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Inservice self-study was utilized to improve the qualitative level of classroom method among teachers of the gifted. Ten judges selected 45 of 75 elementary and secondary teachers by a rating scale of significant behaviors, classroom observation ratings, the Weiner Attitude Scale, and the Terman Concept Mastery Test. The 45 were considered flexible, intelligent, creative, and stimulating. Analysis of the teacher behavior scale indicated four main factors: individualized materials and instruction, art of questioning, encouragement of higher level learning, and communication-interaction. Inservice activities were pupil study (case studies) of gifted characteristics, study of classroom principles for higher level thinking, and discussion and evaluation of a teacher model; teacher-made videotapes of classroom activities, using the principles learned, were also shown and evaluated at the inservice meetings. Interjudge reliabilities of .90 were obtained from audiotape analysis of the teachers' questions and answers at the beginning and end of the project. Significant improvement between the two tapes (p=.01) occurred in the application, generalization, and synthesis questions by the teacher (indicating growth in higher cognitive level questions), and growth in open responses by students were noted.

(Author/SN)
THE IMPROVEMENT OF TEACHING PROCEDURES
WITH GIFTED ELEMENTARY AND
SECONDARY SCHOOL STUDENTS
THE IMPROVEMENT OF TEACHING PROCEDURES WITH GIFTED ELEMENTARY AND SECONDARY SCHOOL STUDENTS

June 1968
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FINAL REPORT
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THE IMPROVEMENT OF TEACHING PROCEDURES
WITH GIFTED ELEMENTARY AND
SECONDARY SCHOOL STUDENTS

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June 1968

The research reported herein was performed pursuant to a contract
with the Office of Education, U.S. Department of Health, Education,
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U.S. DEPARTMENT OF
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Office of Education
Bureau of Research
During the past several decades of planning for the gifted, considerable emphasis has been placed on change in school content and school programs. More recently persons interested in the gifted have increasingly stated that teacher preparation for work with the gifted is basic to the success of any type of educational program, and that without thorough teacher preparation, special school materials or administrative arrangements will have little significant impact.

Increasing efforts in identification of the gifted have been accompanied by heightened concern for the improvement of teaching procedures for them. Within the State of California alone, approximately 100,000 public school pupils are recognized as gifted pupils who are in need of special programs. The teachers who work with them have had to seek special preparation through independent study, school system in-service meetings, or summer workshops or courses, unless they have employed ingenuity in planning study opportunities for themselves within the context of courses under other titles. Little or no opportunity has been available for systematic self-study in the process of teaching the gifted.

It is reasonable to assume that much of the value in any program of preparation for teachers of the gifted depends upon opportunities available to them for observation and study in exemplary classroom settings, with teachers who understand the gifted and provide appropriately for them.

The identification and special preparation of such teachers has been the major goal within this project. The research which has been conducted has tested the efficacy of identification and in-service study toward the purpose of improved quality in the teaching of the gifted.

In any study which occurs within the public school setting, countless courtesies are extended by all concerned. Studies which transcend administrative boundaries and involve college personnel, as well as school personnel, create many demands and require steadfast support and cooperation. The many kindnesses extended by school people to the project staff contributed substantially to whatever success it enjoyed.

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CHAPTER 1

INTRODUCTION

BACKGROUND OF THE STUDY

The two year study entitled The Improvement of Teaching Procedures with Gifted Elementary and Secondary School Students, was developed because of a long extant problem related to appropriate education for the gifted, namely that of effective teaching.

The projects and programs which have been developed in the past have been directed toward two principle types of investigation: characteristics of gifted children themselves, or the effects of certain administrative arrangements on the educational achievements of the gifted. In certain of these projects, attention has been given to teaching process, content, and methodology. In no project, however, has the primary emphasis been on the teacher himself and on his teaching procedures.

Various writers have presented materials on the selection of teachers for the gifted, on characteristics desirable in effective teachers of the gifted, and on the teaching procedures which they regard as particularly relevant to learning by the gifted. These writings have been mainly hortative, with few exceptions. Assessment of the impact of systematic effort directed toward improvement of one's own teaching of the gifted has not been carried out to any great extent. Yet many writers on the gifted have discussed the importance of the teacher as central to the learning process and have presented arguments for the specialized preparation of teachers. A recent publication (Council for Exceptional Children, 1966) includes a suggested program of preparation for teachers of the gifted. Implicit in this document and in others is the assumption that teachers of the gifted need special preparation and special skills beyond those of other teachers.

The skills required for teaching the gifted relate in many ways to the differential modes of learning which they employ. The present project, therefore, was designed in order to delineate procedures and methods which can be utilized effectively by teachers of the gifted, to work with teachers in the utilization of effective teaching processes so that the teachers understand clearly those processes and are able to transfer principles of effective teaching from situation to situation, and so that these teachers may serve in leadership roles in the preparation of teaching colleagues or students to deal with gifted pupils effectively.

Most programs for teachers of the gifted in colleges and universities consist of single courses or summer workshops. In only a few centers more than one course is offered; in some instances one or two courses are combined with summer session workshops.
If special preparation is offered, the typical college or university offers a single course in which students are expected to develop all of their understandings of the psychological characteristics and educational needs of gifted students at all age levels and within varying types of school situations, as well as to understand appropriate teaching process and methodology. These courses have been of some benefit in the improvement of educational opportunities for the gifted but understandably the benefits have been limited.

Before more extensive programs of preparation can be developed, it is necessary that teacher preparation institutions plan programs of study accompanied by adequate opportunities to work with demonstration teachers of the gifted who understand the learning needs of their pupils and can plan appropriately for them.

Without adequately prepared demonstration teachers who can serve as teaching models, the possibility for preparation of expert teachers of the gifted is severely limited. Persons who are interested in learning about the gifted need opportunities to work with teachers who are cognizant of the psychological characteristics of their pupils, who provide for their unusual and advanced levels, and who encourage them to deal with challenging ideas. These teachers are those rare individuals who are able to translate the characteristics of the gifted to appropriate curriculum practices within the classroom.

The present project was established on the thesis that classroom teachers can be given a systematic series of experiences in planning differential curriculum for the gifted which will result in an understanding of certain principles inherent to success in working with this population. Improved teaching comes from understanding of the different modes of operation which are relevant particularly for the gifted, in the view of the investigators. It has been their observation in working with nearly 200 teachers within the context of the California State Study on Programs for Gifted Pupils, and with teachers in courses at California State College at Long Beach, at the University of Washington, at the University of California at Los Angeles and UCLA Extension, as well as within many school systems, that teachers can learn to understand and apply certain principles and procedures particularly relevant to working with the gifted. These procedures often have not been developed in their previous educational preparation and require opportunity for experimentation and trial if teachers are to be willing to attempt change, however.

Among the simpler understandings which permit differentiation for the gifted, as one example, is understanding by teachers of the common ability of gifted pupils to function independently with sustained attention on projects of advanced complexity. This example can serve as just one kind of basic referent that teachers then can
use to transform their operations in order to permit students to do wide bibliographic reading on a given broad topic at even the elementary school level, with merely a broad guiding question or two for the students. The resultant process of working with students then becomes quite different from the more detailed supervision employed in traditional classrooms.

The rationale for the present project is that effective teaching of the gifted does not result from initial centering of attention on curriculum development, but rather from attention to the total educational process in the following order:

First: Thorough study of the pupil population and thorough understanding of its complex nature;

Next: Study and analysis of appropriate teaching process;

Finally: Planning and utilization of procedures and materials which are developed on the basis of knowledge of the capacities, needs, and interests of the student population; and on the basis of certain proven approaches which generate high involvement and open-ended learning by the students.

This approach is one which centers upon pupil first, and which uses curriculum as a means for education. It is quite different from the traditional approach in which a curriculum is perceived as a fixed standard body of knowledge to be used bit by bit, and to be absorbed with limited latitude for variation in content.

The emphasis in the present project, then, is upon the education of the teacher in such fashion that the participating teacher develops a clear understanding of his pupil and from that, understanding of the importance of proper educational adaptations and innovations.

EXPERTS' VIEWS ON TEACHERS FOR THE GIFTED

Writings on the gifted during the period preceding the 1950's contained numerous suggestions on teaching methods and teaching procedures appropriate for the gifted. Major early authorities in the area of gifted, notably Lewis Terman, Leta Hollingworth, Ruth Strang, Paul Witty, and Frank Wilson suggested or implied specific characteristics that the teacher of the gifted should have in order to be effective in the classroom. All these people devoted a significant portion of their lives to studying various aspects of the gifted, and all recognized the significant role of the teacher.

In his Genetic Studies of Genius (1925-1968), Terman concentrated on the physical, mental, and personality traits characteristic
of gifted children and the type of adults they become. He cited as a common characteristic of gifted children the fact that they ask more questions and more intelligent questions than the average child. The teacher, according to Terman, should answer the child's questions whenever possible, but if the teacher could not answer a question, she either should encourage the child to seek the answer himself or direct him to where and how he might find the answer. Terman also asserted that the gifted child should be held responsible for the best work he is capable of doing, not merely the average work of the class. Terman asked teachers of the gifted to give the gifted child challenging work commensurate with his abilities.

Hollingworth's pioneering work in the 1930's at the Speyer School in New York City resulted in the establishment of special classes and an enriched curriculum for the gifted. In many ways the philosophy of the school and Hollingworth's descriptions of activities presented her views on the teachers and the best teaching procedures for the gifted.

The children devoted half of their day to prescribed elementary school subjects and half to enrichment. One major source of this enrichment was the study of a particular unit which was very broad in scope, as on the evolution of food, shelter, or transportation. Since no textbook covers any of these fields adequately, the children did much of their research at local libraries and at the library of Teachers College. Hollingworth believed that this type of in-depth study could make a child more knowledgeable on a particular topic than the teacher. According to Pritchard (1951), Hollingworth believed:

A prerequisite for any teacher of the gifted is the ability to realize that gifted pupils often have more information and deeper insight into a topic than she herself can have. The teacher who cannot accept this fact will come into conflict with the rapid learner and cannot be a successful teacher of students of superior caliber.

A second aspect of this enrichment program was the use of specialists to teach certain subjects. Hollingworth wanted the best teachers and believed that one teacher could not be sufficiently competent in all areas to teach the gifted.

Strang, formerly a professor at Teachers College, Columbia, and now at the University of Arizona, is particularly interested in the role of the school and community in promoting and maintaining good mental health among the gifted. She focuses on the child's self-concept as a necessary determinant of self-realization and on the role of the school in helping the gifted child view himself accurately. She stated in the 1958 NSSE Yearbook:
The way the individual perceives himself and his world largely determines his behavior. If a gifted child conceives of himself as "only an average boy," as a "boy who can't learn to read," or as a worthless sort of person, he will not put forth the effort necessary for any line of endeavor. If, on the other hand, he accepts the concept of himself as an able person with social responsibility for his gifts, he will tend to act accordingly.

Strang believes that the school should help the gifted to discover and develop his potentialities, recognize and build on his weaknesses, and accept certain weaknesses. Thus, the teacher needs to be aware of problems in self-concept. For example, a child may not be putting forth effort and may be acting indifferent because he is experiencing "loss of self" as a result of his parents or other adults imposing their aspirations and ambitions on him. Strang believes that the teacher should help the child with this type of self-concept problem and that teachers should be trained to do so.

Witty, a professor at Northwestern and editor of The Gifted Child, concentrated his efforts on improving educational provisions for the gifted. He emphasized (1951) the importance of identifying the gifted child early and providing a long term educational plan for his needs. Witty regarded the belief that the gifted child can get along by himself as fallacious. In fact, Witty stressed the need of the gifted child for special education which will stimulate and satisfy him. Thus the teacher should motivate the gifted child and tailor the curriculum accordingly.

Ryan, Strang, and Witty (1951) emphasized that a teacher of the gifted should also be more "nimble mentally" and somewhat better read than the teacher of average children. In a classroom of gifted, the teacher should respond to the gifted as follows:

1. Treat each child as an individual and recognize his talents.
2. Foster creativity by encouraging originality and initiative.
3. Provide diversified activities which are connected to one topic so that an individual or a group has choice.

Wilson, a professor at Hunter College for many years, taught courses to prepare teachers of the gifted. He (1951, 1958) insisted that teachers of the gifted should:

1. Understand gifted children and be familiar with popular misconceptions.
2. Have a breadth of interests and a variety of competencies.
3. "Keep step with the driving curiosity and creative intensity of these children."
4. Be flexible in curriculum planning.

RELATED RESEARCH ON TEACHERS FOR THE GIFTED

The research dealing with effective teaching procedures for the gifted is limited in quantity. One of the few commentaries is that of Shertzer who, in 1960, pointed out that pre-service teacher education programs throughout the country are largely barren of specific provisions for preparing teachers to work effectively with the gifted. He noted that in 1958 many institutions provided courses, but only Pennsylvania State University and Hunter College offered a sequence of courses devoted to teacher preparation in this area, and these were in part at the graduate level.

Systematic studies of the general teaching process are also of comparatively recent origin. In one of the first, carried out in 1959, Hughes examined the effects of control and freedom in the classroom. She based her studies on categorizations of nearly 1000 written records of actual teaching by some sixty elementary and secondary teachers. Her group researchers categorized recorded teacher behaviors as (1) Controlling, (2) Facilitating, (3) Content Development, (4) Personally Responsive Acts, and (5) Positively and Negatively Effective Acts. The works of Flanders, Smith (1962), Bellack (1963), and the more recent work of Taba (1964, 1966) have dealt with teaching styles, interaction, and teaching strategies. The latter study analyzed teacher behavior and the quality of student responses with reference to cognitive processes. The relationship of cognitive process to social studies content achievement, to pupil intelligence, to economic status, and to reading and language ability was examined. Teachers were given special training in a five day workshop and in ten subsequent half day sessions throughout a school year to develop skills in analysis of the teaching task, in understanding effective strategies, and in understanding the relationship of teacher acts to level of thought expressed by students.

An analysis of classroom tapes by trained observers provided evidence that teachers who were trained to develop skills in concept formation, generalization, and application of principles produced like skills to a great extent in their pupils. In general, the pupils of specially trained teachers produced more thought units, more complex thought units, and more sophisticated content than the pupils of teachers with no special training. Not all teachers who were specially trained modified their behaviors to a like extent.
In the experimental classrooms, all pupils participated more than they did in the control classrooms. More able students produced more high level thought units and also communicated more. The strategies fostered both more high level and low level thought in the more able students, however. The latter phenomenon may be a function of the fact that the study was not designed for gifted students, but rather for general heterogeneous class groups. Thus, the more heterogeneous classroom activities may have been a factor in producing wide-ranging quality of response.

One of the few efforts in teacher improvement for the gifted has been carried on in Illinois as part of the Talent Development Project (1965). Teachers participated in summer and academic year institutes in which they assessed classroom interaction, and analyzed classroom discussion and the level of classroom examinations. These studies, reported by Rogge and others (1966), produced desirable changes in extent of communication, level of communication, quality of examination items, and rated teacher performance. Teacher participants learned to reduce the amount of their own talking and to reduce as well the amount of memory-cognition content within the classroom.

Several studies have been devoted to communication and to classification of interaction. The studies of Taba and Levine (1964), Rogge (1966) and others all devoted considerable attention to interaction and the codings of interaction. Taba found that teacher behavior determined level of response by learners, through analysis of recorded class sessions.

Tapescripts were used by Smith (1964) to categorize teaching acts into general groupings. From the groupings he attempted to establish a framework for studying teaching strategies. These efforts provide useful data on classification of interaction.

An earlier study by Perkins (1951) utilizing the Withall technique indicated that differences in social-emotional climate produced significant differences in group learning. These were established from study of the verbal statements of groups of teachers who were participating in a child study program.

Several studies have utilized models such as that of Guilford in the analysis of verbal interaction. One such study by Gallagher (1965) assessed the verbal interaction of academically talented students in ten junior and senior high school classes in English, science and social studies. Gallagher's study indicated that cognitive-memory production and convergent thinking production were the most prevalent, and that very few interactions involved divergent or evaluative thinking. The type of student response seemed to be tied to the style of teacher questioning.
General studies of teacher effectiveness have relied largely on behavioral observation. Biddle and Ellena (1964), in reviewing a number of studies, indicate that a long standing issue, that of whether the teacher or the teaching should be evaluated, has been clearly resolved in practice by evaluation of the teacher. Dimensions of teacher behavior have been identified by various researchers as warmth, organization and stimulation, child-centered approach, emotional stability (Ryans); ability to diagnose pupil difficulties, elaborate meanings of fundamental operations, order problems to difficulty level for pupils (Turner); ability to develop a learning environment, to provide a range of roles, to support and encourage student initiative, to change roles, to diagnose a situation and act effectively, and to observe objectively and sensitively (Flanders).

Dorothy Knoell (1953) found that educational fluency, defined as the ability to call up many ideas, bore a significant relationship to teacher effectiveness, as externally rated. Teaching interns who were rated as effective planned open-ended lessons. They spontaneously provided alternative ways to communicate and were able to plan for the unexpected. Their cognitive processes appeared fluid and unrestrained. The successful intern was responsive to class needs and difficulties and used a variety of methods, employing flexibility in the implementation of plans and utilizing inquiry for effective teaching.

General classifications of teacher effectiveness are exemplified by those of Cosgrove (1959) and Barr (1961), among others. Cosgrove establishes a ranking schema for teachers based upon such factors as understanding and organization of subject matter, skill in control, reasonableness of demands, efficiency in management, and skill in motivation. Barr outlines competencies in the effective teacher as related to personal qualities, competencies as a director of learning, in behavior control, in generalized teaching skills, and in interests, attitudes, and ideals.

A significant study of successful teachers of the gifted is one by Bishop (1967), in which data were obtained from three groups of teachers throughout the State of Georgia. One group included 109 teachers who were selected by one or more gifted students as the "most successful" high school teacher. The students who nominated the teachers were high school seniors who had participated in the governor's Honors Program of 1964. Another group included teachers who had taught these persons but who were not nominated. The third group included thirty of the identified teachers who were selected as a stratified random sample for intensive study. Instruments used included the Teacher Characteristic Schedule of Ryans, questionnaires completed by the students, personal interviews of teachers, the Wechsler Adult Intelligence Scale (Verbal), the Edwards Personal
Preference Schedule, and college transcripts. The identified teachers were found to be persons of high ability (main WAIS IQ 128) and high achievers (mean grade point average 3.0 to 3.5 on a 4.0 system).

Bishop found further that teachers who are identified as successful by intellectually gifted, high achieving high school students tend to be mature, experienced teachers. They pursue literary and cultural interests, are student-centered in their teaching approach, possess favorable opinions of students, are characterized by systematic and businesslike classroom behavior, are stimulating and imaginative in their classroom behavior, are well informed and enthusiastic about their subject matter, encourage students to engage in independent study and thought, prefer to teach gifted students, and favor special educational provisions for gifted students.

George Miller (1964) in a study to test a theory of instruction based upon social psychology and educational pedagogy, coded remarks by teachers who instructed seventh and eighth grade pupils during eighty lessons in American economics. The teacher behavior was recorded on audiotape and transcribed. The transcriptions were scored on a responsive-directive scale. Analysis of the content showed that responsive teaching was more effective than directive teaching. Students who were with responsive teachers showed more complex levels of mental activity than those taught in situations where responsive cues were ignored.

Medley and Mitzel (1959) related classroom emotional climate to several dimensions of teacher effectiveness. They found positive correlations between emotional climate and reading growth, group problem solving, pupil teacher rapport, and teacher self ratings.

Wallen and Wodke (1963) investigated the relationships between behavioral and dynamic teacher characteristics and student responses. Data gathered were based upon achievement tests, intelligence tests, special creativity tests, group problem solving tests, an orally administered questionnaire on personality variables, and teacher study through use of OSCAR ratings (Medley and Mitzel) and Q sorts by the 65 participating teachers. Teams of two observers visited each teacher three times and rated the teachers on 35 dimensions. Tentative conclusions were that reading vocabulary gains are positively correlated with the extent to which the teacher is viewed as stimulating by observers, pupil liking for school is related to low teacher achievement orientation (as seen by observers), liking for school is related to warmth and permissiveness of upper grade teachers but not necessarily of lower grade teachers, achievement-oriented teachers produce effective pupil problem solving but not effective group relationships, supportive teachers foster friendly group interaction, supportive teachers produce less test anxiety, and perception of the teacher by observer and pupil is unrelated in the first two grades.
Amidon and Grammatteo (1965) used the Flanders system of interaction analysis in a study of 153 randomly selected teachers in Pennsylvania. Verbal behavior of pupils and teachers was categorized during language arts sessions. Teachers identified as superior accepted expressions of feeling, gave praise for pupil-initiated ideas, used pupil ideas frequently, asked broad questions, and demanded pupil-initiated talk. Teachers rated average lectured in continuous fashion (about 40% of total time), were less frequently interrupted by questions from pupils, used twice as much direction giving, twice as much criticism, and produced less pupil participation.

Flanders found in his study that teachers of high achieving classes accepted, clarified, and used pupil ideas significantly more, criticized less and encouraged significantly more pupil-initiated talk.

An unusually comprehensive study of teacher characteristics is that of Ryans in 1962. One major feature of the study was the careful, systematic effort to eliminate observer bias and subjectivity. The observers were trained to be well acquainted with the behaviors to be assessed, with the situation within which they would observe, to focus attention on specified behaviors and to avoid the influence of general impressions of unusual or dramatic behaviors, or of inferences about possible behaviors. Assessments were made immediately and independently.

Teachers rated high tended to be extremely generous in appraisals of the behavior and motives of other persons, were strongly interested in reading and literary affairs, in music, painting, and the arts in general; they participated in social groups, enjoyed pupil relationships, and preferred nondirective classroom procedures; they manifested superior verbal intelligence and superior emotional adjustment. Teachers rated low tended to be restrictive and critical in their appraisals of others, to prefer activities which did not involve close personal contacts, to express less favorable opinions of their pupils, were less highly intelligent verbally, and were less well adjusted emotionally.

SUMMARY

The antecedents to present-day research on teaching of the gifted are found in the pronouncements of noted psychologists and educators who worked principally during the decades from the 1930's to the 1950's. These individuals, principally Terman, Hollingworth, Strang, Witty, and Wilson, stressed the importance of latitude in learning for pupils, the use of specialists as resource personnel, encouragement to the gifted in their learning
experiences, recognition of talents, recognition of the need for varying interests and activities, and a differentiated curriculum taught by a highly intelligent teacher.

Extensive research on teacher effectiveness and teacher behaviors has been a product largely of the last decade, aside from the pioneer researches of such persons as H. H. Anderson and Lippitt. Through the increasing use of scales and application of sophisticated research methods, certain patterns of effective teaching behavior are becoming evident. In a number of studies, effective teachers are found to be those who permit and encourage pupil productivity, who facilitate pupil-initiated activity, who employ positive methods of working with others, and who produce security in their own pupils as a function of their own emotional well being. Acceptance of others and the use of praise and encouragement appear to be important elements. A number of studies have cited the importance of widely ranging interests and high intelligence as factors identifiable in successful teachers. The latter factors appear to be particularly important in teachers of the gifted.
CHAPTER 2

GENERAL OBJECTIVES AND HYPOTHESIS OF STUDY

The Project, The Improvement of Teaching Procedures with Gifted Elementary and Secondary School Students, was planned to fulfill program-based objectives as well as research-based objectives. If the planned procedures and study materials proved successful, it was assumed that these would have value to others interested in improving teaching procedures for the gifted. Documentation and illustration of the procedures, then, was an important concern. These documented procedures, utilized by a carefully selected group of excellent teachers, should theoretically demonstrate possibilities for improvement even within the experimental group, and thus predict favorable change in other groups who elect similar self-study.

The teachers, as resource personnel within a small geographic area, could serve a future leadership function within their school systems and in the preparation of teachers. Through the leadership of study groups, and through in-service meetings, they, as resources, could extend interest and involvement in the improvement of teaching for the gifted. As mentors for student teachers, they could exemplify proper teaching and translate into action the theoretical.

The study was based upon five major program objectives:

1. To clearly define and describe the processes and methods which should be used in working with teachers of the gifted to produce effective and appropriate curriculum procedures.

2. To utilize these processes to the end that teachers will understand curriculum as dynamic and evolving rather than unchanging.

3. To develop and document processes which have predictable and generalizable results.

4. To prepare a group of master teachers of the gifted.

5. To provide a permanent demonstration center on differential education for the gifted.

The major hypothesis to be tested required the formulation of (1) selection criteria and a selection scale, (2) a process design, (3) study materials for use by teachers during the process, and (4) periodic evaluation to test the success of the process.
This major hypothesis was stated as follows:

The hypothesis to be tested is whether, after careful selection of teachers with certain characteristics for working with gifted pupils, a program of in-service self-study will result in substantial improvement in the qualitative level of classroom method.

The general process, in brief form, is presented below:

Basic study plan formulated
Criteria for selection of teachers established
Nomination of candidates
Selection of teachers
Pre-activity study of teaching competency via judges/rating scale audiotapes
Preparation of teaching plans
Demonstrations
Self-evaluation
Products
Teacher plans
Pupil productions

Plan of study

Procedures and materials
In-service
Evaluation via judges/rating scale audiotapes
CHAPTER 3

SELECTION OF TEACHER PARTICIPANTS

The general objectives of the Project included the preparation of a group of master teachers for the gifted. This goal contained several inherent assumptions: That the school administrators were interested in participating; that the teachers selected were those whose characteristics, professional performance, and abilities assured that they were very well qualified to teach the gifted; and that the teachers were willing to involve themselves for a year of study.

The selection of teachers required three important tasks. One was the establishment of criteria for nomination and selection of teachers. The second was the preparation of a scale which could be used for selection of teachers and for periodic evaluation of their performance. The third was the identification of school systems near the college with large numbers of well-qualified teachers, so that study groups of excellent caliber could be identified and formed.

GENERAL PROCEDURES AND CRITERIA

Conferences were held with administrators in neighboring school districts to present the Project design, the program goals, and to develop a clear understanding of the bases for selection of teachers. These school systems were chosen because of availability of qualified teachers, and proximity to one another and to the college. The school systems participating in the Project include the following:

- Inglewood Unified School District
- Manhattan Beach City Schools
- Palos Verdes Unified School District
- South Bay Union High School District
- Torrance Unified School District

The director and co-director sent the principals of several schools in the five districts a set of criteria which they were to use as a guide in recommending teachers for the Project. These criteria suggested that a teacher of the gifted should be flexible, intelligent, creative and stimulating (Appendix 1). The principals selected 75 teachers who, in their judgment, met these qualifications.
The following added criteria were used by the Project directors for the selection of the final 40 participants:

1. Expressed desire to participate (none of the 75 was unwilling)
2. Observations and ratings by judges
3. Terman Concept Mastery Test
4. Wiener Attitude Scale (Appendix 2)

To implement the four criteria above and to select the final participants, meetings were arranged in each of the school districts. To obtain some general information about the 75 teachers, a nine-item questionnaire, the Wiener Attitude Scale, and the Terman Concept Mastery Test were administered. In addition, four pairs of judges observed the teachers in their classrooms for 40 minutes at scheduled times.

DEVELOPMENT OF OBSERVATION SCALE AND SELECTION OF JUDGES

The scale which was developed for use in the Project was prepared by the following process:

Prior to the development of the observation scale, the director and co-director independently listed the behaviors of teachers and teaching strategies that are essential in working with gifted children. They based their listings on extensive past experience, including work with teachers for the gifted, research studies, and readings. A comparison of the listings indicated that both agreed closely on the behaviors and teaching strategies that are essential in working with gifted children. After discussion, analysis, and synthesis of the ideas in both lists, the director and co-director examined the rating scales in the Handbook of Research on Teaching, edited by N. L. Gage. They also explored other pertinent sources which aided them in improving and refining their list. A preliminary rating scale, Scale of Flexibility and Innovation in Teachers with Descriptive Behaviors of Students and Teachers, was developed from this list. The scale contained 27 types of behavior: Sixteen described the teaching process, seven described the teacher-pupil relationship, and four described the teacher's background. Each of the 27 types of behavior was subdivided into specific behaviors, for a total of 65 statements. For each behavioral statement there were five rating categories: Never, Seldom, Occasionally, Often, and Always. A pilot study was made, utilizing the preliminary rating scale. This study was made of teachers other than the 75 nominees.

Ten experts, known in California statewide and in some cases nationally for their writings, program development, or research in the area of gifted, participated in the Project as judges.
Participating school system personnel were purposely not selected to act as judges. The following served as judges for the purposes of scale validation, for the selection of teachers, and as judges throughout the Project:

George Banks, Supervisor of Secondary Programs for the Gifted, San Diego City Unified School District, has been a consultant and has devised programs for the gifted cited in numerous source books.

Rodger Bishton, Associate Professor of Education, Sacramento State College, has directed college programs and institutes and has sponsored graduate studies on the gifted.

Jeanne L. Delp, Coordinator of the Rapid Learner Program, Garden Grove Unified School District, was a curriculum consultant on the California State Study, and has taught extension courses at the University of California at Irvine and at the University of Nebraska.

Mabel Purl, Director of Research and Testing, Riverside Unified School District, has developed and tested programs for the gifted and has been a member of several state committees.

Anna Mae Gumm, Teacher Consultant, San Diego City Unified School District, was a curriculum consultant on the California State Study and has worked on publications for the improvement of programs for the gifted.

May V. Seagoe, Professor of Education, University of California at Los Angeles, was on the Advisory Committee on the California State Study of Programs for the Gifted, has written articles on giftedness and creativity, and has sponsored graduate studies on the gifted.

Martha Shea, Consultant for the Gifted, Oakland Unified School District, has developed district programs for the gifted and district publications, including criteria for evaluating programs for the gifted.

Dorothy Syphers, formerly Consultant for the Gifted, Arcadia Unified School District, has written curriculum materials for the gifted in language arts and creativity.

Sanford H. Williams, Assistant Director of Instruction, Long Beach Unified School District, has developed district bulletins for various levels of instruction and has taught courses at the University of Southern California.

Gertrude Wood, Consultant in Research and Guidance, Office of Los Angeles County Superintendent of Schools, has taught at the University of California at Los Angeles, and has conducted workshops and aided in the development of school programs.
The judges attended an orientation meeting prior to any observation of teachers. At the meeting the director, co-director, and judges discussed the objectives and purposes of the Project. Then the judges reviewed the scale, item by item. Observation procedures and criteria were considered to increase judge reliability, and the judges did a self-rating analysis, using the observation form. They then made independent comments and suggestions on the observation sheets, which were evaluated by the directors.

After the judges observed teachers and used the preliminary rating scale in the "trial run," they met with the director and co-director to discuss possible ways of improving the scale. On the basis of the judges' suggestions and an item analysis, the director and co-director revised the rating scale. The revised scale appears in Appendix 3.

Within 37 statements, the present scale contains 19 kinds of teacher behavior: Sixteen describe the teaching process, two describe the teacher background, and one summarizes the teacher's understanding of the educational implications of giftedness. For each behavioral statement there are three rating categories: Seldom, Occasionally, and Frequently.

The present scale, A Rating Scale of Significant Behaviors of Teachers of the Gifted, was used in the screening of prospective teachers for the Project. The judges, in groups of two, independently observed 75 teachers for a 40-45 minute interval. The ratings of the observations were subjected to statistical analyses. A test reliability of K-R equals .95 was obtained between the judges.

The scale was subjected to factor analysis, with four factors emerging. These were labeled (1) Individualized Materials and Instruction, (2) The Art of Questioning, (3) The Encouragement of Higher Level Learning, and (4) Communication-Interaction. Nine of the behavioral statements which describe the teacher are subsumed in the factor of Individualized Materials and Instruction, six in The Art of Questioning, fourteen in The Encouragement of High Level Learning, and eight in Communication-Interaction. Of these four factors, The Art of Questioning and The Encouragement of High Level Learning are the most significant factors in teaching the gifted. The items imply that the teacher should use questioning as a tool to stimulate and elicit higher level thinking. She should ask questions which encourage the gifted to draw analogies, to ask analytic questions, and to generalize from the concrete to the abstract at advanced levels. Broad ideas, the inter-relationship between ideas from various sources, and the use of objective evidence to compare and contrast ideas should be emphasized in teaching the gifted.
The rotated factor matrix gave the following results:

### TABLE I
FACTORS IN RATING SCALE OF SIGNIFICANT BEHAVIORS' IN TEACHERS OF THE GIFTED

<table>
<thead>
<tr>
<th>Factor I</th>
<th>Factor II</th>
<th>Factor III</th>
<th>Factor IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individualized Materials and Instruction</td>
<td>The Art of Questioning</td>
<td>The Encouragement of Higher Level Learning</td>
<td>Communication-Interaction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Loadings</th>
<th>Item</th>
<th>Loadings</th>
<th>Item</th>
<th>Loadings</th>
<th>Item</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
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<td>29</td>
<td>.80</td>
<td>17</td>
<td>.72</td>
<td>1</td>
<td>.82</td>
<td>33</td>
<td>.70</td>
</tr>
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<td>28</td>
<td>.77</td>
<td>11</td>
<td>.67</td>
<td>3</td>
<td>.78</td>
<td>18</td>
<td>.69</td>
</tr>
<tr>
<td>13</td>
<td>.64</td>
<td>25</td>
<td>.60</td>
<td>4</td>
<td>.77</td>
<td>34</td>
<td>.68</td>
</tr>
<tr>
<td>14</td>
<td>.53</td>
<td>22</td>
<td>.58</td>
<td>5</td>
<td>.77</td>
<td>31</td>
<td>.67</td>
</tr>
<tr>
<td>36</td>
<td>.52</td>
<td>12</td>
<td>.58</td>
<td>6</td>
<td>.73</td>
<td>21</td>
<td>.63</td>
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<tr>
<td>15</td>
<td>.51</td>
<td>19</td>
<td>.57</td>
<td>9</td>
<td>.72</td>
<td>20</td>
<td>.57</td>
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<tr>
<td>16</td>
<td>.47</td>
<td></td>
<td></td>
<td>2</td>
<td>.71</td>
<td>32</td>
<td>.53</td>
</tr>
<tr>
<td>26</td>
<td>.45</td>
<td></td>
<td></td>
<td>7</td>
<td>.62</td>
<td>35</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td>.55</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>30</td>
<td>.55</td>
<td></td>
<td></td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td>24</td>
<td>.53</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>37</td>
<td>.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>27</td>
<td>.30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FINAL SELECTION**

Forty-five teachers were selected on the basis of the test results and the desire to participate in the Project. Some qualified teachers were not selected because there were, in some cases, too many teachers at a particular grade level. One aspect of the treatment was to combine teachers of similar grade levels and interests in order to encourage the sharing of ideas. Added criteria included judges' ratings, ratings on the Wiener Attitude Scale, and scores on the Terman Concept Mastery Test.
The final selection consisted of the following groups:

**Elementary**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number of Teachers</th>
<th>Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>4</td>
<td>Manhattan Beach, Palos Verdes, Torrance</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Inglewood, Manhattan Beach, Torrance</td>
</tr>
<tr>
<td>3-4</td>
<td>2</td>
<td>Palos Verdes, Torrance</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>Manhattan Beach, Palos Verdes, Torrance</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>Inglewood, Manhattan Beach, Palos Verdes</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>Manhattan Beach, Palos Verdes, Torrance</td>
</tr>
<tr>
<td>7-8</td>
<td>5</td>
<td>Manhattan Beach, Palos Verdes, Torrance</td>
</tr>
</tbody>
</table>

**Secondary**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Number</th>
<th>Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>8</td>
<td>Inglewood, Palos Verdes, Torrance, South Bay</td>
</tr>
<tr>
<td>Social Studies</td>
<td>6</td>
<td>Inglewood, Palos Verdes, Torrance, South Bay</td>
</tr>
<tr>
<td>Science</td>
<td>4</td>
<td>Palos Verdes, Torrance</td>
</tr>
</tbody>
</table>

During the course of the Project, groups were combined in varying ways for special observations, for meetings, or for videotape evaluations.

Correlations were obtained between the items on the questionnaire, the scores on the Attitude Scale, the Terman Concept Mastery Test, and the ratings on the factors of the Observation Scale. The correlations indicated the following:

1. The women have higher degrees than the men.
2. The men scored higher on Factors I and II.
3. Those with higher degrees were earning a higher income.
4. Those with higher degrees had been teaching longer and at higher grade levels.
5. The teachers with higher degrees were lower on Factor III and lower on the total rating.
6. The teachers who had taught more also had more experience teaching the gifted.
7. No relationship was found between grade level of teaching and attitude or score on the Concept Mastery Test.
8. No relationship was found between grade level and Factor I, Factor III, and total rating.
9. No relationship was found between teaching a gifted class at the present time and Factor II.
10. The mean of the Concept Mastery Test of selected teachers was 96.9, and 72.0 for the non-selected teachers.
11. The mean of the Attitude Scale for selected teachers was 47.2, and 47.0 for the non-selected teachers.
Table II presents the results obtained from the questionnaire, the Wiener Attitude Scale, and the Terman Concept Mastery Test.

**TABLE II**

RESULTS OF QUESTIONNAIRE, ATTITUDE SCALE AND CONCEPT MASTERY TEST

<table>
<thead>
<tr>
<th>N</th>
<th>Age</th>
<th>Sex</th>
<th>Degrees</th>
<th>Income Level</th>
<th>Years Completed Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Group 74</td>
<td>20-29 (27)</td>
<td>M-23</td>
<td>BA (45)</td>
<td>4-6,000 (6)</td>
<td>Average 8.0</td>
</tr>
<tr>
<td></td>
<td>30-39 (29)</td>
<td>F-51</td>
<td>MA (29)</td>
<td>6-8,000 (25)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40-49 (14)</td>
<td></td>
<td></td>
<td>8-10,000 (24)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>50-59 (4)</td>
<td></td>
<td></td>
<td>10-12,000 (13)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12-14,000 (6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selected Group 45</td>
<td>20-29 (16)</td>
<td>M-15</td>
<td>BA (29)</td>
<td>4-6,000 (4)</td>
<td>Average 8.1</td>
</tr>
<tr>
<td></td>
<td>30-39 (17)</td>
<td>F-30</td>
<td>MA (16)</td>
<td>6-8,000 (15)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40-49 (11)</td>
<td></td>
<td></td>
<td>8-10,000 (17)</td>
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<tr>
<td></td>
<td>50-59 (1)</td>
<td></td>
<td></td>
<td>10-12,000 (6)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12-14,000 (13)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unselected Group 29</td>
<td>20-29 (11)</td>
<td>M-8</td>
<td>BA (16)</td>
<td>4-6,000 (2)</td>
<td>Average 7.9</td>
</tr>
<tr>
<td></td>
<td>30-39 (12)</td>
<td>F-21</td>
<td>MA (13)</td>
<td>6-8,000 (10)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40-49 (3)</td>
<td></td>
<td></td>
<td>8-10,000 (7)</td>
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<tr>
<td></td>
<td>50-59 (3)</td>
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<td>10-12,000 (7)</td>
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<tr>
<td></td>
<td>12-14,000 (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>N</th>
<th>Level Teaching Now</th>
<th>Assignment to Teach Gifted</th>
<th>Length of Time in Tch G.</th>
<th>Attitude Scale</th>
<th>Concept Mastery Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Group 74</td>
<td>Grades 1-3 (16)</td>
<td>78% assigned to tch gifted.</td>
<td>35.6 months average</td>
<td>Median 45.6</td>
<td>Mean 88.5</td>
</tr>
<tr>
<td></td>
<td>Grades 4-6 (22)</td>
<td>22% not assigned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grades 7-9 (12)</td>
<td>10-12 (24)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selected Group 45</td>
<td>Grades 1-3 (7)</td>
<td>82% assigned to tch gifted.</td>
<td>41.6 months average</td>
<td>Median 47.2</td>
<td>Mean 96.9</td>
</tr>
<tr>
<td></td>
<td>Grades 4-6 (14)</td>
<td>18% not assigned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grades 7-9 (7)</td>
<td>10-12 (17)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unselected Group 29</td>
<td>Grades 1-3 (9)</td>
<td>72% assigned to tch gifted.</td>
<td>29.7 months average</td>
<td>Median 47.0</td>
<td>Mean 72.0</td>
</tr>
<tr>
<td></td>
<td>Grades 4-6 (8)</td>
<td>28% not assigned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grades 7-9 (5)</td>
<td>10-12 (7)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

20
CHAPTER 4

IN-SERVICE ACTIVITY

The first in-service meeting of the Project, Excellence in Education, was held on January 11, 1967. The directors met with all the participating elementary and high school teachers and discussed the project purposes and goals. The central thesis of the study, namely that classroom teachers can be given a systematic series of experiences in planning differential curriculum for the gifted which will result in an understanding of certain principles necessary to success in working with this population, was discussed with the teachers. The directors presented an overview of planned in-service experiences which would implement the central thesis of the study. In order to aid in assessing the effects of the project treatment on teacher-pupil interaction, the directors asked each teacher to prepare a 20-minute tape to document pre-project teacher-pupil interaction.

In most of the subsequent in-service meetings, the teachers met in homogeneous groups. That is, the teachers who taught the same elementary grade met with teachers from other participating school districts; the high school teachers who taught the same subject or subject combinations met together. The purpose of the homogeneous grouping was to maximize the sharing of ideas among people of similar teaching interests.

PHASE I - PUPIL STUDY

During Phase I the teachers studied the characteristics of gifted children. They saw and discussed the film, Understanding the Gifted; they read and discussed Seagoe's "Characteristics of the Gifted," (Appendix 4). The teachers emphasized multiple factors in exploring the case studies of gifted children. For example, they discussed a given child's special talents, his social and psychological characteristics, scholastic ability as determined by products or by a number of special case studies.

The case study of John, a highly gifted and creative boy with a special talent in creative writing, clearly demonstrates that the traditional curriculum is inappropriate for a highly creative individual (Appendix 5). John's case study reveals the need for revamping the curriculum, using content broader than basic texts, and providing opportunity for class discussion of provocative ideas. John was described by one teacher as more stimulating to talk to than 90 percent of her friends, as "a remarkably bright lad distinguished by a humorous disposition, profound insight, a
ready wit, a contemplative intelligence, and a dedication to the acquiring of precise knowledge." Other teachers viewed John quite differently and dealt with him differently. Their attitudes and John's equivocal feelings about himself and about society are poignantly expressed in his poetry. In the in-service meetings the teachers discussed John's characteristics, his evaluation of himself, and the evaluations of his various teachers.

The use of this case study and other case studies was introduced early in the pupil study sequence on the assumption that groups of teachers are better able initially to discuss pupil needs and to make recommendations for pupils other than their own. It was assumed further that teachers are more willing to evaluate teaching practices and to make suggestions for improvement on an impersonal basis initially, and that through the co-working relationship they will develop increasing willingness to place their own practices under scrutiny.

To aid the teachers in learning more about the gifted children in their own classes, the teachers were given interest inventories which had been developed for the primary, junior high and secondary levels (Appendix 6). The parents of the primary children filled out their own inventories in the classroom. At the in-service meetings the teachers discussed the results of the interest inventories and other information they had accumulated. The teachers also interviewed previous teachers of their gifted students and kept pupil essays on the hero ideal, pupil autobiographies, and various pupil products in folders.

**PHASE II - STUDY OF THE TEACHING PROCESS**

**Part I - Classroom Application**

In Phase I the teachers studied the characteristics of gifted children, emphasizing their qualitative and quantitative differences in cognitive skills from other children. By discussing and analyzing the hypothetical case studies and their own pupils, the teachers began to plan ways of making learning more meaningful for their gifted pupils. Some activities that the elementary school teachers began with their gifted included individualized reading and math programs, the writing of fiction and non-fiction, devising puzzles, writing plays, writing editorials, and engaging in class discussions and debates. The chief emphasis in these and similar activities is teacher provision of opportunities for the gifted child to explore and discover for himself. The teacher energizes high-level thinking by asking broad questions which require considerable thought and produce generalization. For example, in a fifth grade study of biographies of inventors, the teacher asked
just one question: "How did the life of the inventor lead him to the invention?"

High school teachers also planned means to encourage independent high-level thinking and creativity. Many created an unstructured environment in which the gifted could go to the library to pursue individual research and study. Social Studies students participated in seminars outside the classroom and conducted class discussions based on the seminars. One gifted girl in biology presented a half-hour television program on her research project. Specific descriptions of activities appear in the Appendices of this report (Appendix 12).

Part II - Higher-Level Classroom Operation

In the second part of Phase II the teachers studied certain principles which they could apply to the classroom to stimulate higher-level thinking of the gifted. Adaptations of Bloom's Taxonomy of Educational Objectives (1961) and Norris Sanders' Classroom Questions (1966) were studied and discussed. Mimeographed questions and activities which emphasized the higher order levels of intellectual processes were used as bases for group discussions. The various materials provided assistance to the teachers in their own increasing stress on questions which would provoke three higher levels of thinking and performance particularly appropriate for the gifted.

Added study of higher-level classroom operation included discussion and evaluation of the teacher model, Focus on the Gifted, Teacher Activities and Behaviors (Appendix 8), the observation rating scale, Significant Behaviors in Teachers of the Gifted (Appendix 3, Group Discussion Suggestions (Appendix 9), and Criteria for Curriculum Development (Appendix 10). The following principles were stressed:

1. Open-ended questions which ask the student to compare, contrast, discuss, evaluate, apply, and generalize.

2. Consideration of the interests of the pupils and choice of materials which challenge the students to explore concepts in depth.

3. Discussion, debate, and controversy, open-ended and non-structured, to stimulate divergent thinking.

4. Independent study, the use of varied resources external to the classroom, and time for self-initiated study to foster higher intellectual development.
PHASE III - APPLICATION OF PRINCIPLES TO PROMOTE HIGHER-LEVEL THINKING AND PRODUCTION IN THE CLASSROOM

In Phase III the teachers applied the principles that they discussed and evaluated in Phase II. All the teachers made videotapes of classroom activities which they felt especially competent to demonstrate. At the in-service meetings those teachers who consented had their videotapes shown and evaluated.

The topics ranged widely. On one videotape a second grade teacher captured the imagination and interest of her pupils by asking thought-provoking questions, as "If there were no insects in the world, what would be different? How are insects like people?" A fourth grade teacher had her class videotaped while participating in a panel discussion on a play that they had written. After discussing the characters and the plot, the pupils performed the play.

A high school teacher's Honors English class videotaped a presentation in which they interpreted modern poems through the simultaneous use of accompanying collages, recordings, and their own interpretive readings.

The elementary and secondary teachers found the videotapes useful in assessing the application of principles to the classroom to promote higher-level thinking and production. Further specifics on the videotape procedures appear on pages 33 to 34. Phase III was a series of interdistrict visitations, during which each project teacher presented one demonstration lesson for his colleagues, and in return had an opportunity to observe eight lessons by other project teachers.

The lessons were initiated on October 3 and continued until early December. They were alternated with the continued viewing of videotapes, and were planned cooperatively with the participating school systems, to avoid other scheduled meetings or special occasions such as holidays. A sample schedule appears in Appendix II.

The teachers were given four days of released time through the employment of substitute teachers. During each of the four days, they saw two lessons. Each lesson was followed by a period of time for discussion, questions, and evaluation. On some occasions the teachers also discussed subjects of general concern, such as working with parents of the gifted, or appropriate evaluation for the gifted.

The content of the lessons ranged widely, from topics related to school courses of study to lessons based upon special topics or special interests. Specific descriptive and illustrative
materials on the demonstrations appear on pages 81 to 93 and in Appendix 12.

Throughout the in-service experiences, the intra-group contacts of an informal nature increased. These included on-campus visits with the project staff, and personal contacts as well as telephone calls among the participants. In a very real sense the group members functioned as resources for ideas and suggestions to one another.
CHAPTER 5

ILLUSTRATIVE IN-SERVICE ACTIVITIES

On pages 21 to 25 a brief description of the three phases utilized in in-service activity were outlined: Phase I, Pupil Study; Phase II, Study of the Teaching Process, and Phase III, Application of Principles to Promote Higher Level Production in the Classroom. In this section the three processes will be described in some detail. The purpose of the more detailed description is to illustrate the manner in which the theoretical approach produced specific changes and specific alterations in classroom practice on the part of the teachers.

PUPIL STUDY

The use of the hypothetical case study was predicated on the assumption that teachers new to one another are more willing to communicate freely and to theorize on necessary classroom change than if they are confronted with both a new working group situation and the necessity to communicate with relatively unknown professionals regarding their own teaching practices. The validity in the assumption that teachers would discuss freely a pupil other than their own was brought out in the numerous comments and suggestions made by the teachers.

The pupils discussed were identified as hypothetical to the teachers, although the studies were obviously of real pupils from schools similar to those in which the teachers were assigned. The discussion of the pupils brought forth many suggestions for curriculum adaptations and for alteration in teaching strategy. The fact that the teachers were dealing with hypothetical children led to suggestions for adaptation which were in keeping with the special educational needs of the gifted. For example, teachers suggested that one pupil work in areas of his own interest, and that another gifted individual be given opportunities to work alone on biographical studies which were related to special interests. They recommended longitudinal observation of a gifted individual and then the establishment of special goals with him, so that he might plan to use materials in depth in order to achieve these goals. The teachers observed (sagely) that a teacher who works with a child of extremely high ability must be psychologically secure. If the teacher is to let the pupil find his own interest and delve into it, they agreed the teacher must be prepared to allow a child to cover necessary or required material in any amount of time, and permit him freedom to go on with his own major interests (Appendix 15).

The teachers advocated the use of questions general enough and broad enough so that latitude for self-management and for unprescribed
exploration of material to answer key questions would result. They sanctioned the use of special periods of time to work independently with the gifted student in encouragement of his planning, and allowance of freedom in the classroom for independent study. Again, on the matter of teacher security, they emphasized the importance of teachers not feeling threatened by the special knowledge of a child.

The contract system for independent studies projects at all grade levels was endorsed as a satisfying approach for gifted children. In their discussion, the teachers stressed the importance of centering initial attention on the production itself and not on neatness, order, correctness of expression, and other types of requisites which tend to decrease the ardor for production ordinarily found in so many gifted individuals.

As anticipated, the discussion of hypothetical case studies led very rapidly to the discussion of pupils within the classrooms of the teachers themselves. As the teachers read and considered the case studies, remarks to the effect that X child is very similar to the case study child, or that Y child in the classroom of the teacher two years ago created concern about making adequate plans, but that discussion of approaches to the hypothetical children would now make such planning easier, soon appeared. The teachers discussed their own gifted pupils with whom they worked either as individuals, as members of cluster groups, or as special class pupils. In the elementary grade discussion groups the teachers suggested expanded use of materials in the educational materials centers of the school systems, the establishment of individualized reading programs in various curriculum areas, and much more freedom for independent production by the children. To this end, the teachers initiated studies such as the following:

One teacher, in a social studies class, developed a unit on people, although this was not particularly a part of the customary social studies framework. She felt, however, that such a study would be of interest to the gifted because of their facility in reading and because of their anticipated interest in biography. The unit included broad study of events or experiences in early life which influenced the person under study, such as Theodore Roosevelt's illness in his early years. The pupils explored also the strengths and abilities which eminent persons used for the benefit of others. They evaluated the contributions of the individuals studied through discussion of one basic question: "What would the world be like if this individual hadn't lived?"

Wide readings of different types of fiction were used by another teacher. The pupils were given opportunities to read with complete freedom in different types of fiction. They read with equal latitude in a broad variety of nonfiction materials as well. The discussion of fiction and nonfiction eventually resulted in examples written by the students themselves.
A third type of production (commonly used in many schools) capitalized on the use of a newspaper, "The Daily Breeze." The production extended beyond the usual in the solicitation of advertising, in the discussion and planning of editorial policy, and in the careful preparation of editorials by the gifted individuals within the class.

Another teacher allowed individuals free time every afternoon for their own interests. No limitation was placed on the choice of topic, nor was any limitation placed on materials used or the length of time devoted to the study. The pupils understood that they had complete freedom to work on the preparation of a topic to their own satisfaction. Pupils prepared information for their classmates either through oral presentations with audio-visual illustrations, or through written reports. The range of materials covered was wide. While the topics changed as pupils completed one subject and undertook another, the following list serves to illustrate the scope of interests pursued at one particular time:

- Civil War Battles
- Siamese Cats
- Muses-mythology
- Uses of Mercury
- Diamonds
- The Planet Mars
- Magnetic recording-Stereo
- Marriage Formalities
- Bees
- Fishes
- Communistic Satellites

- Small Sail Boats
- China
- Dolphins
- Oregon
- Hamsters
- White Mice
- Atlas and Gemini
- Elephants
- Stock Cars
- Otters

The children read widely, used bibliography cards for summarizing information which they felt to be important, and prepared their presentations according to criteria previously established by them, including such factors as completeness of preparation, organization, skillful use of visual aids, the use of interesting and valuable information, and so on. An example of a written report, complete with pupil evaluation, appears in Appendix 13. This report was prepared as a first report during the year, contained 27 pages of pencil-written information, illustrations from magazines, and illustrative diagrams sketched by the author. At the end of the report, comments were solicited by the author and these appear as well in Appendix 13.

The use of the fictitious case study then led automatically and rapidly to consideration of pupils within the existing classroom groups. In discussion of the conditions which possessed relevance for the gifted, the teachers began to talk of practices which would permit their gifted pupils to learn satisfactorily. The few examples cited above were initiated early in the study process by teachers who
discussed the hypothetical children, who were highly motivated to provide for identified gifted pupils in their own classrooms, and who launched immediately certain kinds of changes in classroom operation and content to permit this. The practices which they suggested and reported in the initial project phases were of high interest to other teachers within the group, and other teachers used these suggestions as springboards for attempts of their own.

Within the context of studying their own pupils, the teachers used interest inventories (Appendix 6), autobiographies, and other suitable materials. The acquisition of information, discussions with former teachers, and concentration of attention on the pupils and their characteristics, all enhanced the understanding of the pupils and an interest in providing for their special needs. While the interest inventories were simple in form and easy to administer, the teachers reported that they found them extremely helpful, commenting that they especially gained a great deal of information from the questionnaires which had been sent home to parents at the primary grade level. One teacher observed that the parents contributed much more information on questionnaires than she had received in the parent conference, although the conferences consumed several days of her time (Appendix 7).

The elementary school discussions, utilizing the case studies, pupil study, the interest inventories, autobiography, and other material designed to enhance understanding of pupils, such as the film, Understanding the Gifted, and listings of pupil characteristics, all served to generate initial curriculum suggestions based on pupil needs.

Similarly at high school level, the study of pupils produced teacher recommendations advocating freedom and latitude in learning. The secondary teachers stressed the importance of freedom for independent work, advocated the practice of releasing students from any class to work on projects in the library, and encouraged pursuit of individual projects, both in creative fields and in research. The secondary teachers also advocated team teaching of an inter-disciplinary nature, the use of broader blocks of time for class groups than is customary in the usual departmental setting, and the allowance of freedom to students with special interests to meet with resource people off campus. The teachers early began to discuss the importance of acknowledging pupil maturity and readiness for self-management, and advocated the development of opportunities for independent learning and opportunities for students to teach themselves.

THE TEACHING PROCESS

As indicated in the preceding section, the study of pupils and the movement into consideration of teaching activities are interchangeable functions; that is, when teachers discuss theoretical pupils, they relate the discussions to their own pupils, and the next development then becomes one of planning of classroom changes. To
facilitate the planning, certain materials were introduced very early in the study process, all of which were planned to improve the quality of classroom teaching procedures.

The teachers were provided with materials based primarily on The Taxonomy of Educational Objectives, Part I, by Benjamin Bloom. The taxonomy provides a framework which is readily understood and adapted by teachers who plan for advanced learning and creative functioning. Teachers who evaluate the implications of the terminal, rote-oriented question for pupils as compared to questions and ideas which are open in nature, which stress interrelationships in learning, and which provide opportunity for application and generalization, can apply the considerations in planning procedures for individuals and groups. The easily understood advanced levels of abstraction can be translated into all areas of endeavor within the school operation, including the standard curriculum areas and independent endeavors or creative activities as well. The forms used by the teachers, Group Discussion Suggestions (Appendix 9) and Focus on the Gifted--Teacher Activities and Behaviors (Appendix 8) both utilized the concept of differentiation in favor of greater freedom for advanced levels of performance.

In addition, the teachers were given several books: Sanders' Classroom Questions, which illustrates the Bloom Taxonomy of Educational Objectives Part I, Gallagher's Teaching Gifted Students, and Education of the Intellectually Gifted by Gold. They were provided with sample units which had been developed within a similar theoretical framework by teachers in previous in-service activities with the project director and with materials produced in other settings to enhance awareness of possibilities for changes in classroom process. Initial changes were described by the teachers in small group meetings and were discussed and evaluated. Suggestions were made for alteration in classroom and school procedures in order to permit freedom to pupils. Teachers described the use of multiple texts at the secondary level, and the use of general topics for study from which students could select cultural, economic, or political strands for concentrated reading.

Stress was placed by the teachers on the use of a general topic, broad reading from many titles, including paperbacks, and weekly seminar discussions on pros and cons related to the area under investigation. For example, studies were made of other countries, and their forms of government. Papers were written as analyses of political practices and their implications for the population, within the context of the political philosophy. Documentation and footnoting of ideas was required, but examinations dealing with ideas and broad essay questions were utilized instead of objective-type items.

In a chemistry class, students participated in special topical investigations, chosen independently. The students formulated a problem and presented the problem and their own conclusions to the
class when they were ready. They were given released time for performing experiments and research, and used their outside time as available, with free access to laboratory facilities and to the teacher. Because of the stress on independent study, with open opportunity for personal ideas and experimentation in various subject fields, and opportunity for personal choice, the students maintained their own standards. The teachers encouraged student ideas and varied interests, ranging from electronics experiments to oceanography.

Teachers in English and social studies stressed individual research projects, the use of work centers, free time in library research, and spaced formal class sessions, rather than daily sessions.

The importance of total school involvement was emphasized in a plan initiated by one school for a series of lectures entitled, "Adventures in Intellect." The teachers volunteered to give talks or to conduct a discussion. The topics, ranging from dramatic readings on "Don Juan in Hell," to "Existentialism," "Vietnam 1967," "Protest in Perspective," "Art," "Cinema I," "Evolution of Anti'Hero," "Black Humor," and "Pessimists Learn Chinese," were very well attended by the students and provided a background for continuing interest on the part of some.

One of the impediments to free performance was eradicated early by some secondary teachers, namely that of imposed arbitrary letter-grade systems. The teachers agreed that grades should not be emphasized, but that students should be free to perform in accordance with their individual interests, in depth. In order to free students from anxiety, the teachers either used A grades, or A and B grades, if grades were necessary. They noted that despite the lack of grades as motivators, the students kept notebooks up-to-date, devoted great amounts of time to projects, did excellent work, and raised provocative, highly advanced questions in their contacts with outside resource persons.

THE USE OF AUDIOTAPES FOR IN-SERVICE PURPOSES

At the beginning of the Project, the teachers were asked to prepare an audiotape showing interaction between teachers and students, for a minimum length of twenty minutes. Typescripts were made of the audiotapes for in-service use with the teachers. Two reference guides were employed in the analysis of the audiotapes, both based on the Bloom model. One was Group Discussion Suggestions; the other, the criteria for Tape Analysis, referred to below.

The teachers were given a sample typescript of an audiotape for study. In each group the audiotape for initial evaluation was one produced by an unidentified member of another sub-group. To promote
free and open evaluation, the typescript of the anonymous writer was used as a preamble to self-evaluation of the teachers' own typescripts. The criteria employed for tape analysis were based upon several factors:

Analysis of the use of questions which permitted only factual and/or closed response versus questions which encouraged open response, consideration of alternatives, and application, generalization, and/or synthesis; the use of communication which encouraged rather than discouraged response, and the total output of both teacher and pupil, as well as the quality of their output. The analysis was based on the criteria for Tape Analysis (Appendix 14) which was developed by the project directors. In discussing the initial typescripts, the teachers observed that the unknown colleague worked too hard at trying to get the pupils to think, that the teacher tended to give answers or to rush answers, and that the teacher seemed anxious to wrap up the discussion in "a nice neat little package." The evaluators suggested that discussion might have been improved through the use of initial questions rather than initial teacher statements, and that the emphasis on relationships or characteristics might have been more easily attained by asking the pupils to compare or contrast characteristics under discussion.

In another group the teachers advocated less teacher interjection, less compulsion to have the children arrive at the teacher's conclusions, avoidance of questions eliciting the single answers "yes" or "no," and attempts to diminish teacher interjections.

Another group cautioned against irrelevant teacher remarks and advocated analysis of the necessity for certain teacher contributions. They recommended more student participation and less teacher participation. They felt that the group discussion was very good, but that teachers may artificially seek responses to types of questions which are not particularly relevant at times; i.e., the "higher level" questions rather than simple level questions which actually may be better at a particular point in a discussion.

The analysis of their own typescripts was a personal matter, and the teachers did not discuss these with others, except on a voluntary basis. After consideration of the Group Discussion Suggestions and the Bloom taxonomy as well as the Tape Analysis criteria, it was assumed that personal analysis could be done very well on a private basis, and that the teachers would have ample criteria to employ in self-study. They were invited to discuss the audiotapes with the project directors, but only if they desired. Several persons did so, and others employed personal, independent analysis.
THE USE OF VIDEOTAPE IN SELF-STUDY

In March 1967 equipment for videotaping of classroom demonstrations was available, and a schedule was established for the teachers. The videotape was used on a totally voluntary basis; that is, the agreement with the teachers was that the videotaping would be done only for those who freely volunteered to be taped. The taping was scheduled in accordance with the wishes of the teachers, and the classroom procedures and content were determined by them. The teachers were encouraged to choose subjects or topics for taping in which they felt especially skillful as teachers.

The videotaping was done in the classrooms of the teachers, and the teachers and students were able to view the tapes immediately after production. If the teachers were dissatisfied with the tapes, they could request that the tapes be erased immediately, and this was done. If the teachers were willing that the tapes be shown to their small group colleagues, they gave permission; and if the teachers were highly satisfied with the tapes and were willing that they be shown to their administrators or to a broader audience, they gave consent for this. In no instance was a tape shown anywhere without the knowledge and consent of the teacher.

A few teachers volunteered for the initial taping, but a sizable number was somewhat reluctant. After they had viewed some of the initial tapes, however, many of the participants volunteered for taping sessions. During the course of the Project, 40 videotapes were made. In the months of March and April, ten tapes were completed, and of these ten, six were shown to the participating colleagues after the teachers concerned had given their consent.

The range of topics was great. The teachers concentrated on classroom procedures which encouraged contrast and comparisons, and the development of concepts and generalizations, in a variety of subject areas. The tape content, to illustrate the range, included the following, as examples:

Multi media interpretations of modern poetry
Analysis of a piece of literature by a panel
Discussion of ethics
Relationships between life in Guatemala and life in the United States
A debate on the causes of the Civil War
Comparison and contrast of countries in South America
Review of mathematical concepts
The exploration of probabilities
Discrimination in Australia
The implications of Peter Pan
The relationships of insects to people
The humanistic aspects of African culture
A debate on expenditures for space exploration
Existentialism
Idealism and realism in 19th century American literature
Discussion on the topic "Should the United States participate in the war in Vietnam?"
Advantages and disadvantages of labor unions
Main ideas and concepts concerning the ancient peoples of Mexico
Race relations
Means for determining the temperature of celestial bodies

The emphasis on the production of the videotapes was on the demonstration of teaching procedures relevant to the gifted. The teachers attempted to create settings in which the gifted would be able to participate freely and to use their own backgrounds and resources, as well as all resources open to them, in the analysis of topics and the suggestion of solutions for problems.

The videotape experience was interesting to both teachers and pupils, and a number of teachers volunteered for repetitions, despite the unavoidable disruption of their daily activities. Evidence of their interest lies in the fact that several teachers requested the opportunity for additional videotapes after the teacher participation phase of the Project was terminated in January 1968. Additional tapings were made for these teachers.

The videotaping procedure was subject to a number of problems. Some of the problems were mechanical and operational and necessitated retapings for a few teachers. Other problems occurred because of usual and sometimes unusual difficulties in the school setting. For example, school ground noise or noise generated by other events, such as music practice in a school building, produced interference for occasional taping sessions. In one case a remarkably fine tape was not useable because of the incessant noise of jet planes coming in to the Los Angeles airport over the roof of a high school building.

Despite the difficulties, the experience was of value to the teachers themselves, and to their colleagues. Even though certain teachers were hesitant about subjecting themselves to the camera, they were able to view the efforts of their more venturesome colleagues, and to learn from both the demonstrations and the small group evaluations. The completely constructive nature of the discussions and the knowledge of the teachers that in no case would their work be discussed outside the Project encouraged a number of them to become adventurous and to volunteer for the tapings themselves. The opportunity to see themselves in the teaching situations, working with their entire class group, provided many opportunities for discussion of teaching manner and teaching procedures, as well as for analysis of the factors illustrated by the Rating Scale, the criterion forms used in the Project, and the general frame of reference implicit in higher level classroom functioning.
RATING SCALE

One of the major means for evaluation in the Project was the Rating Scale of Significant Behaviors in Teachers of the Gifted. The development of the Scale and the statistical analysis are described on pages 15-18 of this report. The major factors identified in the Scale, Individualized Materials and Instruction, The Art of Questioning, The Encouragement of Higher Level Learning, and Communication-Interaction, were developed because of their special relevance to successful teaching of the gifted. The sub-items within these factors formed the major body of content in the in-service effort.

The Rating Scale was used by pairs of judges, all of whom were persons with considerable knowledge and expertise on the education of the gifted. These judges participated in pre-project preparation for their tasks, and functioned in pairs throughout the Project. At each of the evaluation periods, the judges were rotated so that no judge evaluated the same teacher twice, nor did a judge evaluate a given teacher twice with the same alternate judge. The inter-judge reliability, also reported on page 17, was .95.

Perfect performance on the Rating Scale would have produced a score of 111; this figure represents the total number of sub-items. The total score for Factor I, Individualized Materials and Instruction, was 27; for Factor II, The Art of Questioning, the score was 18; for Factor III, Encouragement of Higher Level Learning, the total score was 42, and for Factor IV, Communication-Interaction, the total was 24. The emphasis in the Scale, thus, was on the Encouragement of Higher Level Learning.

Analysis of Table III on each of the factors reveals highly significant gains for the group of teachers during the course of the study. On Factor I, the mean for the first evaluation was 18.41; for the second evaluation, 22.0, and for the third evaluation, 24.10. For the first evaluation the range in ratings was 9-26, and this range increased to 15-27 for the third rating.

For Factor II, The Art of Questioning, the mean on the first rating was 10.69; for the second, 13.38, and for the third, 14.33. The range on the first rating was 3-18, and for the final rating, 10-18.

For Factor III, the mean increased from 25.41 on the first rating to 34.56 for the third rating. The range on the first rating was 13-39 and on the final rating, 24-42.
For Factor IV, the mean was 13.92 on the first rating and 19.90 on the third rating, with a range of 3-23 on the initial rating and 14-24 on the final rating.

Again, the total possible rating on the scale was 111. The mean total on the first rating was 68.44, or slightly less than half of the total possible. On the final rating the mean was 94.44, approximately 17 points below the maximum attainable. It should be noted that the initial range was highly disparate (32-104) with considerably less range at the time of the final rating (62-110).

T tests to determine the difference between the means were computed, using the direct-difference method. As Table III indicates, highly significant gains were made on all of the factors between evaluations one and two, two and three, and one and three. One can reasonably assume, therefore, that the study process, directed toward the improvement of teaching procedures with the gifted, produced highly significant and favorable changes in the performance of the teacher group.

It should be noted that in the first evaluation ten teachers scored in the upper quartile and twelve teachers scored below the mean (55) of the total score. In the second evaluation 21 teachers scored in the upper quartile and only two teachers scored below the mean, while in the third evaluation 32 teachers scored in the upper quartile and none of the teachers scored below the mean.

TABLE III

Comparison of Three Evaluations
by Judges on Rating Scale

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<th>Factor I (27)</th>
<th>Factor II (18)</th>
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<td>1 2 3</td>
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<td>Mean</td>
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(Table III continued on next page)
TABLE III (Continued)

Comparison of Three Evaluations by Judges on Rating Scale

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TABLE IV

Comparison of Items 17, 18 and 19 on First, Second and Third Evaluations

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Item 17</th>
<th>Item 18</th>
<th>Item 19</th>
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</thead>
<tbody>
<tr>
<td>Difference between means t ratio</td>
<td>3.08</td>
<td>2.71</td>
<td>4.09</td>
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<tr>
<td>Significance</td>
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A specific analysis was made of the three items shown in Table IV as items which especially produce higher-level thinking: Item 17, Questions encourage students to draw analogies and to indicate relationships; Item 18, Students are able to ask analytic questions, and Item 19, Students generalize from concrete to abstract at advanced levels. As Table IV shows, the teachers showed highly significant improvements on each of these items during the study.
RATINGS OF INDIVIDUAL TEACHERS

Summaries of data on the performance of groups of teachers do not present the individuals themselves or their specific strengths and weaknesses. Neither do the data present individual variabilities, nor some of the basic factors which account for those variabilities. Because group data invariably obscure individual differences, we are presenting as well some information on selected individual teacher participants. The information may add insights into reasons behind successes and failures in selecting teachers and motivating teachers, as well as to describe behaviors which characterize excellent and poor practices in teaching gifted young people.

In each instance the information on an individual is presented in partial form. Certain data have been eliminated, to preclude identification of an individual by either the project participant himself or by colleagues. The information presented includes the chronological age span, the educational level, the general level at which the individual is teaching, performance on screening instruments, evaluation ratings during the course of the project, and comments.

The comments, made by the judges, were written on the Rating Scale. In conducting the ratings, the judges were encouraged to write comments, but notations were not required. Therefore, the comments on one individual may have been made in all three evaluations; on another individual, written comments may have been made only during the screening visit and in one other instance. In all cases, the essence of judges’ comments is preserved. The only deletions are those which would permit direct identification of the subject, either by colleagues or by himself.

The summaries on individuals which appear below include information on twelve teachers who were given increasingly higher ratings during the course of the study. Two of these teachers were from the primary level, two from the middle grades, three from the upper grades, and five from high school level.

Teacher I described below was a very shy person, initially uncertain about her professional abilities. Prior to involvement in the Project, she commented to the director that she had extreme difficulty in maintaining her poise whenever another adult walked into her classroom. She was sure that her knees knocked visibly as she tried to maintain composure. She is a woman between 40 and 49 years of age,
has a Bachelor of Arts degree, and has been teaching for the past four years, at present teaching a primary grade. Her score on the Attitude Scale was 60, indicating a very favorable attitude toward the gifted.

The results of the evaluations by judges on the Rating Scale of Significant Behaviors in Teachers of the Gifted were:

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<thead>
<tr>
<th>Evaluation</th>
<th>Factor I</th>
<th>Factor II</th>
<th>Factor III</th>
<th>Factor IV</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Score</td>
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<td>22 22 27</td>
<td>12 12 18</td>
<td>34 30 40</td>
<td>20 16 24</td>
<td>88 80 109</td>
</tr>
</tbody>
</table>

Growth was shown from the first to the third evaluation. There was an increase of five points in Factor I, six points in Factor II, six points in Factor III, and four points in Factor IV, for a total of 21 points.

Written comments of the judges on the observations were:

First Evaluation
"Cluster group developing time concept. Teacher has great potential, but tense during observation.

Second Evaluation
Judge 1: "An excellent teacher doing an excellent job. I liked her method of questioning students to develop more critical thinking and analysis.

Judge 2: "She is a strong teacher, but essentially traditional in her methods. Although I think it is her inclination to favor the gifted and more or less ignore the less able in her classroom, she is not apt to depart from convention. Essentially a conformist herself, I doubt that she would even try to provide a stimulating environment for gifted youngsters."

Third Evaluation
"The quality of thinking in this class seemed uncommonly excellent."

"A bright class involved in discussion. Many original, creative, and analytic points brought up by students. Children free to explore own ideas."

The second teacher showed dramatic change in both personality and attitude, according to the comments of the judges during the first and third evaluations. She is between 20 and 29 years of age and has a Bachelor of Arts degree. Her score on the Attitude Scale was 62, indicating a very favorable attitude toward gifted children and programs for the gifted. She is presently teaching a primary class.

Below are given the results of the three evaluations by the judges on the Rating Scale of Significant Behaviors in Teachers of the Gifted.
Progress was made in all the factors from the first to the third evaluations. In Factor I (Individualized Materials and Instruction), there was an increase of 10 points. In Factor II (Art of Questioning), there was an increase of two points. Maximum progress was made in Factor III (Encouragement of High Level Learning), 19 points. Four points were achieved in Factor IV (Communication-Interaction). There was an overall increase of 37 points.

Written comments made by the judges on the Rating Scale were:

Screening
"Difficult from lesson to note many questions."

First Evaluation
"Becomes impatient when right answer not given. Active but no humor. Doesn't enjoy the children. Cold and rather punitive."

Third Evaluation
"Teacher makes students feel worthy." This statement was underlined by the judge and the following comment was beside it, "Outstanding in this regard."

In addition, comment "to a high degree" was next to "Teacher encourages effective pupil displays, not teacher-made displays."

Teacher III showed a marked change for the better during the course of the Project. This was true despite the fact that the teacher was initially rated very high by her administrator, and despite the fact that she had had more than ten years prior service in the classroom. This teacher is vivacious and completely at ease in front of the classroom. At the beginning she tended to "overact," but her ability in this area is now being utilized in very constructive ways. She is between 30 and 39 years old, has a Bachelor of Arts degree, and presently is teaching a middle elementary grade. Her score on the Attitude Scale, which was given during the screening period, was 28. This is well below a favorable attitude toward the gifted. However, this attitude changed considerably through in-service meetings.

The judges rated her in the following manner on the three observations on the Rating Scale of Significant Behaviors in Teachers of the Gifted:

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<tr>
<th>Evaluation</th>
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<tr>
<td>Score</td>
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<tr>
<td>Score</td>
<td>16 26 27</td>
<td>5 10 18</td>
<td>20 32 42</td>
<td>8 16 23</td>
<td>49 84 100</td>
</tr>
</tbody>
</table>
An analysis of these ratings indicates a pattern of tremendous growth from below the mean in the first evaluation, ranking fourth from the bottom, to one of the four highest scores in the last evaluation. An increase of 11 points from the first to the third evaluation was shown in Factor I (Individualized Materials and Instruction); an increase of 13 points in Factor II (Art of Questioning); the largest increase, 22 points in Factor III (Encouragement of High Level Learning). In Factor IV (Communication-Interaction) there was an increase of 15 points, and an overall total increase of 61 points.

The following comments were made by the two judges during the second observation:

Judge 1: "Students read the poetry with interjections by teacher. Essentially a class activity but one in which student interest was high. Emphasis seemed to be on word recognition."

Judge 2: "She impresses me as a woman who aspired to be an actress but settled for teaching. She puts on a great performance, and for the youngsters who have a flair for the performing arts, I am sure she is quite an inspiration. . . ."

Judges who observed this teacher during the third evaluation were very impressed with her. The following comments were written on the rating scale sheet:

Judge 1: "This is a great teacher. Five different activities are going on at once. Each one is different and exciting. Everyone is deeply involved in his activity. Use of audiovisual in original and multiple ways. A rare experience for children."

Judge 2: "As I think of it, all the work going on was social studies related. Teacher worked with reading group. Multiple activities: two film strip viewings (music, social studies, art)."

Teacher IV, who also showed marked gain, was a novice teacher. This individual, initially inclined to structure activities and direct them somewhat rigidly in the classroom, developed greater ease with children and greater confidence in vesting responsibility in them. If the changes are indicative, this individual should improve further with added experience. She is between 20 and 29 years of age, has a Bachelor of Arts degree, and is teaching a middle elementary class. The score on the Attitude Scale was 100, indicating an extremely favorable attitude toward the gifted and programs for the gifted.

The results of the three evaluations by the judges on the Rating Scale of Significant Behaviors in Teaching of the Gifted were:

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<th>Evaluation</th>
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Score: 15 22 24 9 13 16 32 35 38 14 16 22 70 86 100
An analysis of results shows that progress was made in all the factors. In Factor I (Individualized Materials and Instructions), nine points were made. Seven points in Factor II, six points in Factor III, and eight points in Factor IV were obtained from the first to the third evaluation. A total of 30 points were gained.

Written comments made by the judges during the observations were as follows:

First Evaluation
"Would suggest fewer reports by children in allotted time, allowing more time for class discussions."
"Teacher has great potential."
"Students giving speeches from notes; class members doing evaluation from prescribed form. No group evaluation of speeches; no discussion; students have been well trained in note usage; organizing for oral reports."

Second Evaluation
Judge 1: "Very attractive room. Student responses and participation were outstanding. Hard to evaluate teacher. Teacher participation in science reports as partner made inferences difficult to make. All signs point to good teaching. Discussion technique somewhat rigid."
Judge 2: "For reasons unknown to us, she seemed defensive and ill at ease in our presence. My intuition tells me that she is a better teacher than we had a chance to observe. She "staged" a lesson carefully selected and planned for our benefit. We first listened to a student give a report which was followed by a period of student evaluation. This phase of the lesson was structured by a list of criteria which a student led the class in discussion about, one point after the other. Though there were many instances when the teacher should have stepped in, she did not enter the discussion once. We had no opportunity to observe the teacher in action. In using the Rating Scale, I was inclined to give the teacher the benefit of the doubt. The physical environment and general climate impressed me as being favorable to gifted students."

Third Evaluation
Judge 1: "Exchange between students carried on with teacher playing role of interested participant. Children did not raise hands—asked thoughtful questions of each other in orderly way. The process was excellent but the quality of thinking ordinary."
Judge 2: "Student reports. Very little teacher involvement."

Teacher V, who also improved greatly, is perceived by other professional persons as an open, receptive, interested teacher. He is between 20 and 29 years of age, has a Bachelor's degree, and is presently teaching an upper elementary class. During the screening
period his score on the Attitude Scale was 34, which was below the median and indicates a less favorable attitude toward the gifted.

The results of the evaluations by the judges on the Rating Scale of Significant Behaviors in Teachers of the Gifted are indicated below:

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Factor I</th>
<th>Factor II</th>
<th>Factor III</th>
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</table>

An analysis of these ratings shows that progress was made from the first to the second evaluation, and from the second to the third evaluation. There was an increase of 12 points in Factor I (Individualized Materials and Instruction); 10 points in Factor II (Art of Questioning); 15 points in Factor III (Encouragement of High Level Learning), and 11 points in Factor IV (Communication-Interaction). A total of 48 points was achieved.

Written comments made during the observations were:

Screening
Judge 1: "A very fine prospect. Ranks first of those observed."
Judge 2: "The teacher in my judgment appears to have the potentialities for a teacher of the gifted. I feel that he would be amenable to training."

These predictions were borne out in the very fine progress that was shown by this teacher.

Teacher VI is a veteran teacher who may be described as secure, experienced and open, or direct and honest in her relationships with pupils. She is between 30 and 39 years of age, has a Bachelor of Arts degree, and presently is teaching an upper elementary grade class. The score on the Attitude Scale was 48, indicating a favorable attitude toward the gifted.

The results of the three evaluations by the judges on the Rating Scale of Significant Behaviors in Teaching of the Gifted were:

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<thead>
<tr>
<th>Evaluation</th>
<th>Factor I</th>
<th>Factor II</th>
<th>Factor III</th>
<th>Factor IV</th>
<th>Total</th>
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<tbody>
<tr>
<td>Score</td>
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<td>13 16 15</td>
<td>34 37 40</td>
<td>15 19 22</td>
<td>86 98 102</td>
</tr>
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</table>

An analysis of the results shows that some progress was made in all the factors. The most growth was shown in Factor III (6 points), and seven points in Factor IV. There was a total increase of 16 points. It should be noted that the teacher was rated high in the first evaluation, and the total score finally achieved was 102, nine points from the top limit.
Written comments made by the judges during the observations are listed below:

Screening
Judge 1: "Conducts group discussions skillfully. She does withhold her ideas but discussion is random."
Judge 2: "Rich in stimulation, individualization, penetrating questioning. Teacher helps students in self-evaluation and self-improvement. Gives appropriate encouragement to pupils--a nod or smile--praise."

First Evaluation
"This is a silk purse."

Second Evaluation
"She has the ability to generate enthusiasm for learning. She seems to encourage self-direction and independent thinking. She does not supply youngsters with information and answers before trying to draw it out of them. There was good interaction between students. She showed no inclination to dominate youngsters, but is always there when needed to give guidance, encouragement and approval."

Third Evaluation
"Skillfully done--teacher a director!"

Teacher VII is the type who enjoys innovation and new ideas. She is venturesome and curious about the identification and employment of new means or methods in teaching. She is between 40-49 years of age, has a Bachelor of Arts degree, and is presently teaching at junior high school level. Her score on the Attitude Scale was 48, which is above the median for teachers and indicates a favorable attitude.

The following scores were obtained on the Rating Scale of Significant Behaviors in Teachers of the Gifted for three evaluations:

<table>
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<th>Evaluation</th>
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<th>Factor III</th>
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<tbody>
<tr>
<td>Score</td>
<td>21 27 27</td>
<td>12 17 18</td>
<td>38 42 42</td>
<td>19 20 23</td>
<td>90 106 110</td>
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</tbody>
</table>

The teacher was rated very high on the scale in the first evaluation. The maximum in all factors except for one point below in Factor IV was reached in the third observation. An analysis of these ratings shows the most growth in Factor I (Individualized Materials and Instruction), and Factor II (Art of Questioning).

The comments of the judges written on the rating scale sheets were as follows:
First Evaluation
Judge 1: "Individual students working on research reports--good atmosphere."
Judge 2: "Equipment available and used by children. All working with high level interest, purpose and enthusiasm. Twenty-seven children, some in library, all working independently or in groups of two or three. No discussion period during observation."

Second Evaluation
Judge 1: "Class in library. Teacher mature, presenting excellent image of teacher for mentally gifted. I'd like to be in this teacher's class! Teacher met with evaluation committee to discuss forthcoming reports. Outstanding teacher. Classroom exemplary!"
Judge 2: "She is truly a talented and gifted teacher. She has created a more stimulating environment for learning than I think I have ever observed. As is seldom the case, her students are experiencing the feeling that learning can be exciting. She maintains a nice balance between a professional and personal relationship with each student."

Third Evaluation
"A creative teacher who allows students, successfully, to assume much responsibility for their learning."

Teacher VIII is a relatively new teacher who enjoys the challenge of the gifted. She is between 20 and 29 years of age with a Bachelor of Arts degree, presently teaching at high school level. She obtained a score of 55 on the Attitude Scale, which is considerably above the median for teachers and indicates a very favorable attitude toward the gifted.

The scores on the three observations rated by the judges on the Rating Scale of Significant Behaviors in Teachers of the Gifted, were:

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<tr>
<th>Evaluation</th>
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<th>Factor IV</th>
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<tbody>
<tr>
<td>Score</td>
<td>24 26 27</td>
<td>15 15 18</td>
<td>33 38 42</td>
<td>13 22 23</td>
<td>85 101 110</td>
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</table>

An analysis of these ratings indicates that improvement was made in all the factors. The judges gave her a high rating in the first evaluation and therefore the top limit was reached with a growth of a few points in Factors I, II, III, and one point less in Factor IV. There was a growth of three points from the first to the last evaluation in Factor I, three points in Factor II, nine points in Factor III, ten points in Factor IV, and an overall increase of 25 in the total score.

Some of the comments of the judges were as follows:
Screening period
"This teacher appears very bright and able."
First Evaluation
"A dandy teacher. We found the four gifted enrolled were in the
library by discussing class responses with teacher. Class in three
groups. Discussion groups discussed and compared Brutus, Cassius,
Caesar and Anthony. Structured question format. Group leaders re-
port--general discussion involved many."

Second Evaluation
1 "We read several cum folders of students' written work which
included teacher's comments. This teacher truly likes gifted stu-
dents and probably has her greatest strength working with them.

Third Evaluation
"Superb!"

During the teacher demonstrations the students displayed work
that they had done for their last project. The students had decided
to work on The Pearl by John Steinbeck. The students took different
chapters, wrote scripts, selected music, and most of them made
collages symbolizing the material in the chapter. One group of two
girls did an overall presentation of the book, made slides, and wrote
a script of the story.

Teacher IX is a very young secondary teacher who is oriented
toward intellectual pursuits. She is between 20 and 29 years of age,
has a Bachelor of Arts degree, and is presently teaching at the high
school level. Her score on the Attitude Scale was 39, at the median
of the teacher's scale.

The results of the three observations by the judges on the Rating
Scale of Significant Behaviors in Teachers of the Gifted were:

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<td>20 38 38</td>
<td>8 20 24</td>
<td>53 101 107</td>
</tr>
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An analysis of the results shows that great progress was made from
the first to the last evaluation. A growth of 14 points to the
maximum was made in Factor I. In Factor II the maximum was achieved.
Eighteen points were obtained in Factor III, and 16 points to the
maximum in Factor IV. A total of 44 points was achieved.

The written comments on the observations by the judges reflect
some of this progress.

Screening
Judge 1: "Teacher too impatient to wait for student response."
**First Evaluation**

Judge 1: "Lecture--purely--excellent content. Some attempt at illustration."

Judge 2: "This was a very well prepared lecture to a large group of students. Many materials were used for emphasis, and the teacher had done much preparation and had a good background, but there was no participation by students although they were invited."

**Second Evaluation**

Judge 1: "This is an excellent teacher. Her method is unconsciously inductive! She maintains her role despite her youth. In short, she may well become a great teacher."

Judge 2: "An outstanding creative teacher! Use of opaque projector to display student work illustrating Elliot’s modern poetry. I thought this idea superb! Use of mood music from tape recorder. Terrific student response, participation, ideas, cooperation."

Teacher X received an initially low rating on the Attitude Scale and was not high on the Concept Mastery Test. His acceptance of students and his ability to deal with them on higher ideational levels resulted in especially high ratings during the study. He is between 30 and 39 years of age, has a Master of Arts degree, and at present is teaching at the high school level. His score on the Attitude Scale was 20, indicating a less favorable attitude toward gifted children and programs for the gifted.

The results of the three evaluations by the judges on the Rating Scale of Significant Behaviors in Teachers of the Gifted are given below:

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<th>Factor IV</th>
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<tbody>
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<td>16 13 17</td>
<td>17 23 40</td>
<td>22 17 21</td>
<td>76 71 105</td>
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An analysis of the results shows that there was an increase of six points in Factor I. Maximum growth was obtained in Factor III, 23 points. There was a total increase of 29 points from the first to the third evaluation.

Written comments made by the judges using the Rating Scale were:

**First Evaluation**

"A warm enthusiastic person, with real appreciation for students, carefully planned lessons--values the application of factual knowledge. Excellent lesson on critical thinking in the (subject) area. Instructions to students clearly given--opportunity for differences in conclusions as long as a student can defend his thinking. Not disturbed by movement of students, recognizes different kinds of noise. A very calm, accepting person. Excellent questions
at a high level of conceptualization: "What are the unifying effects of (subject) in the Middle East?"

"Appears to be a creative resourceful teacher, who himself is a scholar."

Third Evaluation

"Rich resources. Talented teacher!"

Teacher XI received markedly low ratings during the second evaluation period as compared to the first, but ranked very well on the final rating. He was unable to participate in some of the in-service activities because of extra school administrative responsibilities given to him. He is between 30 and 39 years of age, has a Master of Arts degree, and is presently teaching at the high school level. His score on the Attitude Scale was 43, indicating a favorable attitude toward gifted children and programs for the gifted.

The results of the three evaluations by the judges on the Rating Scale of Significant Behaviors in Teachers of the Gifted are given below:

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<td>18</td>
<td>42</td>
<td>22</td>
<td>109</td>
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</table>

An analysis of the results indicates that there was a drop from the first evaluation to the second evaluation. The teacher missed a number of in-service meetings and this may account for the lack of progress. However, he did attend the teacher demonstrations. There was marked progress between the first and the last evaluation. Maximum growth (21 points) was shown in Factor III. An overall progress of 31 points was made. The teacher went from the lowest rank in the second evaluation to close to the top rank in the third evaluation. He reached the top limit in Factor I, in Factor II, and in Factor III. He was two points below the limit in Factor IV.

Teacher XII is an experienced individual who learned in the course of the Project to vest responsibility increasingly in her students. She is between 30 and 39 years of age, has a Master of Arts degree, and is a high school teacher. Her score on the Attitude Scale was 43, indicating a favorable attitude toward gifted children and programs for the gifted.

The results of the three evaluations by the judges on the Rating Scale of Significant Behaviors in Teachers of the Gifted are given below:
Considerable progress was made from the first to the third rating. In Factor I there was an increase of five points, and an increase of five points in Factor II. Maximum progress was made in Factor III (11 points), and Factor IV (10 points). Overall progress was 31 points.

Written comments made by the judges on the Rating Scale were:

**First Evaluation**

Judge 1: "Too teacher-dominated though well organized for group work."

Judge 2: "Dynamic, enthusiastic teacher, values self-direction in students, small groups in self-directed discussion, but what they talked about in the groups was too tightly pre-structured. However, the purpose of this lesson was to provide experience in the skill of how to study a novel, how to make use of underlining, margin notes made by the student—so more structure was needed to accomplish the purpose. The teacher moved from group to group and would occasionally stop the class and herself read aloud (very well done) the significant passages."

"A very well organized teacher, who carefully builds a program of skill building in the study of literature, how to study—exercises and instructions presented to students in written form were well done, teaching the process of how to analyze a piece of literature. Evidence of individualized selection of reading was apparent. Many resources available to students in the room."

**Third Evaluation**

"This is one of those rare, especially energetic and able teachers. Everything is excellent."

The descriptions of eight teachers whose ratings showed losses during the Project are presented below. Two of these are from the primary grades, one from the upper elementary grades, two teach at the junior high school level, and three at the high school level. The losses occurred for a variety of reasons which will be apparent to the reader. Some of the reasons are based upon actual teaching practice, but not all. In some instances problems related to teacher assignments or to school practices contributed to the lower ratings.
Teacher XIII is an individual characterized as exceedingly verbal. The problem existed at the outset and remained. Because of the excessive verbal output on the part of the teacher, as the description indicates, she limited the opportunities for classroom communication, for the use of ideas by the children, and for the development of conceptualization processes on their part. She is between 30 and 39 years of age, has a Bachelor of Arts degree, and has been teaching at the primary grade level. The score on the Attitude Scale was 50, indicating a favorable attitude toward gifted children and programs for the gifted.

Listed below are the results of the three evaluations by judges on the Rating Scale of Significant Behaviors in Teachers of the Gifted:

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<tr>
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<td>18 25 25</td>
<td>9 15 14</td>
<td>25 38 35</td>
<td>12 22 20</td>
<td>64 100 94</td>
</tr>
</tbody>
</table>

An analysis of the results indicates that progress was made from the first to the second evaluation, but a slight drop is shown from the second to the third evaluation. A growth of 30 points is shown from the first to the last evaluation, however.

Written comments made by the judges on the Rating Scale were:

**Screening**
"Excellent bulletin boards and room environment. No A.V. Resource Center limited to supplementary books. Interest centers excellent -- aquarium, rocks, shells."

**First Evaluation**
Judge 1: "Talks too much. Teacher directs everyone to think her way."
Judge 2: "My first impression was very positive, but after observing her a few minutes it was very apparent that this woman is a compulsive talker. She never stops long enough to give any child a chance to participate. Her objective for the lesson we were observing was to get the youngsters to write a letter, but it was also obvious that she wanted every child to write the same letter. . . ."

In spite of Judge 2 comments on the first evaluation, the teacher made progress, achieving a final score at the mean of the third evaluation.

Teacher XIV is a methodical teacher, in control of the classroom at all times. The decisions are made by her, and the latitude determined by her. "Creative" opportunities are predetermined and closely planned in advance of the activity. She is between 30 and 39 years.
of age, has a Bachelor of Arts degree, and has been teaching a primary grade. She received a score of 64 on the Attitude Scale, which is well above the median on the teacher's scale. The teacher maintains firm control on the children. There is a formal atmosphere in the classroom.

The scores on the Rating Scale of Significant Behaviors in Teachers of the Gifted were:

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Factor I</th>
<th>Factor II</th>
<th>Factor III</th>
<th>Factor IV</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Score</td>
<td>26 18 20</td>
<td>17 8 14</td>
<td>37 20 34</td>
<td>18 15 16</td>
<td>98 61 84</td>
</tr>
</tbody>
</table>

The teacher received a high rating at the first evaluation. The judges were very impressed with her techniques in the classroom. Subsequent judges did not feel that she was functioning as well. This is the only instance of marked differences between judges' ratings. An analysis of the ratings shows a drop in all the factors from the first to the third evaluation. However, there is growth shown from the second to the third evaluation.

First Evaluation
Judge 1: "An excellent teacher. Firm control--manages situations beautifully. The girl is a genius!"
Judge 2: "This teacher is a real professional in all respects. She never makes a move or utters a sound without a purpose behind it. She is a performer and demonstrates the fact that teaching is an art. It is obvious that she likes an audience and is getting something out of teaching for herself that very few teachers experience. She uses the soft voice technique very effectively. She knows kids and she knows how to use her relationship with them to bring out the best in them. In my opinion she exemplifies the skill and insight that is essential in demonstration teachers."

Second Evaluation
"Keeps close control. Uses near ridicule and sarcasm. Tight control of children for quiet and conformity, especially the boys."
"Feeling-tone in Teacher-Pupil interaction that teacher doesn't really enjoy or like the children as they are."

Teacher XV is described as rigid, inflexible, and authoritative. The characteristics were only slightly altered by the in-service program. The overall rating was quite low in comparison to the other teachers. She is between 20 and 29 years of age, has a Bachelor of Arts degree, and has been teaching an upper elementary grade. During the screening period she achieved a score of 22 on the Attitude Scale, indicating a less favorable attitude toward the gifted and programs for the gifted. The results of the three evaluations by the judges on the Rating Scale of Significant Behaviors...
in Teachers of the Gifted are listed below:

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Factor I</th>
<th>Factor II</th>
<th>Factor III</th>
<th>Factor IV</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>17</td>
<td>21</td>
<td>23</td>
<td>22</td>
<td>28</td>
<td>59</td>
</tr>
<tr>
<td>60</td>
<td>75</td>
<td>11</td>
<td>10</td>
<td>14</td>
<td>62</td>
</tr>
</tbody>
</table>

An analysis of the results shows that some progress was made from the first to the last evaluations. There was a growth of four points on Factor I. In Factor II four points were made. In Factor III there was an increase of five points, and three points in Factor IV.

The following comments were made by the judges on the observations:

**First Evaluation**

"A cold appearing woman, sharp tongue, not responsive to children. Evidence of boredom. All teacher-drawn bulletin boards. Many cut out patterns in evidence for kids use. Seems to seek only one or two right answers. Does not tolerate or accept differences, way-out answers are not pursued for the logic they might contain. Was doing a creative writing lesson. Poorly motivated, little student involvement. Forty kids in the class. All use the same social studies text. Questions on the board--very low level questions. A very rigid personality. No real warmth expressed for children during the observation."

**Third Evaluation**

"Appears rigid--one right answer sort of person. -Quite skillful in promoting discussion but cannot resist imposing her own evaluation on almost everything that is said."

Teacher XVI is a person who is described as an individual with an excellent attitude and excellent skill at classroom organization. The teacher is not viewed as "harmful" to any pupils but is described as less valuable for the very bright than for those who are less capable. She is between age 40-49 and has a Bachelor of Arts degree, at present teaching in junior high school. The score on the Attitude Scale, which was taken during the screening period, was 16, considerably below the median on the teachers scale.

The teacher received a very favorable report on the screening and was therefore included in the study, in spite of the low scores achieved on the Attitude Scale and the Terman Concept Mastery Test. The following scores were obtained on the Rating Scale of Significant Behaviors in Teachers of the Gifted:

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Factor I</th>
<th>Factor II</th>
<th>Factor III</th>
<th>Factor IV</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>11</td>
<td>17</td>
<td>6</td>
<td>9</td>
<td>12</td>
<td>42</td>
</tr>
<tr>
<td>15</td>
<td>32</td>
<td>15</td>
<td>15</td>
<td>32</td>
<td>73</td>
</tr>
</tbody>
</table>

52
The teacher scored fairly low on the first evaluation. Some growth was shown by the second and third evaluations (a total of 20 points). However, the teacher was rated higher by the judges at the second evaluation than at the third evaluation. Part of this is due to the impression of "smugness" that is presented by the teacher's appearance. Also the lessons appear to be planned in advance.

The written comments of the judges in the screening period were:

Judge 1: "Many attractive articles, bulletin boards, exceptionally attractive, four at listening post. One of the best observed. The lesson may have been pre-planned but the spontaneous reactions indicated excellent rapport and respect."

Judge 2: "This teacher might be inclined to let brighter children carry the load at the expense of some slower children."

Third Evaluation

Judge 1: "Unaware of errors -- smug"
Judge 2: "Uninspiring, unimaginative, dull and very conventional but reasonably harmless."

Teacher XVII did not participate in the in-service activities. He was regarded by the project staff as an individual who seemed unaware of any need for improvement on his part. The ratings indicate that the judges disagreed with him. He has completed his Bachelor's degree and is teaching at the junior high level. His score on the Attitude Scale was 57, well above the median on the teacher's scale. There was poor attendance at the in-service meetings. He seemed to have the attitude that he knew all the answers and therefore did not need to attend the in-service meetings. However, he did attend all the teacher demonstrations, for which he was released from teaching.

The scores obtained on the Rating Scale of Significant Behaviors in Teachers of the Gifted were:

<table>
<thead>
<tr>
<th>Factor I</th>
<th>Factor II</th>
<th>Factor III</th>
<th>Factor IV</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation</td>
<td>Score</td>
<td>Score</td>
<td>Score</td>
<td>Score</td>
</tr>
<tr>
<td>1 2 3</td>
<td>18 20 17</td>
<td>9 15 10</td>
<td>31 37 25</td>
<td>67 92 67</td>
</tr>
</tbody>
</table>

An uneven pattern is shown by the judges' ratings. There is progress between the first and second evaluations. There is progress in Factors II and III from the first to the third evaluations. However, due to drop in Factors I and IV, there is no progress indicated in total evaluations from the first to the third rating.

At the third evaluation the teacher had a class with very few gifted children in the class. Comments of the judges are as follows:
Screening

Judge 1: "Teacher did not address class or work with any student while we were there. This teacher has a system of progression at individual rate. Students check work in answer book. Several students not working. I would predict this teacher is not likely to change."

Judge 2: "This rating may be misleading in that the teacher seemed autocratic. He organized his course very logically and students were engaged in multi-level activities, but the whole process seemed rather mechanical. Students ground out the exercises, evaluated their results from teacher's manual and proceeded to next lesson."

Second Evaluation

"Teacher pleased with himself but unaware of his errors. Few children seem to know what they are doing."

Teacher XVIII was one of the most creative and capable of the secondary teachers, in the judgment of the project staff. The loss indicated by his evaluations is not valid. The final rating is due to an error by the clerk at his school. The clerk kept the judges waiting in the office instead of sending them to the classroom, and as a result, they were unable to make a valid observation. The comments on the first evaluation are descriptive of the individual. He is between 40 and 49 years of age, and has a Master of Arts degree. His score on the Attitude Scale was 44, indicating a favorable attitude toward gifted children and programs for the gifted.

The results of the three evaluations by the judges on the Rating Scale of Significant Behaviors in Teachers of the Gifted are given below:

<table>
<thead>
<tr>
<th>Factor</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Score</td>
<td>26</td>
<td>27</td>
<td>22</td>
<td>17</td>
<td>15</td>
</tr>
</tbody>
</table>

The overall results show a drop of seven points. Two factors reflect this loss—Factor I four points, and Factor III three points. All indications from demonstrations, videotapes, and observations indicate that he is an outstanding teacher. Written comments made by the judges on the Rating Scale were:

First Evaluation

"A warm, well-informed teacher. This was a small honors section of seniors in a seminar on ___ (subject). Much evidence of student selection of materials at advanced levels. Excellent interchange between teacher and students in an exploratory discussion of reactions to the materials they were reading (all different). Excellent
use of student knowledge. Opportunity for students to demonstrate areas of real knowledge. Many resource people available. References to other discussions on controversial issues were made. Teacher gives students opportunity to deal with critical issues, to express their ideas. The teacher himself reflected a high level of scholarship, an intellectual honesty and a respect for the opinions of the students."

Third Evaluation

"We had difficulties in getting into the room. It was so short a visit that these comments hardly seemed valid."

Teacher XIX is an extremely well organized person. His ratings indicate that a high degree of structure is not the best answer to effective teaching for the gifted. He is between 30 and 39 years of age, has a Master of Arts degree, and is teaching at the high school level.

During the screening period, this teacher received a score of 28 on the Attitude Scale. This indicated an unfavorable attitude toward the gifted. Below are listed the results of the three evaluations by the judges on the Rating Scale of Significant Behaviors in Teachers of the Gifted:

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Factor I</th>
<th>Factor II</th>
<th>Factor III</th>
<th>Factor IV</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>17</td>
<td>22</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An analysis of the results shows a drop from the first to the last evaluation. This was primarily in Factor III, particularly in questions 1, 3, 4 and 30. These questions involve utilizing the talents and interests of the students. There was an increase of four points in Factor I.

Screening

"This man may not be as good as the rating makes him appear. The class was using study materials which pretty much structure the teacher's role. This teacher does have a good potential for gifted kids."

First Evaluation

Judge 1: "Atmosphere excellent--students occupied and interested. Self-evaluation and self-improvement built into procedure."
Judge 2: "This appeared to be a well-run class."

Second Evaluation

"Much fun approach. I would prefer some evidence of students being stimulated to be more thoughtful, scientific, etc. About one-third of the group worked seriously."
Teacher XX, through no fault of his own, was assigned a class with very few bright students within it. He, in the judgment of both project staff and the judges, is capable of a much better performance, given a group of students capable of response to his excellent background of knowledge. He was assigned the wrong types of groups for the second half of the Project, through administrative error. He is between 20 and 29 years of age and has been teaching for the past two years at the secondary level.

This teacher received a score of 70 on the Attitude Scale, indicating a very favorable attitude toward gifted children and programs for the gifted. The results of the evaluations by the judges on the Rating Scale of Significant Behaviors in Teachers of the Gifted were:

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Factor I</th>
<th>Factor II</th>
<th>Factor III</th>
<th>Factor IV</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td></td>
<td>18 25 24</td>
<td>13 14 15</td>
<td>20 26 26</td>
<td>13 18 18</td>
<td>64 83 83</td>
</tr>
</tbody>
</table>

Some progress was shown from the first to the last evaluation. A six point increase was achieved in Factor I, two points in Factor II, six points in Factor III, and five points in Factor IV, for a total of 19 points. This growth was not as great as anticipated, as the teacher showed a great deal of promise and potential. Very little change in technique or strategy was observed in his classroom during the observations, demonstrations, and evaluations by the judges.

Written comments made by the judges during the observations were as follows:

**Screening**
Judge 1: "I believe this man would be good. He had a slow class and was reviewing for exams.
Judge 2: "I'm inclined to like and admire him but this situation just isn't related to teaching the gifted. I gather that this fellow is likely something of a scholar, and I bet he could handle gifted kids if he had any to teach."

**First Evaluation**
Judge 1: "Few flickers of interest, but for most part students seem to feel that it's remote from their interests and lives. Articulate, expressive, enthusiastic, but teacher centered. Students like him, I gather.
Judge 2: "Class slow--teacher well prepared--diversity of questions. Class response poor--teacher talk carried the discussion."

**Third Evaluation**
"I had a feeling this was a poor lesson for this teacher and that he generally has much more to offer."
In summary, certain traits were specified again and again by the judges in their comments on the teachers who showed improvement during the Project. The teachers were open, receptive, and interested in new ideas. They were willing to use new approaches to working with their pupils, and to deal with them at appropriate ideational levels. They were willing to forego the closure resulting from complete pre-planning and structure for increasing involvement and responsibility of students. In the centering of responsibility with their pupils, they were secure themselves. All of them were interested in learning.

The teachers who did not improve, apart from the casualties described in the accounts of Teachers XVIII and XX, also were described in similar terms, in several instances. Teacher determination, teacher direction, and teacher structure characterized many of their efforts. Less evidence appeared in the descriptions of interest in new approaches. More comment related to inflexibility and verbal domination of classroom procedures. In short, the teachers maintained practices which were comfortable for them, but which were not conducive to open learning opportunities for the gifted in their classrooms. The structure, especially where the gifted were placed in heterogeneous groups, precluded independent activity. The close organization, while no doubt viewed as excellent by those who nominated the teachers for participation, limited the development of widely-ranging, interesting learning opportunities for their pupils.
RESULTS OF THE COMPARISONS OF AUDIOTAPES I AND II

Audiotapes produced by the teachers at the beginning and end of the Project were transcribed and subjected to independent analysis by two judges. The transcriptions were made in each instance on twenty minutes of taped discussion. The interjudge reliabilities, as determined by the intraclass coefficient of correlation defined by Fisher, appear in Table V below:

<table>
<thead>
<tr>
<th>Table V INTERJUDGE RELIABILITIES ON AUDIOTAPE EVALUATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Questions (single fact)</td>
</tr>
<tr>
<td>Teacher Questions (application generalization synthesis)</td>
</tr>
<tr>
<td>Teacher Answers (closed response)</td>
</tr>
<tr>
<td>Teacher Answers (open response)</td>
</tr>
<tr>
<td>Student Questions (single fact)</td>
</tr>
<tr>
<td>Student Questions (application generalization synthesis)</td>
</tr>
<tr>
<td>Student Answers (closed response)</td>
</tr>
<tr>
<td>Student Answers (open response)</td>
</tr>
</tbody>
</table>

The judgments were based upon changes in both teacher and student questions and responses, from questions permitting only single fact response to those producing or calling for application, generalization, or synthesis; from answers which were fixed and finite to those which generated additional examination or exploration.

An analysis of the audiobases was made by computing a "t" which tested the significance of the difference between the paired scores. The "t" was based on a formula by W. J. Wittreich and K. B. Radcliffe in the book, Information and Error, by Solomon David, Basic Books Inc., New York, 1959. The results were as follows:
### TABLE VI
COMPARISONS OF TEACHER AND PUPIL QUESTIONS AND ANSWERS

<table>
<thead>
<tr>
<th>1. Teacher Questions (single fact)</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. All Teachers</td>
<td>1.50</td>
<td>Not Significant</td>
</tr>
<tr>
<td>b. Omitting eight Teachers not on Audiotape*</td>
<td>.803</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Teacher Questions (application generalization synthesis)</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. All Teachers</td>
<td>1.57</td>
<td>Not Significant</td>
</tr>
<tr>
<td>b. Omitting eight Teachers not on Audiotape*</td>
<td>3.05</td>
<td>Significant 1% level</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Teacher Answers (closed response)</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Teacher Answers (open response)</td>
<td>.63</td>
<td>Not Significant</td>
</tr>
<tr>
<td>5. Student Questions (single fact)</td>
<td>.04</td>
<td>Not Significant</td>
</tr>
<tr>
<td>6. Student Questions (application generalization synthesis)</td>
<td>2.83</td>
<td>Significant 1% level</td>
</tr>
<tr>
<td>7. Student Answers (closed response)</td>
<td>1.14</td>
<td>Not Significant</td>
</tr>
<tr>
<td>8. Student Answers (open response)</td>
<td>5.17</td>
<td>Significant 1% level</td>
</tr>
<tr>
<td>9. Encouragement</td>
<td>.13</td>
<td>Not Significant</td>
</tr>
<tr>
<td>10. Discouragement</td>
<td>.03</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

*It should be noted that category b under items 1 and 2 is the only relevant item, and that category a is included only for the sake of complete data. On eight audiotapes, the teachers did not participate at all in the discussion; hence, the category Teacher Questions does not apply to them. When they are omitted, item 2b is significant at the 1% level, with a "t" of 3.05. The teachers felt that it was more important for the students to question and discuss the topics themselves rather than to have the teachers lead the discussions, and since the teachers were given no instructions beyond the simple request for the tapes, the procedure could not be structured.

The single fact-type questions made by the teachers showed no significant increase or decrease from the first to the second audiotapes. A "t" of 1.50 was obtained including all the teachers, and a "t" of .803 was obtained omitting the eight teachers from the second audiotapes. The "t"s were not significant.

The answers given by the teachers to student questions remained approximately the same from the first to the second audiotapes. A "t" of 1.23 on the closed response type answers and a "t" of .63 on the open response type answers were obtained. These were not significant.
The student single fact questions remained the same from the first to the second tape. A "t" of .04 was not significant. There was a significant increase in the application, generalization and synthesis type questions of the students from the first to the second audiotape. A "t" of 2.83 was computed. This was significant at the 1% level.

Student answers in the closed response category remained the same from the first to the second tape. A "t" of 1.14 was not significant. However, the student answers in the open response category showed a very significant increase from the first to the second tape. A "t" of 5.17 was obtained, significant at the 1% level.

No changes were noted in the psychological dimension categories of discouraging and encouraging remarks of the teachers. A "t" of .13 for encouraging remarks and .03 for discouraging remarks indicated no significant differences from the first to the second audiotape.

In summary it should be noted that significant increases were indicated from the first to the second audiotapes. Significant gains occurred from first to final tape recordings in teacher questions which called for application, generalization, and synthesis. Student questions likewise gained significantly in qualitative level. There was apparent growth in higher cognitive level-type questions by both teachers and students and growth in open responses of students.

Subjective evidence came from the teacher participants in comments about their increased confidence, and their awareness of change in scope and quality of classroom learning opportunities. The objective evidence from the rating scale and the audiotape comparisons bears out the opinions they expressed. From the evaluations made in observations by trained experts and from independent judgments made of audiotape content, the conclusion is that significant improvement did occur.
CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

The study project, The Improvement of Teaching Procedures with Gifted Elementary and Secondary School Pupils, has demonstrated to a fair certainty the main thesis on which it was based: namely, that teachers, already highly selected, can improve their teaching performance significantly through a self-study process. By using certain study guides, readings, small group conferences, and observations and analysis of their own teaching, they can employ a basic set of principles as a framework for improvement in teaching with favorable results. The use of these materials and procedures, described throughout the study and presented in the Appendix, resulted in highly significant improvement in teaching, as evaluated by independent judges.

The frame of reference involved initial study and discussion of pupils, the anonymous pupils of other teachers first, and then their own. The discussion of pupils by teachers inevitably directed itself toward educational planning and the establishment of favorable learning conditions for pupils with exceptional or unusual learning needs.

Pupil study, then, developed into curriculum study which employed principles based upon pupil characteristics. Since the gifted are persons who require a curriculum based on major concepts, issues, and ideas, activities were planned with the major topical approach as a principle criterion. The increasingly abstract, more complicated conceptual levels in the Cognitive Domain of the Taxonomy of Educational Objectives by Bloom serve particularly well as guides for teachers who develop frames of reference within which their pupils can use their capacities and talents freely. The study guides within the present Project are philosophically consistent with the advanced levels of the Taxonomy.

Similarly, the personal qualities and abilities of the gifted were used as a basis for curriculum planning. For example, such traits as the ability to assume early responsibility for their own learning, the liking for independence, the interest in pursuing ideas in depth, or the persistence and long-time range of interests suggested criteria to be employed in the planning of curriculum and in the planning of learning procedures appropriate for the gifted. The characteristics of the gifted were seen as especially harmonious with the level of performance implied by the advanced levels of the Cognitive Domain, and carried implications as well for the development of learning opportunities in all fields of human endeavor.

The study demonstrated that teachers can be selected with success by employing the behaviors on the Rating Scale of Significant Behaviors.
in Teachers of the Gifted, developed within the project context. The personal qualities important in teachers of the gifted, as well as the academic qualities, are implicit in the behaviors described. If school administrators responsible for the assignment of teachers and pupils utilize the scale to match teachers and pupils with compatible qualities in school situations where grouping is possible, the gifted may be placed with teachers who enjoy the challenge of working with them.

The rating scale can be used in the improvement of teaching in a variety of ways. For example, it may be used as a basis for discussion of teaching practices in in-service study sessions; it may be employed by administrators in the identification of specialist teachers to work with pupils in short-term groupings, or it may be used by teachers of the gifted for in-service study and evaluation, and improvement of their own teaching procedures. Many of the scale items should prove useful in small group in-service discussions, where teachers discuss curriculum development and their own teaching procedures.

Because the study process resulted in highly significant gains by the teacher participant group, it is valid to suggest that the pattern employed in the study be utilized for in-service purposes. The design involving small groups of teachers can be adapted to school systems of any size. All it actually requires is two or more interested teachers, willing to use whatever parts of the in-service materials they can realistically employ and to involve themselves consistently in self-study and evaluation. The opportunities for insight are enhanced, of course, if schools possess portable videotape equipment or have a consultant for the gifted with whom teachers can discuss their teaching, or if schools can give teachers assigned time for visitation. Even without the equipment or assigned time or special resource person, however, the teacher who is willing to study his pupils, to study and apply the in-service forms, to read the suggested resources and to talk openly with colleagues about what he is doing stands to improve himself markedly as a professional.

Teachers or school administrators interested in studying the effectiveness of in-service programs may find the scale useful for evaluation. Use of the scale by pairs of judges who rate teachers independently before, during, and after an in-service program will provide a means for judging the impact of a particular study program. Research on teaching performance may be extended to various populations of teachers, various grouping or program designs, and/or various in-service innovations.

The process of in-service study and self-improvement is never ending. The need is always present in any profession. The basic purpose of the study, the study and evaluation of a process for the improvement of teaching to lead to the establishment of a
demonstration center for the preparation of teachers, is a clearly justified purpose.

In our judgment, centers based on the demonstration of teaching which is pupil-based rather than on program demonstration or demonstration of specific administrative arrangements should be established. Teaching then would go on in a center where teachers would be psychologically free of the restrictions implied and actually inherent in the word program. Here they would study pupils and then seek all means possible to cultivate and extend the known abilities of children with unusual learning capacities. The knowledge of pupils would serve to reduce and even eliminate concern for prescribed texts and predetermined but unnecessary content.

It is to be hoped that centers could be initiated and maintained under college or university auspices, and be given Federal support, with the purpose of providing and demonstrating truly differential education for gifted pupils. Such centers could be means for refinement of the understanding of special needs and special problems of the gifted, including underachievement or poverty or relationships with others, and for curriculum improvement. If the philosophy of the teachers within the center were truly pupil-based, it should serve as a constant source of dissemination of new and creative ideas. This would be an almost automatic result of adaptations and ideas focused on the education of the gifted pupil. The pupil as the center of concern would be the motivator of a constant flow of ideas and practices as well as materials which could be employed or adapted by teachers of the gifted in other environments.

Finally, the practices within the study point favorably toward the building of a professional commitment of teachers themselves to the gifted. This commitment and favorable support can be built by following the practice followed in the Project, of regarding the teachers themselves as professional resources and professional peers. The teachers served excellently on many occasions as consultants to one another. They spoke at meetings and carried on in-service responsibilities in their school systems. They conducted sessions for other teachers in short-term courses, and communicated skillfully and effectively with parents of the gifted.

The involvement of busy teachers in these kinds of special activities is time-consuming, but in the experience of the project directors, even the busiest teachers invariably came through with superior contributions. A final suggestion, therefore, is that we radically alter our concept of the role of consultant or supervisor within these programs, that we work toward the development of leadership in highly educated, articulate teachers, and that we give them recognition for the work that they are doing with their peers in the profession, with other professionals and with the public. Perhaps this will serve to place the consultant in a different role and cause him
to carry a different type of responsibility as a resource to teachers. This role, as a resource person rather than as an interpreter and disseminator by himself, may put him on his mettle and may prove productive in the in-service sense for him as well. For, in the final analysis, the consultant who develops methods and materials which can be used independently by teachers is preparing willing teachers to serve as consultants to other teachers, and this means that he, too, must go on with self-study and self-improvement.
CHAPTER 8
SUPPLEMENTARY AND APPENDIX MATERIALS

The following section will consist of two parts. The first part contains a number of suggestions and procedures found effective by some of the project teachers. In most cases the ideas prepared by the teachers were edited briefly, and their suggestions are presented as they wrote them, with minor alterations. In one instance, the Individual and Society project, the material is condensed and described simply because of the sheer volume of the material. In the second part of this section, a few illustrative plans developed by the teachers for in-service demonstrations and the ensuing in-service discussions are presented.

PART I. TEACHING SUGGESTIONS

Some Suggestions for a Biography Unit for Gifted Second Graders
---Jacque Steffen

The Discovery Books published by Garrard are excellent. These books contain enough new words to help enlarge vocabulary and introduce new ideas without being so difficult that the ideas contained therein are not easily absorbed.

I have found that advanced second graders are extremely enthusiastic about biography. I have introduced this unit as part of their reading program when they are ready for more difficult reading material. Reading biographical material extends their horizons in the areas of place and time, and gives them many vicarious experiences which are valuable for these children, with their sensitivities and social awareness.

Titles in the Discovery Books series I have used are these:

Jane Addams  
John James Audubon  
Clara Barton  
Luther Burbank  
George Washington Carver  
Ben Franklin  
U. S. Grant  
Sam Houston

John F. Kennedy  
Francis Scott Key  
Abraham Lincoln  
Dolly Madison  
Florence Nightingale  
George Washington  
Booker T. Washington

There are other books that are suitable, and artists and musicians should be included. (A word of caution—in order to avoid conflict of subject matter from another grade level, I have purposely omitted biographies of Helen Keller, Samuel Morse, etc.)
The following can be put on a ditto and given to children:

People have become famous for many different reasons. Some are known for great athletic ability. Some have made discoveries that have helped other people. Some people are famous for adding to our knowledge of the world around us. There have been many great people and there have been many great accomplishments.

Read at least five of the biographies provided. We will discuss what you have read, answer questions you may have, and discuss the questions and activities on this sheet at suitable intervals on dates you set. For each book, you will write down new words, where the person spent most of his or her life, and the year (if possible) that the person was born. Keep these questions and activities in mind as you read:

1. How are these people alike?
2. How are these people different?
3. What words would you use to describe what kind of people they are?
4. Evaluate friends and acquaintances of yours and your family by this list of words. Do you know anyone with several of these traits?
5. Place a notation of some kind on a map showing where each person spent most of his/her life.
6. Make a time line showing dates of birth or dates of most notable achievement, etc., as a group activity.
7. Group together those who lived approximately the same time and see if there are common elements. Find out what "the times" were like in that period—transportation, jobs, how people dressed, recreation, some major events, etc.

Pupil Name ________________________

1. Book Title: ________________________________________________________________

   New Words:_________________________________________________________________

   Place:_________________________ Year:____________________

2. Title:____________________________________________________________________

   Etc.   Etc.
Some lines of investigation and some questions that can be used with the Second Grade Social Studies Unit on Foods.

Besides the usual books used for this unit, World Book (Agriculture) and Time Magazine for August 18, 1967 will be valuable.

Compare and contrast one area with another. Decide why one area is suitable for wheat farming while another is more suitable to cattle raising, for example.

Change one factor such as rainfall or insect damage and make forecasts of immediate and long range changes that might occur.

Compare agriculture in such diverse areas as Switzerland and Equatorial areas.

Find out why transportation, availability of labor, weather are important to farmers.

Compare size of farms today with size of farms 100 years ago, and discuss reasons for difference.

What are some relationships between farmers and insects?

* * * * * *

'Method of Classroom Organization For An Individualized/Self-Selection Reading Program in the Primary Grades

--Helen Strickley

(The following is simply a description of a way of working with primary children in an individualized/self-selection reading program that has seemed successful to me. It makes no attempt to convince anyone of the values of such a program. However, inherent in the success of such a program, I am sure, is the belief that it is worth while and that one wants to teach in this way.)

Beginning the Program

During the Language Arts period of the first day of school I give some sort of written assignment and tell the children that when they have completed it they are to go to the library shelves and each choose a book that he would like to read and that is comfortable for him to read by himself. This allows the children to come to the library shelves a few at a time, and I can stand close by to help if they seem bewildered by the choice. The next day, and for the following month or so, I divide the children into three arbitrary, heterogeneous groups. I call one group at a time to come to the large reading table, around which ten of us, including the teacher, can sit.
Each child brings his own book. One child sits beside me for a conference while the rest of the group reads silently in their books. A child who needs help with a word raises one hand and points to the word with his other hand. It is easy to look over and quietly give him the needed word without interrupting the conference. It is also easy to spot the "page-flipper" who hasn't yet realized that you really do mean for him to read the book alone. For the first few weeks it is often hard for some of the children to concentrate on their own books, but these are the same children who, in a group reading situation, would be kicking their neighbors' chairs, dropping their books, and losing their places. Before long, particularly when they have learned to choose books that are right for themselves, they are reading longer and with more concentration than they usually would in a group.

The Conference

I will usually have a conference with about half the children in each group each day. Each conference lasts about 5-8 minutes. My record-keeping is very simple: Just a small composition book for each child. At the beginning of the conference I note the date, the name of the book, and the page where the child is. I usually ask questions such as, "What has happened in the story so far?" "What have you learned about snakes in this book?", or "Which poem did you like the most? ---Why?" etc. . . .

As the child reads I note in a special column of his notebook any basic sight vocabulary words that he is having trouble with. I also note briefly word-attack skills that he needs to develop. We work on these at the end of the conference, either using the chalk board that I like to have behind the reading table, or the child's own notebook. . . .

When a child's conference is finished, he trades places with another child and continues to read alone in his book, or goes to the library shelves to choose another, if necessary. (If a child has trouble choosing a book, I will make three or four suggestions and let him choose from among them. I practically never have to say, "Take this book." . . .

Later Organization

By November the format changes somewhat. Most of the children are now very comfortable in the individualized program. We now begin reading all at the same time. We begin the reading period with a "book sharing" time, when children either read a story or poem they have written, or tell about and read briefly from a book that they have enjoyed and think others would enjoy. (Only a few children share each day.) Following this a small group of the least capable readers comes to the reading table and reads near me. I usually have
a conference with each of these children every day. The other children in the class read at their seats, helping each other with words as needed, or, as a last resort, coming to me.

During this time the children are free to go to the school library to check out books, if they wish, although I still try to maintain a large variety of books on the classroom library shelves.

When a child finishes a book, he fills out a book report form and puts it on my desk for me to check.

Once a week the program is varied by using "My Weekly Reader." The slower children read and discuss it with me. The others read it individually at their seats and then come to the reading table in two groups to discuss it and read it orally.

An invaluable aid to carrying on a good writing program concurrent with the reading conferences is a small Spelling Dictionary for each child, which has a limited number of most used words listed, as well as space for the teacher to write in other needed words. When I am conferring with a child I leave the area to my right open so that another child may walk up quietly, with his dictionary open to the proper page, and say the word he wants softly to me. I enter the word in his dictionary and he returns to his seat, hopefully with no other conversation to interrupt the reading conference I am conducting.

The Books

Fundamental in a reading program such as I have described is an adequate supply of books. Fifteen copies of each state text for the grade level won't do it. I seldom have more than three or four copies of any reader on the library shelves but I have at least four or five different titles on every level from pre-primers to fifth readers in my second grade classroom. However, I do not use state texts above my grade level, out of consideration of my fellow teachers who teach grades higher than mine and may prefer to use a more traditional approach to reading. The readers are just a part of our classroom library. I also use science and health texts (some old, discarded state texts are gold mines here), and many many books drawn from our school library, our district library, and my own personal library. Our district library gets many samples of reading
texts and I am a great scrounger. About half of the books on our classroom library shelves are trade books. Many of them are the beginning reader "Cat-in'the'Hat" type, but a large number are regular "library" books of every type, from picture-story books, to science books of the "True Book of" type, social studies books, poetry, riddles, and art books. Another interesting group of books always available on the library shelves (and often chosen) are those written by the children themselves. In our school the children have access to the school library every day, which is a boon, particularly for the advanced readers. The children are also very generous about sharing their own books from home. If I did not have the school library, I would utilize the public library "teacher loan" to its fullest extent.

In Conclusion

I am occasionally asked, "But isn't an individualized program like yours an awful lot of work?" To which I must truthfully answer, "No." Once a teacher has worked out the mechanics for such a program in a fashion that is comfortable to her, it is really the easiest program imaginable. When I see fellow teachers running off reams of follow-up seat work, preparing lesson plans to motivate a reading group, etc., I feel almost guilty about the little work necessary to carry out an individualized/self-selection program. There are, of course, things that can make such a program easier, such as having less than 25 in the class, or having an assistant or mother helper, or having a split-reading program (wherein half the children come to school from 9:00 to 2:00 and the other half come from 10:00 to 3:00 and reading is taught during the two hours that begin and end the school day.) However, I have found it to be a workable organization for me with a class of 32, no assistant, and on a regular schedule.

* * * * * *

Ideas for Creative Writing in Primary Grades

-- Nancy Johnson

Suggested Pre-Made Books


Ending Stories

The worst scare I ever had came one night last summer. I had gone to a movie and when I reached our house I noticed all the lights were out. That didn't bother me, for I decided that the family had
already gone to bed. I had a key to the back door so I went around to the back of the house. As soon as I opened the door, I ------.

Two children, walking along a country road at night, were startled by a peculiar whitish thing rushing at them with low whistlings and cracklings. They had just turned to flee when one of them, recognizing something about the object, cried out: --------.

The boys fished the floating object from the sea. It was just a common, ordinary soft-drink bottle. Jim was about to throw it back, when Dan noticed something inside ------------.

Explaining a Natural Wonder

Primitive people used to tell stories to explain the strange or beautiful things in nature which they did not understand. Write a story or explain one of the following or some other natural wonder.

Why the wind sighs through the pines.
How the sparrow got his black necktie.
How the duck's feet became webbed.

* * * * * *

A Stimulating Reading Idea
For Talented Students
-- Beth Berry

The teacher who is privileged to work with a group of gifted students at the upper elementary level encounters some unique problems when attempting to plan a vital, imaginative reading program. Talented students of this age group have acquired the reading tools which will allow them to progress rapidly in a challenging situation. They are ready to be guided into the subtler, more difficult areas. An adequate program will provide opportunities for development of abstract and divergent thinking and guide students toward a more sophisticated understanding and evaluation of reading material. If varied resources and proper motivation for research are provided, these boys and girls should rapidly gain skill in assimilating, evaluating, summarizing, and utilizing the wealth of information they can uncover.

One experience which has enjoyed noteworthy success is a biography unit entitled "What Talents and Characteristics do Great People Possess Which have Enabled Them to Contribute to Society?" This particular study is of value not primarily because of the information the children gain through reading about the subjects they have chosen, but because they are guided to apply that information in a new and unique manner.
In preparing for and presenting the unit in question, the teacher will wish to keep in mind four questions she will be guiding the children to answer about their individual biographical subjects. These questions are:

a. What events in their early lives and education helped to mold them?

b. What talents and traits of character did they exhibit in adult life?

c. What lasting contributions did they make to society?

d. How might the world today be different if they had not lived?

A brief analysis of the questions will reveal their worth. The child seeking to answer question "a" will need to relate the information he has discovered about the subject's childhood to what has been learned about his later life. For example, the fact that Theodore Roosevelt suffered from asthma as a child and exercised vigorously to overcome his weakness doubtless was largely responsible for his interest in physical fitness and robust condition as an adult.

Question "b" will afford a chance to enrich the young readers' vocabularies. Such terms as "humanitarian," "industrious," "scholarly," "devout," and "humble" will prove of value in describing their subjects. A chart might be displayed with a list of such words. New ones could be added as the students find a need for them.

Question "c" is self-explanatory. The students will enjoy debating the relative values of the contributions made by the subject they have chosen and arriving at an evaluative decision. Question "d" is perhaps the most stimulating, for it opens the door for speculative and divergent thinking. Even gifted students, upon initiation, may be hesitant to explore and "hazard guesses," but, through class and small group discussion and careful teacher guidance, they will begin to discover more facets to, and see more possibilities in, any situation.

A simple bulletin board with the unit title, four posed questions, and selected pictures of great people will help the students keep in mind just what information they are seeking and how they should apply it.

In preparation for the unit in question, the teacher will wish to assemble as many biographies and research materials as are available. The subjects of the biographies should not be limited to any particular area, such as patriotic figures, inventors, etc., but should cover as wide a scope as possible. Neither should the subjects of the biographies be limited to "sympathetic" characters. Napoleon certainly left his mark on history. Tapes, movies, film strips, and
other available audiovisual aids should be utilized so that the
students can glean as much information as possible.

The teacher might choose the "patriotic period" of February to
introduce this study. The lives of Washington and Lincoln are fami-
lar to the children and afford interesting contrast. A class dis-
cussion of the biographical subject, using the posed questions as a
guide, should lead to an understanding by the students of how they
are to pursue their project. The reading and discussion of a sec-
ond biography might prove necessary to assure that the method of
approach is fully grasped.

After the children have gained an insight into the meanings of
the questions, they should have a chance to do some sampling through
reading and research before choosing a subject for further study.
When actual research begins, stress should be placed on quality of
information, not quantity. Students should be guided to organize the
information they obtain and apply it to answering the guide questions.

As the children pursue their research, the teacher will have an
opportunity to serve as resource person and discussion guide. If
answering the questions proves confusing for any of the students, a
small group "round table discussion" will perhaps prove helpful.
Several children, in session with the teacher, might present the
facts each has gathered about his biographical subject and discuss
how these facts can be applied to seeking solutions to the various
questions. If several children choose the same subject or wish to
utilize the same material, small group research may result. Time
should be allowed for the sharing of information the children have
obtained and the evaluating of individual answers to the posed
questions.

As the unit progresses, each child will have a chance to examine
the lives of as many famous people as his own interest and the
materials available allow. The faster worker may complete several
reports while the more methodical student may choose to present a
more thorough, carefully prepared work. Another valuable by-product
of the study will be the skill gained in use of research materials
and audiovisual aids and the preparation of a bibliography. In
summation, I feel that the teacher who presents this unit as outlined
to a group of students who have the reading skills necessary to pursue
it, will evaluate it as a stimulating, worthwhile experience for her
class.

* * * * * * *
LAZARO CARDENAS
MEXICO'S GREATEST PRESIDENT

-- Sunga Greisman

This unit has been selected because of the lack of material available for sixth graders dealing with the life of this great president. The sixth grade texts barely touch upon him and his great contributions.

Objectives

1. To help develop an understanding as to what motivating forces shape a man and his ideas.
2. To develop an appreciation of an outstanding Mexican president.
3. To develop an understanding of the struggle of the Mexican people for life, liberty, and dignity.
4. To develop an understanding of the needs of an underdeveloped country with an agrarian economy.
5. To develop an understanding of the forces that led to agrarian reform and expropriation of oil.
6. To develop an appreciation of the positive role played by the United States during the Cardenas regime.

Sample Questions and Activities

Agrarian Reform - Different kinds of land reform. Kind of reform Cardenas used. Why? What kind of program would you recommend?

Compare and Contrast Cardenas with Other Mexican Revolutionary Leaders, i.e., Morales, Hidalgo, Juarez, Zapata. How did Cárdenas carry out their aspirations?

Compare and Contrast Cardenas & F.D.R.

Expropriation of Oil. Positive and negative effects on Mexico. Action of USA. Compare and contrast with expropriation in Cuba and USA action there. Reasons for difference in America's handling of matter. Role of USA when American properties are expropriated.


Oral Activities

Imaginary interviews conducted with Lazaro Cárdenas or a person who knew him. "You Were There" TV program. (Cardenas' meeting with people of a town lends itself well.)
Dramatization of parts of story. (March 18 Holiday Expropriation can be done. See Many Mexicos by Lesley Byrd Simpson, 291-292).

Dramatize expropriation of oil. Do a dramatization with a different ending. As Cardenas, carry out your campaign for office.

Written Activities

1. Time line of Cardenas' life; graph reforms.
2. Chart Cardenas' character traits and list examples below. Use chart with others.
3. Write story, log, diary, or poem; someone who lived near Cardenas; soldier or his wife who fought with Cardenas; member of Cardenas' family; landowner or peon; owner or worker of oil company; citizen of Mexico; inanimate object involved in Cardenas' life.
4. Write a constitution correcting wrongs in the school. Be ready to defend it.

Art Activities

Paint a mural copied after a Rivera or Orozco mural of:
Cardenas' life
Land Reform
Expropriation
Changes in Mexico 1934-40

Draw an outstanding incident in the story. Try to use ideas of color and form of Orozco, or Siquieros.

Sample Bibliography

Cline, Howard F., Mexico, Oxford Univ. Press, N.Y. 1963.

* * * * * *
English IV Honors will be largely given over to an eclectic and analytical study of quality literature which tends to develop within a student skills which not only characterize a mature, responsible, and sensitive reader but also characterize a writer of competence, whether his prose be argumentative, analytical, expository or creative.

In developing this quality of proficiency as both reader and writer, the student should become more aware of the necessary relationship between form and content, techniques of delineating character, rhetorical subtleties, the uses of analogy and symbolism, and most especially the suggestive power of language which if effectively used will communicate ideas and extract or evoke definite attitudes and responses.

Therefore, in conjunction with reading the following sixteen books, students will be expected to write themes on topics adequately geared to motivate and demand both thought and language efficiency.

Prescribed Reading for English IV Honors

1. All The Kings Men - Warren
2. The Great Gatsby - Fitzgerald
3. A Separate Peace - Knowles
4. Heart of Darkness - Conrad
5. Winter of Our Discontent - Steinbeck
6. Babbitt - Lewis
7. Pride and Prejudice - Austen
8. Mayor of Casterbridge - Hardy
9. Portrait of An Artist - Joyce
10. The Stranger - Camus
11. The Crucible - Miller
12. Billy Budd - Melville
13. Washington Square - James
14. School For Scandal - Sheridan
15. Volpone - Jonson

* * * * * * *
Putting educational theory into practice in the classroom can be an exciting process, especially if one has been stimulated to make the effort by participating in a program such as The Improvement of Teaching Procedures with Gifted Elementary and Secondary School Students. Prompted by discussions of the problems of freedom and discipline in an English curriculum for the gifted, I experimented with assignments that encouraged freedom to explore certain talents but also required intellectual discipline to produce desirable results. The assignments described here are just two of several kinds given during the year. Although I had used these assignments in other years, I introduced a different approach by discussing with the class Bloom's Taxonomy, as modified in Norris M. Sanders' Classroom Questions. Because gifted children are interested in the psychology of learning, they readily saw how they could apply the methods described to the unit we were then studying: the short story.

In the first assignment, each student designed a test covering the material just studied; in it he was required to use each type of question described in Sanders' book. On the appointed day, the tests were distributed among the class members, then returned to the "designers" for correction. Later I collected the tests to record grades and to review the students' efforts. Some of the tests were amazingly good and all were successfully designed. Because each of them had designed a test of his own, each student understood how to answer the types of questions given. This assignment surely provided challenge, an opportunity for creativity, and reinforcement of learning.

The second assignment also was part of the short story unit, but it could be applied to longer fiction as well. This assignment is based on suggestions given in Fred Millett's Reading Fiction and emphasizes the translation category in Bloom's Taxonomy. The assignment is to chart the emotional responses of the principle character(s) in correspondence to the events of the story. The accompanying illustration shows a typical response to the assignment; some students produced much more elaborate charts, reflecting the flexibility of the question. Again, the assignment was not a new one for me, but by making use of the theories discussed in the Dominguez Hills program, I was able to give greater scope and meaning to my students' learning experiences.
The study, The Individual and Society, was developed in a back-to-back class taught by Mrs. Woehler and Mrs. Kusaka. The students used field trips, interviews, on-the-site study, and the resources of various libraries in order to develop answers to key questions and to prepare committee reports and individual summary papers. A partial example of one summary paper appears in Appendix 16e. The problem of The Individual and Society was approached through depth study by specialist student groups. The topics studied included architecture, art, ethnic, folk song, jazz, language, mass media, men and machines, and values. Work sheets were provided for the groups in their specialized studies. The work sheets dealt with topics in such a manner that the study subjects were interrelated. Thus the whole class was concerned with the investigation of all of the topics in some respect. Sample work sheets and other forms are presented below to give an indication of the scope of this particular study. Reference to the individual report in Appendix 16e will provide additional understanding.

Language Field Trip Work Sheet

1. The areas to be concentrated on for the Language Committee:
   a. China Town
   b. Million Dollar Theatre
   c. Olvera Street
   d. Japanese Settlement

   Work Sheet
   1. How is language an isolating factor in the separate ethnic communities?
   2. What problems exist in these communities due to the language difference? (Jobs, communication, etc.) Would these problems exist if there were no language barrier?
   3. What contributions have these separate ethnic communities made upon our English language?
   4. Select a word which has a strong emotional charge, such as "Jap", "Gringo," "Nigger," "Mexican," and describe the feelings associated with these terms.
   5. What important communications come to you from the past? The Bible? History? Science? Opera? To what advertisements do you pay special attention? Newspaper and magazine ads? Billboards? Radio and TV commercials? Direct mail? How do you select what to listen to, what to read carefully, out of all the hundreds of thousands of words directed at you daily by all the channels of communication? What do the channels of communication you prefer reveal about the kind of person you are?
   6. Attempt to discuss your emotions and feelings upon seeing a certain picture or observing a certain building. Is it easy or difficult?
Values
A person's values are the things which a person holds important and his sense of right and wrong.

Name five things which you would put in a time capsule for future generations to see as things representative of what our society values.

1. How does the Neutra House show that environment affects men's minds and their values?
2. What attitude toward society is reflected by the modern art?
3. Do our moral values affect our tastes in art and architecture? Why?
4. How do the things which Chinese, Mexican, and Japanese people value, differ from ours?
5. What type of atmosphere affects the development of their values?
6. Do you think our city should preserve structures important in our history? How do we decide which ones are important?
7. Does one man have the right to impose his ideas on society? (Bradbury Building--people have to work in public buildings).

Folk Song Group -- Work Sheet

1. How does folk singing affect and historically relate to each separate community?
2. How have the Mexican, Negro, Japanese, Chinese and other ethnic groups affected American folk singing?
3. From your references, what songs refer to the individual as being conformist?
4. From your references, what songs refer to the individual as being critical of himself?
5. From your references, what songs refer to the individual as being progressive?

Ethnic Field Trip

A. Chinatown
   1. Characteristics of the homes
   2. Condition of yards
   3. Type of cars
   4. Class of living
B. Japanese
   1. Restaurant: describe experience
   2. Stores: type of merchandise
   3. Buddhist Temple: describe interior and impressions
C. Mexican -(American Settlement)
   1. Condition of homes
   2. How do these homes compare to others
   3. Type of people in this area
   4. Class status
D. Olvera Street
   1. Types of stores and buildings
   2. Type of people
E. Compare the living standards of these three groups
F. Why are these ethnic groups living where they are now?

Ethnic Field Trip -- 2

A. Chinatown
   1. Historical
      a. Design, culture
   2. Relating to the individual
      a. Bringing culture, etc. Note: objects of art

B. Japanese
   1. Historical
      a. Restaurant - observe old cultural surroundings
      b. Buddhist Temple - observe ancient surroundings
   2. Relating to the individual
      a. Take into consideration historical aspect of a. and b.

C. Mexican
   1. Historical
      a. Why they live there. Hint: transportation, work, cheap housing
   2. Relating to the individual
      a. Poor vs. rich

D. Olvera Street
   1. Streets. Note contrasts
   2. Shops. Note architectural design
   3. Relating to the individual
      a. A commercial Mexican establishment
The class chairman took charge. He introduced the basis for the
discussion: Understanding the original colonies. He reviewed with
the class the rules for discussion they had established.
T: Are you going to talk about each colony?
A: The question was to compare the group, giving the likenesses
and differences.
T: How would you like to go about the discussion?
A: What they did when they came, how they lived, etc.
T: I am not going to be leading the discussion from here (at side of
room). You just begin.
Child 1: The Pilgrims had a hard time in Holland.
2: There were many reasons why they had a hard time in Holland.
3: The land was very rocky. They had two ships, and they had many
trials. One ship fell apart.
4: They couldn't communicate very well.
5: They would go all Dutch, and they forgot what the others were doing.
6: Their religion created problems.
7: The English didn't especially like the Dutch customs.
8: They first thought they were landing on a bumpy shore of Virginia.
9: They didn't know it was going to be so cold. One half of them died.
10: After they landed, they couldn't find any water.
T: What group of colonies are you talking about?
A: The North East.
T: What about the other colonies:
A: The Quakers were concerned because they had no religious freedom.
Child: I'd like to know why they have the colonies in a wacky order
in the book. I looked up the dates in the book, and they are not
in order. The Puritans weren't first, they were third.
Child: The differences were that they had rice and indigo in the
South. In the North it was too cold.
They were alike because they all had dealings with the Indians.
They were different in that they wanted different religions.
They were alike in that they all came from England.
They were different in that the Puritans brought their own charter.
The others left theirs in England.
They were different in that the Puritans were strict in their
religion, and the others were not as strict.
T: Did the Southern colonies have as strong a church?
A: No, the meetings did not last as long, and if you were sick you
didn't have to go.
A: The Southern people really went to church more than we've been
saying. They drove 20 miles sometimes.
A: The forms of punishment in all the colonies were pretty much the
same.
A: The Puritans really celebrated Christmas. They were just different in a way.

Child: (generalizing about Southern leisure). They had time to admire a pheasant under glass. Another objected, "Some Northern people were rich too. Not all the Southern people were rich, either."

The Southern colonies were almost a completely different nation. They had a warmer climate and had more trade with England.

Teachers Discussion Period

Q: What is the classroom government?
T: A democracy, with a weak monarchy.

Q: How do you tie together the discussions?
T: We'll continue next time.

Q: What is the content of the class meeting?
T: They choose officers every two weeks. They discuss and solve their problems. They talk about the use of the library, management of classroom activities, keeping the library in order, setting up the art committees, problems related to such matters as making prints, and anything that comes up.

Q: How will you run the printing privileges?
T: We use the materials every day. The children take turns, and the children manage it themselves.

Q: What do you do about the problem children?
T: We have no problem children.

Q: Does each child have a card for individual reading program? Do they do book reports?
T: I would rather have them analyze the books and talk about them. They may do some reports. I don't think this is the best way. We need to know why book reports should be used.

* * * * * *

World Geography

---Elroy Lang

Today's Lesson

This lesson is essentially the culmination of approximately two and one half weeks of work in the area of economic or industrial geography. The students have been working on this problem outside of class for three days. They had no restrictions regarding their sources of information and I have no idea what their answers are going to be. It should be interesting to see not only what country each student chooses, but why. The object is not only one of economics, but also to bring the students closer to an understanding of the many ways that nations may differ from each other.

Open book problem
Use any books, magazines, maps or graphs that may be necessary.
Problem: You are a Swiss manufacturer producing medium-priced ($25 to $40) and expensive ($100 or more) watches. Due to import duties placed on your product by foreign governments, you have decided that you would like to open up a new factory in some foreign country. For a variety of reasons you have narrowed your choice to five countries - The U.S.A., India, Brazil, Israel, Republic of South Africa.

1. List the many factors (both natural and human resources and other problems) that you must investigate before you decide where to build your factory.

2. What advantages would there be for your company in the country of your choice?

3. What disadvantages or problems would you think that you would find in the country of your choice?

4. What advantages would there be for your company if you decided to locate in the other countries listed?

5. What disadvantages would there be in the other countries listed for your company?

6. Which country have you chosen in which to locate?

7. Where in the country chosen will you locate? Why?

8. Would your overall decision regarding selection of the country have been the same for the following industries?

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<th>INDUSTRY</th>
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<td>25 foot Sailboats</td>
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Teacher Group Discussion Following the Lesson

Q: Did the kids talk a little less?

T: First we did it with a videotape. The first time they were embarrassed. I'm glad too that we had time to go through this type of discussion. The students talked more this time.

C: A creative teacher inspires enthusiasm. Implies rapport. Freshman youngsters, are being able to handle themselves well. I thought there was beautiful rapport.

T: This is a new thing for them. I design activities so they will have opportunities.

C: Tried to develop a pattern of sequence of courses, with conscious effort to build from year to year. Have certain kinds of experiences as they go on.

C: In English, start writing once a week. Have good reader service. All readers are former teachers. Have readers in social studies and meet with them.

T: I was surprised there are so many of them taking U.S. and South Africa.

C: Cliches getting out in the open and then getting them dashed.

T: The depth of the answers depended upon how much they read. The
mother is a teacher of the student who was very verbal. I play chess with the students in terms of seating. I have had only 9th graders. Bruce is gifted; watches things rather than talks. Bobby came from Oregon and we have no data on him. We don't have all the gifted identified.

In class this afternoon 21 out of 27 are labeled as gifted. They are running more tests on identification. Next semester a class of underachieving gifted will be started. What happens with the gifted who are not achieving? Verbally oriented.

C: Basic thesis: alter one thing about the formal classroom. It serves as a stimulant. Sit in the child's chair and it changes the role. The teacher becomes a learner as well as a teacher. Teacher-student provides socio-drama. It is very useful. Try more time for speaking to students on a personal level.

C: You pay a price when the class is not structured. You have to vary from one shift to another. Use technique, each youngster has a folder which he keeps from his freshman year. He can see growth in composition.

C: We need to consider the role of a teacher, redirect students if the discussion is misconception or misleading.

C: Can't make a statement without some authority. One may never get the African's view.

Resource suggested by a teacher: Writing good prose, Faulkner
University of Arkansas Press

logic

* * * * * *

High School English

---Martha Gatsinaris

We have been studying motifs or how an author's theme is carried out in his writing. We interrupted our reading of The Nigger of the Narcissus by Joseph Conrad in which we were discerning symbols and motifs, to work on The Pearl by John Steinbeck as a study in motif.

When I told the students about Mrs. Osburg's work, they were enthusiastic and anxious to try working with media. Thus, the students have been planning and designing a production of The Pearl with the accent on motif. At this stage, they are synchronizing the three medias: script, art, music.

The following students are prepared to explain the several facets of the project:

Terry - overall
Robert  
Lynn  
Jill  
Laura  
Chris  
Patti  
Mae  
  
David  
Rick  
Cynthia  
Larry  
Joy  

Also, there is one splinter group that is working on its own project:

Leth  
Mary  
Kathy  
Dorothy

19 out of 26 students are gifted

The children sit in concentric circles. One group is taking the story of the Pearl, and will develop slides to portray different symbolic sequences in the story. They will also have a background of music to establish the mood.

The second group has a collage of different parts of the story of the Pearl.

There are six groups, each one a chapter of the Pearl.

Students have been working on the motifs and symbols in the Pearl. They have chosen the music, the Soul of Spain. They are ready to tape the presentation.

There was no discussion on the novel before this project. The students read the Pearl over the Thanksgiving holidays. They wanted to do a similar project like Mrs. Osburg's. The work was done in class, at home and after class.

The students were busy working in groups on their projects during the demonstration. Since it was not finished, the visitors walked around and watched the students working on their projects.

**Teacher Group Discussion**

T: Knew you were coming but students did not have to finish their efforts. Learning experiences were the most important.

C: Opportunity to see process.
I am surprised that students want to do so many things.

I saw a well established good working relationship.

Real learning takes place with interest.

Students had freedom to make mistakes. Child without art experience had a book on art perspective. Everyone was doing this.

McLuhan shows that stick advertising technique is being used.

There is a difference between fine art and commercial art.

Youngsters are getting closer appreciation for symbolism.

McLuhan shows that stick advertising technique is being used.

Much of the art is symbolic. How very effective this is.

Had a student reading U.S.C. juxtaposition and principle of the objective correlative. Kids were intuitively understanding this.

I was impressed with the enthusiasm of the teacher and permitting the students to grow in enthusiasm.

You know what our principal said, "You should explain the pandemonium that is going on here."

I am amazed at the art work, without making a mistake, nothing was cut out.

They had a script. There are six scripts.

Did you choose the leader?

They were elected. Teacher becomes a member of the group. One child is working on her own project.

***

U.S. History 11th Grade Honors Class

---Wilfred Lee

The teacher played a tape of a talk by Chief Reddin re: searching a teenager's car.

Class, what do you think of it?

It seems to me the police officer goes beyond the bounds of normal procedure because they are teenagers. Laws should be different for kids than for adults in this particular case.

Where do they get these rights?

The assumptions are that some people will make according to a group of people who are specifically different from another group of people--teenagers opposed to people who are over 25, Jews opposed to Christians, Negroes opposed to whites. Any other group that is different. Arbitrary judgments are made.

How were situations different at the time the Constitution and the Bill of Rights were being written?

At that time the main foundation of the laws came from England.

One main difference is in our age. Although you can be a citizen, you don't have full rights--you can't smoke, you can't buy liquor, you can't vote. You have never been old enough to manage what you are going to do. Because we teenagers are more closely controlled than older people, we are more susceptible to suspicion, because we can get in more trouble, because we have less restraint.
Q: Do you have any civil rights? Is there a difference between civil rights of adults and civil rights of teenagers?

Teacher Group Discussion

Q: Is this the average size class for U. S. History?
T: This is the first year it has been below 30 students.
Q: Is this your honors group?
A: Yes, homogeneous group.
A: This activity is an introduction. We work on a problem 1-2 days, skimming over and filling in. We are concerned with whether they understand the basic concept called individual liberty, the bill of rights foundation.--solve the same basic problem. How would you do it under the same situation?--Force the issue and force attention on the one fundamental concept.

Q: Does this group argue or discuss very much?
A: Yes, I was trying to get more of it today. There are three groups that like to argue, one boys, one girls, and one mixed. I give them a subject and they will argue among themselves. I get them together so that they can arrive at conclusions all their own.
A: All I have done is develop What is Law, so they will get some kind of feeling of the law as opposed to the policemen, court, etc.
Q: I did like to see their ideas brought forth, specialized law for teenagers, for example.
Q: To what extent do they respect each other's opinions, as opposed to the more popular kids saying something? By knowing they are an intellectual group, do they tend to respect each other's opinions more?

T: A bright student may be very intolerant. If he has had experience with presenting his ideas, he may be very intolerant. If he has had experiences to doubt his experience, he will be sensitive about criticism.

Q: Do they accept each other's opinions, and respect them?
T: Yes, they do.
Q: When you are there alone with them do they give you a feeling of what they are actually thinking? Are they completely honest with you?
A: No.

Q: Do they try to impress you?
A: Some of them.
Q: Do you get an idea of what they are actually thinking?
A: Yes, but only because I want to make an issue of it.
Q: Are they worried about grades?
A: Yes.

Q: What is the goal,—study, political, philosophy?
A: First, they give me an idea of their interest—intellectual, political, social, music, etc. They use the library. We get any book which might have something on their interest. They use tremendous quantities—hundreds of books. They may have no topic yet. They might be interested in sailing, then would narrow it down to maritime history. Psychology of history, apply knowledge of psychology to historical personality. They exhaust the library—
four sessions of one hour each. They get books they think appropriate, keep a bibliography (we have good library facilities). They have to be structured just like other students. They are no different than other kids in this respect. So far they have no specific topic, they are just reading.

A: They finally reach the point where they decide on a narrow topic, decide it on the basis of using a criteria, how much material there is in the library, access to L.A. City library, UCLA, Long Beach State, paperback bookstore. They will purchase anything the kids want. I insist they exhaust the library. I can control the material. I insist the student report on what he discovered, and not on the paper itself, getting away from a pseudo research paper.

Then they write the paper in simple style, on this particular subject, at this particular time, using this particular source of materials. I insist that they put the footnotes in the body of the paper, and not at the end.

Q: What type examination questions do you give?
A: One type is essay. I give them a model and then they put in their perspective. Two, identify a personality and indicate what his particular belief was and what effect his viewpoint had. Three, ask questions in class-brainstorm type questions.

Q: Teaching this way is easier on the teacher, don't you think?
A: It is harder on me. I can lecture much easier. This way you have to be on your toes every minute. But the minute I relax, they relax.

* * * * * *

High School Social Studies

Topic: Protest Against the Establishment

---Jack Belasco

Four groups get together for a discussion and then come to a conclusion which is presented to the class by the chairman of the group. The visiting teachers are asked to participate in the groups. The following comments are from a discussion taking place in one of the groups.

Q: What is a legal way to protest against the establishment? I investigated J. Rap Brown's statements in a speech in Detroit. He said, "We will have to burn down the city." He is fed up with machinery. You have only so long to live on this earth. Most of us are not pioneers. We want to see some results now.

Q: Do you think it is treasonable?
A: I don't feel that Rap's philosophy of mass violence will achieve his purpose.

Q: Do you have any views as to whether it is legal?
A: It is not legal.
Q: Are you talking about what he is saying, or what he is doing?
A: Take a quick look at past protests. Most of the past were successful protests.
A: I was supposed to look into Gandhi. The reason it is different is that he was with the majority of the people who were behind him.
A: Did you make a comparison with the British government and Gandhi?
A: His success was due to the compassion or conscience of the British government.
A: In the South this might happen, but the North would get mad.
A: What do you mean by this?
A: I guess this isn't right. They are burning cities, and they are getting mad at them.
A: Do you feel that the passive resistance of Martin Luther King has worked?
A: Yes, but it is going too slowly.
A: Society is moving more rapidly.
A: Why is it that the person who has no hope is not a revolutionary?
A: When the person has no hope he won't do anything.
A: If you didn't have it and thought you could get it, then you become angry.
A: They are not reaching their goal. I looked up Buckley. He is using his pen to get back at people, but this is not burning of anything.
A: Buckley is not being deprived. He makes sure he is within legal grounds.
Q: Is the pen mightier than the sword?
A: How about Thomas Payne in "Common Sense."
Q: Talk about a riot. Do you or don't you want a riot?
Q: Which is successful?
A: It gets attention. More people read about a riot.
Q: What is the purpose of the riot?
A: To get what you want done.
Q: Does Rap Brown want anything different from Buckley?
A: Brown wants racial equality.
Q: What does Buckley want?
Q: Then what are they arguing about?
A: I think you have to reach a happy medium. You need to draw attention and get favorable attention.
Q: Who is he aiming it for, or who is Buckley writing for?
A: Let us summarize this now. Anti-war demonstration
A: There are two types. There are some that don't want it that way, and the others are afraid to fight.
A: I think the war is bad because I don't want to die.
Q: Is there anything wrong in valuing your life?
A: I don't believe in clinics set up to tell you how to become a conscientious objector.
Q: If you believe something, is it a protest?
A: Yes, it is against the establishment.
A: In reality he is not protesting. He says, I believe.
The chairman of each group gives a summary of his results.

On the board is written the following selection:

Whatever was in fashion is what the _____ would not wear . . .
Fashionable shoes were wide at the toe; his were sharp.
Fashionable stockings were, as a rule, any color except black;
his were black.
His garters were short, and before, all his hair was short . .
Short hair was the mark of _____ism.

T: These were Puritans. They were one of the protesting group.

1st Group Chairman:
Starting out with Mao. He considered violence as a protest.
Know your friends and enemies. Infiltrate if you don't have
the numbers. He came to the conclusion that violence works. A
person won't listen to someone talk, but he is forced to watch
violence in the streets. If you thought something in your
mind, is this protest? The conclusions on this were controversial.
One student said that it is not so much violence but that it is
something new that produced attention. Tried to define protest.
You say something to get a following. Another one said that if
you thought something, it was a protest.

2nd Group Chairman:
Two things. First, the aristocracy were protesting. Everything
wasn't quite equal enough or not democratic enough. We had two
non-violent people, Jesus Christ. He was not successful yet a
lot of his doctrines are felt by other people; Gandhi was not
violent. The violent ones were Malcolm X, who was too much
involved, and Lenin.

Sit-ins used to work and nonviolence used to work.

A: I don't believe that it worked, otherwise there wouldn't be any
violence today.
A: Negroes achieved their questionable freedom by violence. This
was Civil War.
A: The conclusion is that both of them have worked. There will
always be protests because there will never be equality.
A: If you never dissent, such as in Brave New World, we would all be
followers. Protests will bring out new ideas.

3rd Group Chairman:
A lot of these people like Camus and Thoreau. Camus was totally
devoted to one thing, drug religion. Nonviolence is displayed
by Joan Baez. Violence has brought about attention but there is
backlash. If there had been more of a response to peaceful
demonstrations there would not be a need for violence. We thought
that this is a trend. Most of the protestors are young people
and don't have a security risk. They have people to support and they will say, "I agree with you," but are afraid they will lose their jobs.

A: I think that young people will be put in jail, and this will be on their records. If they apply for jobs, they won't get them. Young people are trying to create a place where they don't have to go to the establishment to get a job.

4th Group Chairman:
We ended up with unresolved questions. Some had the opinion that violence does not work. What is more important, achieving ends, or how you achieve them? Expectations were raised but were not fulfilled. Fear is a logical weapon.

A: I think you missed a deeper meaning in India. You could try it in any set of circumstances.

A: I could sit here in school and stare at the ceiling and not do any work, but would it work? We can all agree, protestors are what makes change. Hegel thought that history is the unfolding of God. Every protest is to move toward a better world and a perfect society, but I can't accept this. Whether it is good or bad, it is important that we will still move forward.

At the end of the period the students wanted to know if they could come back, since they felt that they really hadn't got started on the discussion.

Teacher Group Discussion
Q: What is this trial?
T: Moot court trial -- we have to borrow jurors from other classes. It is similar to the Kirscke trial. The name of the game is that the student is thinking on his feet. He must think logically on his feet. They have to give hearsay evidence, etc. on their feet. We will try it as an experiment this year, then we will finish our trial.

1st track -- have been working individually and reporting in panels. 2nd track -- paperback book which deals with foreign affairs.

C: The students did a good job. They brought in your lecture on Hegel. The gifted tend to do this. They remember previous material and relate it to the present. There is an atmosphere of cross-fertilization.

T: Most of the children have 70 minute periods. It is important for the teacher to assume another role sometimes, take another hat and become a learner too. If you do it long enough they accept you and you become a fellow learner.

C: You can't do as much of this in a heterogeneous class.
C: I take issue with you.
C: Word gets back to administrators when you try new things--
criticisms, suggestions or advice.

C: I will borrow this technique from you. The individual report is
very effective. The panel as I had it is a little too loose. It
tends to cloud your individual focus.

Q: The honors class, is there a number limitation?
T: No, we have about 25.

Q: How much had you talked about protests?

T: I had asked the students to dip into something.

Q: Do you let them choose the men?

T: They select topics and the men.

Q: What will you go to from this?

T: They do not have to dovetail their reports.

Q: Do you have committed topics?
T: No, I want them to make order and to think, to generalize.

Q: Will you deal with American institutions?

T: Incidentally, with this group, but they have books that they can
read. In regular classes they form committees, and make up bills,
but in this class I want to try something different, such as the
moot court. Any hints? Should I be pointing more?

Q: Did you have any preliminary meetings?

T: Here are the topics

Q: Do they ask you to lecture?

T: Yes, I follow up with lectures, like on Carl Fredrich.

Q: Maybe at the first of the year you have a meeting?

T: No, very unstructured. They had an idea of philosophers, and tie
in political viewpoint with this. They will do a community pro-
ject. They will examine the nonpolitical aspects. They will go
out and do interviews, and then work with political parties and
do an analysis of the ballot. They can shortcut the regular
classes.

Teacher Group Discussion back to previous demonstration

T: I would like a feedback on the taxonomy.

C: More spirit of the thing--overlap in application and synthesis.
All these things merge and overlap.

C: You can't do an evaluative question without going through all the
other categories. Going back to historical aspects, you must go
to history to understand the Arab Israeli question.

T: My intent was different. One of the reasons I have stuck to the
text is that I wanted them to be more critical of the author.

Q: How many different ways do authors approach geographical problems?

T: One of the things we discusses is how is traditional Africa treated.
This is not a good text for the title of the course, Economic
Geography.

Q: Have you ever thought of using supplementary sets of good materials?

T: There is a book by Van Brock which is essentially a structured book.
Next year I hope to have this case study book. It is purely what
is seen. It has 35 case studies, a new publication, Dors-Summers,
case studies of geography. We have three paperbacks and have taken classics on physical and cultural geography.

Q: Who determined the title of this course? Did the board of education have the same idea in mind as your concept?

T: Nobody has ever questioned us on what we are doing in this course.

Q: Did you look into the scholastic series?

T: We have them.

C: I don't think there will ever be a perfect text.

C: We are trying to get away from the text and go into paperbacks.

Q: Do you have to follow or use the textbooks? It is wasteful. Why not leave it on the shelf?

C: There is still a tendency to order a large lot of books of the same kind and then not use them.

C: A multi text is what is desired rather than a hard bound text.

C: English teachers do not like the excerpt business. One whole essay is better than excerpts.

C: It is easier to handle one textbook than other source books. Teachers take the short and easy way out.

C: A diversity of materials is possible. Have a number of texts in the room and establish a number of criteria. Why are they different?

C: The biggest problem in teaching is there is not enough competition, they are afraid of subjecting themselves to evaluation. Some teachers ask, what is in it for us?

C: I would like to begin this kind of thing that you did.

C: There are certain ways to get things--might have them teaching at the same grade level, give them responsibility for helping to plan, but usually get involved in superficial problems. The difficulty is that so many teachers are not concerned with developing new ideas.
APPENDIX 1

CRITERIA FOR SELECTION OF TEACHER FOR THE GIFTED

1. Wide opportunities for learning as opposed to structured uniform curriculum.

2. Teacher allows pupil to work at an advanced level.

3. Time allotted for pupil to pursue special interests.

4. Teacher has ability to stimulate and inspire.

5. Teacher is appropriate model for the pupil.

6. Classroom atmosphere of freedom to pursue intellectual activities.

7. Teacher encourages unusual ideas and imaginative products.

8. Teacher uses human resources effectively.

9. Teacher studies professionally the needs of the gifted and takes part in in-service activities.

10. Teacher has a rich fund of information.

11. Teacher has a superior intelligence.

California State College, Dominguez Hills
APPENDIX 2

ATTITUDE SCALE

This questionnaire has been devised to measure your attitudes. There are no "right" answers and no "wrong" answers. The only right answer is the one which best reflects your true personal opinion toward the question considered.

To answer questions, choose the answer below which corresponds most closely with your personal attitude toward the particular question, and place the corresponding number in the space provided at the left.

+ (plus) 3 for strongly agree - (minus) 3 for strongly disagree
+ (plus) 2 for agree - (minus) 2 for disagree
+ (plus) 1 for mildly agree - (minus) 1 for mildly disagree

____ 1. Gifted children want to take too much of class time.
____ 2. There should be a change in the grading system for gifted students in special classes for the gifted.
____ 3. The aptitude of a given child is the primary consideration in the screening and selection of gifted children.
____ 4. Gifted children should remain in heterogeneous classes because they will spend their lives with all types of people.
____ 5. Gifted children develop cliques and exclude the rest of the class.
____ 6. Gifted children make great progress when placed in special classes.
____ 7. The most important kind of ability to single out for consideration in a gifted child program is intellectual or mental ability.
____ 8. Too many supplies are given to gifted children and denied to the other children.
____ 9. Teachers should be selected on the basis of personality in addition to knowledge for instructing gifted classes.
____ 10. Parents of gifted children interfere with the teachers and the teaching of the children.
____ 11. Singling out gifted students for special treatment results in the establishment of an elite class.
____ 12. The rigidity of teachers and administrators has acted as a buffer against more effective programs for the gifted.
____ 13. Special classes and special teachers should be offered to the gifted children.
____ 14. It is wiser to accelerate the gifted in the elementary school than in the secondary school.
15. Teachers become too interested in the gifted and neglect the average and below average in the classroom.

16. Gifted children stimulate each other to greater enthusiasm, effort and accomplishments.

17. Gifted children tend to display a degrading disrespect for the teacher.

18. There is a tendency to slight the gifted children when there is a wide range of ability in a class.

19. The school has to be concerned with the fundamental learnings and skills for all children and not with programs for special abilities and needs.

20. It is more important to provide special services for the handicapped child than for the gifted.

21. When considering acceleration for the gifted, too much emphasis is placed on the social and emotional factors rather than intellectual growth.

22. Gifted children show sustained intellectual capacity proved by repeatedly high intelligence test ratings.

23. It is a wise educational procedure to require the gifted child to assist the slower learners.

24. Too many high I.Q.'s together create many problems -- the interests are too great and varied for the teacher.

25. Having a gifted class carries special esteem for the teacher.

26. Gifted students can be taught more effectively when grouped with other gifted children than when grouped with non-gifted children.

27. The I.Q. of a child is not a fair estimate of his ability.

28. Teachers should have special qualifications if they are to work with the gifted.
APPENDIX 3

California State College, Dominguez Hills
Project on
Excellence in Education

Rating Scale of Significant Behaviors in Teachers of the Gifted

Rater
Ratee
Date
School
Grade Level
Length of Observation
Subject(s) being taught

To the Rater: A minimum of 40 minutes should be used for each observation. Use every opportunity to examine folios of materials, files of children's products and other evidence, as well as teacher behavior, to confirm impressions.

<table>
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<th>Teaching Process</th>
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<td>1. Utilizes specialized pupil interests constructively.</td>
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<tr>
<td>a. Students work in areas of interest.</td>
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<tr>
<td>b. Teacher capitalizes on student interest in classroom.</td>
</tr>
<tr>
<td>2. Utilizes special talents and abilities of the students.</td>
</tr>
<tr>
<td>a. Students are involved in activities which display or include their special abilities and talents.</td>
</tr>
<tr>
<td>b. Individualized materials are available for development of special talents and abilities.</td>
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<td>3. Encourages self-selection of materials</td>
</tr>
<tr>
<td>a. Students have freedom to select materials at higher conceptual levels of difficulty.</td>
</tr>
<tr>
<td>b. Teacher encourages pupils to make own selections and decisions.</td>
</tr>
<tr>
<td>4. Makes classwork interesting through use of different sense media.</td>
</tr>
<tr>
<td>a. Teacher encourages effective pupil displays, not teacher-made displays.</td>
</tr>
<tr>
<td>b. Teacher uses maps, charts, TV, radio and/or films to augment or advance the quality of instruction.</td>
</tr>
<tr>
<td>5. Maintains or uses classroom resource center containing materials at appropriate advanced levels.</td>
</tr>
<tr>
<td>a. Learning resources are openly available to students.</td>
</tr>
<tr>
<td>b. Teacher serves as a resource to pupils.</td>
</tr>
</tbody>
</table>
6. Clarifies classroom goals and purposes using broad concepts rather than detail.
   a. Relates discussion to course objectives.
   b. Student's performance indicates understanding of course objectives.

7. Uses varied teaching strategies effectively.
   a. Teacher is sensitive to students' responses, both verbal and non-verbal.
      1. Teacher responds to visible cues in physical behavior of students.
      2. Teacher uses student verbal reactions to extend student insights and understandings.

8. Conducts group discussions skillfully.
   a. Teacher withholds own ideas and conclusions.
   b. Teacher encourages participation of students in discussions.

9. Selects questions that stimulate higher-level thinking.
   a. Questions encourage students to draw analogies and to indicate relationships.
   b. Students are able to ask analytic questions.
   c. Students generalize from concrete to abstract at advanced levels.

10. Utilizes synthesis and analysis in appropriate areas.
    a. Teacher utilizes effectively inductive and deductive reasoning and is able to apply techniques in classroom.
    b. Teacher assists and/or encourages students to relate theory to practice.

11. Draws examples and explanations from various sources and related fields.
    a. Interrelationships are emphasized by teacher and students.
12. Presents activities that challenge and stimulate the students.
   a. Students are eager to work on activities.
   b. Teacher varies the kind of assignment to the learning abilities and interests of the students.
   c. Teacher emphasis is on broad ideas and not drill and rote memory activities.

13. Utilizes evaluation in various forms.
   a. Teacher helps students in self-evaluation and self-improvement.

14. Encourages independent thinking, including difference of opinion.
   a. Students are encouraged to examine thoroughly and accurately controversial issues.
      1. Students compare and contrast different issues, using objective evidence.

15. Gives appropriate encouragement to pupils.
   a. Teacher gives praise when deserved.
   b. Teacher makes students feel worthy.
   c. Teacher provides for recognition of outstanding creative and/or scholarly performance.

16. Understands and encourages student ideas.
   a. Teacher encourages students to try new approaches.
   b. Teacher is tolerant of students' attempts to find solutions of problems.
   c. Teacher encourages "guesses" by students and facilitates evaluation of guesses by students.
   d. Teacher helps students to realize that research involves trial and error.
      1. Students are encouraged to apply principles of scientific procedures.
Teacher Background

17. Is unthreatened by own mistakes.
   a. Teacher is undisturbed and unembarrassed by own mistakes or criticism of students.

18. Teacher displays enthusiasm and employs humor constructively.
   a. Teacher is energetic and animated.

Summary Item:

19. Demonstrates understanding of the educational implications of giftedness.
   a. Teacher uses implications of characteristics in the classroom operation, selection of materials, schedules, and questions.
APPENDIX 4

SOME LEARNING CHARACTERISTICS OF GIFTED CHILDREN

by

May V. Seagoe

Characteristics

1. Keen power of observation; naive receptivity; sense of the significant; willingness to examine the unusual

2. Power of abstraction, conceptualization, synthesis; interest in inductive learning and problem solving; pleasure in intellectual activity

3. Interest in cause-effect relations, ability to see relationships; interest in applying concepts; love of truth

4. Liking for structure and order; liking for consistency, as in value systems, number systems, clocks, calendars

5. Retentiveness

6. Verbal proficiency; large vocabulary; facility in expression; interest in reading; breadth of information in advanced areas

7. Questioning attitude, intellectual curiosity, enquisitive mind; intrinsic motivation

8. Power of critical thinking; skepticism, evaluative testing; self-criticism and self-checking

Concomitant Problems

1. Possible gullibility; social rejection; value system and its defense

2. Occasional resistance to direction; rejection or omission of detail

3. Difficulty in accepting the illogical

4. Invention of own systems, sometimes conflicting

5. Dislike for routine and drill; need for early mastery of foundation skills

6. Need for specialized reading vocabulary early; parent resistance to reading; escape into verbalism

7. Lack of early home or school stimulation

8. Critical attitude toward others; discouragement from self-criticism
9. Creativeness and inventiveness; liking for new ways of doing things; interest in creating, brainstorming, free-wheeling

9. Rejection of the known, need to invent for oneself

10. Power of concentration; intense attention that excludes all else; long attention span

10. Resistance to interruption

11. Persistent, goal-directed behavior

11. Stubbornness

12. Sensitivity, intuitiveness; empathy for others; need for emotional support and a sympathetic attitude; ego-involvement; need for courage

12. Need for success and recognition; sensitivity to criticism; vulnerability to peer group rejection

13. High energy, alertness, eagerness; periods of intense voluntary effort preceding invention

13. Frustration with inactivity and absence of progress

14. Independence in work and study; preference for individualized work; self-reliance; need for freedom of movement and action; need to live with loneliness

14. Parent and peer group pressures and non-conformity; problems of rejection and rebellion
APPENDIX 5

THE IMPROVEMENT OF TEACHING PROCEDURES WITH GIFTED ELEMENTARY AND SECONDARY SCHOOL STUDENTS

California State College, Dominguez Hills
October 1966

(Material courtesy of Mr. Thomas Mooney, Palos Verdes Unified School District, West Rolling Hills, California)

CASE STUDY OF JOHN

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Introduction

This is not truly a case study of an individual student as such; rather it is an accumulation of information, ideas, dialogues and questions which arose in our school setting when we attempted to study the problems of a given child. The writer found that a tremendous amount of teacher concern and involvement needed to be expressed about just how we went about doing things at our school.

This report then revolves around John, an extremely talented 13 year old boy, whose particular gifts and problems furnish a springboard for teacher expression.

The writer (or accumulator, so to speak) has brought together a variety of materials which were available in their original form, has asked teachers to respond in written or tape recorded form, and/or by personal interview. The report asks many more questions than it answers, to be sure, and perhaps suffers from a certain lack of unity due to its form. So be it!
My Experiences

6th Grade

I first came to this school in the sixth grade. I started this year with Mr. F as my science and math teacher and Mrs. G as my English-social studies teacher. Mrs. G was a quiet teacher and never seemed to get angry. I suppose I took advantage of the situation and read all the time. This didn't do much to help my grades. In math and science I did fairly well. I liked the way he taught math. We never used the math book. He always gave us mimeographed sheets to work on. Also we had math relays at the board which improved my speed a lot. In science we had a lot of dull stuff to study. He would start talking to us about it and we would gradually change the subject until we had a rather interesting discussion going. I talked a lot and he would always be assigning sentences for me to write 25 times. I didn't do most of them though. He had a bad memory and usually forgot he ever assigned them to me.

My main friends were, at the start of the year, Jack, Sam and most of all Martin. As the year progressed Jack and I faded farther and farther apart. We used to have "free-for-alls" with Richard and Joe. About this time me, Peter and Frank became firm friends. Me and Peter were always fighting about Joe not having any friends. Mrs. G got married and we were going to have this lady who treated us like kindergardners. At the last second she had to move so we had Mrs. F instead. We readily accepted Mrs. F because she was so much nicer than the other lady. Paul who had always been very well-behaved suddenly became a goof off under Mrs. G. We all were getting a little rowdy however. Mrs. G really didn't mind a wisecrack if it was funny. We used to have creative book reports and me, Frank and Martin used to have a great time with those. Ever since the start of the year I had liked Mary and about half way through the year I asked her to go steady and she accepted. There really wasn't very much you could do though and just to talk to her I used to tell her facts about Communism. It must have bored her something horrible.

I ran for school office a few times and was badly defeated. At the end of the year we had a party which fell through.
7th Grade

At the start of 7th grade I had Mrs. S for ESS, Mr. R for math, Mr. C for Spanish, Mrs. C for science and Mr. I for P. E. My favorite classes were ESS and science and math. I never got along with Mr. C. I really wasn't able to memorize dialogues and Mr. C was always insinuating I smelled. It really wasn't a very nice situation. Mrs. C's class I liked though because she made the dull curriculum interesting and made us think. Mrs. S made us do a lot of reports which I always did at the last moment. We had a lot of interesting discussions though on current issues. She made us do a lot of creative writing which I enjoyed a lot. Mr. R's class was interesting because I learned how to express things in formulas and was able to forge ahead from the classes progress. I always did my homework in class the day it was due. Every now and then to prove to Mr. R that I didn't do that I would go to the board and solve problems from last nights homework while I was up there. I never had a social problem in that class. I got along pretty well with everybody. Peter used to write notes on the desk to the girl who sat there after him. I used to erase them and rewrite them and mess up the works. Mr. R always seemed so shocked by petty cheating and slightly unpatriotic things. He had a very high sense of morals and integrity. The class went to slow though. It was beyond half the people and below the others. Some guys were in there who really didn't belong there.
DESCRIPTION

Your request that I fill out a Teacher's Recommendation for John has proven to be a most frustrating experience for me!

John has talked to me about a private school. He indicates that he would like very much to attend the school. I heartily recommend that you accept his application!

John is an unbelievably complex character to define. Your form just doesn't ask the right questions. For this reason, I have chosen to answer in a personal letter of recommendation.

It would be absolutely correct to say that John is an intellectual esthete -- isolated and meditative. He sets personal standards of excellence for himself that far exceed any such standards commonly set up by his teachers.

On the other hand, it would be equally correct to call him a voluble extrovert -- stormy and impetuous. He has the soul of a poet, but can be a veritable devil in a classroom situation.

I, personally, find him more stimulating to talk to than 90% of my adult friends. For example: today John was held after school on detention because of misbehavior in somebody's class. I gave him a ride home, since I was going that way. Our conversation ranged from Stephen Crane's writing to Brook Farm, 19th Century haven of the Transcendentalists. John affirms that Crane should have limited his writings to poetry and short pieces, and that Crane's prose is undistinguished except for the individual paragraphs which are built with profound power. He expressed dissatisfaction with the name "Brook Farm." Said it reminded him of ANIMAL FARM with its symbols of Communism. Stopped at this point in our conversation to consider whether or not Orwell may have had such a parallel in mind; wants to reread ANIMAL FARM again to see if, perhaps, Orwell may have been parodying Brook Farm rather than early Communism.

John is an inveterate reader and cannot pass a table with an open book on it without stopping to dip in it.

One day as I walked across campus with my science class following a nature study walk, John appeared from nowhere to tell me that the pretty blue flowers I clutched in my hands were Texas Bluebonnets. When I argued that they were lupine, he couldn't rest until he had found the reference in a Dictionary of American Wildflowers. Luckily, we were both right, for bluebonnets are a species of lupine.

When I showed my classes a wonderful fossil found by a student in the science section, John told us that he had found a similar fossil some years ago which men at the Los Angeles museum had identified as from a whale which swam above Palos Verdes some five million years ago. My science student later verified this identification at the museum, himself.
One day I was trying to sell my class on the unbelievable delights of scholastic research, and gave as an example my own pleasure in the college literature course I am presently taking. I told them that we were studying Kafka, and that I'd found the initial lecture unbearably exciting because "I didn't understand a word the professor said in it." John appeared to be engrossed in my comments and showed up the next day with a copy of THE TRIAL which he had checked out of the library. He has followed closely my subsequent struggles with Kafka, and read with interest my lecture on the symbolism of the hands, in THE TRIAL. (I can't think of another person in the world, outside of members of the class I attend, who would find this subject inspiring!)

Do you understand what I am trying to say? This is no idle attempt on his part to try to "butter up" his teacher, for John just doesn't have the time for that sort of deception. He is really, honestly, dedicated to the total range of human knowledge. I am sure our tests just do not measure his capacity for learning, in spite of the fact that he was tested as being in the 99th percentile, SCAT test, last fall.

On the other hand, John has a limitless capacity for fun. He has a sure ear for the pompous or the ridiculous, and has not yet learned enough tact to keep his amusement to himself. He teases and bedevils his companions—tried to feed a pal's pencil to a sea anemone in my salt water aquarium and encountered the wrath of both the pal and his teacher! Recently he was working in my little chemistry laboratory and emerged with a harried look on his face. I asked what was going on, and he responded, deadpan, "Would you believe that it was just a small explosion?"

He is absolutely an innocent in terms of his relationships with his teachers. John still cannot understand why he was kicked out of the classes of two different teachers -- all he did was ask questions! Now, I know the kinds of questions he asks. They are penetrating, and devastating, and, I can verify, pose a problem for the teacher involved. One of his favorite comments is: "But that just doesn't make sense!" I've learned, painfully, that if John says it doesn't make sense, it probably doesn't. Either that or I have skipped a step in my presentation so that he has not followed the logic of it. When John is bored with classwork, he disappears behind a book or else creates a disturbance. If the subject captures his imagination, he wants to pursue it much further than other students want to go. One day when the assignment had to do with creative writing, he was far from satisfied with his efforts when I called for the papers. With my permission he continued to labor over it another fifty minutes. I enclose a copy, which I consider to be superb prose.

One day we were discussing techniques used by students to "up-stage" a teacher. I want to make him aware of the sort of thing he does which rubs teachers the wrong way. I told him of a former student of mine who now informs me that he has given up all those "childish" tricks and finds that a well-placed yawn does the same thing admirably. The following day I was introducing "causes of the Civil War" to my class and had my back turned to the students as I wrote on the board. From John's seat I heard an extended, squeaky, obvious, out-loud, tongue-in-cheek yawn! It broke

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up, to his intense delight, but I managed to snarl something threatening over my shoulder and he got right to work.

John has been accelerated one year ahead of his grade level. In spite of this, and the fact that he is placed in our most accelerated sections, he is virtually self-educated. He "over-learns" at every point!

My classes are presently doing individual research on some aspect of the Nineteenth Century. John read widely and almost never did get a paper written because of his own indecision as to what he wanted to study in additional depth. He finally settled for "Aspects of the Franco-Prussian War Which Made World War I Inevitable." Before that he had considered the changes in philosophy as reflected in the literature of the period, a comparison of Marx and Nietzsche, and so forth.

Because he is constantly thinking of so many things, he is absolutely unorganized. He tried, once, to explain his dilemma to me. As I remember it, he feels as if he is swimming in a sea of facts and information, none of which assumes any form for him. Obviously, then, my lectures which help him organize his thinking receive avid attention -- for instance, I am currently trying to establish in our thinking a parallelism between music and literature of any given period such as the Romantic period. He is "with" me at every step. (Contrast this with the yawn over "causes of the Civil War.") It is difficult for any teacher to get him really interested in a lecture -- he can hardly wait to get away and read a book on the subject which will give him the whole picture!

This lack of organization extends to pens and pencils and paper and books -- to time limitations -- to deadlines -- to his notebook. One day he was delivering himself of a voluminous dissertation on animals of the tidepools. I interrupted to ask what class he had first period (thinking I might be able to get him excused so that he could go with my science class to the tidepools as sort of a visiting specialist.) He gave me a terribly blank look, still concentrating upon the tidepool animals, and then replied with a far-away look. "Well, let's see. I get off the bus, and then I walk to my locker, and then -- oh, yes! Physical education!" His notebook is quite unbelievable, to the intense frustration of his more organized teachers. Just one part remains intact, the plastic zipper bag commonly used to carry pens and pencils. I asked him why he didn't put some pens and pencils in it, so that he wouldn't have to borrow constantly from friends. He claimed that this was deliberate -- that he carried his bus pass therein, and since he never unzipped it he never lost his pass!

In short, John is a remarkably bright lad, distinguished by a humorous disposition, profound insight, a ready wit, a contemplative intelligence and a dedication to the acquiring of precise knowledge.

Any school and any faculty should consider themselves lucky to have him in the student body. I recommend him to you with all my heart. The experience of having him in your student body will be most rewarding!

Mrs. A

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PROGRESS REPORT - JOHN

The question has been asked: what can the schools do for students like John? Candidly, I must admit that we can do very little which can be laid out in precisely-drawn guidelines for others to emulate. Rarely do we find individuals who have John's rare combination of extreme talent and extreme creativity (or non-conformity, perhaps.)

Parenthetically, one of my major concerns has to do with the extremely bright child who has been trained to be conforming. We give them the label "bright" and we notify their parents by putting them in top classes and we proceed to imply that something is wrong with them, then, if they do not get "A's". And how does a student get "A's" -- by following the directions of a teacher precisely, of course! It's a rare child, and John is one, who has strength of character enough to hold out against all of these pressures and accept the "B's" and sometimes "C's" which he deserves when he departs too widely from teacher-established norms!

And so, because John is self-directed by parents who know the direction, as well as talented, he has created his own educational world. He can be lured into learning at his own level -- it's difficult to direct him to do so.

My own efforts have reflected this fact. In one instance I was successful, in the other not-at-all. I'll deal with my failure first.

Because I know that gifted young people should be led into making generalizations and into seeing causes and effects, it seemed to me that one area for study in my classes might well be the relationship between the music and the literature of any given historical period, particularly as reflected in the philosophy of the same historical period. I involved our music teacher in my planning, to the point that he volunteered to teach our combined section a few times. I would discuss the literature of, say, the romantic period -- then he would discuss and play examples of the music of the same period. Meanwhile the class was studying the history of the times and trying to evolve some understanding of the philosophy which guided all this. John was less than interested (as far as I have ever been able to detect) and misbehaved the first time I took him to the music teacher's room, passing notes and drawing pictures and doing all those miserable things which we decry in our students. He later explained to me that he had acted this way because he had already heard Mr. G's little lecture about the Beginnings of Music in a course last year. After I "leaned on" him a bit, he behaved for subsequent lectures. I've never felt that the experience was very inspiring for him -- on the other hand, I did capture a couple of young ladies in my net, so the series was not a complete loss by any means.

The successful effort was an outgrowth of this program. When we examined the "surrealistic" period, I read aloud sections from Samuel Beckett's MURPHY. I asked the classes to try to decide what Beckett meant in these passages, and was purely delighted to have John ask that I loan him the book. Now, aside from the fact that I structured this one particular lesson with John in mind and in an effort to capture his interest, the remainder of the program has been almost completely John directed!
The classes had already had a brief exposure to surrealism when we viewed the award-winning film THE RED BALLOON, and each student was asked to try to interpret what the film meant to him: "What is your personal 'red balloon'?" and so forth. John had derived particular joy from trying to attempt, with me, to follow the pattern of the background music -- it is interesting to note that the first time we hear church bells is when the menacing boys are first beginning to pursue the little boy with the balloon!

It would be impossible to detail all the lines of instruction-learning which went into John's mastery of Beckett. At least half of the time I was the learner. Together we attacked the total problem of what-is-Beckett-saying-in-MURPHY? The total result of our studies has been that John had prepared a paper about MURPHY which is at least equal to those prepared by students in my college class, all of whom are candidates for the doctorate in comparative literature -- my personal feeling is that his paper is superior to any I've heard read about the same material.

Techniques of teaching? Impossible to boil down into "lesson plans" -- in a word, we have been two friends with a mutual interest, a mutual intellectual problem. Our relationship has been distinguished for its complete informality. As an example, he phoned me one evening to tell me he had just played out the chess game which is a climax to the book and had discovered that Mr. Endon did not win the game, as I had supposed from related footnotes and discussion in the book. We both found this marvelously revealing and were extremely excited about it. He discovered that Murphy was non-Newtonian, I reacted with information relating to the continuing arguments between Newtonian philosophers and Cartesian philosophers, and he nailed the total book down to an exposition of Cartesian philosophy!

Right now I'm engaged in marking passages in Will Durant's THE STORY OF PHILOSOPHY, preparatory to loaning it to John. Both John and I feel that Beckett is still an unsolved riddle -- it may be that MURPHY is a satire of all philosophies. Why, for instance, does the book continue for some 75 pages after the death of Murphy? There is still the problem of the man upstairs, and of Mr. Kelly, and of Celia, whose importance cannot be summarized in her physical attractions.

John, then, is now operating at his level -- broad philosophic concepts as to the nature of reality, appreciation for intellectual inquiry, understanding of great literature. Typical of the advances made by this highly-gifted young man is the fact that he finds Thornton Wilder's BRIDGE OF SAN LUIS REY tepid and uninspiring. (After Beckett, only the Truly Greats will satisfy.)

Now I believe the same sort of thing could have happened this year for John in any of a multitude of fields. If he had happened to get a teacher with a passion for physics, John probably would have made the same advances. Belatedly I realized that it was possible for him to have such a physics instructor. I happened to sit beside C D, the high school physics instructor, at a board of education meeting last week, and let him read John's paper on Beckett during a lull in the proceedings. He was very impressed, and when I
commented that he ought to have John in his 11th grade physics class RIGHT NOW, C D said for me to send him along to the class that meets at 8 a.m., before our school gets started. This could have been going on all year! I have a feeling we are too late, at this point. It's too near the end of the term -- John is tired of school and just waiting for summer to come -- it's difficult for him to get to the 8 a.m. class and he must ride his bike from high school to our school -- just too many problems involved. It's a shame. Both John and C D would have gloried in the mutual intellectual stimulation which they could have afforded for one another!

I do have one other thing to mention, in terms of John's relationships with others, and would like to comment on his acceptance by other students as well as his non-acceptance by teachers.

Teachers must be extremely careful when dealing with individual students on a tutorial basis. The balance of the class tend to see the situation as a teacher's-pet-relationship, which indeed it may be. I was moving in very dangerous waters every time I spent class time talking to John about Beckett, every time I excused him to study in the library or in a semi-private little study room I have. Such "preferential" treatment is bound to arouse jealousy among other students. However, as far as I have been able to determine, such has not been the case this term. "They" (the other students) continue to hold him in the same esteem they did previously -- for example, there was the situation regarding the band concert! John noticed that everybody wearing suits and ties was excused from class at 9:30 to participate in the band concert -- so, naturally, he wore his suit and tie and stood up and left class with members of the band -- this in spite of the fact that he is NOT in the band. He had three free hours, as a result, which he spent back-stage chatting with members of the chorus who were not on stage at the moment. The marvel, of course, is that nobody "finked". Everybody knew what he was doing, but nobody told any authority figure! I can't think of any other student who could have gotten away with such a blatant activity with such immunity! How does he maintain such a position? Typical of his relationships with other students: last week he mailed an overly-toasted piece of bread to another very bright boy with a slip of paper signed "Regards, John"; recently he accompanied my science class to the beach, discovered an octopus under a rock, and drew a dozen boys into the activity of lifting the rock and capturing the creature, forming firm friendships with many of them as a result; recently he and a small group of students investigated a trap door near the ceiling of my room together and found a neat little attic hidden behind the door. The point is: he is never dull to be around. They like this.

And now, as regards his relationships with teachers! This certainly is another situation entirely! At school we do not have flexible scheduling, but through judicious juggling on his part, John has about as much flexibility in his schedule as though we did! (And I'm the one who gets juggled, I'll admit. Because I believe he profits from a great deal of freedom, I go along with his maneuvers.) There was the day when he insisted his stomach muscles were entirely too sore from weekend activities for him to engage in physical education -- but when he got excused from P.E., he was nowhere too muscle-bound to have to stay at school when my class went to the beach! And he is
constantly too involved in his studies to get to his next class on time, and so must have an "admit slip" and incidentally misses a great portion of the next class. He tells me that his ideal school would be one in which there are no scheduled classes, no bells to ring -- in which he had the utmost freedom to read when he wants, wander about when he wants, just sit when he wants, chat with friends or teachers when he wants. Do not misunderstand: this is not his means for avoiding work. He would get a better education if this were a reality. Last year he told me that teachers were always interrupting his thinking. I'm sure that we do just that!

But teachers tend to decry such freedom on the part of students. John just got a citation for being tardy to one of his classes three times -- this in spite of the fact that the class in question is one in dramatics, and John was not a participating member of the cast those particular days. John claims those three days were study-hall for him, so why was it important for him to be on time? Along the same line, I took him with me the day that I was to judge the science fair at another school. (It seemed wise from two points of view: there was no reason for inflicting him on a substitute, and he could be valuable to me in making my judgments.) He discovered a flaw in the project which teachers at the other school had assured me might well be considered for First Place. Flaw! The thing was a patent error, which would have made us all a laughing stock to scientifically knowledgeable parents, though I didn't know this was true until I got back to my college texts. Because I am accustomed to accepting John's word for it, when he knows that he knows something, I was willing to go along with him in his judgment. But you should have seen the reaction of the other teachers! Resentment and anger was obvious on their part -- they argued with him until John backed down with the comment "Well, perhaps you are right..." I thought that John was, at last, learning tact in his dealings with adults but such is not the case. He assures me now that he really wasn't sure it was a mistake -- that, had he been absolutely sure, nothing would have made him back down! What happened was that we gave First Place to the project, in the face of such determination on the part of the teachers; I looked it up when I got back to school; and I phoned the teacher involved and asked him to get the ribbon off the project, for John was right!

I have no suggestions about the education of the Very-Very Gifted, nor even the Very-Very-Creative. Perhaps it is well that we so seldom meet such students! I know that John's best work has been done quite outside the ordinary classroom tasks I assign -- and, in contrast, I am satisfied that what I am doing is good teaching in terms of the majority of the students. Very few of them are self-directed enough to profit from absolute freedom in their education -- perhaps even John would not profit from his ideal school, for then what would he have to rebel against? His best creative writing has been done when he should have been working on his geometry or his Spanish -- or at home -- or, once, when I excused him from answering some questions in his social studies book. His best thinking has been when he had been sent to his room to do his geometry homework. And it had nothing to do with geometry.

John thinks that no subject, especially mathematics, should be surrounded by nun-like disciples who breath an air of absolute seriousness into it.

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THE FOREST

The forest appeared
a thick wall
of separate and
separated trees.
Green hung
on dark branches,
branches the color
of the soil beneath.
The humus crackled with freshly
fallen needles,
a mat of moist death.
The stars wearily faded
from the sky
or the fragments of sky
as seen from the forest.
The sun
would soon rise.
The forest would change
its alias of death
to the mysterious twilight
of life.
But now stood the forest
introverted, absorbed,
in spinning through space
at speeds unknown
and unseen
in the
Antepurgatory of non-existence
forever.

**********

In the pink sky,
after sunset,
a few gulls lazily glided over the glassy sea,
and to the east
a ring of pink and yellow tinted clouds
slowly darkened.
The night
crept on to slowly steal away
the soft colors.
A cricket chirped and a moth took flight.
Night was here.
BY NIGHT

He turned noiselessly and surveyed the dark alley and then with a bound he jumped to the fire escape. Up he went, his feet making hollow clangs on the ancient ladder. Second floor, third floor at last. He eased himself onto the platform and flattened his body against the rusted iron. He listened. Yes, he could hear the regular breathing. Assured, he took a chisel-like object from his pocket and fitted it under the window seal.

As he lifted he saw the latch slowly turn until the window was open. Silently he lifted the window up. He reached to his back and from a pack he removed a square package attached to a flat roundish object by two shining copper wires. He adjusted something on the round object and put it all inside the window. As he pulled down the window he heard a faint rumble of a powerful motor in the distance. He lowered himself down to the second story platform and hooked his leg over the rail. The sound was rapidly approaching. It was the sound of a powerful sportscar. It turned into the alley. It's headlights made two white circles on the old brick walls.

He stood poised on the rail. Twenty feet, fifteen feet, ten feet. He jumped into the approaching car landing in the back seat with a thud.

Far above a man stood in the window and then a flash and for an instant he was silhouetted in orange and yellow splendor. The car raced out of the alley and turned as the driver made a racing shift. "One down, two to go!" the man murmured to the driver above the roar of the engine as the car thundered down the vacant streets.
God said, "Oh, atoms, go!
From you I shall construct the Universe,
the galaxy, the world of which we marvel.
You are all I have of life
for you spin around your
nucleus of might
and never die.
But you will make all that lives
and dies.
Bird, Plant, Animal, and Man --
these are the ones that think and die
but always will be there
for they will conquer my Universe,
my galaxy, my world of which you marvel,
and they will one day say,
'I have explored all'
and then there will be more."
He stood on the edge of the steep barrier to the elements.
To his right
it dropped off into a dry gorge,
gaily splattered with greens and browns,
not unlike a parachutist's camouflage jacket
except endowed with a dimension and texture
that early spring exhibits.
In the east
where the sun would soon rise
a layer of rosy clouds was tinted pink;
they spread around the horizon
turning gray in the west
and making the ocean and the sky one
at the horizon.
Far below
there was a cove and on its right jagged rocks reached out
to foam the glassy swells.
Farther into the cove
a singular rock stood cleaving the swells roughly
and starting the break.
On one side the shoulder sped,
at last closing out in a muted gasp,
while the other shoulder broke slowly and perfectly.

As he stood watching the tranquil scene
a bird took flight
from the slope below him
and rose into the air,
then dived and wheeled at the opposite side of the gulch.
Smoothly
the bird turned and circled back
to a scraggly pine which seemed to frame the cove below.
Three small birds flew by,
far out,
silhouetted against the pink rim of the horizon.
One rose up and down
behind the first
as if see-sawing on some invisible plaything of the winds.

The sky brightened in the east
and the sun appeared.
Scene: Three children sitting on seats.

Action: They rock their chairs back and forth, bobbing their heads up and down.

Enter: Tall person.

Action: Children lean right and left and bob heads together.

Tall person: HE comes today.

Action: Children nod in unison.

Tall person: Number one, speak.

1st boy: In the regular tetragon, the altitudes from the vertices meet 2/3 distance from them forming a square against the side forward the altitude with a radius of the inscribed circle equal to 1/6 "a".

2nd boy: Does Herschel in Aquarius stop water if you were born in Gemini and wear orange every third Tuesday?

Tall person: The square you said can also be a rectangle in certain tetragons.

3rd boy: Do not all tetragons exist in similarity when in reference to the mathematical studies of shapes in space?

Action: 2nd boy rocks until teacher (tall person) speaks.

Tall person (after 10 second thought): If they try.

3rd boy: As far as animism goes....

Tall person: Another day perhaps for He is coming.

2nd boy: Is not He always?

3rd boy: Why should we not? What else exists outside of physical besides mental?

1st boy: Debate the mental.

Tall person: Quiet, for He is here.

2nd boy: Is not He always?

3rd boy: Herschel in Aquarius never stops water, the square of Hyleg might if you were born in Tarsus.
Action: Boys stand.

1st boy: Define all outside Physical.

2nd boy: Define nothing.

3rd boy: Define HIM.

Action: Students exit.

Tall person: Why Mental? Why Hyleg? Why Him?

Action: Teacher rocks.

Tall person: Perfection!

***************

A human stood, surrounded by monkeys inane and mimicking, telling them how to do something or other important in an inverse ratio to time. Another approached and watched the antics of the group. "What are you teaching them?" he inquired of the teacher. "Something or other." "Oh, it is obvious," he said and stumbled off.
A HIGH TIDE OF BLOOD

A high tide of blood
The surge of power
listless, relented,
Forward sweep the sand
of shell
and pretty rock
and flood footprint
of wandering child.
So is the All
All that is of man
and mind,
or lunar god detached,
a cycle of impossibility
the no-more will be,
the doubters' right,
A high tide of blood.

**************

He stood poised
on the threshold
of space
of vastness
of Heaven
of Hell

He glanced within
and stepped beyond

Because
it was there
and because
he was a Man

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I reached the fork.  
One path was uphill  
The other was down.  
I took it,  
I walked,  
The sign appeared:  
"Unshoulder Responsibility  
And Drop."  
Farther on  
Another:  
"Forget Before."  
And another:  
"You are Alone."  
The road dropped.  
The sign said:  
"Never Look Back."  
I hurried  
I approached the edge  
Of a great precipice.  
On it stood  
The last sign:  
"You are now  
As free as a bird.  
Try your wings."  
I jumped  
And glided slowly downward.  
Suddenly I saw  
The altitude sign:  
"Height: Oblivion  
Rapidly Deteriorating  
Into An Infinity of Anonymity."  
I clawed at the air  
Grasping for one pinnacle  
Of hope.  
There were none.  
I plummeted.
THE STAR SHONE

The small boy stood
among the dunes
A Sea of Sand
extending to Infinity
A mountainous region
of silvery mountains.
The moon hung in the sky
The sheep bleated
The Star shone.
He walked up one dune
As if
To gain a vantage point
To see his kingdom.
The Star shone, real;
It seemed to be
within reach
And just a little farther.
He followed.
The Star led.
A town,
The small stable,
The Star so near
he reached to touch.
It shone an inch
beyond his groping fingers.
It stopped above the stable.
Inside a mother stood
And a father
And a son.
The boy walked nearer.
The Star shone.
He reached up
And touched.
These times have changed
And so have I.
I sit here Alone
As the world goes by
And even now wish for a little of it back.
So what does the future hold for me?
A bright brilliant emergence
into a bright brilliant world
or a dull grey graduality of existence?
The answer is there
but yet to be discovered
yet to be blown past my foothold of soul.
In a world of tangibility
Somehow I cannot grasp
A song of beauty,
The blue sky,
A cool breeze.
Will they stop and wait for me
or must I chase
never reaching, never living?
Or may I wait
and let my fate blow by
just watching?
These times are changing
And so am I.

**************

RELATIVITY IN SOCIETY

Quite alone, to the conversation I turn
my ear,
and I think all these people must
be queer,
for trash, on and on, is all
I hear;
but if these people are normal,
I fear
that I must be the one
that's queer!
TEACHER REACTION

Mrs. R, Librarian - Teacher of Library Science

Mrs. R reflects that John's main problem in her class was one of refusal to do routine tasks, such as dusting and stacking books. She would often find him reading in some corner after a routine work assignment had been given, and found that she would have to hound him to perform the mundane tasks of the library. When the more inspirational aspects of the library science program were discussed, Mrs. R found John reluctant to produce anything in the way of a written report. She attempted to overcome this problem by having John write something of his own choice that related to the library. He agreed to write a science fiction story about the library of the future, but needed the pressure of detention after school, and eventually the detention itself to complete the assignment. Mrs. R relates that the story was not very good!

The one successful experience that Mrs. R recalls was on an occasion where John questioned the placement of a book in the Dewey Decimal System. There was apparently a good spirit of give and take in this discussion. John, on the other hand, seemed to delight in giving her a "bad time", such as the occasion where he deliberately needled her (which John later admitted) by saying, "Why don't you have any science books worth reading? These are all baby books. Who picks out these books, anyway?" Mrs. R admits that she rose to the bait.

Mrs. R recalls an occasion when John was a 6th grader that his mother spoke to her about a concern that John was reading too many Hardy Boy books, and shouldn't he be concerned with reading a better quality material. Mrs. R's response was that John was only ten years old, and that an interest in Hardy Boys was typical of his age; that she should not press for deeper material until he himself showed an interest.

In attempts to discuss the problem of getting along with others, Mrs. R recalls that John's general attitude was one of "you don't have to get along if you are smart enough."

Mrs. R feels that we need to work with John in his problem areas, as well as to just give him his head, so to speak.
Teacher Dialogues

The following dialogues were obtained by personal interview with the recorder. The interview was structured in that the teachers were asked to respond in whatever manner they desired to these general questions:

1. Tell me about your experiences with John - areas of strength, problem areas, peer relations, etc.

2. How do you view the school's responsibility for providing for children like John?

3. Any comments on our grouping procedures, etc.

Mrs. F, teacher - 7th grade, English/Social Studies

Mrs. F observed that one of John's big problems when he entered her class was that of organization - forgot to bring notebook, materials for writing, books, etc. His attitude seemed to be "I don't need to be bothered if I don't want to." He evidenced an immature, little boy behavior which was quite often disruptive to other students. John liked to play the game of needling or putting down the teacher by placing her in a competitive position.

Mrs. F had many individual conferences with John on how to use his intelligence in a constructive rather than a destructive way, to which he responded well because "he could see the logic of it." (John's response) His attitude changed markedly during the 2nd semester after several of these talks.

Mrs. F felt that her own effort to respect and give support to John's better questions, as well as to cut off the silly ones seemed to help the class gain respect for him as an intellectual leader. She felt that a factor which may have contributed to John's initial problems could have been the status and social pressures placed on him by being selected as one of two 7th graders for the 8th grade algebra class, that he and the other boy became an isolation group of two special people. The other boy was eventually transferred at the request of the parent, and Mrs. R felt that this move helped John.

She found that she had to work with John constantly on bringing his materials to class and on turning in his work on time. She gave him many open end assignments allowing him to choose his own topics for reports and encouraged his divergent thinking. She also found that it was necessary to provide John with a basic structure as a starting point, but that the more freedom the better as to the development of the report.

John began to take pride in his work and would often come in after school to show her. She found that it wasn't necessary to check on his progress in class so often.

Some techniques which Mrs. F thinks important in dealing with John and other gifted children are:

1. Make your demands with a sense of humor
2. Let students know that you mean business in that which is demanded
3. They need a balance of structure and freedom
4. They need a sounding board for their own thoughts - hence much time spent in student-teacher discussion
Mrs. F feels that in John's case it was important to encourage him to search out sources of fact instead of talking from the top of his head, that finding fault was not enough without a balance of constructive thinking. She describes this as "intellectual discipline." She also feels that John goes through an individual testing period immediately with each new teacher in order to determine whether or not they are worth while. Mrs. F feels that John's success in her class was due partly to his discovery of poetry and creative writing which allowed him to test his own thoughts, ideas and philosophy.

Mr. S, Teacher - 8th grade, Science

Mr. S sees John's strength in his intellectual capacity and reasoning powers. He found that John would only do the work that interested him the most, and that he found very little of that. John would become a discipline problem when not interested, and would display very immature behavior - petty remarks, poking others, etc.

Mr. S relates that he attempted to spark some interest in John by allowing him to go ahead on his own, but that John very seldom if ever would follow through.

John did not try putting down Mr. S, but evidenced his displeasure in other trivial behavior. In Mr. S's opinion, John was unable to produce a project which showed the boy's ability.

Mr. S feels that John needs time to have his "body catch up with his mind." He feels that John has intellectual power, but that he lacks drive and follow-through. He wonders whether science is John's interest field.

Mr. H, Principal

Mr. H has known John for several years, first as a student in his Sunday school class, then as a student in elementary school.

He describes John as a boy having a very mature, questioning, interested mind which offers unusual insights; constantly spinning off from one idea to another.

Mr. H sees John's success in school, or lack of success, as dependent upon the teachers he has come in contact with. "The structure has not been important, but the people have." He feels that the teacher must be secure about his or her approach, must not see John as a challenge to authority; must work not from a permissive or authoritarian base, but through getting involved with him. He agrees that John can sometimes be quite intimidating to the teacher.

Mr. H feels that John has been a success in classrooms where teachers have modified their approach to John by not holding him to all the standards imposed on other students. This prompted him to ask the question: just how much should John be expected to conform for his own good, so that he can work successfully in the society in which he will travel? What are the minimal standards?
In the second semester of this year, John's mother asked for a conference with Mr. H to discuss concerns which centered around John's problems in his science class. The principal decided that this would be an opportune time to share ideas about placement for the 9th grade year, and invited all of the teachers who had experienced some degree of success in working with John. The purpose of this meeting was to share the ideas and mutual concerns of both the home and school. The group was composed of the parents and teachers. The parents admitted later that they were very nervous going into this meeting -- that they thought they were going to get worked over!

A variety of opinions were expressed at this meeting including the suggestion that John might well profit from a move to a good boys' private school. The teacher proponents of this suggestion felt that John might better be challenged in such an environment. The pros and cons of this suggestion were much discussed, and the parents' initial reaction was one of reluctance. They stated that they had always been public school oriented, and that this idea seemed somewhat disloyal to them. They were also concerned about the obvious financial burden. They agreed to look into the matter more thoroughly.

The principal delegated one of the teachers to visit two private schools and report on her opinions as to their appropriateness for John. A copy of this report was sent to the parents.

The parents applied for a scholarship at both schools; John received a one thousand dollar scholarship at one. This apparently will be accepted.
V. Questions

A. What characteristics are displayed by John? How do these characteristics compare to characteristics displayed by other gifted children?

B. How does John evaluate himself?

C. How can a teacher help John with some of his problems?

D. What provisions should be made for maximum efficient learning to take place?

E. If you were his teacher, how would you "handle" a child with these characteristics in your classroom?

VI. Analysis of Teachers' Reports
APPENDIX 6

INTEREST INVENTORY

1. What are your favorite TV programs?

2. What are the best books you have read this year?

3. What do you like to do best for fun or recreation?

4. What are your hobbies?

5. What do you like to do best with your family?

6. Have you taken any trips? Where did you go?

7. What would you like to be when you grow up?

8. Do you like school? What do you like best about school?

9. If you dislike school, tell why.

10. Do you take any lessons outside of school? If so, what do you study?

11. If you would like to write a paragraph about yourself which you would consider interesting to other people, write it on the back.

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APPENDIX 7

PARENT INFORMATION ON CHILD

To add to the understanding that I have of the children in my class, I am asking each parent to give me the following information. Thank you for your help.

Teacher

Pupil's Name

1. Describe the special interests of your child.

2. Child's special talents or skills.

3. Child's reading interest (favorite book: type, titles)

4. Child's hobbies or collections.

5. Special opportunities child has had (trips, private lessons, etc.)

6. Child's special needs at home.

7. Child's special needs at school.

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FOCUS ON THE GIFTED
TEACHER ACTIVITIES AND BEHAVIORS

APPENDIX 8

2 Teacher Domination
Close Organization

Classroom as main
center of Learning

Student
Independence;
Self-Management

Free Access to
Library, Adults

Emphasis on
Perfection in
Structure

Emphasis on
Ideas of Merit

Content

Advanced
��识

Pupil-Centered;
Qualitatively
Suitable (Free
Use of Debate,
etc.) Controversy

Open-Ended
Questions

Content

Support of
Wide, Unique
Interests;
Implementation

Application to
Fewer Interests

Structured
by Teacher

Potential
for Higher Level
Learning & Thought;
Invention, Creation

Communication

Interests
Children have ready access to library and other resource materials.

Students are involved in independent study activities. The teacher does not dominate the classroom and does not run the class as a "tight ship" but permits the student to have freedom in selecting and pursuing problems.

The major emphasis is on ideas of merit and structure is used to enhance these ideas.

The teacher's questions are open-ended, with an emphasis on generalization, analysis and synthesis.

The interests and abilities of the students are utilized in planning and implementation of curriculum materials.

Discussion, utilizing debate and controversial issues, is freely used in the classroom.

 Appropriately advanced content is available to the students so that there can be exploration in depth.

Teacher and materials in the classroom are the main sources of information. Children do not have the freedom to utilize library frequently and to work with other resource people.

Class is run as a "tight ship." The topics and activities are prescribed for the students and there is very little deviation from the routine.

The major emphasis in productions is in correct usage, neat papers, proper spacing and punctuation, etc., rather than on concepts and ideas of merit.

The teacher's questions are primarily closed-type questions with an emphasis on specific facts and rote memory.

The course of study is followed very closely, with little attention being paid to the interests of the children.

The lessons are carefully structured and there is little room for debate and controversy.

The content is based on specific facts and there are very few opportunities for exploration in depth or going beyond the grade level material.
1. Start with a provocative question. (Use broad questions and use them sparingly.)

2. Avoid teacher interjections. Try to avoid teacher to student, teacher to student (etc.) progression. Notice the amount of teacher-student interchange.

3. Introduce opportunities for controversy and debate.

4. Provide opportunities for discussion.

5. Attempt to get more direct student response and less reliance on teacher guidance when having a discussion.

6. Avoid small teacher lectures that are not relevant to the discussion.

7. Try to use a question rather than a statement in group discussion.

8. Try interludes of silence when appropriate. Silence may promote thought.

9. Be aware of the types of teacher comments which facilitate or hinder expression. (Are you sure? Oh, come now! The habitual OK or all right. Do you agree? etc.)

10. Assess the quality or level of response you evoke through openers, as:

<table>
<thead>
<tr>
<th>Opener</th>
<th>Response</th>
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<tbody>
<tr>
<td>Who</td>
<td>Factual</td>
</tr>
<tr>
<td>What</td>
<td>Factual</td>
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<tr>
<td>Where</td>
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<tr>
<td>Why</td>
<td>Analytical</td>
</tr>
<tr>
<td>Compare</td>
<td>Analytical</td>
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<tr>
<td>Contrast</td>
<td>Analytical</td>
</tr>
<tr>
<td>Discuss</td>
<td>Application, generalization</td>
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APPENDIX 9b
Sample Questions
for Grade 5

Contrast the explorations of Columbus with those of the astronauts today. What are the similarities and the differences?

What problems did the early explorers have that today’s explorers do not have? What problems are almost the same?

What were the responsibilities of a colonial child? How do these responsibilities compare with those of a modern child today?

Contrast the ways of earning a living in the colonies with the ways of earning a living today.

Why were there differences in the colonial life of the north and south?

What did the colonial people bring with them to the New World? What would have happened if the early migrations had been from Africa instead of England?

Why were the Indians and the negroes not happy with the white man’s way of life in colonial times?

Contrast the life of the Indians and the negroes in colonial times with their life in modern times.

What difficulties did the colonists and Indians have in understanding their different ways of life?

Why are there conflicts between old and new customs and resentments against newcomers?

Describe the feelings of a newcomer to a new area -- what are the hardships, the adjustments, the reactions of others?

What are the relationships between the Constitution and the agreements of the Iroquois League?

Compare and contrast the prices of land and methods of acquiring them today and during the Westward movement.

Why were the diaries of Lewis and Clark valuable?

Draw a floor plan of a typical colonial home and an average home today. What were the similarities and differences? Are the homes of today more functional? In what ways?

Why did people migrate to the west? How were they able to provide for their needs?
What if there were no Mississippi River? What if the railroads had all run north and south?

What would have happened if the first settlers had landed on the West Coast instead of the East Coast?

Compare the Pioneers’ idea of land ownership with the Indians. How did this lead to conflict and misunderstanding? How did the Indians feel about the white man moving in on their lands?

“What might have happened if France had refused to sell the Louisiana Territory?”

What were the similarities and differences between public schools in colonial times, during the pioneer period (Westward movement), the Civil War period and modern times? What were the aims and goals of the people during those times?

Discuss how climate and land affect the schools in the north and the south.

Why is there no reference to free public education in the Constitution?

Explain in your own words the meaning of "free education for all," "the right of freedom of speech," "the right to life and liberty."

What changes have the automobile brought to the country?

Which is more important to the production of goods -- human resources or natural resources? Why?

Why is there still a Westward movement? Is this influencing politics, industry, education, and other aspects of life? Choose one to explain.

Why are people more dependent on each other today rather than on their environment?

What are some of the factors that contributed to the growth of the U. S. from a weak nation to a world power in less than 200 years?
APPENDIX: 10
CRITERIA FOR CURRICULUM DEVELOPMENT

The Improvement of Teaching Procedures with Gifted Elementary and Secondary School Students
California State College
Dominguez Hills

The content and ideas with which gifted students work can be exciting and challenging to them if certain criteria are used in planning. The teacher who provides opportunities for gifted students to use their abilities in satisfying fashion, in turn derives more satisfaction from the teaching process himself. Gifted students do not need the close supervision or detailed attention required by other groups. The following brief pointers may serve as a frame of reference in working on curriculum content of value for the gifted.

Curriculum for the gifted should provide opportunity for:

1. Study of major issues.
2. Study of major ideas.
3. Independent study.
4. Time to study and research in depth.
5. Generalization and application of information and ideas.
7. Development of new and original ideas, and time for self-initiated activities.
8. Use of varied resources, external to the classroom.
9. Use of student interests.
10. Emphasis on analysis and critical thinking.
11. Use of pupil initiative and leadership.
12. Large blocks of free time for pupil study.
13. Materials at appropriately challenging difficulty levels.
14. Materials at appropriate ideational level.
15. Use of only broad frames of reference, with relatively few major questions as the curriculum framework.
16. Use of legitimate learning content in all fields, including the arts.

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# APPENDIX 11

## REVISED VISITATION SCHEDULE

**Grades 5 & 6**

<table>
<thead>
<tr>
<th>Date</th>
<th>Demonstration Teachers</th>
<th>Schools</th>
<th>Visiting Teachers</th>
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<tbody>
<tr>
<td>10/5/67</td>
<td>Carol Madrick</td>
<td>Ladera, M. B.</td>
<td>John Bacigalupi, Linda Dozier, Sunga Greisman,</td>
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<td>Judith Matheson, Mildred Pearsey, Betty Ross, Leah Webber, Janet Willner</td>
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<td>10/19/67</td>
<td>Leah Webber</td>
<td>Valmonte, P.V.</td>
<td>John Bacigalupi, Sara Content, Sunga Greisman,</td>
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<tr>
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<td>1:00</td>
<td>Mira Catalina, P.V.</td>
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<tr>
<td>11/7/67</td>
<td>Mildred Pearsey</td>
<td>Jefferson, T.</td>
<td>John Bacigalupi, Linda Dozier, Sara Content, Sunga Greisman, Carol Madrick, Judith Matheson, Betty Ross, Janet Willner</td>
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<td>Meadow Park, T.</td>
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<td>Judith Matheson</td>
<td>Freeman, Ingl.</td>
<td>John Bacigalupi, Linda Dozier, Sara Content, Sunga Greisman, Mildred Pearsey, Carol Madrick, Betty Ross, Leah Webber</td>
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<td>Payne, Ingl.</td>
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<td>12/5/67</td>
<td>John Bacigalupi</td>
<td>Seaside, Torrance</td>
<td>Linda Dozier, Sara Content, Sunga Greisman, Carol Madrick, Judith Matheson, Mildred Pearsey, Leah Webber, Janet Willner</td>
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<td></td>
<td>Betty Ross</td>
<td>Robinson, M.B.</td>
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APPENDIX 12

REVISED MASTER SCHEDULE
(Sample In-Service Schedule)
California State College
Dominguez Hills
Project for the Gifted

<table>
<thead>
<tr>
<th>Date</th>
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<td>Visitations</td>
<td>Grades 2-4</td>
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<tr>
<td>Thurs. 5</td>
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<td>Grades 5 &amp; 6</td>
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<tr>
<td>Tues. 10</td>
<td>&quot;</td>
<td>High School and Grades 7 &amp; 8</td>
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<td>Grades 5 &amp; 6</td>
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<tr>
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<td>Mon. 27</td>
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<td>Visitation by Judges</td>
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<td>Mon. 15</td>
<td>Final Meeting</td>
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APPENDIX 13

CLOUDS
--by Julie ______ Age, 9 years

(Prepared in one week of independent study)

Introduction

This report is about how high clouds are, what they look like, and what they produce.

Clouds are important because they give rain. Without rain we wouldn't have crops, and it would be hard for the animals that live on crops to live.

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CLOUDS

Some clouds are big and some small. Some clouds bring rain, some bring snow, some bring both. Sometimes they bring hail.

Clouds are all different shapes and sizes, such as tower-like Cumulus and sheet-like Stratus. The kind of cloud depends on the kind of air it's cooled in. Clouds form on hot days. Water evaporates and then the droplets join together to form a cloud. When the cloud gets too heavy it bursts and either rains, hails, or snows.
It rains if the water doesn't freeze from cold. If the droplets get cold while coming to earth they turn to snow. Hail is formed when snow is blown back into the cloud, water gets on it, then it falls out of the cloud again, then is blown into the cloud again. This happens over and over until finally it's heavy enough to fall to earth.

Cirrus
The delicate fibers of this cloud usually are made of small ice crystals. Sometimes they have a silky sheen. These clouds don't cause rain themselves but indicate rain.

Cirrocumulus
These clouds are the white sheets with small grains forming ripples. This cloud is sometimes called the "mackerel sky." At the approach of a storm, it turns into Cirrostratus.

Altostratus
Even though the sky is likely to be completely covered by Altostratus, its fibrous sheet is fairly uniform in appearance and is thin enough to show the sun vaguely as through a ground glass. When this cloud increases it may indicate a rain or snow of a lasting and continuous nature.

Nimbostratus
Nimbostratus is thick enough to completely blot out the sun. It gives out continuous rain or snow which gives it a "spread out" appearance. This cloud, in the life cycle of a storm, develops from Altostratus. It is sometimes called "nimbus."

Cirrostratus
Cirrostratus is a thin whitish veil over the sun. It is too thin to cover the sun's outline so it looks like a halo around the sun. When it thickens it's going to rain within 24 hours.

Altocumulus
This cloud is a canopy of white or gray flakes and rounded masses and rolls. Altocumulus is sometimes a sign of rain, especially when some of its masses are higher than the ones next to them; then they indicate possible thunder storms.

Stratocumulus
A continuous canopy of irregular layers and folds scattered with dark patches or sheets, stratocumulus is not usually a rain or snow cloud, but sometimes snows lightly.

Stratus
Stratus is the lowest and most uniform Appearing cloud. This cloud sometimes occurs when fog drifts over the warmed surface of the land and then rises. It is a flat, gray cloud with a ceiling like underside. Stratus often gives drizzles, or snows very lightly.
Cumulus
Cumulus develop vertically forming billowing mounds and towers. Their tops are brilliant white in the sun while their bases most often are dark. These clouds don't bring rain unless they get very very tall; then they turn into Cumulonimbus.

Cumulonimbus
These clouds build over summer landscapes or tropic seas. Cumulonimbus clouds bring heavy rains and thunder storms; sometimes they bring hail. The tallest of these clouds have their heads in the cold upper air, their tops are anvils with trailing bits of Cirrus.

<table>
<thead>
<tr>
<th>Cloud</th>
<th>Height</th>
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<tbody>
<tr>
<td>1. Cirrus</td>
<td>20,000 to 40,000 ft.</td>
</tr>
<tr>
<td>2. Cirrocumulus</td>
<td>20,000 to 40,000 ft.</td>
</tr>
<tr>
<td>3. Cirrostratus</td>
<td>20,000 to 40,000 ft.</td>
</tr>
<tr>
<td>4. Altocumulus</td>
<td>8,000 to 20,000 ft.</td>
</tr>
<tr>
<td>5. Altostratus</td>
<td>8,000 to 20,000 ft.</td>
</tr>
<tr>
<td>6. Nimbostratus</td>
<td>Below 8,000 ft.</td>
</tr>
<tr>
<td>7. Stratocumulus</td>
<td>Below 8,000 ft.</td>
</tr>
<tr>
<td>8. Stratus</td>
<td>Below 8,000 ft.</td>
</tr>
<tr>
<td>9. Cumulus</td>
<td>Base to top: 8,000-45,000 ft.</td>
</tr>
<tr>
<td>10. Cumulonimbus</td>
<td>Base to top: 10,000-60,000 ft.</td>
</tr>
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</table>

Pictures of Kinds of Clouds

Aurora Borealis
Noctilucent Clouds
(these shine)

Nacreous Clouds
(sort of shiny)

Cirrus Clouds
**Cumulonimbus Clouds**

- Cirrus
- Stratus
- Cumulus

**Meaning of Cloud Names**

<table>
<thead>
<tr>
<th>Name</th>
<th>Meaning</th>
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<tr>
<td>Cirrus</td>
<td>Curl of hair</td>
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<tr>
<td>Stratus</td>
<td>Spread out</td>
</tr>
<tr>
<td>Cumulus</td>
<td>Pile</td>
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</table>

Note: These are the three main clouds. Other cloud names come from these.

**How a Drop of Rain Falls**

- This isn't a drop of rain coming from a cloud but it's a drop of water coming from the nozzle of an experiment scientists did. First the drop clings to the nozzle, then it is very loose about to drop, then it assumes a "hamburger bun" shape. It is never the shape of a tear-drop.

**Thunderstorms**

Meteorologists don't agree on why a rainstorm is a rainstorm and a thunderstorm a thunderstorm. But almost all of them believe it is a difference in height. In a rainstorm air laden with moisture is brought only to a sufficient to squeeze out water, the water falls as rain. But in a thunderstorm the moisture-laden air is carried to a very much higher height. Heat released by condensation makes the air more able to float so that it is forced even higher. Then bits of air rise higher and higher until now the thunderhead is so high the moisture freezes. It is ice that turns on the energy and electricity which turns on a thunderstorm.
Comments

Julie--I think you could have done a neater job of your report. In some places it was kind of messy but I think your information was good!

Julie, I think that you did a very VERY good job but I think that your spelling in some places could be better.

Julie, I think your story was very good but your spelling wasn't so great and your writing was sloppy.

Julie--I think your story was good but you spelling could be better.

Julie--I think that your writing could be neater and the places where you glued in pictures is a little sloppy. Otherwise it is an excellent report.

Julie, I think that your report was sort of good and you wrote very good.

Julie--you have very good information but one thing--don't put your name and date at the top of every page. Put it at the end or on the cover.

Julie, it seems like you have copyed every word out of your books! You had a very good report otherwise!

Julie, I think you could have done a better report. The gule was very sloppy and part of the writing I could not read! I hope you do better next time. But I really liked your information!

Julie--I think your writing was a little sloppy in some places but your report was good.

Julie-- I think your report was good and your handwriting was good for a first time.

Julie -- I think your report was excellent except the pictures were sloppy and your writing could be better.

Julie--I think your report was very good for a first time. However I think your pictures had too many distractions.

Julie--I think that in all cases your report was very excellent.
APPENDIX 14

The Improvement of Teaching Procedures with Gifted Elementary and Secondary School Students
California State College, Dominguez Hills

TAPE ANALYSIS

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<th>CLASSIFICATION</th>
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<th>TOTAL</th>
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<td>Application</td>
<td>Response</td>
<td>Discouraging</td>
<td>Simple Repetition</td>
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<td></td>
<td>(Gen. synthesis)</td>
<td>Closed/Open</td>
<td>Encouraging</td>
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<td>(A)</td>
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<td>or pupil name</td>
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<tr>
<td></td>
<td>(B)</td>
<td>(A)</td>
<td>(B)</td>
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* Indicates questions which produce debate, examination, study of issues, etc.
APPENDIX 15

Descriptions of Four Gifted Children
and Study Questions

(material courtesy of Leah Webber Palos Verdes Unified School District)
California State College, Dominguez Hills

CASE STUDIES

The following case studies are of four children in the same fifth grade class:

I. James is a rather remarkable 10½ year old boy in the fifth grade. He is impeccable in dress, manners, and appearance at all times. He seems to be extremely well adjusted to the fact of his giftedness and knows his own mind to the extent that he is not influenced by his peers. As an example, whenever class officers are nominated, he is among those chosen, but declines. I have discussed this with him and, even though he realizes the great desire of the class, he feels that he already has enough activities and doesn't wish to accept the responsibility. As I have mentioned previously, he is quite popular with the entire class and is able to communicate successfully even when discussing on very high levels. I feel that strong admiration exists in the feelings of the class toward this boy who is able to comprehend and explain subjects which confuse them. James is listed as having an I.Q. of 151, but in my opinion he is much higher than this.

His abilities are strong in every area, as shown by his quick ability to analyze situations and assignments objectively and to carry them out efficiently. His level of perfection is such that he always pursues a subject beyond the limits of class time and requirement, and his most beneficial characteristic is that he truly appears to contemplate each subject of class discussion.

James' principle areas of interest lie in the science, music, and literary fields, although he shows high interest in all subjects. He is especially fascinated by the subject of lasers and masers in the field of physics, and celestial mechanics. In the literary field he writes long and complex stories using imagination and showing cleverness in his choice of introductions and conclusions especially. James also has a tremendous gift in the musical area. He has been playing for only three years and yet performs as an accomplished pianist with poise and an unchanging drive shown by the 3-4 hour long practices each evening and 2 hour lessons twice a week taken in the San Fernando Valley. James' other hobby, if his efforts at the piano may be labeled a hobby, is the raising of carnivorous plants, the Venus Fly-Trap.

James is certainly a sensitive, diverse child with wide interests, abilities, and needs who exemplifies one end of the continuum of giftedness in my class.
II. Thomas is a 10 year 2 month old fourth grader who is normal in height and weight and has excellent coordination. He has an allergy to dirt and has had bronchitis, but otherwise is a healthy, physically normal child.

His interests are not as wide as James' and seem to be more of the conventional nature. However, he, too, becomes very involved in any subject studied or discussed in class. His hobbies are building model cars of all types, including engines and accessories, bowling, and car racing, and these are the areas wherein his interests mainly lie. Thomas seems to have no special talents or gifts in any specified area; rather he is strong in all areas because of his personal desire to achieve and, of course, his I.Q. of 139.

Thomas is socially well adjusted. He is accepted by his peers, and they obviously must have admiration for him as he was the only fourth grade boy to be elected as president of the class this year. He seems to have made friends with nearly all the boys in the class, both fourth and fifth graders; perhaps this stems from his sports prowess.

Thomas seems to be very capable in all areas -- he expresses himself well, both orally and in written work, can be quite creative in story writing at times, is totally competent in the mathematical field, and is able to analyze, synthesize, and evaluate in most subject matter areas, competently and with ease. He often completes work above and beyond the required; however, I feel that he is motivated more by the desire for "extra credit" grades than to satisfy his own high level of standards, as he invariably asks if he will receive extra credit for this or that project.

There is an easily recognizable difference between the "outstanding" giftedness of James and the "solid" giftedness of Thomas, but both certainly belong in the category of high achievers.
III. Richard is 10 years and 5 months in age, of normal height and weight had has no physical problems except for trouble with ear infections which has not occurred since I have had contact with him. His coordination is good, as is his ability in sports.

Richard's I.Q. is listed as being 154, and he certainly seems to demonstrate capability of this caliber shown by his ability to immediately catch on to new ideas and the ease with which he accomplishes most tasks. He is especially competent in mathematics, spelling, and music and seems almost to have a gift in these areas. However, when I consider Richard's school situation, I have found myself developing a strong intuition that there is a wealth of potential within this boy which has not been reached by our school program. He completes nearly all assignments, but does not seem sufficiently interested in them to pursue any one of them beyond the surface level. Sometimes his mind seems to be miles away and he looks as if he would fall asleep given the chance.

Richard's special interests are in the field of science primarily and are especially that of electricity, chemical compositions, the latest scientific developments and discoveries, such as lasers, computers, etc. His hobbies seem to lie in the field of detective work where he has worked on coding and decoding messages, developing his own tear gas, etc, and in making his own models "because they sometimes don't have them in the store." Richard seems to have a special talent in the music area and his music teacher seems to feel that his work on the trumpet is far above the norm.

I feel the key to Richard is his social immaturity. He is quite young for his fifth grade and also has been preceded by a highly gifted brother who rather overshadows him. Also, this past year, both his grandfather and his favorite cousin died -- facts which seriously upset him for a time. He is extremely sensitive, easily embarrassed, and often giggles self-consciously when working in front of the class. He tries to be a "class comedian" of sorts, but often he does not succeed to a high degree. Richard seems to need much extra attention and when given it responds to almost any task. Perhaps more personal attention and interest shown by others would encourage this boy to fulfill his potential.
IV. Warren is an example of the underachieving gifted boy. He is nine years old, of average height, slightly "pudgy" in build. He has had some physical problems such as eye surgery three times, therapy for flat feet, a left-handedness which causes slower writing, and many visits to doctors for various "illnesses" brought on by a rather hypochondriacal mother. His coordination and physical ability do not meet his expectations nor the norm for the class. His father is quite critical of him and his work and does not have a high estimation of his son, a fact which I feel has been communicated in various ways to his offspring. This factor of a tenacious, hypercritical father and an over concerned mother have served to mold Warren into a person who has complete lack of self confidence and a very poor self concept.

Warren registered only 135 on the Binet, however, I feel that the extenuating psychological factors must have influenced this score to an extent. His ability to reason, his vocabulary, and critical thinking power seem to rate with students in the 140 and 150 I.Q.'s. When one has rapport with Warren, one can find out much information verbally from him. However, it is difficult for him to force himself to write any information on paper. He seems to feel that it is better not to answer at all if one is not 99% sure of being correct. To give a "wrong" answer to him is a horrendous thing. This certainly leads to problems in a classroom when much work must be of the written type. Encouragement and vast amounts of praise have helped this situation somewhat.

Warren's main interest and hobbies are making models and reading. He likes to work with drawing, painting, and other art processes, primarily is noted for gathering vast amounts of information and insights from his reading.

Warren is not particularly popular or unpopular in class; some of the children become disgusted with his slow, methodical, never-able-to-finish-an-assignment-or-find-a-paper personality, but primarily he is left alone to his own devices. Most of the children seem not to care one way or the other about him.

In summary, Warren seems to have great potential that is being stifled by an emotional-psychological problem.

STUDY QUESTIONS

A. Compare and contrast the characteristics of James, Thomas, Richard, and Warren.

B. If you had these four children in your class, what provisions would you make for maximum efficient learning to take place?
In order to judge the value of the sad ending of Billy Budd, Foretopman, it is necessary first to consider the major facts concerning the literary nature of the story preceding that ending, that the tragic fate which befell that Handsome Sailor in the year of the Great Mutiny might be viewed in its proper context.

To begin at the beginning, then, Billy Budd is Adam before the Fall, he is the pacemaker, effusing virtue and sweetness to all around him; he is incapable of even comprehending and dishonesty; not philosophy or religion give him his virtues, but entire and innate purity of heart; he is, in short, innocence incarnate. Nor is the exterior of this gleaming cup wanting in cleanliness or adornment. Melville's radiant and extensive declamations of his hero's personal beauty leave the reader quite assured that innocence is well housed in "Baby Billy." So determined is our author to leave no virtue unclaimed for Billy that he even provides us with just enough information about Billy's obscure origins for us to know that he was of noble birth. This Boy Scout Pledge inventory of virtues together with the author's preoccupation with cutting a fine physical figure for the hero might mark another novel as a Romantic melodrama. But such characterization is a virtue in this little novel, for the portrait of the Handsome Sailor is not drawn as the likeness of a man, but as the representation of an ideal. Billy is not merely a handsome sailor; he is, spiritually and physically, the handsomest of all who sail from birth to death. As such he is an allegory of Human Goodness. But being also an entity in the real world, Billy is not entirely perfect. In agitation or distress, he becomes tongue-tied. This single trivial flaw leads him to the gibbet.

This flaw is the result of no human action. It is rather Billy Budd's allotment of fault which fate sews randomly through human kind. It is but one more voice in the omnipresent and inescapable polyphony of the "marplot of Eden." Similarly, Billy's impression was a work of the Fates. The Navy's need for men was beyond its control, the lieutenant's orders were beyond his control, and it was the Foretopman's very perfection which made his enlistment in the King's service inevitable.

Now upon examining the foregoing, it can be seen that Billy Budd, Foretopman is distinctly analogous to a Greek tragedy. There is a hero, a good man of noble birth, for whom the Fates have ordained a single significant, ruinous flaw. Although Billy Budd's heroism is magnified and his fault minimized, there is yet far more than an incidental strain of classic tragedy running through this plot.
So Billy Budd has begun as a Greek tragedy. Should it continue so? Should it end as it does in the fall through his own tragic flaw of our good hero? Style and theme dictate that it must, which fact may be seen by examining the alternative "happy" ending, considering what the effects of its adoption might be, and comparing these with the observed effects of the tragic ending.

There are a number of possible happy endings. The most plausible though, is that which would have the Foretopman acquitted by the court-martial or else saved from the execution of the court's verdict of guilty by the invention of Captain Vere. In crudely summarizing such a story, one might say, "Billy is good, Claggart bad. Claggart attacks Billy, Billy destroys Claggart. Billy is vindicated by authority. Good beats bad." Such a book would be totally divested of reality. No man, without strong motivation, risks censure to attack another man. Moreover, no sailor would have been saved who had killed a Master-at-Arms in the year of the Great Mutiny. The characterizations which serve well as allegories in the book as it stands would be betrayed as mere fantasies by a fantastic ending. More importantly, the story would lose much of its thematic value as a stimulus for profound thought. What would become of the controversy between Law and Justice which is so deftly exposed in the tragedy? It would not appear in the rewritten book. Had Billy's defect failed to adversely affect his destiny, he would have been effectually perfect. What value would the perfect Handsome Sailor's victory have to real, imperfect men who must face Claggart with no magic escutcheon of Virtue, but with only the corroded shields of their more or less marred consciences? It would have none. Not only the validity of Melville's style, but much, if not all, of his great tragic themes would be sacrificed to the "happiness" of the ending.

In the ending as it stands, however, the reader sees plausible, real characters (Captain Vere and his officers) battling with a realistic situation in which Good and Evil have taken roles, each so exaggerating his part as to invest the situation with clear and unmistakable moral overtones. The allegories make sense as personifications of the moral questions involved in everyday life. By rattling the reader between irresistible moral absolutes and unmoving realities, Melville has exposed man's inevitable imperfection, the necessity of compromise with that imperfection by relying on reason and establishing rules, and the inability of reason or rules to blot out the Polaris or moral perfection. These ideas are worth more than the superficial satisfaction of a "happy" ending, for they are the ancient and realistic themes of tragedy which will far outlive dreamy adulation of a super good guy.
APPENDIX 16b
Comparison of Locke and Jefferson

(The following essay is presented in partial form only. The entire essay contained a thorough analysis in a thoughtful presentation of the background of a basic American government document, the Declaration of Independence. The sections presented below contain the frame of reference utilized by the student, and illustrations of the quality of argument he employed in his essay. This was for a high school history class, Hunter Watson Teacher.)

Far too many history teachers have nurtured the misconception that our revolution suddenly sprang full blown onto the colonial scene; a spontaneous upwelling of democratic emotions, embodied in a framework of government that was the sudden inspiration of a brilliant gathering of men. Good reading but, alas, poor history. To Adrienne Koch the American dream is as well an "American experiment," and to place our revolution in its proper perspective is to recognize it as the culmination of long years of theorizing on the structure of democratic government, and at the same time, as a transition from theorizing to practical implementation of such a government. Nor is our government a static perfection, but rather an evolving imperfection with the intrinsic ability to perfect itself. And to a very great extent, our political system is still an unknown quantity—even today an "American experiment."

It is essentially with the object in mind of lending a truer perspective to our system of government that this project was undertaken. So often we say that our democracy had the breadth of a continent to develop in; in that case, it also had the depth of history to evolve in. To deny the spontaneity of our revolution is but to embrace the far more overwhelming concept of our nation being the end process of thousands of years of history in myriad lands. And probably the most vital link in this chain is our revolution, the period of transition.

It is possible to examine almost this entire period and recognize the process that was taking place by studying the microcosm of Thomas Jefferson. His very eloquent Declaration of Independence is probably the most well-known exposition of those "inalienable rights" that are the fundamental motivating force of our government. Unfortunately, Jefferson stands forth as probably history's most unpublishable plagiarist, for those ideas (indeed the very words that express those ideas!) are in reality the ideas, the words, of John Locke, a political philosopher of the late 17th and early 18th centuries. Thus Thomas Jefferson, one of the guiding lights of the revolution, is a very conspicuous link between the writings of John Locke, representing evolution, and the Declaration of Independence and the experiment that it helped bring into being.

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The project focused upon a comparison of John Locke's 'The Second Treatise of Civil Government' to Thomas Jefferson's 'Declaration of Independence'. As an adjunct to this comparison, two books were read (albeit selectively) of a biographical nature concerning Jefferson. John Des Passos 'The Head and Heart of Thomas Jefferson' yielded information concerning the intellectual development of Jefferson. The other book was Adrienne Koch's 'The American Enlightenment' which actually consists of a short biographical essay for each of several prominent figures in the American Revolution. Each essay is accompanied by a rather extensive collection of that individual's letters and writings. Both books supplied valuable insight into Jefferson's intellectual development, the motivations that directed that development, and the diversified uses to which Jefferson eventually devoted his intellect.

However, Adrienne Koch's collection of Jefferson's writings provides far more than a mere insight. It can be argued that any similarity between the Declaration and Locke's philosophy is an isolated example of Jefferson borrowing from Locke. But time after time in the writings collected by Koch are examples of obvious similarity between Jefferson and Locke. The conclusion becomes more and more inevitable that Jefferson did not develop his political philosophy as a compact system isolated from the influences of other political thinkers, and formulated solely from his own brilliant analysis of human nature and the political conditions existing in the late 1700's. Rather it becomes more obvious that the political system of Jefferson is a brilliant synthesis and adaptation of many other political systems extant at that time. Such apparently is the case with Jefferson; undoubtedly such is the case with our revolution as a whole.

But the best proof of this continuity is an actual comparison of the Declaration of Independence with Locke's Second Treatise. . . .

Inevitably the best way to comprehend the debt owed by us to Locke is to examine the Declaration of Independence, comparing it to Locke's Second Treatise. Such is the conspicuous borrowing that Jefferson did from Locke that one form of comparison would be to simply compare their language and phraseology. But such comparison is superficial, and taking out of context or simple coincidence would be quite adequate explanations for any similarity. Nonetheless, let the following comparison serve to demonstrate the amazing similarity. Locke writes:

"But if a long train of abuses, prevarications, and artifices all tending the same way, make the design visible to the people, and they cannot but feel what they lie under and see whither they are going, it is not to be wondered that they should then rouse themselves and endeavor to put the rule into such hands which may secure to them the end for which government was at first erected. . . ."

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And in the Declaration of Independence, Jefferson wrote the following explanation for the same concept:

"But when a long train of abuses and usurpations, pursing invariably the same object, evinces a design to reduce them under absolute despotism, it is their right, it is their duty, to throw off such government, and to provide new guards for their future security. . . ."

Even Jefferson's ringing declaration of our right to "Life, Liberty, and the Pursuit of Happiness" is quite conceivably a reworking of Locke's declaration of men's right to "preserve their lives, liberties, and fortune. . . ."

By far, however, the most effective means to compare the two works is to follow the logic of Jefferson's Declaration of Independence, comparing it step by step with the corresponding arguments in Locke's Second Treatise. At times I shall quote pertinent sections from the Declaration where corresponding arguments follow one upon the other; otherwise I shall paraphrase the Declaration, presenting the main idea of the passage and Locke's corresponding argument.

"When in the course of human events, it becomes necessary for one people to dissolve the political bands which have connected them with another, and to assume, among the powers of the earth, the separate and equal station to which the laws of nature and of nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation."

When Jefferson says that the people are about "to dissolve political bands" he refers to the Lockeian attitude that a political compact exists between the people and the government. When Locke spoke of the body politic being dissolved, the people returned to the state of nature. In Jefferson's case, the people assume "separate and equal station" as afforded by the "laws of nature" and of "nature's God." Jefferson has simply restated Locke's state of nature, notably using even Locke's phrasing, such as the "law of nature." Curiously enough, just as Locke used God for his source of "natural law," so does Jefferson imply that nature's God is the source of natural law. But Jefferson's purpose in this paragraph is not a description of the state of nature, but rather an explanation of the purpose behind the Declaration; that is, to define the reasons to reassume the state of nature. Again, Locke felt that no revolution should take place without specific reasons, proof of a government's abuse of power; Jefferson is about to supply such reasons, such proof.

"We hold these truths to be self-evident; that all men are created equal, that they are endowed by their Creator with certain unalienable rights, that among these are life, liberty, and the pursuit of happiness."
Jefferson is beginning to defend the colonists' right to revolt at the very same point that Locke did, that is with the natural rights given to man in the state of nature.

"That, to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed; that whenever any form of government becomes destructive of these ends, it is the right of the people to alter or to abolish it, and to institute new government, laying its foundation on such principles, and organizing its powers in such form as to them shall seem most likely to effect their safety and happiness."

Locke said that man gave up the state of nature to better insure his natural rights, and that is the reason Jefferson gives for the institution of governments. Man gave up his power to judge and concentrated it in the hands of the government; Jefferson's government likewise derives its power from the consent of the governed, from the consent of the people to enter the body politic. If government abused its power, the body politic was dissolved and people had the right to revolt; Jefferson states that when government "becomes destructive of these ends (the protection of the people's natural rights)", the people can overthrow it, a simple restatement of Locke's ideas. Once Locke's citizens returned to the state of nature they could once again enter the body politic, this time hopefully establishing a government that would better protect their rights; Jefferson says that the citizens may "institute new government" most likely "to effect their safety and happiness." . . .

Whether or not the influence of Locke upon the Declaration of Independence in any way diminishes the importance and grandeur of that document is a question that a great many people would ask. Yet these very same individuals would probably take great pride in pointing out that many Europeans were so illuminated by the ideals of our revolution that they chose to come over here and fight for us. The truth is that they were fighting for ideals that originated with them but then emigrated along with thousands of dissatisfied Europeans to the United States. We've grown to regard democracy as our own American brand of government and we usually let other people know it. If nothing else, a demonstration of the similarity between Jefferson and Locke (and between our revolution and European political theory as a whole) should provide an argument for a considerable change in our attitude towards the Revolution. The "natural rights" of Jefferson and Locke, and the democratic form of government that was devised to protect them, are the product of mankind as a whole and thus belong to mankind as a whole.
APPENDIX 16c

The January Series


(The following poems and commentaries are illustrative of the multifaceted psychological and intellectual nature of one high school student. His poems and essays were published in a 49 page booklet, with elaborate sketches by a classmate and close friend.)

This collection is dedicated to

My Friends

with the following words:

"If at verse you don't succeed, try, try again."

Brown Sugar

Too many roaches in my loaf of bread;
The hound's got too many fleas;
There's too many bills on my chest of drawers;
I got too much of doin' as you please;

Too many ants down on the kitchen floor;
Too many kids in the street;
Too many threats to my security;
Too many words on this sheet.

I can kill off them roaches in my breadbox;
Soak that hound in kerosene;
Pay off them bills and get a job, maybe;
Start a little sayin' what I mean;

Swab down the ants in the kitchen;
Stick the sprinkler in the street;
Start threatenin' everybody's security;
And ..ah... Oh, yes!
I am beginning to think that putting the explanation of these poems below them on the same page could be a serious mistake. I guess though if you, the reader paid any attention to the Introduction, these explanations aren't such a bad idea after all.

"Brown Sugar" was written with no particular resident of Watts in mind, and was titled "Brown Sugar" because of a sign on my bedroom wall which proclaims BROWN SUGAR. It could make an interesting folk song or ballad.

The punch-line ending is used here for the first time in the January Series, although it will crop up several more times in the collection.

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Druthers

A doe in the meadow chews grass with her fawn,
(The clouds are all laundered and white,)
They look like two statues on somebody's lawn.
(The dew glistens wet in new light.)

A grasshopper sits on the top of a hill,
(The flowers are lovely today,)
A-munchin' on grass shoots 'till he's had his fill.
(And love seems to float time away.)

A robin sings lively in tree tops up high,
(The pines seem to sigh in the breeze,)
His red breast is throbbin' as closer he flies.
(The world is at rest, at its ease.)

An inch-worm comes near me, he can't seem to fear me;
I pick myself up from the grass.
(With sunshine and live things, I'd sit out behind things
Just watching the seasons go past.)

This poem poses an interesting problem; is there one speaker or two? This may sound strange, but I don't know the answer any more than anyone else does, and furthermore, I don't think it matters. No matter how many speakers there are, they are doing what I would like to be doing instead of running around at the last minute trying to turn in a term paper or something that nobody really cares about anyway.

Walk down to the river bank just south of the Madison Junction Campground in Yellowstone National Park in the early morning during the summer; read this poem; then decide whether or not I could be talking about any other place.

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Invictus
--William Ernest Henley

Out of the night that covers me,
Black as the pit from pole to pole,
I thank whatever gods may be
For my unconquerable soul.

In the fell clutch of circumstance
I have not winced nor cried aloud.
Under the bludgeonings of chance
My head is bloody, but unbowed.

Beyond this place of wrath and tears
Looms but the horror of the shade,
And yet the menace of the years
Finds, and shall find me, unafraid.

It matters not how straight the gate,
How charged with punishments the scroll,
I am the master of my fate;
I am the captain of my soul.

---------

I couldn't resist the following pun on one of my favorite poems. The idea seized me as I was walking home one afternoon, and by the time I walked in the door the poem had only to be written down.

This is not a true parody in the Carrollian sense of the word.

---------

Invictus ab Shoesalesman

Forty years I've worked and scrimped
And saved; I've groveled on the rug
To fit a stocky matron's foot
Into a slipper much too snug
For any but her darling babes
To wear. Full forty years I worked
And now, at last, my time has come.
The wish that all those years had lurked
Within my heart is mine: I am the Manager.
Rewarded for my humble role,
I am the master of my feet,
I am the captain of my soles.
Girls are a pleasure to behold

---

**In Winter Time**

In winter time, in dreary days, When thunder dulls the skies, When kernels in the earth below Await the time to rise, When men retire within their homes Away from falling rain, The world has purred itself to sleep, To rest, and wake again.

---

**The Mirror of the Mind**

Resting here, in deepest thought, I find myself reflecting on reflections. Oh, yes, they're quite well known to me, I see every corner of every room they show; And yet, I wonder.

What causes a reflection? Something shiny surely; Something bright and polished makes a reflection. I've seen metal's cold and brooding images, And glass' crystal truths, of course; I've also seen the kindly flattery Which pools of water show.

But what is a reflection? It must be something. Something which makes the mind perceive A world which is not there, an image of a world Which stands with reality in another place.

And is that other place beside me in this room, Or is it deep within an author's thoughts, Reflected in his writing?

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On this note the January Series ends.
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APPENDIX 16d

CREATIVE WRITING MAGAZINES

(Excerpts from "A Sea of Talent," creative writing magazine by students of Mary Ann Simont's class, giving examples in intermediate school poetry.)

THE YOUNG SAILOR

--by Gilbert

One misty morning
by the sea
A strange thick smoke
enveloped me.
I breathed it in
both deep and long,
And then I heard the eerie song.

A fog horn struggling in the bay,
Its song rang out...
"Show us the way, The way."

My face grew damp.
I stood there dazed.
Could they not see my lantern raised?

I swung the lantern
to and fro
And shouted to the cliffs below
Hold fast, hold fast, you draw too near!

Too late, there was no relief
From a thunderous crash upon the reef.
I strained my eyes,
The terror to see.
But the devil's smoke
still blinded me.

Lord, you alone can save this day.
They must be helped.
Show me the way.
A shock of light, a golden ray,
Began to burn the mist away.

The rays were glorious, warm,
and true.
Help now could come below,
I knew.
In darkest wrath, In bitter pain,
How easily we call Your name.
But when we need you not, We find-
We too go on through life's mist
Blind.
A SHOREBIRD'S THOUGHTS
---by Luita

The sea is my mind
With it I do as I please.
When I am angry
It becomes a mad
Swirling
Mass of charging fury and foam
Spitting revenge at an insane world.
When I am disturbed
The sea becomes
Quiet,
Meditative,
As if gathering strength
For a soon-to-be battle.
When I am content
It playfully tosses
Pebbles
To its playmate
The shore,
And together they ponder
At what will be my next mood.

THE CHEST
---Vicki

He knelt in the sand,
And fumbled with the latch on the chest
That the tide had washed in.
Would it open? Indeed it would.
And feverishly he opened it.
The lid sprang back.
Inside? The Joy! He tossed aside the little things
That lay above the coins, the bills, the currency.
And rose, taking with him the chest,
And the money.
He rushed away to proclaim his find
To all the world.
And on the beach there lay
The objects the youth had flung aside:
A tiny silver crucifix
Leaves
And a book.
And the tide came in,
And washed them slowly away.
LONE

--by Ellen

Loneliness is a pale moon,
Floating above the pines
On a warm night.
Loneliness is a tiny kitten
Crying for its mother.
Loneliness is the warm night breeze
That murmurs through the trees.
Loneliness is a single crystal tear
Sliding down a baby's cheek.
Loneliness is a well-worn chair
Now empty.
Loneliness is a locked door;
Long locked.
Loneliness is the sad, dark eyes
Of an old man whose time is soon done.
Loneliness is sorrow, peace, and
An empty feeling in your heart.

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(Excerpts from Reflections '67, creative writing magazine by students of Margaret Nicholson, giving examples of high school poetry.)

TO WHOM IT MAY CONCERN

--by Kendra

While one child searches savagely
for a meager bite of bread
Another wants a piece of cake
as soon as he's been fed.
A young boy prays to win first place
possess a gold award.
Another runs a race of death
and grasps a gun or sword.
A pretty girl glares in the mirror
and loathes her twice-worn dress.
Another needs a simple shawl,
hers bluish limbs confess.
How can the world, divided so,
continue round the sun?
As one youth wades in poverty
another seeks his fun.
Is there anyone who sees it all,
the laughing eyes, the empty stares?
I wonder for which He mostly cares, if He loves them both;
If He's with a starving woman
as she grinds rice on a stone
Does He have the time to watch a play
or save a broken home?

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YOU HAD A FLOWER
--by Kristin

Babe: You were happy;
You had a flower,
A fresh and young flower
That worshipped the sun,
And caressed the dew,
And brightened the garden . . .
But it died.

Youth: You were glad;
You had a friend,
A warm and just friend,
Who worshipped your time,
And embraced your joy,
And shared your sorrow . . .
But he died.

Lover: You were loved;
You had a woman,
A tender, true woman
Who worshipped your eyes
And forgave when you lied,
And made tears disappear . . .
But she died.

Old Man: You were beaten,
You had a flower,
A worn, wilted flower
That worshipped the dark,
And bent under the dew
And kissed the grave . . .
As you died.
UTOPIA
--by Galen

Everywhere
The sunless cloud
Born of fumes from stinking Babels
Beshrouds a gloomy mortuary
On whose sinking streets and sidewalks wander,
To joyless toil, The speechless shadowless dead.
The sea's brack,
Turning, churning, in a black-grey bed,
Spewing up onto fenced-empty beaches
Slowly overflowing lanes of waste,
Stains the banned, grieving sand.
Leafless trees
Imprisoned along long-known rain-running walks
Scarred sad
Are crumbling stone,
Covering the silent skeletons
of songbirds scorched
By blaze-breathed birds and beasts
with beacon-eyes.
Roses and blues of one day bloom no longer;
Stronger than they, endless weeds of fog choke
Life from the unwelcome new-born
And speak
As,
Challenging the growing rows of towers loud
With proud smoke and furnace-fire,
Black-besmeared billboards spoke:
Come
And see the never-ending city.
The Individual in Society
---term report by Paul

Every individual has a place to fill in the world, and is important in some respect, whether he chooses to be so or not.

Nathaniel Hawthorne, individual

I wish to dedicate this effort to the Back to Back Class and moreover to the institution of team teaching; may it continue as a citadel of progressive education and reach the great heights for it envisioned by this consecrator.

Introduction

Man, the two-legged creature that walks the earth, is indeed a strange inhabitant of this or any other planet. Binomial nomenclature describes this peculiar air-breather as homo sapiens, a Latin cognomen for intelligent man. Linnaeus, the deviser of this system of biological classification seems to have hit the proverbial nail on the head. For he recognized that this certain species, unlike the others, has a brain of sufficient sophistication so as to utilize that essential in homo intelligens, thought.

Freud tells us that homo intelligens, in the possession of such a brain, displays certain psychiatric configurations in the day to day utilization of said brain. Others tell us some who claim membership in the species make no use of this tool. Still others warn us of such evils in homo intelligens makeup as greed, lust, complacency, prejudice, bellicosity, etc. And then there is Dame Gloria Woehler, overseer of Back to Back Class, who, like the soothsayer, warns us of man's fatal flaws:

CONFORMITY! !Heavens!
CRITICISM! Mercy!
PROGRESSIVISM! %$#$

The author, in his notoriously prosaic style, will deal chiefly with the latter caveat in his term report. A wise man once said: "Tell 'em what you're going to tell 'em, tell them what you've told them, and then tell them again." The author is going to now tell you; homo intelligens shall be twisted, turned, scrutinized, magnified, and albeit the author frowns on such practices, generalized.

The author could quite easily begin this paper with Noah Webster's definitions of conformity, criticism, and progressivism, yet he chose not to. If homo intelligens does indeed display these idiosyncracies and others left unmentioned, then can it be correct to substitute the efficacy of definition for the completeness of the use and even the cause of such behavioral traits? To this the author replies in the
negative, and instead of expedient jargon shall produce relationships, truisms, and motivations.

These traits are certainly not chronic, as is a deformity, but rather is acquired from the environment. Yet they are as common as those who possess them; for they indeed represent a tangible part of man's existence. They control his ego, motivate him, mutate him, and affect his every thought. These traits described earlier are not as inanimate as their word representations might appear, yet homo intelligens can mask them at will, as he masks the words which represent them. Man himself has shown them to be embedded deep within his awareness.

But man, it seems, is a considerate one, for he provides us with crystal clear evidence of these traits. Even if we cannot cure them, we can readily observe them and describe them to the peruser of this manuscript. Homo intelligens, the exhibitionist he is, challenges even the most casual of observers to exist unaware of these traits. He does so by means of:

- Folk Songs
- Ethnic Groupings
- Values
- Art
- Architecture
- Men and Machines
- Language
- Jazz
- Mass Media

The two following examples are illustrative of the nine essays which appear in the body of the paper:

**Folk Songs**

The folk song, as we know it, expresses and interprets the national growth of our nation. But more importantly, it expresses the feelings and emotions of the everyday man and acts as a medium of such expression.

Few folk songs tackle purely political problems. The great majority attain a certain satirical impact upon the listener. In American Folk Song's humble beginnings, these tunes were merely secular hymns written with religious texts. An example of this is "Virgin Mary." But even in these early days, man's critical nature is illustrated in satires such as "Good Old Colony Days."

The American has sung folk songs for various reasons. Some were work songs which seemed to lessen the burden of their work. Yet the immigrants sang of their old country in minstrel type arrangements. Those who sang them were known as "shanty boys" from the French word meaning to sing.

The Western Migration marked a large upswing in folk songs. Those hardy pioneers were quite liberal in the content of their folk
songs, indeed they were quite progressive in such works as "Banks of the Ohio." Folk songs during this period also acted in a commercial capacity, as unfortunately folk songs must, when land promoters in the West "advertised" with such ballads as "Oleans," which told of the great beauty of the West.

Please note in the previous paragraph the word progressive was used for the first time in the body of this term paper. The author feels it is his responsibility to touch on this subject in a little more detail. The progressive tendency in the knowing man is that quality which makes him strive for if you will "the better mouse trap." Homo intelligens realizes the future must bring change, and in so doing reasons that this change need not be toward the more mediocre, much less remain the same, and at that point in his thought decides to better himself. Was it Victor Hugo who said, "Progress--the stride of God!"

The cowboy's folk songs were simple in design, for they acted only to lull the cattle, nervous from a long drive, to sleep. They usually told of the cowboy's lonesomeness as in what can be considered the national anthem of cowboys, "Home on the Range."

At this time, an art form in music emerged which was destined to change the entire face of folk singing; this form was called the ballad. These songs originated in the railroads where they were used as work songs. They told of such heroes as John Henry (in the ballad bearing the same name). Also popular at that time was "Mule Skinner Blues." Usually the ballads told of disreputable men, yet they always glorified them, almost to the point of deifying them.

These folk songs were sung mainly at the folk singer's equivalent of a jam session--the hootenany. This entity is quite prevalent today in some night spots around the country. They usually occur in smoky second stories, inhabited by an assortment of guitar and banjo strumming folk singers. The audience merely sprawls on the floor in college sessions and burns logs at ski resorts where folk songs are offered. Another common name that has almost replaced the hootenany is the "coffee house." Young people inhabit these places which offer mocha coffee at anything around $.60 a cup.

During the early years of this country man saw fit to place his fellow man in bondage. He made him toil at hard labor, and saw to it that he have no family ties whatsoever. This evil was to be known as slavery. The Negro reverted to a medium most familiar to him in Africa, music. In such songs as "Elijah Rock," the Negro lashed back the only way he could at his master in spirited pieces as the above mentioned. Because of the hardships placed upon them, the Negro seized Christianity because of its promise for a better life in the future. In many of the negro spirituals, references are made to biblical characters and occurrences.
Many times the negro spiritual acted as a medium for communication, for it was considered a crime for the negro to learn how to read. Such songs told the way for escape for the promised land, the north. In such songs as "Follow the Drinking Gorge," the Negro was told to follow the north star and watch for tracks left by a one-legged man. Because the Negro slave thought himself the equal of his master and because of his longing for freedom, he was critical and progressive. (Criticism as an entity in this discussion, shall be dealt with in greater detail in upcoming sections.)

Today we are experiencing a revival of folk singing where the lyrics serve a different purpose. (The folk song always served a purpose.) Today's purpose is to criticize. Yet this ought not be shunned, it should be admired, for any free society must have dissent and moreover must tolerate and listen to it. Today the lyrics of many folk songs are questioned for their content, sometimes thought to be risque. The lyrics of Bob Dylan in particular are under heavy scrutiny. Everyone is looking for the hidden meanings behind songs. In that group of scrutinizers emerges two distinct factions, the "Cleans" and the "Dirties" if you will. The Dirties are contending that such songs as "Strangers in the Night" has homosexual references. They seem to delight in the decoding of implied sexual innuendoes. The rival group, the Cleans, merely maintain that lyrics should not be censored as they are part of the entire art form.

Architecture

"Architecture encloses space so that beauty and utility are one."

Whatever we are is reflected in the architecture of our time. One might say the buildings and edifications of man are the mirror image of homo intelligens. If this is so, then this field of art can certainly be used to prove the author's major premise; that is, that man is basically conforming, critical of himself and others, and progressive.

At this time the author would like to deal further with the term of conformity. Homo intelligens wakes up every morning and enters a society filled with other such men, each possessing the same basic anatomical features. Most of them talk alike, eat the same foods, and dress the same way. Thought, unlike the others being intangible, is often found to align itself with the aforementioned entities. None are unapart from their environs, and are dealt with as such and under those conditions.

Whenever one studies the field of architecture, he must realize that words and photographs give very little justice to the total art form concerned. For the quality of space and spirit can be fairly examined only at the structural reality. The written word and the
drawing are ludicrous expressional media; the only proper one is the building itself.

As in any art field, there are the traditionalists. And certainly architecture had hers. American traditionalists are those who hand on or record a statement or belief from generation to generation. These men make strong statements about their beliefs. Some truly great American traditionalists are described below.

Louis Henri Sullivan (1856-1924). Sullivan was truly a man of sensitivity and great creative powers, although he was extremely arrogant, and this unfortunately caused us to lose all the great works he was capable of creating in the last twenty years of his life. For he was a "dirty old man" as it were. His critical nature became the most paramount reason for his existence. This author maintains that one of the most important obligations of the critic is not only to criticize but to offer alternatives. This Louis Henri Sullivan did not do.

Mr. Sullivan patterned his life and his works after this profound maxim which he originated: "Form follows function." He believed, "Structure and function are mutually related. Function produces structure and structure modifies and determines the character of function."

Sullivan maintained that the building mirrored the society for which it was constructed. He said that the real function of the architect was "to vitalize buildings with material, to animate them with a subjective significance and value, to make them visible parts of the social fabric, to infuse into them the true life of the people, to impart unto them the best that is in the people, as the eye of the poet, looking below the surface of life, sees the best that is in the people."

One can learn much from the life of Louis Henri Sullivan. In insisting that architecture must be responsive to society, and in his own gradual wasting away during the September of his years, he set down certain universal truths for us to follow.

Henry Hobson Richardson (1836-1886). Mr. Richardson's edifications are easily distinguishable from any of his contemporaries, for his works have a strong sense of repose, stability, and strength. These qualities appealed to the rough industrialists around 1880, during the Gilded Age, and because they liked this style, they felt at home in his buildings. This is very important when discussing architecture. If the architect himself, in his views, beliefs, feelings, is congruent to a person, then that person will like the architect's buildings and will indeed "feel at home in them."

Because Henry Hobson Richardson was given many commissions, he had a chance to combine beauty with utility; there is unity, coherence, and oneness in his work.
It seems all great architects in the traditionalist attitude try to combine utility and beauty. This was quite obvious even in the Back to Back Class Field Trip. In most of the buildings of this period, the superfluous was frowned upon.

Frank Lloyd Wright (1869-1959). Frank Lloyd Wright is probably the greatest architect of them all. His works and influence can be found everywhere. What distinguished Mr. Wright from all other architects? The answer is quite simple. He had a great love for nature, being brought up in an agricultural environment. He always maintained that a house ought not be built on the earth, but rather in the earth.

Wright always had a group of admiring proteges following him around wherever he went. He later remarked that they were a necessary part of any egotist's life. The latter remark was probably not one of his more facetious moments, but rather a statement that he made in criticism of himself. Please take careful note that this is not in criticism of others, but himself. Homo intelligens is just that type of being.

In Frank Lloyd Wright's home, the Taliesan, in a desert near Phoenix, Arizona, was built his fellowship to permit a completely integrated life of creation and recreation. He worked there with his apprentices who participated in a wide variety of activity, such as farming, animal husbandry, conservation, and cooking. Wright had a passion for all art forms, music being his probable favorite. But he also loved movies, and showed them quite frequently at the Taliesan.

All in all, Frank Lloyd Wright had a profound statement to make about homo intelligens. Today man tends to forget that man has virtually emerged from nature and that breaking away from his beginnings would only cause his destruction.

Architecture is very important as an art form. When viewing it, as one views any other art form, one must not look at any certain part of the building or interior (such as a certain wall or chair), but rather should consider the total effect.

Conclusion

The author has shown homo intelligens in nine different aspects of his existence. He has been shown to be basically conforming, critical of himself and others, and progressive.

His folk songs have been shown to have originated through his progressive wish to be set free from bondage and also because he felt critical of his slave owners. Since folk singing in itself is a group activity, it surely must be conforming.
Man's values were shown to be progressive for they must have a basis or foundation from which to start. And since they need such a basis, they must continually be changing. Values and morality are certainly conforming and critical of people, for they attempt to set down certain protocols by which people ought to model themselves.

Homo intelligens architecture, being in itself a medium for man's expression, must demonstrate these three idiosyncracies. If the architect is critical, conforming, progressive, then his buildings must be them, too.

Certainly it is intuitively obvious to even the most casual observer that man's language displays the above mentioned characters. Since language is in a continual state of flux, assimilating new words and meanings at fantastic rates, it must be progressive. If certain words in language or even their meanings are challenged by others as not being morally sound, then it must be said of it that it is critical. For without language, man would not be.

The mass media, it is said, are pushing us toward passivity and conformity. In exposing evil, it is critical not only of themselves but of others. And in that it strives for amelioration, it is surely progressive.

Men and machines have been demonstrated to be possibly the most progressive of them all. For machines, in trying to make work easier and faster, are aiming toward a world of more leisure time. This author feels that machines shall not eliminate jobs, but rather create more jobs and give homo intelligens more time to make something of himself.

How about art? Is there ever a more efficacious medium of expression than art? Is it certainly more eloquent than even the spoken word? Just as mass media has been shown to be an outlet for man's thought, and just as folk songs have and jazz shall be, art is congruent to this author's major premises.

Ethnic groupings are very important in the world of homo intelligens. For they demonstrate quite clearly man's attitudes toward other peoples.

William Shakespeare summed man up when he said, "What a piece of work is man! How noble in reason! How infinite in faculty! In form and moving how express and admirable! In action how like an angel! In apprehension how like a god! The beauty of the world! The paragon of animals! And yet, to me, what is this quintessence of dust? Man delights not me; no, nor woman neither, though by you smiling, you seem to say so."
Addenda to the Paper

Footnotes
Bibliography
Folk Song Time Line
Folk Song Committee Report
Mass Media Time Line
Mass Media Notes
Mass Media Presentation Report
Participation Projects
  Language Committee
    Some Americanisms and Their Authors
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BIBLIOGRAPHY


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Hughes, M., Development of Means for the Assessment of the Quality of Teaching in Elementary Schools. Salt Lake City: Univ. of Utah Press, 1959.


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**Identifiers**
The two-year study The Improvement of Teaching Procedures for Gifted Elementary and Secondary School Pupils was conducted with a group of 45 specially selected teachers. The study procedure included special case studies, readings, teaching guides directed toward classroom process and content appropriate for the gifted, videotape study and evaluation, audio-tape evaluation, and special demonstrations.

Evaluations were conducted by ten judges rotated in changing pairs three times during the study. The judges used a scale entitled Rating Scale of Significant Behaviors in Teachers of the Gifted which had been validated and factor analyzed. The teachers made audiocassettes for analysis, both before and after the study. The audiocassette analyses also were made by judges working independently.

The report indicates highly significant gains by the teachers on rated behavior for all factors in the rating scale, and for teachers and pupils on several higher-level cognitive functions on the audiocassette. Suggestions are made for use of the study materials and procedures by study groups of interested teachers.

The materials used by the teachers, the rating scale and form for audiocassette evaluating examples of teacher lesson plans and teaching suggestions, and illustrative pupil products are available in the Appendix. These materials can be used or adapted for use in other school settings.