed.), Junior Scholastic (Englewood Cliffs, New Jersey: Scholastic Scope, 1970).

³⁰William Kottmeyer, Classics Illustrated (New York: Gilbert Company, Inc., 1970).

³¹M. D. Sullivan, Programmed Math (New York: McGraw-Hill Book Co., 1968).

³²George C. Laughlin and Betty R. Blanche, Guidebook to Mathematics (Oklahoma City, Oklahoma: Educational Guidelines Company, 1970).

³³Albert G. Foley and Bernard B. Burke, Individualizing Mathematics (Menlo Park, California: Addison-Wesley Publishing Company, 1970).

of these students were from deprived homes one could assume they were lacking in some experiences necessary to achieve their full potential. Special materials used exclusively for this class were: This Is Our Country,³⁴ and World History Study Units.³⁵ In addition, they used a study game called "Baseball" that continued with enthusiastic participation throughout the school year. This type of creative, motivational effort is an example of the characteristics needed to stimulate pre-scriptive classes.

The science department does not revolve around a single program, textbook or workbook for seventh grade science. A large part of their source material was taken from a special low level science reading book list selected by the school librarians. The one book that did prove to be of the most value for this class was Biological Science: Patterns and Processes.³⁶ This was a selection from Biological Sciences Curriculum Study.

³⁴Elvin A. Baker, Global Culture Series (Wichita, Kansas: McCormick-Mathess Publishing Company, Inc., 1965).

³⁵Leland T. Johnson, The Changing Old World (Morristown, N.J.: Silver Burdett Company, 1963).

³⁶Evelyn Klinckaam, Biological Science: Patterns and Processes (New York: Holt, Rinehart and Winston, Inc., 1966).

Chapter 4

RESULTS

In April, at the conclusion of the sixth grade, the Stanford Achievement Test Battery scores indicated relatively low mean grade level achievement for the students selected for the prescriptive class. The lowest grade level score received by the students was in the area of language arts. Their highest area of achievement was in the field of mathematics, a course of study not depending on reading skills. All of their achievement skills combined to reflect a mean level grade attainment of 4.1 as shown in Figure 1.

After a summer and two months of prescriptive class experience, grade level improvement was indicated by scores obtained from the Stanford Achievement Test Battery, given in October of the seventh grade year. The greatest gain was in the area of paragraph meaning and the smallest gain was in the area of mathematics as shown in Figure 2.

In May, the third and final Stanford Achievement Test was administered by the Junior High School counselor, in a normal classroom setting. The improvement in language arts which included paragraph meaning, spelling, and language usage, reflected a .90 grade level improvement. Mathematics, which included computation concepts and application reflected a 1.06 grade level of improvement while science showed the greatest gain with a full 3.00 grade improvement in only one year. The overall grade level improvement showed a gain of 1.10 years compared to an average of .57 years for the first six years of conventional

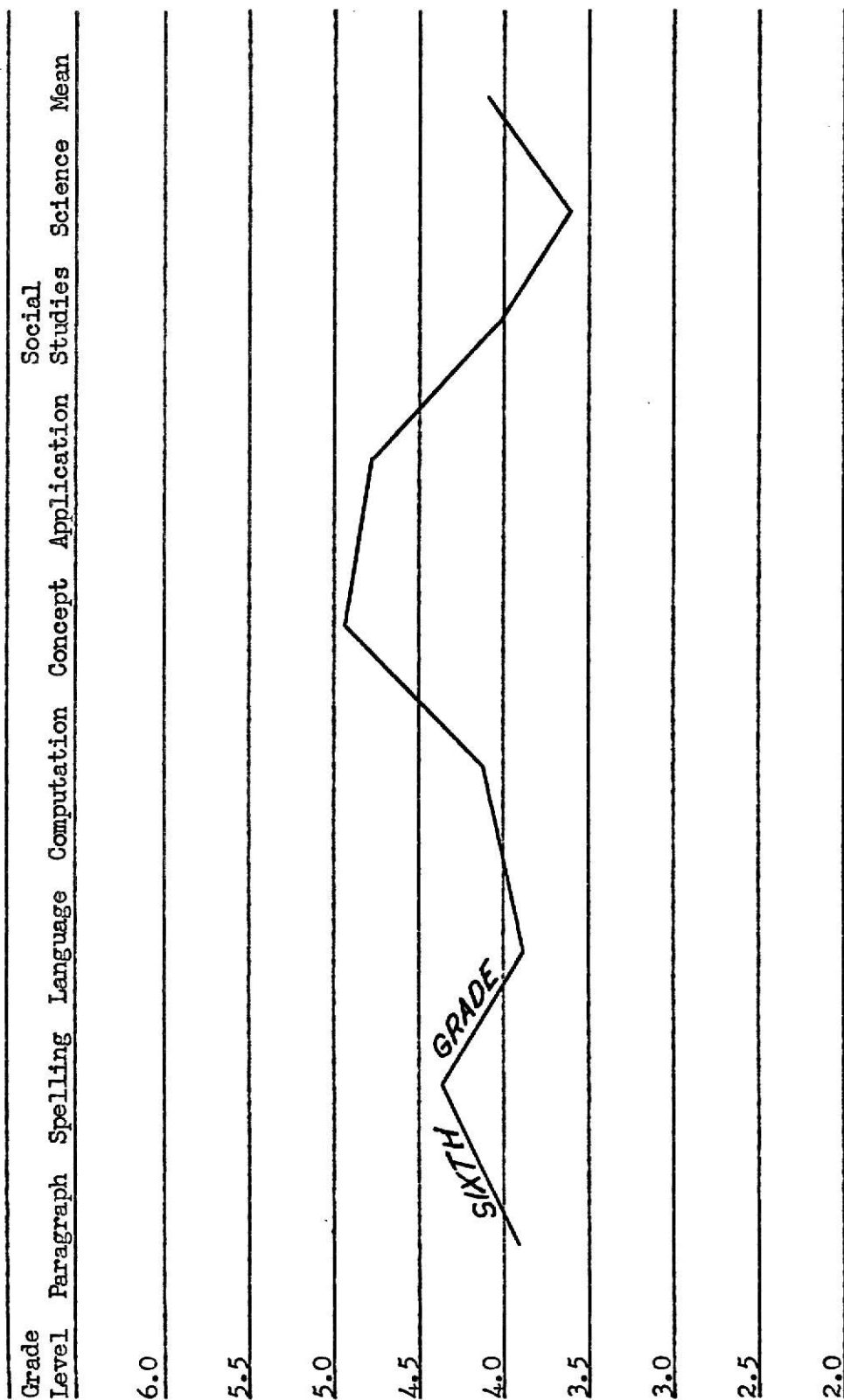


Figure 1
Profile of Spring Sixth Grade Scores on the
Stanford Achievement Test

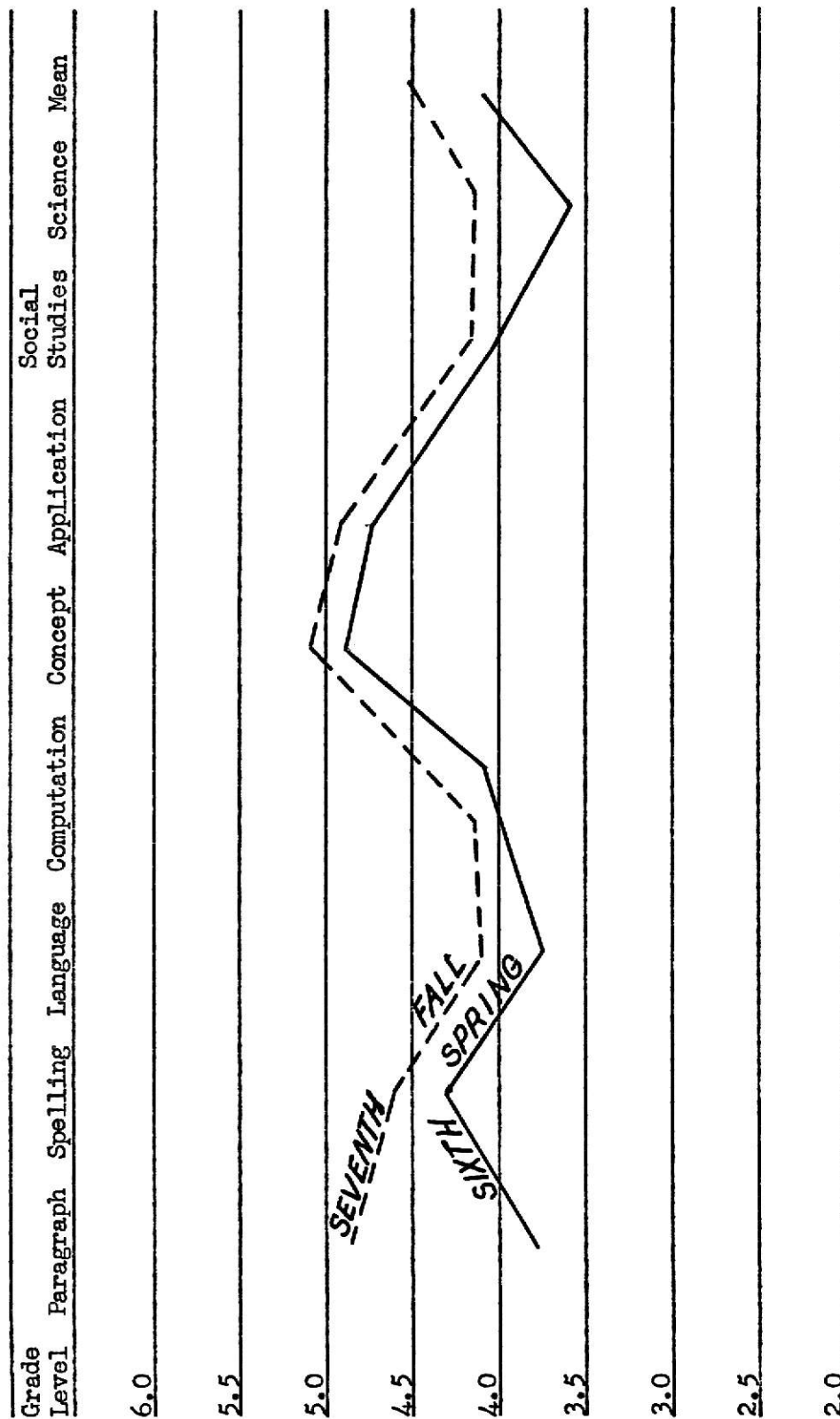


Figure 2
Comparison of Spring Sixth Grade and Fall Seventh Grade
Stanford Achievement Test Results

class experience. Figure 3 shows the comparison of the sixth and seventh grade scores.

The Iowa Test of Basic Skills was administered to all seventh grade students in January. The Stanford Achievement Test was administered to the prescriptive class in May. For the sake of comparison, language arts on the SAT composed of spelling, paragraph meaning and language usage, were combined into one score to be comparable to the ITBS test. Although there was a time lapse of one semester between administering the ITBS and the final SAT, a mean grade level improvement of .43 at the end of the first semester on the ITBS test, and a grade level improvement of .83 on the SAT for the full year, in the area of language, mathematics and social studies was noted (Figure 4).

In addition to academic achievement a teacher must consider the whole child. At the conclusion of school a survey of each student's progress in ability to lead, work, function and express himself in class was rated by the teacher involved. In addition, attitude toward himself, school, class, teachers and peers proved to have a significant value. The result of the survey by the teacher assigned indicated they judged the students had progressed in social interaction from a point of 3.0 on the stanine scale to point 4.3 by the end of May as shown in Figure 5.

Attendance records acquired from the confidential files of the students revealed that during the fifth grade they were absent 19.7 days and in the sixth grade they were absent 18.9 days for a mean of 19.3 days absent. In the seventh grade, days absent were 11.9, a number comparable to the fourth grade of 11.0 days absent.

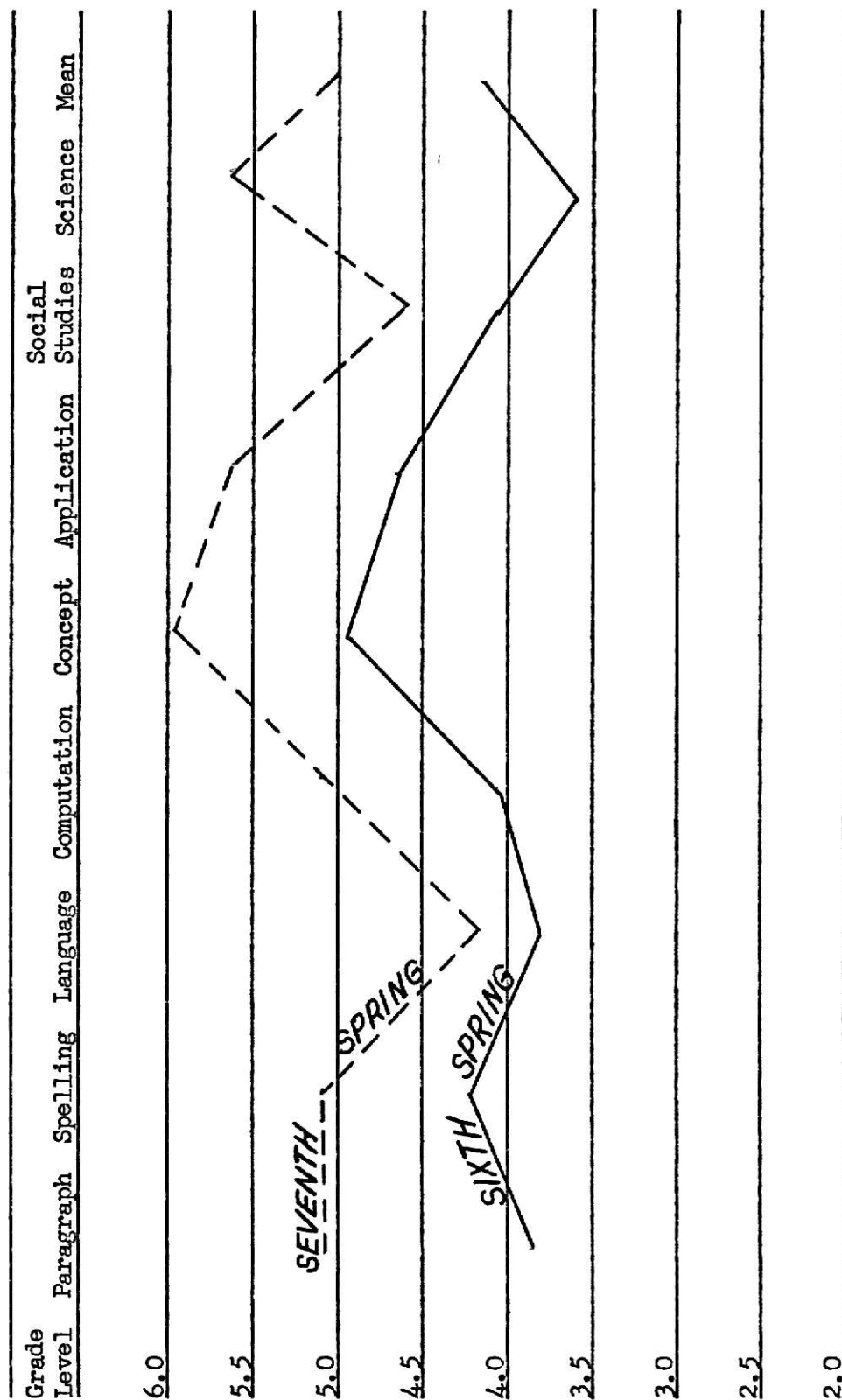


Figure 3

Comparison of Spring Sixth Grade and Spring Seventh Grade
Stanford Achievement Test Results

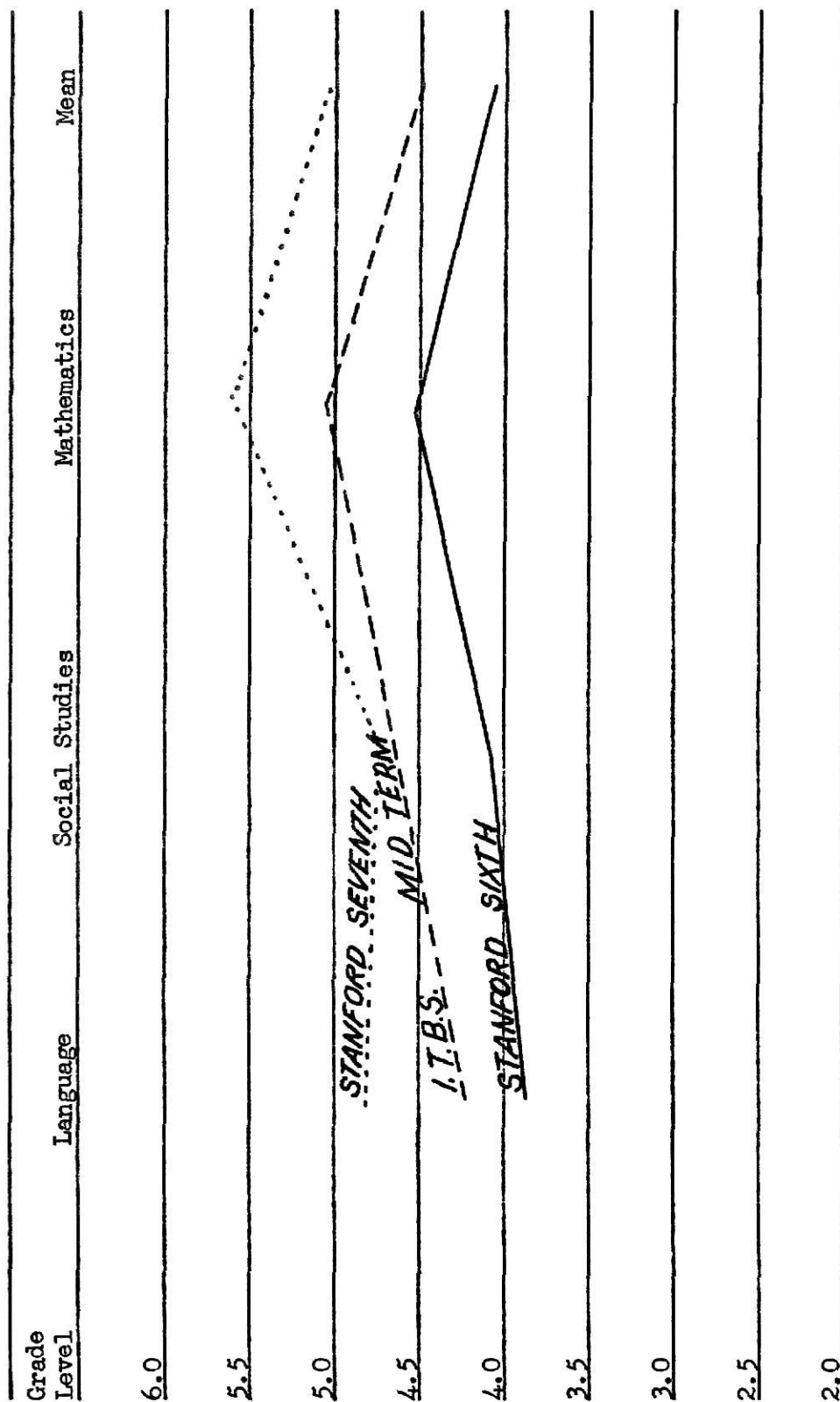


Figure 4

Comparison of Midterm Iowa Test of Basic Skills Results
with Spring Sixth Grade and Spring Seventh Grade
Stanford Achievement Test Results

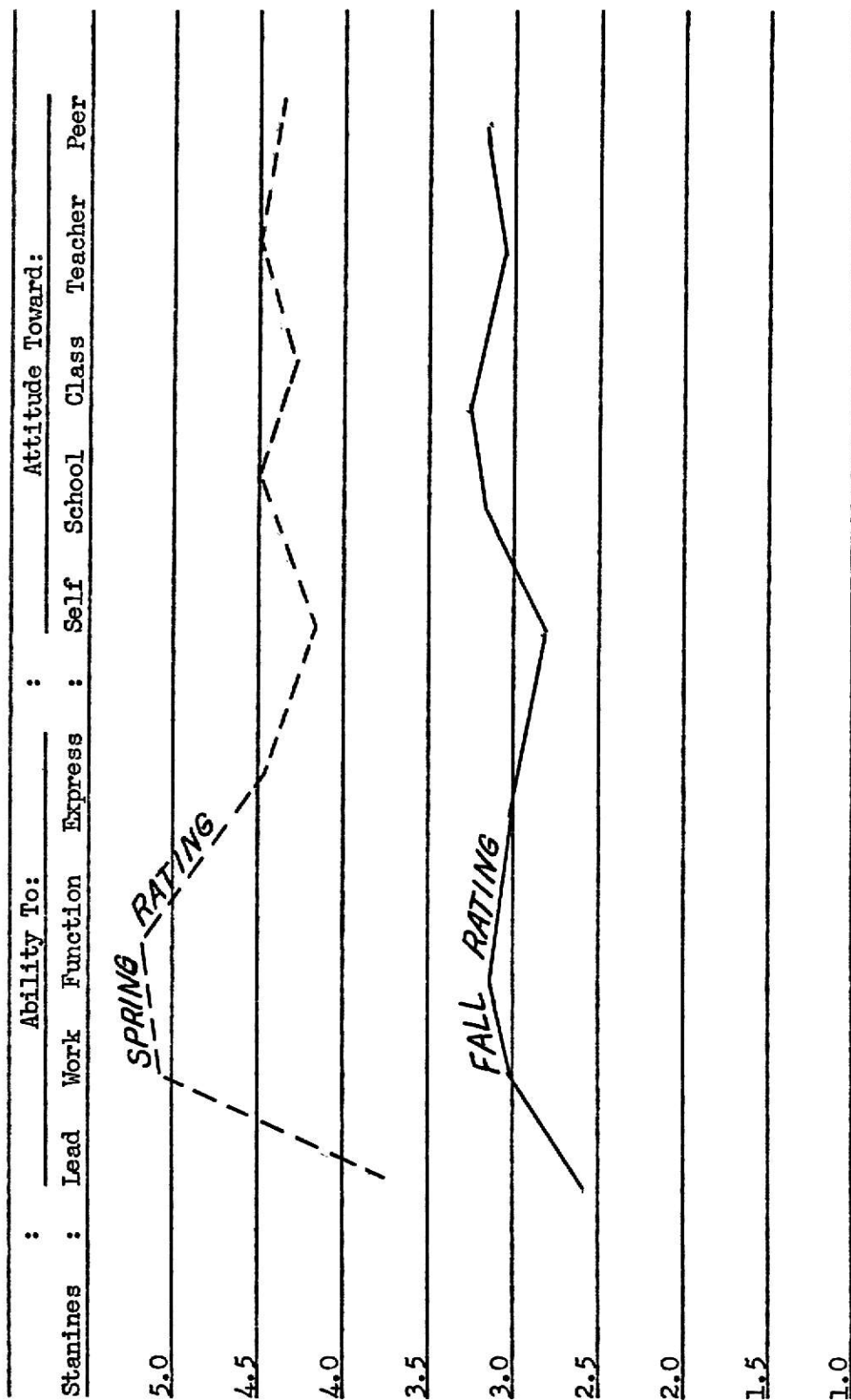


Figure 5

Comparison of Attitude and Social Development as Judged by Teachers
at the Beginning and End of the Seventh Grade

Chapter 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The purpose of this study was to determine achievement results of a special class designed for low level, underachieving students at the junior high school level. Students selected for this class were just above the special education level in the area of intelligence and were achieving two to three years below grade level.

It was decided that a minimum of fifteen and a maximum of twenty students would be an ideal size for a class of this type. The class members were selected through a cooperative effort of sixth grade teachers, principals, school psychologists and counselors. Members had psychological evaluation previous to selection and parental approval was obtained prior to selection.

A primary and a secondary list of names was presented to the counselors and teachers. The list of names was not the same for all subject areas. The final class membership was then coordinated with the lists and the scheduling concluded.

A prescriptive class by design must be small in number and special materials are required for these students. Recommended materials used in this classroom were high interest level, low vocabulary, activity or inquiry oriented.

The following methods of evaluation were used during the school year: Using student scores on the Stanford Achievement Test administered

at the end of the sixth grade as a point of beginning, the same type of test was used the first semester of the seventh grade and at the end of the seventh grade. The Iowa Test of Basic Skills was given to all seventh grade students and was used as a tool of comparison with the Stanford Achievement Test.

The Spache Diagnostic Reading Scales³⁷ and Triggs Diagnostic Reading Test³⁸ were employed to determine reading skills. School attendance records for grades four, five, six and seven were compared in addition to a teacher survey of attitudes and social skills development from the start of the seventh grade until the end of the school term.

Conclusions

Although this program was not designed specifically as a strict research project, there were sufficient pre- and post-test results, to indicate the amount and direction of change of learning skills during the school year. The Stanford Achievement Test at the conclusion of the sixth grade indicated the class had a 4.1 year grade level achievement. As beginning seventh grade students the mean rate of grade level improvement was .57 for the first six years of school. The final Stanford Achievement Test conducted in May reflected a grade level attainment of 5.20. In one school year they had made a 1.10 gain compared to a normal

³⁷George Spache, Diagnostic Reading Scales (Monterey, California: Del Monte Research Park, McGraw-Hill Book Co., 1963).

³⁸Francis O. Triggs and others, Triggs Diagnostic Reading Test, Mountain Home, North Carolina, Committee on Diagnostic Reading Tests Publishing Co., Inc., 1958.

advance of .57. A significant gain in academic improvement can be expected by grouping underachieving students with others of like ability and individualizing instruction to meet their level of accomplishment.

Because most of these students had physical handicaps, their disabilities contributed to poor attendance. However, with a low of 11.0 days absent in the fourth grade, the fifth and sixth grade reflected 19.7 and 18.9 days absent, respectively. During the seventh grade the days absent returned to 11.9; a figure comparable to the fourth grade. This record indicated the reduction of threat at school--they were not searching for reasons to miss a day of school.

Teachers having the students in prescriptive class rated them on attitude toward school and social development on the stanine scale. These scores were compared with seventh grade students in regular classrooms. The survey revealed the greatest improvement in the areas of ability to work and ability to function. The class had progressed to the fifth stanine which compares with an average seventh grade student. The class, in all areas of ability and attitude, made a mean gain from the third stanine to the fourth stanine, compared to their peers, in one year of prescriptive class experience.

In conclusion, the establishment of a prescriptive class of below average IQ students who have been discouraged because of lack of success in past experiences but who are willing to learn, can meet with success. Academic and social improvement can be realized for these students.

Recommendations

The size of the class for optimum success should remain at

fifteen for each course of study. If necessary, this number could be increased to a maximum of twenty students. However, to preserve creative instruction and individualized techniques, the class should remain as near the optimum number as scheduling permits.

Class activities should be scheduled to change every twenty minutes with a maximum activity period of thirty minutes. One activity should involve motion, possibly in the form of a game. If it is necessary to schedule the students into the same class more than one hour then a different type of study activity should be employed, such as a reading teacher or a teacher aide on a one to one ratio.

Students should be selected who can function in a group setting and who can benefit from individual attention. Importance must be placed on selection of teachers who are warm, friendly and sympathetic toward the student.

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A STUDY OF BEHAVIOR MODIFICATION
THROUGH PRESCRIPTIVE TEACHING

by

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AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

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MASTER OF SCIENCE

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ABSTRACT

A prescriptive class for seventh grade students was instituted in an attempt to allow each student to grow and develop to his full potential. Students selected for the class were just above the special education level in the area of intelligence and were achieving two to three years below grade level.

The purpose of the study was to evaluate the students to ascertain if a prescriptive method would, in reality, fulfill the needs of the selected students for the class.

It was decided to have a minimum of fifteen but not more than twenty students per class in each subject area. The original class was selected by a cooperative effort of sixth grade teachers, principals, school psychologists and counselors. All students had psychological evaluation previous to selection and parental approval was obtained.

A primary and a secondary list of names was presented to the counselors and teachers. The lists were not the same for all subject areas. Special materials suggested for this classroom were of high interest level, low vocabulary and activity or inquiry oriented.

The following methods of evaluation were used during the school year: (1) Stanford Achievement Test, Advanced Battery for Grades 7, 8, and 9, (2) Iowa Test of Basic Skills, (3) Spache Diagnostic Reading Scales, and (4) Triggs Diagnostic Reading Test. The achievement and reading tests were given at the beginning of the term and repeated at the conclusion of the school year.

The Stanford Achievement Test administered at the conclusion of the sixth grade indicated the class had a 4.1 grade level achievement. The final Stanford Achievement Test conducted in the spring reflected a grade level attainment of 5.20. In one school year the students made a 1.10 gain compared to a normal advance of .57. During this period the days absent was 11.9, a figure much improved from 19.7 and 18.9 for the fifth and sixth grades, respectively. A teacher survey of attitude and social development reflected a mean gain from the third to the fourth stanine, compared to their peers.

A significant gain in academic and social improvement was noted as a result of grouping low level, underachieving students with others of like ability and individualizing instruction to meet their level of accomplishment.