DIMENSIONS OF LEARNING FOR THE HIGHLY GIFTED STUDENT

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PALO ALTO UNIFIED SCHOOL DISTRICT 1974 - 1977

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PREFACE

The study contained herein is a result of the commitment and dedication of the staff of Palo Alto Unified School District. Its concern for students and for quality experiences for those students has been a forceful and consistent guide to the investigators of this project as it was conceived and implemented.

It is to them that this study is dedicated in the hopes that in some small way it may "make a difference."

Ruthe A. Lundy Richard Carey Rosemarie Moore

SPECIAL ACKNOWLEDGMENTS

Rose Drewek who did the original literature search.

Julie Stulac, Pauline Brunhouse and Tom Tobey who did the interviewing.

Joyce Bryson and Jean Gong who helped develop the interview form.

Kay Cook, Joe Ruth and Miles Putnam who helped identify the samples.

Vida Arant who spent many hours at the typewriter transcribing the interviews.

Shirley Reith who helped in significant ways far too numerous to mention.

Jim Hessler who reviewed and critiqued the paper.

Isabel Rose who edited the manuscript.

Joyce Hardy and Cecil Munsey who provided support and understanding.

And finally,

Ruth Martinson who served as mentor, inspiration and model.

DIMENSIONS OF LEARNING FOR THE HIGHLY GIFTED STUDENT

THE PROBLEM

In a school district with a large proportion of students identified as academically gifted (20 percent in the Palo Alto Unified School District during the period of this study), the question arises as to the effectiveness of the programming for the entire group of gifted students. Within the group of gifted much concern has been expressed for the highly gifted (defined in this study as those 3+ standard deviations above the mean on nationally normed individual tests i.e. WISC or Stanford Binet, or with I.Q. scores above 145 or 148). The literature has raised some questions about this group in comparison to those students in the lower ranges of giftedness (130 to 145). The program coordinator and other staff working with these students were concerned with the difficulty of making qualitatively different and appropriate educational programs for these students.

In view of these questions, it was decided to design a study for the purpose of isolating and focusing upon the learning characteristics of the highly gifted. Since the learning of these students at the elementary level takes place within a classroom of students with varying ability, it was felt that some comparison of these characteristics with those of the academically "average Palo Alto student" (defined in this case as students with academic aptitude scores on national norms between 50th and 75h percentile) might be of value. other words, what kinds of individual programming might be needed by the academically highly gifted student which might be different from the needs of the larger numbers of academically average students within the same classrooms? At the secondary level

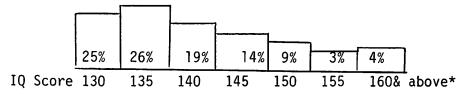
there are some special advanced groupings for the gifted; however, for a portion of the day they are in classes with average Palo Alto students.

POPULATION

The Palo Alto Unified School District has a student enrollment of 12,500 (during the period of the study), and over 2600 had been identified as gifted using state criteria (i.e. over 20 percent). State criteria include an individual intelligence test score at or above the 98th percentile in elementary school, or, at the secondary level, a group academic aptitude and an achievement score in reading or math at or above the 98th percentile.

Another perspective on the abnormal distribution of the academically gifted in Palo Alto is illustrated by the graph below. It shows that over 30 percent of the gifted population have scores above 145. The number of students who score 3+ standard deviations above the mean (i.e. 145 or above) in a normal distribution is 13 in 10,000, while in Palo Alto it is approximately 420 per 10,000. Therefore, it is clear that it is not a small or insignificant part of the student population that is being studied.

TABLE I: Distribution of IQ Scores Within the Gifted Range in Palo Alto, 1974-75



(*The test norms do not discriminate very well above 160.)

SETTING

Programming for the students identified as gifted in Palo Alto spans two decades. Provisions for these students at the elementary level takes the form of enrichment within the basically self-contained heterogeneously grouped classroom. These provisions are individually designed programs which provide qualitatively different experiences for the students. At the secondary level Honors and Advanced Placement classes are available for the student.

Student, teacher and parent evaluation of this system of providing experiences for this population has, over the years, been generally positive and supportive.

As described in the statement of the problem above, however, some concern was felt for the educational programming for the students in the academically highly gifted range.

PROCEDURES USED IN THE STUDY OF HIGHLY GIFTED STUDENTS AND THEIR APPROACHES TO LEARNING

OVERALL METHODOLOGY

The study was conceptualized as essentially inductive. The method was to gather subjective data in a systematic way from a large number of students identified as highly gifted. These data were recorded on tapes and transcribed for review by the three investigators who helped design the data gathering instrument. The analysis took place over a period of two years with interim reports, the formulation of additional questions and the raising of new issues.

IDENTIFICATION OF THE SAMPLE

It is important to note the details of how our gifted sample was identified. The students were identified as gifted by either a Wechsler Intelligence Scale for Children or a Stanford-Binet.

None of the students were chosen from those identified by group measures. Both of these instruments put a certain premium upon speed of reaction and timed exercises. Our group of academically highly gifted students may also be gifted in "academic speed;" that is, other potentially highly gifted students without the capacity for completing academic tasks quickly might not be in our sample of "highly gifted." Therefore, if this speculation is correct, it has implications for educational programming (and probably for identification procedures). Our sample included students who are not only accurate but very quick in their academic responses.

At first the study was going to include only highly gifted subjects, but early in the planning it was decided to add a comparison group of students matched on sex, grade level and class. it was decided to add the comparison group was twofold. First, a frequent question from teachers and others when we presented the early findings was, "But are these characteristics any different from other more average students?" Second, "How might your findings help us provide for this group when they are in a learning environment with other PAUSD students?" Thus, a comparison group was chosen to represent as nearly as possible an "average" PAUSD student. Since the average score on group academic aptitude tests is about at the 65th percentile for all students, a range of from 50th through 75th percentile was used for selection to the comparison group.

Another change in sampling took place when the 8th and 1lth grades were added. The reason for this was the frequently raised question, "Are there likely to be differences in learning characteristics of the highly gifted that change as they get older and in higher grades, or will any generalizations you reach hold for later years?" Also, teachers and staff in the secondary school showed definite interest in any findings that might help them program secondary school students.

The sample for the study is shown in TABLE II.
This sampling was designed to allow for comparisons over a range of developmental levels and grade levels.

TABLE. II.

GRADE	HIGHLY GIFTED	COMPARISON
3	30	30
5	38	38
8	20	20
11	23	23

DEVELOPMENT OF THE INSTRUMENT

The first step for developing an instrument for describing individual differences among very able students was asking three teachers with considerable experience teaching highly gifted students, to describe the learning styles and preferred learning situations of highly gifted students with whom they had worked. (One teacher was also a parent of three such children.) This was completed on released time when teachers had an opportunity to review their experiences in depth, with the three investigators taking notes and listening to their commentary.

These descriptions gave the investigators some in-depth descriptions of how highly gifted students react in classes which contain a wide range of academic aptitude. From these descriptions standardized interview questions were generated. The expectation was that very able students could provide analysis and insight into their learning characteristics when provided with the right stimulus.

A structured interview of fifteen items was developed, and tried with a small sample of fourth

and twelfth grade highly able students. In addition, the same instrument (slightly reworded) was used for teachers of elementary students (third and fifth grade) who were also interviewed. (See Appendix I) The appropriateness of the questions seemed to be confirmed by the reactions obtained from the teachers and the grade groups. In addition, several useful interview "probes" were developed, making for a more reliable interview instrument. This same instrument was used for the entire sampling group, and interviews were tape-recorded and transcribed for review by the investigators.

ANALYSIS OF DATA

The process of doing the interviewing of all the groups sampled and getting the data transcribed was lengthy and took place over two years. During this time interim status reports were given to teachers, administrators and guidance workers. These reports resulted in the enlargement of the study from an elementary level to include secondary level, and the development of a comparison group. A desirable result of the interim reports was a widespread use of the interview instrument by school staff in developing programs for the general students identified as gifted.

The analysis of the data proceeded over many meetings and discussions after reading and rereading the interview transcripts. This resulted in the identification of four dimensions which seemed to describe the learning characteristics of the highly gifted. These dimensions were:

- A. Instructional style
- B. Peer context
- C. Independence
- D. Variety

The discussion of the findings of the study will be organized around these four areas.

A. RESULTS: INSTRUCTIONAL STYLE

The importance of the teacher's instructional methods and style is a major theme with highly gifted students at all levels. When asked to describe "best, most rewarding experiences of the school year," or the settings "where you learn best," the highly gifted included examples of teaching methods and of teacher responsiveness toward student ideas.

An opportunity for discovery learning or problem solving is most important to these students, with the adult resources available according to a student's need for them. For example,

> "I like to discover facts and things, rather than having someone tell me thirgs..."

and

"I like a teacher who does not help you all the time, only when you really need help."

Teaching methods cited as giving chances for discovery learning are class discussions, projects, problems or applications of new knowledge, simulations and learning games.

To be without the time and opportunity to locate information and to use new ways of learning brings disappointment and disinterest for the gifted students. Frequent or routine use of any method (lectures, reading with reports to follow, same book or workbook, same kind of tests) prevents their discovery of new ways of learning. While giving students answers or information prevents their discovery experiences, they mention also that use of single or few

methods of study prevents a variety of experience in their learning how to learn.

Enough students describe the importance of discovery learning experience and of applying or sharing their knowledge, that programs for gifted students need to include such opportunities routinely. Each day, in some subject areas, and weekly for all subject areas, highly gifted students probably need to have these opportunities.

A <u>teacher's readiness to listen</u>, to <u>respect</u> and understand what students say, and to <u>accept suggestions</u> are also very important to the learning of highly gifted students, at all levels.

Typically,

"I like teachers who are understanding. They act like they really care for you, (and) they make things fun for the whole class...."

and

"...a teacher who likes to talk about things, who listens to you, too, who doesn't interrupt and change the subject."

and

"...one who checks if we understand, accepts our ideas....one who takes suggestions."

The quality of responsiveness desired in a teacher's style is remarkably similar for highly gifted students grades 3-11.

A teacher's <u>humorous and playful approach</u> to instruction is also appreciated by many highly gifted students.

"I like _____, she is funny and we laugh a lot. I don't like a teacher who yells at you and gets mad...."

and

"I would use games to learn things...it's fun and I learn more that way..."

and

"My teacher helps me more and does it by making a little joke."

The kind of lightness, the keeping of a perspective of several views at one time described by highly gifted students, is reminiscent of the ways many of them use their own imagination in school learning situations. (See Interview Question: What Part Does Imagination Play in Your Life?)

Perhaps an ability or a preference for playful approaches to a situation is an aspect of some highly gifted students' learning style. It would be interesting to investigate whether those highly gifted students would rank high on tests of creative or playful uses of objects and concepts. For while giftedness and creativity are not closely related in the general population, for those students who are highly gifted and specifically creative in such ways, school programs could include provision for their individual learning style.

Instructional style and aspects of learning

The identification of highly gifted students is by an individual intelligence test score. Both WISC and Stanford-Binet tests measure abstract and conceptual ability...the ability to generate and use concepts. The tests present standardized situations that require new uses of old concepts, or development of concepts, for successful performance. Highly gifted students succeed above 99 percent of the population. So, it is not surprising that students selected for very high ability also gain great personal satisfaction from using their conceptual ability in school learning situations through discovery, learning of new concepts and using familiar concepts in new ways.

Differences by developmental level

While many similarities exist across school levels in the student preferences for instructional style, it is interesting to look at differences as well.

Secondary school highly gifted students more often prefer and learn best when activities are clearly related to the purpose of the class, when teachers show their own interest in the subject and the activities, and when the class atmosphere is informal yet busy. Perhaps the departmental organization of studies, and the teacher's evident choice of materials and approach, lead older students to notice such learning situations. They describe personal behavior by teachers, in contrast to a 'role' or a 'procedure' of teaching, as helping them learn better in all subjects.

Elementary school highly gifted more often describe humor, lightness, and learning through games as important qualities for their learning settings.

<u>Differences</u> between highly gifted and above average groups

Many qualities of teachers' behavior toward students are desired alike by the two groups....caring and interest, listening, providing variety of methods for learning, allowing for students to work at different speeds and work with students of like speeds, and allowing students to pursue different interests within each subject area.

Yet, important differences are found in the purpose of adult (teacher) availability and interest in students. The above average students want thorough explanations, non-judgmental assistance when having difficulty, and a teacher taking time to help and not hurried or impatient in responding. This is in contrast to the members of the highly gifted group who wanted to be left alone until they ask for aid, then as little as necessary, so they can return to their solitary or small group learning efforts.

B. RESULTS: PEER CONTEXT

Peer context is a major element in school learning, and the student interviews included very clearly described sets of variations which actually influence their learning experiences.

Highly gifted students at all levels want to choose the peer context in which they learn, and they also have definite purposes for the choices they would make. Two aspects of peer context seem to be important: learning alone, and teaching others, including tutoring.

Working or learning alone helps many students to develop understanding through reading, to improve personal competence in writing or in music, and to formulate ideas. Some students make the choice for learning alone by subject matter such as English or mathematics, others by activity such as discussion vs. paper work.

Small classes or small groupings up to ten are chosen for shared learning activities such as projects, or for the teacher to serve as consultant while students share their learnings and their methods of finding out via discussion.

Tutoring or teaching others is cited also as a desirable way to learn. To help someone is reported a good way to understand better oneself, and it brings satisfaction to help another or to be sought for help. At the same time, several students clearly state they do not like to help others, or only in certain subject areas. So individual preferences are very important among highly gifted students in this sub-dimension.

<u>Differences</u> by developmental level

While highly gifted students want the choice of individual and group settings, the elementary students cite subject matter area as the basis for choice more often than secondary students. The older students, however, more often mention the pleasure of doing well with peers, or of sharing ideas together and developing new viewpoints than do the elementary students. Since the social learning experiences are very important to secondary school-age students, this difference in purpose served by group settings is not surprising.

<u>Differences</u> between highly gifted and above average groups

Both groups want choice of peer context, whether to learn alone or with small groups. The above average group cites the purpose of mutual aid, of getting and giving necessary help, of working together. The highly gifted groups cite the discussions which produce different opinions and ways of learning as the purpose for group work.

C. RESULTS: INDEPENDENCE AND DECISION-MAKING

At all grade levels studied, the highly gifted students described in the interviews their need or desire for some part of their learning to be self-directed. This is a very frequent theme in the interviews. For example, a typical reaction to the question, "How do you learn most enjoyably and best?"

"I like the kind of class where you are put on your own...it is more fun. I don't like to sit and be bored."

The very strong desire for independence is accompanied by discussion suggesting that for many of these students the lack of some independence in learning is painful. Closely related is the observation that this need is related to pace and timing. Some students cite the disadvantage in frequently finishing ahead of others and either being punished by being assigned repetitious work (which most often highly gifted students do not need), or simply wasting time doing nothing.

So many of the highly gifted students describe problems of this kind in their learning that it seems important for many students to design educational experiences which program "independence" into their learning. Also, perhaps a well-balanced program for the highly gifted student needs to review whether they have the study skills or maturity to be self-directing. Rather clearly they desire, and they have differences in academic aptitude that strongly suggest, the need of independence in their learning program, particularly for that part of learning related to timed assignments.

<u>Learning in relation to independence -- differences</u> for the highly gifted and above average

The interviews revealed a considerable difference between "above average" and "highly gifted" students in relation to independence in learning and the time dimension. Both groups made comments regarding being able to decide how fast to cover materials, but the average group more often wanted things to go more slowly. The highly gifted almost always wanted to be free to go ahead on their own faster, and they felt slowed down by waiting for others or by having an assignment that was not appropriate to the time span given to it.

Another possible difference, although not so clear cut, is that the highly gifted tended to have more confidence that they could go ahead on their own. They more frequently described the teacher as the "consultant" for the use of their time rather than the "director." The teacher who can help them at the time they need help, and then provide them with another assignment, is of great value to them. Whereas the patient teacher who carefully takes the time to go over learning carefully is more frequently identified by the above-average students. Thus, although the degree of maturity was not obviously different for the highly gifted and above average student, more highly gifted students seem confident in going ahead independently in learning situations, if allowed to do so.

Another possible difference in functioning might be termed "desire for depth of pursuit." More highly gifted indicated a desire to pursue a subject area at some length in some detail. This may be viewed as contradictory to the earlier observations but actually it is not. Finishing up the "compulsory" or "basic" content does not mean it has to be superficial. Once a student gets past fundamental learning the question of how to do more creative or self-expressive activities becomes important. For example, highly gifted students often gave a description of a lengthy detailed type of

project as their "high point" of learning for the school year.

Another frequently mentioned point by the highly gifted students was related to having to do workbook or repetitious exercises. The repeated application of a concept or skill with a number of identical or very similar problems was boring and not felt to be productive. Although the comparison group often had similar comments, they were not so frequent nor so sharply worded.

A final comment about the research methodology in this study: the highly gifted were identified on the basis of two different individual tests which were largely verbal. Because the identification procedures put so much emphasis upon verbal aptitude, it is difficult to separate what is really "different" in their learning style from what is simply said more clearly or eloquently. of the dimensions of desired independence are similar to those found in any discussion of individualized learning, but the highly gifted seem to articulate these needs more clearly and urgently than others, possibly because they experience the pains of lack of individualized programing more, and possibly because they are more articulate in explaining what they would like to have happen to them in academic situations.

Differences by developmental level or grade

Since our study covers third through eleventh grade, it is interesting to note differences that might be attributed to age and maturity of learners, or to the differences in the kind of educational programing they were experiencing. The senior high students less frequently complained of lack of options than did the younger students. Possibly the senior high programing does provide more options, and also, possibly they have more frequently learned to discover or create new options for themselves. Also, the discussion of learning tends to reflect

subject area disciplinary differences more frequently in the higher grades.

Another difference is that the higher grade students are more likely to have specific critical commentary about a teacher's style and how he/she might improve than the lower grade students. The element of "activism" with regard to teachers and education is more evident in the later years. In fact, it was interesting to note the large number of highly gifted who describe giving input that improves the teacher's performance as an outstanding or a "high point" educational experience for them. Possibly programing that encourages more discussion of the educational process itself and how to alter it is valuable for the older highly gifted student.

One other difference is in relation to grades and out-of-class activities. The secondary students mention grades and evaluation of learning much more frequently. This is not surprising since the elementary students have their progress reported in conferences, whereas the secondary students have their progress reported on written cards. The highly gifted, more frequently than the above average sample, find grades rewarding. An interesting corollary is that at the higher grade level the above average student more frequently than did the highly gifted mentioned a social or sports event as rewarding. Possibly the students' school "style of life" is influenced much more clearly by methods of reporting pupil progress in the secondary school than in the elementary. Despite the obvious differences, however, it was possible to mistake the comments of some of the younger highly gifted students with the older ones. Ways of describing the impact of school and learning are not so radically different as to be easily discerned.

Similarities in above average and highly gifted

Most of the above discussion related to differences. A number of similarities exist. One is that much of what the highly gifted students describe is

different only in sharpness of expression.

Another similarity seemed to exist with regard to subject matter. Both groups tended to want more structure in science, math and language, and more independence in English and social studies. This near consensus did not seem to be related to liking or not liking a subject area, but related to the subject area.

D. RESULTS: VARIETY

Variety in learning experiences is valued by the highly gifted throughout the study. By definition variety means various, varied, lack of monotony. The importance of such diversity in school experiences became apparent through student responses to questions No. 1 (What is the most important thing that happened in school today?), No. 4 (What was the most exciting school experience last year?) and No. 15 (If you could have any kind of situation at school that you wanted, what kind of thing would you ask for?). The interest/ value in variety was expressed in two dimensions: variety of experience and activities within the parameters of a subject, e.g. reading, English, math, and interest in a variety of instructional methods used by the teacher.

In comments relating to variety within a subject area, students included interest in "more experience with different types of science," "using real objects in math," "more selection of books in the classroom," "go in depth in a subject," "learn what black history had to do with us today, not 100 years ago," "discuss ideas," "computer classes," "language labs" and "we did research on China -- all about mythical animals like dragons and lions." Students also made an appeal for new and different assignments, e.g. do an autobiography of their parents, make a puppet show of their visit to the zoo.

Variety in instructional methods included comments on the value of seminars, plays, making of bulletin boards, movies on various subjects, independent study, small group study, alternatives to reports for displaying knowledge, slides, tapes, plays, dioramas, creative stories, rewriting resource materials, kids teach kids, special interest groups. Field trips were valued and pleas to: "Let us learn in the

community. When taking cooking, let us go to restaurants and see how people cook." "Let us see what occupations are like," trips to missions, planetariums, zoos. The use of resource persons in the classroom was mentioned particularly by the older students. "The most exciting experience for me last week was the law student who came to talk about freedom of the press."

One fifth grader said, "What's exciting to me is learning something new!"

<u>Differences between the highly gifted and the above average</u>

Both groups identified as valuable field trips, resource persons, multiple media and alternative assignments as ways to display learning. The highly gifted, however, responded more quickly and more relevantly and were more fluent in their responses. Furthermore, they seem to carry an experience to a greater depth or a more complex level. For example,

"We heard a tape on China and I thought about being Chinese -- my life would certainly be different."

"We visited San Juan Mission. The priest who took us around was very interesting."

"We made a movie of the Boston Tea Party."

"We did a puppet show of...."

"I made a scale model of...."

The application of an experience and the perceived implications of an experience appeared to be more characteristic of the highly gifted than the above average.

Differences by developmental age

The youngest children in the study, the third and fifth grades, both highly gifted and above average, had more difficulty recalling and being specific about "exciting" school experiences or "how they might change things." Their comments were much more related to a school routine and teacher and peer relationships than were the older ones. The above average young ones seemed to be searching for the right answers to the questions. The older students seemed more free in the expression of their ideas, with the highly gifted making frequent reference to the power or effect of the teacher on the breadth or limitations of learning experiences.

<u>Similarities between highly gifted responses and above average students</u>

Similarities between the responses of the highly gifted students and those in the comparison group were more apparent in grades three and five than in grades eight and eleven. The younger students of both groups identified multiple items which reflected variety as exciting and important. The highly gifted students, however, included more items and described them in greater detail. Variety as identified as important and exciting by 8th and 1lth grade highly gifted and above average students was in most instances related to grades and personal achievements. These older students also provided greater detail and number of items in their responses than did the above average.

The implications of student responses to items which relate to variety in learning experiences seem clear. Exciting and important experiences for highly gifted students are those which are open-ended, provide opportunities to use previously learned skills in different contexts and ones which allow for accelerated experiences.

Additionally, the use of the community as an extension of the classroom enhanced learning for all students in the study. Scheduling undoubtedly serves as an impediment to the field study trip concept in the secondary school and, therefore, accommodations for this concern of students may be difficult. The elementary school, however, should have no such problem and could take full advantage of opportunities outside the classroom to enrich students' learning experiences.

SPIN OFF

Other Uses of Interview Form

During the conduct of this study, the three investigators had grown interested in the potential use of the interview instrument by teachers. Several teachers who attended discussion sessions where the interim results were presented also had inquired about using the interview to gather useful material for their planning.

We reviewed the results of the study for implicstions about the usefulness of a workshop for interested teachers.

The interview itself, taking 20-30 minutes, might be very useful as a tool to teachers for individualizing instruction for any student. Most characteristics of good learning settings, of helpful teacher behavior and peer context were similar for the highly gifted and the average students. All interviews had included students' descriptions of actual "good" experiences (which are possible to replicate) and "disappointing" experiences (which could be avoided).

So, a teacher of highly gifted students <u>could</u> use the same <u>kind</u> of information about instructional settings in individualizing for other students as well.

Teachers Learn Interview Procedure

A two-hour training workshop was included in a regular school district autumn conference. It was designed and led by one investigator and a psychologist colleague and included experience in being interviewed as well as interviewing, and ways to use the results with highly gifted students

and those with more typical aptitude.

<u>Pre-test/Post-test Measure for Individualizing</u> Instruction

A future use of the interview would be to examine some <u>results</u> of student-teacher planning through interviews after the learning settings preferred by the student had been provided. For example, would some students prefer <u>different</u> features in their programs after a period of 4, 6, 10 weeks? Would students request more <u>specifically</u> as they learned more about their learning under their preferred conditions? Many questions could be investigated, using a student interview method, as to effects <u>of</u> individualizing programs and upon teacher planning.

Since highly gifted students do articulate so clearly the experiences and preferences of most students, they are a marvelous resource to teachers in learning about what is currently important for individualizing group learning settings. The pleasure which the highly gifted students describe from informal discussion about areas of common interest with their teachers also underscores the ready regard they have for teachers who work with them.

SUMMARY AND SOME POSSIBLE IMPLICATIONS

The implications described in this summary are offered in the spirit of sharing hunches and insights gained from listening to, reading transcripts and talking about what these students seemed to be saying to us with some consistency.

- Providing frequent opportunities to learn through discovery is important to many of the highly gifted.
- 2. Highly gifted students comprehend basic concepts quite quickly. Their discovery learning experiences may be combined with either depth or breadth of pursuit, as they choose. Thus, for example, a learning center, or a looseleaf notebook or cardfile of activities and applications elaborating or using basic concepts, could be an approach to giving independent choice and discovery learning oppotunities.
- 3. The matter of pacing units of learning deserves attention by the teachers of highly gifted. Highly gifted students report finishing concepts and units more rapidly than others. Since they often report also the desire for greater depth, it may be possible to arrange for further pursuit following completion of the basics.
- 4. The frequent high value placed on independence of pursuit suggests still another strategy. If the teacher, early in the school year, can get some feeling for how confident the student is in his/her ability to proceed independently, the teacher can provide more effective assistance in "independent" work or make an early start in using the ability already developed. Once established, this makes it possible without a great deal of extra teacher time to provide the greater depth or breadth the student wants.

- 5. The highly gifted students often provide insights not only into their own learning but that of others as well. Many of these students spoke very highly (especially in the upper grades) of an opportunity given by some teacher for them to contribute to the design or improvement of a learning environment. This has the additional value of preventing an overemphasis upon independence at the expense of being a part of the larger group in a meaningful way.
- 6. The expressed needs for variety by these students often seem well served by openended assignments, the opportunity to use previously learned concepts or skills in different contexts and allowing for accelerated experiences.
- 7. Broadening the concept of school so as to include the community resources and specialists will provide the challenge, stimulation and depth of exploration cited by highly gifted of a great value to learning.
- 8. Vary the manner in which instruction occurs. A written report is only one way to display or share information. Other ways could include debates, slides, seminars... To apply knowledge to a creative form of communication has the additional benefit to students of requiring the use of high cognitive skills.
- 9. A number of the highly gifted spoke quite negatively about workbook or repetitious exercises. The repeated application of a concept or skill with a number of identical or very similar problems was often views as unpleasant.

There are a number of questions related to our original problem that we were not able to deal with very well. The question of whether the

highly gifted are being served as well as possible is not answered by the data; it is clear that the students in the study identified as highly gifted did not appear to be an unhappy or discontented group. As pointed out above, however, there did seem to be evidence that in some cases there are strategies that might assist in building better individual programs for some of these students. Finally, as discussed in the section on "spin off," much of what was learned simply related to having the time to talk to students about what they were experiencing and learning and what they would like more or less of as they progress. Where time is taken for this, it appears to benefit students of all ranges of aptitude and gives the academically highly gifted a chance to provide insights that are often unique and valuable to others as well as themselves.

BIBLIOGRAPHY

- Gallagher, James T. <u>Teaching the Gifted Child</u>. 2nd ed. Allyn & Bacon, Boston, Mass. 1975.
- Goertzel and Goertzel. <u>Cradles of Eminence</u>. Little Brown & Co., Boston, Mass. 1962.
- Gowan & Torrance, E.P. Educating the Ablest. F.E. Peacock & Co., Itasca, Illinois, 1971.
- Hauck, Barbara and Freehill, Maurice. <u>The Gifted Case Studies</u>. Wm. C. Brown Co., Dubuque, Iowa, 1972.
- Hollingworth, Leta S. <u>Children Above 180 IQ Stanford-Binet Origin and Development.</u>
 World Book Co., Yonkers-on-Hudson, N.Y. 1942.
- Leichter, Helene. <u>Guide to a Study of Poetry</u> for Especially Able Children in Primary Grades. Palo Alto Unified School District, Palo Alto, California, April 1972.
- Leichter, Helene. <u>Using Literature in an Individualized Reading Program for the Especially Able Reader</u>. Palo Alto Unified School District, Palo Alto, California, April 1972.
- Martinson, Ruth and Delp, Jeanne. <u>The Gifted</u> and Talented: A Handbook for Parents. Ventura County Superintendent of Schools, Ventura, California, 1975.
- "Thought-Provoking Books for Good Readers"
 Palo Alto Unified School District, Rev. Apr 1976.
- Torrance, E. Paul. <u>Gifted Children in the</u>
 <u>Classroom</u>. The Psychological Foundations
 of Education Series. Macmillan, N.Y. 1965.

APPENDIX I

PALO ALTO UNIFIED SCHOOL DISTRICT ADVANCED PROGRAMS DEPARTMENT

INTERVIEW DATA SHEET

Write in summary of students comments.

- 1. WHAT IS THE MOST IMPORTANT THING THAT HAPPENED IN SCHOOL TODAY? (alone or with others? how did it come about? momentary or prolonged?)
- 2. WHAT WAS THE MOST BORING THING FOR YOU TODAY? (alone or with others? how did it come about? momentary or prolonged?)
- 3. WHAT DID YOU THINK ABOUT OR IMAGINE TODAY THAT SEEMS WORTH REMEMBERING?
- 4. THINKING BACK, WHAT WAS THE MOST EXCITING, MOVING, UPLIFTING OR "PEAK" SCHOOL EX-PERIENCE OF THIS LAST SCHOOL YEAR?
- 5. THINKING BACK, WHAT WAS THE MOST DIFFICULT, UNHAPPY, DISAPPOINTING, SAD OR "VALLEY" SCHOOL EXPERIENCE THIS LAST SCHOOL YEAR?
- 6. COMPARING WHAT HAPPENS IN SCHOOL AND OUT OF SCHOOL, WHAT IS DIFFERENT ABOUT THE IMPORTANT THINGS IN SCHOOL AND OUT OF SCHOOL TO YOU?
- 7. ARE THERE THINGS YOU ARE VERY INTERESTED IN THAT YOU DON'T DISCUSS IN SCHOOL? WHY? WHAT MIGHT MAKE THIS DIFFERENT IF SCHOOL COULD BE CHANGED?
- 8. WHAT PART DOES IMAGINATION PLAY IN YOUR LIFE? WHAT DO YOU USE IT FOR? HOW DOES IT HELP YOU (OR DOES IT)?
- 9. IN WHAT KIND OF CLASS SETTING OR WITH WHAT KIND OF TEACHER DO YOU LEARN BEST (MOST ENJOYABLE AND IN DEPTH)?

- 10. HOW WOULD YOU ORGANIZE SCHOOL OR HAVE IT ARRANGED SO THAT YOU OR OTHERS LIKE YOU COULD LEARN BEST? (self-study, small groups of other students you could teach as well as be taught?)
- 11. WHEN DO YOU LIKE TO LEARN ALONE? WHEN DO YOU LIKE TO LEARN WITH OTHERS?
- 12. DO YOU HAVE SOME TEACHERS YOU LIKE TO TALK
 TO ABOUT THINGS IMPORTANT TO YOU? WHAT ABOUT
 THEM MAKES YOU FEEL YOU CAN TALK TO THEM?
- 13. WHAT KIND OF SCHOOL WORK DO YOU LIKE BEST? WHY? HOW MUCH OF THE SCHOOL DAY GOES INTO THIS KIND OF WORK?
- 14. WHAT KIND OF SCHOOL WORK DO YOU LIKE LEAST? WHY? HOW MUCH OF THE SCHOOL DAY GOES INTO THIS?
- 15. FINALLY, IF YOU COULD HAVE ANY KIND OF SITUATION AT SCHOOL THAT YOU WANTED AND STILL GET CREDIT, ETC., WHAT KIND OF THING WOULD YOU ASK FOR?

January 1970 AP

APPENDIX II

1. WHAT IS THE MOST IMPORTANT THING THAT HAPPENED IN SCHOOL TODAY?

Comparison Group Highly Gifted (Gr. 3) Topic book - like horses. Saw a movie on insects The substitute helped us in art. I like reading. Sang black spiritual songs because Math contracts it was a multicultural day. Movie on Mexico Working on looms. Halloween party Mostly math and reading. Got to write about my favorite subject -Art and stitchery. dogs. The Team (P.E. art, music, etc.) Playing games - part of reciting is fun. Tumbling Running off the math sheets on the Art - putting cellophane into windows ditto machine. to make them look pretty. Going to the library. Did a Made spice balls. worksheet on putting books in alphabetical order. Surprise party for child who is leaving. Movie about Japan learn how to read Braille writing. Playing a card game in math. Map and pictures about Father Serra was more fun than just talking about it. A movie with no end - we had to Had a "press conference." make the end. We got to finish any unfinished work. The math lab questions are fun. Reading. Doing 5th grade math work. Student council. A play about George Washington and I was in it. A fire drill - we had a real fire!

2. WHAT WAS THE MOST BORING THING FOR YOU TODAY?

Highly Gifted (Gr. 3) Comparison Group Math is boring when there are new Geology is boring. We have to write problems. When I don't know how to down a lot of stuff and watch our spelling. do it, that is. Science is boring. Nothing is boring at school. Math is boring. Jump rope contests - my feet hurt! Had a movie of California - had to Writing out answers to math. write 5 facts - I lost 5 or 10 minutes of recess trying to think about them. Doing alphabetical order things. Boring to read alone - I like to read Spelling test - had to wait for out loud. the other kids. Science - the teacher talks too much. A copy assignment - I -do not like to copy, I like to just write my Spelling sentences. own answers. Spelling is a bore! My math book is boring - I've already done it. Waiting for the other kids to "shut up. My teacher was mean and yelling. Doing SRA kits. Spelling - I know all the words. Math problems that go on and on. Easy math problems. Spelling - its too hard. When I finish my work too fast. I don't like seat work.

WHAT DID YOU THINK ABOUT OR IMAGINE TODAY THAT IS WORTH REMEMBERING?

Getting S+ on my reading.

Experiments using an egg, showing pressure, oxygen.

I imagined a machine where you just press a button and money came out. I thought about this while playing

Read two books by Beverly Cleary.

This week is a minimum day week.

I like remembering about my teachers.

Super secret club called the Pink Panther. Used my imagination and made up a game using initials.

Monopoly with my sister.

Correcting folders, I only got 2 marks on them, I imagined I was better than the others.

I imagined riding the hills on this horse while reading this book.

I was thinking about the spelling unit - I didn't get it done.

Making my grandma a foot blanket - I thought about it while listening to a story.

Jumping over mats in P.E. made me think of being Superman.

I imagine that I want to be a better reader.

I always think about getting all my tests right.

Question 3 (con't)

Highly Gifted (Gr. 3) Comparison Group I imagined what was happening in a We had to do a report about dinosaurs story I was reading. and I thought about what they were. Usually it has to do with what I'm Tomorrow is my birthday and I keep thinking about a science book I want. reading. One boy in our class went to Cupertino I like to think about football. and I like to imagine what he's doing I like to think about skiing. in his new school. A movie I saw on TV where birds I like to day dream about horses. attacked people. My piano lessons - learned four new songs. My first play - I felt butterflies in my stomach.

4. WHAT WAS THE MOST EXCITING SCHOOL EXPERIENCE LAST YEAR?

I was excited about in whose class I would be. Game called four-man prison ball. Mexican style Xmas party. Pinata! Election for class president. My reading teacher is reading us "Helen Keller" and its exciting. Fractions. Learning multiplication tables. Prep Team - doing experiments. Nothing in school but during vacation we went in a trailer all over. Field trip to the airport. Math field trip to the supermarket. Moving our desks around. Having my regular teacher get back after she was out sick a long time. Writing to penpals in Alaska. Studying Indians. Information movies. Went to 4th grade class for math. Learning how to make my stories shorter. Science & Art Fair. Tie-dying and water colors and clay masks. I brought my rabbit to school to share. Being picked for student council.

Studying about Indians.
Working with dry cells.
Guessing how many seeds in a pumpkin.
Learned to write long hand.
Learned about music.
Saw "Black Ballet", it was important.
Teacher played the guitar.
Free activity time.
Field trips - Coyote Point.
College kids came and did a play.
Had a festival of Mexico.
Oral reports.

One day I didn't finish my math and had

A game in P.E. was too hard.

to miss some recess.

When I finished the 3rd grade material I thought I could go on to the 4th but my teacher wouldn't let me.

Our teacher got married and went away.

I like to do tough things.

Multiplication.

Our school will be closed next year. Writing a long report.

Topsy-Turvy day on Friday - I missed it when I was sick.

Changing classes on Mondays.

To study a thing that I already know, like in science - living and non-living things.

Robert's English is terrible.

Not having anything to do - its boring.

My teacher went away - both our teachers had babies. I would like to have a man teacher like my brother.

Rather be \underline{in} the play than sit and listen to \overline{it} .

When the teacher tells me to get back to work when I'm just sitting and thinking about the math problems.

Reading contracts were hard at first but now I guess I like them.

Comparison Group

 ${\sf Math\ was\ difficult\ and\ disappointing.}$

Didn't like our field trip to the library. Had to make a diary - if you didn't write in it, you were bad. Sometimes I didn't have anything to say.

Reading is difficult.

English was bad!

Sometimes math was hard, sometimes reading was hard.

Geography papers are hard to do.

COMPARING WHAT HAPPENS IN SCHOOL AND OUT OF SCHOOL, WHAT IS DIFFERENT ABOUT THE IMPORTANT THINGS IN SCHOOL AND OUT TO YOU?

Highly Gifted (Gr. 3)

Comparison Group

Out of school is sometimes boring.

Out of school I go bike riding, play games and cards. I have more time to play.

Out of school is fun things and in school the important things are serious things.

I learn outside too; we sometimes go on a nature walk.

Playing cards with my mother.

In school they plan for you; outside you plan yourself.

I like conversations with my teacher; outside sometimes kids get too noisy.

Having to skip a grade is better than finding a pond with tadpoles. Frogs can die, but you can stay in the 4th grade!

No difference.

There's no bell to ring at home.

Math, spelling and reading. I was put in the high group and this is important. I just read a book at home, at school we discuss it.

I work at school and play at home.

If you didn't go to school, you couldn't write or speak. Out of school I can build forts and get into fights.

At home my grandma teaches me about cooking and knitting. At school we just do math and reading. At home things are fun.

At home you don't learn out of a book.
Rules at school but not the same at home.

I work harder at school - at home I can

collect stamps.

At school you have to finish something even if you don't want to; out of school

you finish because you like winning.

More exciting things happen out of school.

7. ARE THERE THINGS YOU ARE VERY INTERESTED IN THAT YOU DON'T DISCUSS IN SCHOOL...?

I like to knit and the teacher said we may.

Like to talk about math in school. We talk about it even at recess.

Sometimes its about what I'm reading, but like the one I'm reading now, I don't hink anyone else would be interested in.

How to blow glass and make tiles. Discuss sports.

Piano pieces - I like to discuss that with my teacher. My mother can memorize lots of them.

What I plan to be when I grow up. I'm interested in how to keep the world good and clean.

I'm very interested in reading. Discussing animals.

I like science but we don't discuss it much.

Changing rooms so you could learn in a different place.

Interested in space and we don't talk about it.

Gardening.

Sports.

We discuss things like math and reading and English but we don't discuss stuff like animals and wild animals.

Question 7 (con't)

Chemistry and science. I know all the stuff in the books we have. Would like electronics. I'd like to use an experiment kit. We get plenty of time to discuss things. I would like to make a cardboard model of the new school. My teacher would help because she's good in art. Tennis - have everybody bring racquets. We haven't discussed trees - we do discuss plants sometimes in science.

8. WHAT PART DOES IMAGINATION PLAY IN YOUR LIFE? HOW DO YOU USE IT? WHAT DO YOU USE IT FOR?

Helps me draw a design.

I imagine pictures while reading a book.

In Social Studies, I imagine the Indians.

Make up stories to make people laugh.

Creative writing.

Inventing things in the lab.

It doesn't help me when I start to daydream in the middle of math. I do this when I get bored.

I make up stories when I have extra time.

I imagine when I read.

When I watch movies.

Imagination helps with writing a story.

I like to imagine when I read - like now I'm reading "Lord of Flies."

Imagination helps in plays when you have drama - gives you a feeling for what you want to do and be.

Writing stories.

Thinking about the future - say 15 years from now.

9. IN WHAT KIND OF CLASS SETTING OR WITH WHAT KIND OF TEACHER DO YOU LEARN BEST?

Highly Gifted (Gr. 3)

Comparison Group

We get to do fun things after our work is done. My teacher explains things until we really understand them.

Chairs in rows instead of a circle.

I learned from my brother before I got to first grade so I'm ahead a little.

Teachers that don't yell.

Recreation and art teachers.

Play games to learn things.

Doing what you want to do when you want to - you still learn the same things but you make your own decisions.

A teacher that gives good assignments.

Demonstrations by the teacher.

My teacher is strict and yells a little and so I try harder and I learn more.

I like when everything is organized and you know what is happening next.

Crossword puzzles in math and a scientific experiment kit.

Making puppets for the stories we read.

I would like to try learning on a computer.

Independent work.

My teacher explains things and talks to you.

A teacher that lets you do science for free time.

Tables and chairs all around the teacher who talks with you.

I like reading and learn best from this.

I like the teacher who teaches us fun things.

A nice teacher who doesn't yell.

A teacher who puts the times tables on the board and work in groups.

Working in little groups.

Extra stations in the room where 2 or 3 can work together.

Different people from different classes get together for reading.

I like a teacher who keeps it quiet.

Lots of free time to do anything we want.

10. HOW WOULD YOU ORGANIZE SCHOOL OR HAVE IT ARRANGED SO THAT YOU OR OTHERS LIKE YOU COULD LEARN BEST?

Highly Gifted (Gr. 3)

Comparison Group

Upper grades and lower grades should get out at the same time. We should be able to work alone.

School is not for play - only to learn. I like to learn alone but I like to help others when they can't get it the first time.

Independent work.

Small groups with more teachers to help the groups.

Help the students in math that need it. Using the computer is interesting.

Voting on whether we should do something like spelling.

Small groups where we make up our own work sheets.

Start school later - move desks around often - shorten math so I don't have to wait for the slow ones.

Go into the next speller when you're ready. I should go into the 4th speller because the 3rd is too easy.

More recess and more sports.

Different groups for different kids at different speeds.

Learn by playing games.

Change rooms for different subjects.

Have high school students and college students teach us because they know more new stuff.

Have kids help one another in groups.

Lots of math.

Small groups working on different things.

Just the way it is now.

Groups of 4.

Have the boys in one half and the girls in the other half of the room.

Reward system - more free time to do what you want rather than be forced to do things - that is when you have finished your assignments.

11. WHEN DO YOU LEARN ALONE AND WHEN DO YOU LIKE TO LEARN WITH OTHERS?

Highly Gifted (Gr. 3)

Comparison Group

Reading alone, listening to records alone but math with one other person.

When we do plays I like others.

Study alone except for math.

Others all the time.

Spelling alone but math with others.

I can figure out my math better at home alone.

Learn in small groups.

When they're new things I like to do them over and over by myself.

When the teacher bugs me I like to be left alone - when I'm in a good mood I like to work with others.

Reading alone - math with someone.

We learn better from small groups.

I do not like to learn alone.

- I like to learn alone to finish my assignment.
- I like reading alone, but sometimes we help each other in groups.
- I like to learn math alone. Math is my best subject and if I work with someone then they start to goof around and we don't do it.

Learn alone, play with others.

12. DO YOU HAVE SOME TEACHERS YOU LIKE TO TALK TO ABOUT IMPORTANT THINGS?

Science experiments.

Mrs. L. She listens to anything you say. Talk about music things.

I like Mr. P. Once when I brought my electrical things in, he helped me and then we bought a kit and a group learned about it.

I like to talk to Mr. H., the custodian.

I like my math teacher - he's a man and young and he doesn't get mad if you forget something.

I like to talk about my spoon collection and Mrs. T. will listen - she's nice and easy.

I like to talk to my mother and father best.

My teacher is gentle.

I discuss things better with my friends.

When I don't understand math and spelling they talk to me and help.

My teacher is nice. Its kinda hard for me to go up to the teacher and when math is hard she knows and talks to me.

My teacher says I can do work on my own or just work with her sometimes and I like that - I like it when they treat you individually.

13. WHAT KIND OF SCHOOL WORK DO YOU LIKE BEST? WHY?

Highly Gifted (Gr. 3)	Comparison Group
Math. I like to multiply and divide. I like contracts. Art. My imagination helps me draw. Math is fun! Reading for half an hour a day. Spelling because I'm good at it.	Math because its easy. Art and reading. Science because I like to work with chemicals. Math because you need to learn the times tables in order to get a job later in life.
Doing experiments and art. I like spelling dictation but not spelling workbooks. I like everything in school. I like crossword puzzles.	Handwriting, Spanish and math. Music and Art. Recreation reading. Math Social studies because you learn about explorers, kings and queens. Reading, but not in a workbook. Discussion groups.
14. WHAT KIND OF SCHOOL WORK DO YOU LIKE LE	EAST? WHY?
Reading the least - I don't know the assignments. Math because it's hard. Penmanship - over and over and over again.	Spelling because of the rules. Math when you just copy if off the board. Doing maps in social studies.
The spelling book is confusing. Math. Reading out loud mostly. It slows you down.	Reading because its hard for me. Literature and all the papers you have to do. They're hard with goofy questions.
SRA lab work. Spelling quizzes. I hate writing - it makes me nervous	Math was my favorite but this year its boring. Spanish - I don't understand what they are saying most of the time.
and grumbly. I talk better. Social studies because its boring.	Handwriting exercises.

Math.

The reader we have is hard because of the questions in the back.

Highly Gifted (Gr. 3)	Comparison Group
Science - its complicated with long words that I never heard before. Robert's English!	Timed tests - I have to sweat it out! I like poems but other English I don't understand.

15. IF YOU COULD HAVE ANY KIND OF SITUATION AT SCHOOL THAT YOU WANTED, WHAT KIND OF THING WOULD YOU ASK FOR?

Do more plays with the class. More field trips.

Longer recess.

More free play.

Choose the teachers I want.

I like it the way it is now.

Skip grades if you wanted to, like when you are really good in math or spelling.

Different teachers for different subjects and carpeting on the floor. Work on old cars.

More sports.

Math with real objects. TV or films. Telephones for everyone to connect with places to get answers.

Study about wars and different people. New equipment and materials all the time. More interesting science things.

Not write down things so much - just more talking with teachers and small

groups of kids.

Instead of P.E. organize your own games and play with kids you want to. Develop fun ways to learn things.

Lots of independent reading.

Get better math books.

More time in the library.

No more split groups - like 3rd, 4th and 5th together. Teacher never gets time for you if there are split classes.

Have a choice about what you do.

I would like to try a separate school for boys and one for girls.

More sport equipment. More sports.

Do the things that will be important when you grow up like knitting and cooking. Boys could learn sports and other things they will need.

Have "steps" in math so you could go as fast as you wanted.

I think it should be the way it is now.

Two yards for playgrounds - one for the rough games and one for more free stuff (like for the girls).

I don't like to work on ditto work sheets. I would like a teacher to help you more.

Time for working all alone.

Horseback riding for 5 hour.

Longer recess and maybe a zoo where the children take care of the animals. You could learn about living things that way, too.

Big field trips - like Hawaii. Do big reports.

1. WHAT IS THE MOST IMPORTANT THING THAT HAPPENED IN SCHOOL TODAY?

Special sort of math assignment.

Highly Gifted (Gr. 5)

Research on China - I'm studying mythical animals like dragons and lions.

Saw a movie on Hawaii and read books on Hawaii, too.

Reviewing fractions, multiplying fractions.

I received a book as a prize for a contest on writing titles for books.

Our teacher talked to us (only girls) about things we needed to know - the boys were in a separate room.

Helping a second grader learn to read and do math better.

We learned about the American Revolution. Made a bulletin board about it.

I like to sing - we have a group that meets Tuesday mornings before school.

We played a game in social studies to test how students could answer questions.

Learned how to run - I don't fall over any more.

One-minute speeches in English. I talked about my hamster.

Taking up new subject in social studies.

Spelling tests.

Writing biographies on our parents.

Learned about physics today.

I changed reading groups - the other one was too easy.

Interest groups - drama. Movies in social studies & tapes of a man from China. Comparison Group

Mr. L. read us a chapter - we had questions to answer.

Doing maps in social studies.

Math - we learned new things.

Learned about fractions.

Writing a report about Luxemborg.

P.E. - playing with others.

Learning division.

Saw a movie on slaves.

Free time.

Working on topic book - cars.

Reciting poems.

Reading

Writing a report on Mexico.

Saw a movie.

Math - percentages - all kinds of stuff.

Playing tic-tac-toe.

I got a paper right the second time.

Geography - Southeast Asia.

Got a good grade on math test.

Got perfect on a test.

Playing chess every Friday.

Wrote about our rooms at home and what they looked like.

Solar System report.

Helped the first graders.

Having reports to do.

2. WHAT WAS THE MOST BORING THING FOR YOUR TODAY?

Highly Gifted (Gr. 5)	Comparison Group
Writing a script about the revolution. I don't like writing. Nothing, really.	Science - I don't understand it. Painting
Reading Robert's English book and maybe the Mifflin Math book.	Things that are hard I don't like. Math
Spelling is the most boring thing.	Reading and spelling.
Spelling books where you fill the blanks,	Teacher talking a lot.
Parts of speech and noun phrases and stuff like that.	Writing a story. Music - singing with others for
Reading.	half an hour.
The teacher went into detail and told it over and over again.	A movie we saw the day before. P.E. I just don't like it.

Math because it's easy to figure out. They should make it more challenging. The metric system - 20 minutes of it!

Long speeches and long concerts. The ones that take an hour.

Listening to the teacher explain something to the slow students. I know that makes me sound like a "big shot," but it is awfully boring.

Slow movie about Indians.

Studying about English colonies - it went on and on.

Social studies outlines.

to do. Discussion on our reading assignment.

Social studies - I finished my report and now I have nothing new

English - I don't always understand what we're doing and have to ask the teacher.

Spelling - the workbook.

Writing projects.

The book reports everyone does out loud in class.

Math. Multiplication. I have to use my fingers and it slows me down.

Reading because there's not much to choose from in the class and you can't always go down to the library.

3. WHAT DID YOU THINK ABOUT OR IMAGINE TODAY THAT SEEMS WORTH REMEMBERING?

Highly Gifted (Gr. 5)

A book on puzzles I got from TAB order forms.

My secret club - I can't tell you about it.

My report card.

I'm reading <u>Five Children and It</u> and I keep imagining how "it" looks. I think it's like a monkey with rat-like hands.

A bulletin board.

I only use my imagination in games.

I stopped to imagine about the story we're reading.

During P.E. I imagine I'm the best guy in the game.

I was thinking about chorus practice.

About a poem I'm writing - you pick a picture and then write a poem about it.

I keep remembering the trip to New York we took.

Math - integers - I'm sure it is something I will use a lot later.

Answers to a crossword puzzle.

Inventing things in my mind.

I imagined those 10¢ monsters you get at the domestore came alive.

Today, I'm thinking about your questions.

Puppet show on the Boston Tea Party.

I don't really imagine things but when things get boring during reading out loud I just go ahead instead of listening. I'm a good reader!

Comparison Group

My spelling book. I'm a little behind.

A puppet show about the book we're reading.

A poem about a watermelon picker.

About the Hallowe'en Party.

A Greek play. I'm writing it.

The report I have to give.

Something I have to recite. I get so nervous.

Old English lettering in art.

The isolated tribe we found. We pretended we found them and what they were like and how they lived.

It's a hot day and during math I imagined I could jump into a pool. I love to swim!

Travelling around the world, maybe France.

Nothing, really. We just had an election.

Question 3 (con't)

Highly Gifted (Gr. 5)	Comparison Group
Murals that the 6th graders did.	
I saw a word differently. I thought it meant something else.	
Designing cars.	
The tape on China we heard. I thought about being Chinese. My life would certainly be different.	

4. WHAT WAS THE MOST EXCITING SCHOOL EXPERIENCE LAST SCHOOL YEAR?

A trip to China town and the Foothill Planetarium.

Getting my spelling done in class. When you get your papers back and you get a good grade.

Reading, because I'm good at it. Getting the same teacher as last year. She taught 4th last year but 5th this.

The orchestra - I play cello.

The physics Discovery Group.

The teacher letting us do things on our own.

Field trips.

Field trip to Crystal Springs Dam.

Math is always exciting.

Winning a prize in the See's Candy Contest and also in a math contest. Also, I got an A+ in social studies.

A report I did on Inca. It was 30 pages long and it took me two months to do.

Student Council.

History projects.

Field trip to San Juan Bautista.

Chinatown trip. Lunch there and visiting the museum.

A music group we formed.

Learning multiplying and division of fractions.

A trip to an organic garden.

The whole class went to Yosemite.

A trip to Chinatown.

When our teacher taught us "her own brand" of math. We learned a lot.

We made radios that didn't need batteries.

Reading because I liked that a lot.

My report on Daniel Boone.

A field trip to Hawaii.

Getting into the first reading group and being elected president of student council.

Playing the piano in a concert.

Teletype computer math.

Highly Gifted (Gr. 5)	Comparison Group
The Black Ballet in November and the quartet that came to play for us. San Juan Bautista trip. The priest took us around. He was interesting. A field trip to San Francisco and Chinatown. We had lunch at a real good restaurant. Art projects. Getting to do 6th grade math. Sports. A camping trip with the whole class. We were gone 3 days. The Van Gogh exhibit. Studying the California Gold Rush.	The special P.E. people that come. Our school musicale - it was hard work but fun. Moved into a higher math group and I could keep up all right.
5. WHAT WAS THE MOST DIFFICULT, DISAPPOIN	TINGSCHOOL EXPERIENCE?
I couldn't do the Soma Block Puzzles.	Science - just can't understand it.
Everything was pretty good.	
every uning was precty good.	All the rules you have to follow in
The time I tried to explain about	All the rules you have to follow in school. Division and multiplication in math.
The time I tried to explain about erosion to the class.	school.
The time I tried to explain about erosion to the class. Having a substitute. Hath - we didn't do enough.	school. Division and multiplication in math.
The time I tried to explain about erosion to the class. Having a substitute. Math - we didn't do enough. Reading. Math - having to do one paper	school. Division and multiplication in math. Writing stories and stuff like that. Social studies reports - I didn't do well. We had to do a report in science and
The time I tried to explain about erosion to the class. Having a substitute. Hath - we didn't do enough. Reading. Hath - having to do one paper a day. My reading contract.	school. Division and multiplication in math. Writing stories and stuff like that. Social studies reports - I didn't do well. We had to do a report in science and I wasn't too interested in it.
The time I tried to explain about erosion to the class. Having a substitute. Math - we didn't do enough. Reading. Math - having to do one paper a day. My reading contract. Group reports on every continent.	school. Division and multiplication in math. Writing stories and stuff like that. Social studies reports - I didn't do well. We had to do a report in science and I wasn't too interested in it. Reading - nobody likes those books.
The time I tried to explain about erosion to the class. Having a substitute. Hath - we didn't do enough. Reading. Hath - having to do one paper a day. My reading contract. Group reports on every continent. Fimes tables test - too easy!	school. Division and multiplication in math. Writing stories and stuff like that. Social studies reports - I didn't do well. We had to do a report in science and I wasn't too interested in it.
The time I tried to explain about erosion to the class. Having a substitute. Math - we didn't do enough. Reading. Math - having to do one paper a day. My reading contract. Group reports on every continent. Times tables test - too easy! The reading books were boring and easy. Myriting projects- I'm not good at	school. Division and multiplication in math. Writing stories and stuff like that. Social studies reports - I didn't do well. We had to do a report in science and I wasn't too interested in it. Reading - nobody likes those books.

Geography assignment - 20 questions.

Making reports.

Question 5 (con't)

Highly Gifted (gr. 5)	Comparison Group
I was moved into a reading group I hated being in.	Rainy days when you have to stay inside.
Music - the teacher usually picks out a song she likes.	Language tests. Art and maybe math.
Social studies assignments.	Handwriting and reading and I guess
Picking out nouns and verbs.	my spelling is sort of disappointing,
Finding a friend of mine had cheated on a spelling test.	too.
Having a 30-page assignment in math.	

6. COMPARING WHAT HAPPENS IN SCHOOL AND OUT, WHAT IS DIFFERENT ABOUT THEM?

I can build things at home from the things I read about at school.

Learning new things at school.

Things are more interesting at school.

Learning about churches and going to them out of school.

I play out of school and have to think in school.

The things you do out of school you already know how to do, but in school you learn things all the time.

Out of school I have art classes I like.

At home I can play or read but in school you have to work on assignments.

I take Chinese out of school but I don't know what it is all about. In school they teach you vowels and words you can understand.

You have to work in school and you don't have to outside if you don't want to.

I learn about reading and math and science in school but stuff like animals and camping out of school.

School is a place to learn and discover things.

You can do what you like out of school.

The math I learn in school I use out of school.

I take piano lessons out of school.

I go to Hebrew school out of regular school.

I learn a lot more at school.

You have to do research and hard work in school and out of school you can have fun.

Mom says school is more important, like math and reading, but I still like the fun things out of school.

In school you get grades and out of school you get allowance.

Nothing really happens in school but outside I can play tennis and music and go to ceramics class.

Question 6 (con't)

	Comparison Group
I like to do math and reading both	Home activities are more fun.
Social Studies in school and recreation out of school.	In school you have to learn and at home you don't have to do things unless your Mom makes you do it.
Out of school I learn from books and in school I learn from what the teacher says.	Athletics in school is a big thing but out of school you play differently.
There are deadlines for projects in school.	
I listen to people talk and build my vocabulary.	

for tun.
Talk about hobbies like fish.

Coins and fish.

Literature classes so you could write more poems and stories. Study about the history of art.

Sports

Some things aren't appropriate to discuss in school.

Time to talk more about other countries that people might have visited.

Chemistry - lab like in high school.

Zoology

Spanish - we had it last year but not this.

Outside sports.

Fossils - have a special time to talk about things you do at home.

Algebra and calculus. I would like to be able to discuss these things when I'm ready.

Free time for football discussions. Science stuff.

Talk more about people, what they are like.

Personal things - but we don't get to do that.

I don't discuss things I like because I don't want them to think I'm a show off.

Animals

Airplanes

Sharing you vacations with others.

More gymnastics and tumbling.

Have a board of students work with the teachers to discuss what should be done.

8. WHAT PART DOES IMAGINATION PLAY IN YOUR LIFE? WHAT DO YOU USE IT FOR?

Highly Gifted (Gr. 5) Comparison Group I just think about it but do not I use it only for free time. For sports - I pretend I'm on the team. write anything down. I have a drawing board at home and I draw all my "wild ideas." I pretend I'm a veterinarian. For making up plays. I make up stories, using my I use it when writing stories. It's a big help. imagination. Imagination gives me confidence. For painting. For art and design. I imagine what will be in the future. I don't do much daydreaming. It helps in all sorts of school For my puppet plays. projects. I invent mathematical formulas. Creative writing projects. I write poems - never stories. An airplane flyer - I always think about that when I'm reading a book about planes. only poems. I think the happy things that happened in the past. When you're lonely you can pretend you're a different person. In sports I imagine I'm a star! Imagination does not help at school, only for play. Helps with clay - if you don't have an imagination you can't make anything.

9, IN WHAT KIND OF CLASS SETTING OR WITH WHAT KIND OF TEACHER DO YOU LEARN BEST?

Highly Gifted (Gr. 5)

Comparison Group

More freedom like in nursey school.

When everybody is studying the same thing.

Learning to read in groups.

A class when you are put on your own.

The teacher who gets the job done so I can get school over with.

I cannot learn from a teacher who is mean.

A variety of things to do each day.

Groups of kids that go at the same speed I do.

When a teacher tells you the easy and fun way to do math.

A man teacher - one who likes science, too.

When a teacher adds things so you want to do more.

A teacher who remembers what it was like to be a child.

Lots of discussions.

A democratic classroom where the kids can vote on how to do projects.

Small classes with lots of smart kids.

A teacher who keeps the rest of the kids under control - no yelling and stuff.

Working at your own speed.

Combination grades.

A strict teacher who pushes me to finish the work.

One who doesn't let you get bored.

One that makes things interesting like drawing things about science.

Doing things instead of reading out of a book.

Dividing the class into higher and lower groups but having the teacher pay attention to all the groups.

Being put into the right group - it makes you feel better if you are in the right place.

10. HOW WOULD YOU ORGANIZE SCHOOL OR HAVE IT ARRANGED SO YOU AND OTHERS LIKE YOU COULD LEARN BEST?

Highly Gifted (Gr. 5)	Comparison Group
Read the textbooks by yourself.	Everybody all mixed-up so the older kids could help the younger.
choice of different subjects to study.	Nothing you could do could make it better.
Three one-month vacations instead of a 3-month vacation.	Small groups to help each other.
t's fine the way it is.	Different room for different things.
imaller groups.	I like it the way it is.
fore field trips.	More free time to get the help you need.
Ingraded system.	Have the teachers trained to teach
fore time in school. Learn one thing at a time.	in a fun way.
ork at your own speed.	
Recreation time after school.	
Computers	
Put the dumb kids in another class because you have to wait so long for them.	
lot so much art activities.	
et the students decide.	
itudy groups for homework.	
et some kids teach others.	

11. WHEN DO YOU LIKE TO LEARN ALONE? WHEN WITH OTHERS?

Highly Gifted (Gr. 5)

Alone when its something I like that no one else is interested in.

Book reports alone but a big social studies report with others.

Alone when it is something new.

Math alone. Spelling in a group.

Reading alone.

Homework alone and reports with others.

I like to read alone. I sometimes read in bed at night with a flashlight.

With others only when they're not noisy.

With others all the time.

I like to be with others when things are rough and you need to bring your work up so you can feel proud.

For some projects alone because \mathbf{I} want to get all the credit not just half.

Social studies is always better with someone else or with a group of people.

Comparison Group

History alone and reports together.

I like to learn with others all the time but I don't know why.

Others for math - because they help.

Reading alone.

I do better alone all the time.

It's more fun in a group.

Social studies alone because I can concentrate better by myself.

Art projects are better with other people.

Alone in math and reading.

I like science, reading in small groups and when you do it orally.

Highly Gifted (Gr. 5)	Comparison Group
My teacher has lots of interests and is fun to talk to. A teacher who helps me enjoy a subject. A teacher who kind of makes everything like a game. Teachers who know when something is important to you and don't laugh when its supposed to be serious. A teacher who lets you work on your own. No. Nice and quiet.	Not really. My reading teacher likes to help. I like a teacher who explains things in detail. I learn more this way. I like to talk to the principal. He's fun and understanding. My dad is a principal, too. I like to talk about the papers I get a 100 mark on. I'm proud of good grades. If I don't understand a lesson I like to have it explained. I go after school to talk to my teacher and she is very nice. My teacher is young and the first man teacher I've had. I guess because he's young he knows what its like being in school.
. WHAT KIND OF SCHOOL WORK DO YOU LIKE	E BEST? WHY?
Math and social studies. Oral reports and doing research. Reading - I get absorbed in it. Geometry is better than plain math. Math, I'm good at it.	Making things like a model of Jamestown. Math and reading because they're easy. Math. Spelling.
Everything.	If I have spare time I read a book.

Reading about horses and other animals.

Math.

I like historical parts - reading about things and making things.

Robert's English is a challenge.

Art is the best.

14. WHAT KIND OF SCHOOL WORK DO YOU LIKE LEAST? WHY? Highly Gifted (Gr. 5) Comparison Group Science - I don't understand it. Spelling workbooks. Music - not the kind they teach Art is boring - she brings up things you here. never heard about. Math - repeating stuff is boring. English and spelling. Reading - I prefer to pick my own. Math because its confusing. Having to do homework. I like everything. I don't like writing. When you have to express yourself, I don't put it into very good words - nobody understands it except me. Spelling. Everything I'm doing in class is a repetition of what I already know. Robert's English. I have speech therapy twice a week. But, I'm improving. I like math the least, except that geometry is pretty good. English - I get writer's cramp. Grammar - maybe if they taught it Reports. in a different way it would be more interesting. Nothing - I enjoy everything. Language arts - over and over again with the same thing. Copying down sentences. Follow-up exercises for reading. I just like to read. Oral reports - I get embarrassed and it makes me look stupid. Long social studies assignments. History textbooks - they leave out too much.

15. IF YOU COULD HAVE ANY KIND OF SITUATION AT SCHOOL, WHAT WOULD YOU ASK FOR?

More free time for reading and sports. More interesting literature. Chemicals Have Spanish back in elementary school. Zoology - field trips about animals. Free reading time. More outdoor activities. New math books and equipment like adding machines and computers. Earn credits for doing things in the class. Physics/building things/field trips.	Highly Gifted (Gr. 5)	Comparison Group
in junior high. More free time for reading and sports. More interesting literature. Chemicals Have Spanish back in elementary school. Zoology - field trips about animals. Free reading time. in junior high. More free time for reading and sports. More outdoor activities. New math books and equipment like adding machines and computers. Earn credits for doing things in the class. Physics/building things/field trips.	Home economics.	Math all the time.
More free time for reading and sports. More interesting literature. Chemicals Have Spanish back in elementary school. Zoology - field trips about animals. Free reading time. More outdoor activities. New math books and equipment like adding machines and computers. Earn credits for doing things in the class. Physics/building things/field trips.	Computer programming.	
Architecture More interesting literature. Chemicals Have Spanish back in elementary school. Zoology - field trips about animals. Free reading time. Sports. More outdoor activities. New math books and equipment like adding machines and computers. Earn credits for doing things in the class. Physics/building things/field trips.	Gymnastics	More free time for reading and
Chemicals Have Spanish back in elementary school. Zoology - field trips about animals. Free reading time. New math books and equipment like adding machines and computers. Earn credits for doing things in the class. Physics/building things/field trips.	Architecture	
Have Spanish back in elementary school. Zoology - field trips about animals. Free reading time. adding machines and computers. Earn credits for doing things in the class. Physics/building things/field trips.	More interesting literature.	More outdoor activities.
Have Spanish back in elementary school. Zoology - field trips about animals. Free reading time. Earn credits for doing things in the class. Physics/building things/field trips.	Chemicals	
Zoology - field trips about animals. the class. Free reading time. Physics/building things/field trips.	Have Spanish back in elementary school.	•
	Zoology - field trips about animals.	
Mini-course like at junior high. Have only 5 kids for one teacher.	Free reading time.	Physics/building things/field trips.
	Mini-course like at junior high.	Have only 5 kids for one teacher.

1. WHAT IS THE MOST IMPORTANT THING THAT HAPPENED IN SCHOOL TODAY?

Highly Gifted (Gr. 8)

Comparison Group

Handing in a report in social studies. A report on the President along with some other subject matter in Soc. Studies. I did it by myself.

German class went to Gunn. This is a pleasant class every day. We went with others in the class - only for 8th graders.

Music. Going to be practicing for concert - all-city orchestra - will have a guest conductor. Happens once a year.

Had math test and checked it over. It is fun. I like to work in groups.

Getting on the trampoline in P.E. I like P.E.

Industrial Arts most important. Shooting cars down. I am out of class now making a report. Plan cars from rough draft - shape them and then mark up and sand them down. Group project but each one does his own car.

My English project. Gave report, working on this with two others. Made film about Wilbur. Worked on this at lunch hour, taking pictures, etc. Sound track. Got it all together and showed the film.

What I learned in metal shop because I have never had much experience in woodworking and metal shop. How to drill and work it up.

Found out I could do extra work in classes to get extra credit. Can learn more not to get just a grade but learn more and get credit for it. I like extra work, You can do more reports and this goes into your file - until the end of year.

Got over my oral report today in English. I was scared and nervous about it. It takes much work - worked alone.

Getting my archery class set up and doing fine in it. We did this during lunch. This is separate course, not P.E. Have one good friend who told me about it and helped me. Really like the class.

Got a B in math test. Quarter test. Knew the subject matter. Didn't study hard for it. Take tests about once a week. Get a B or higher on all of them.

Got grades and I was asked to return after school in a couple of classes. Asked to represent and record game and time in P.E. Did this with a friend. Was sick over the summer and tone quality was not too good for glee club so I was worried about my grade. Averaged A and B.

Doing good in math. Just know that I am good at it. Corrected papers together. I like math.

Got a lot done in Spanish. Got behind and decided to get it done. Some are faster and some slower. Finish this at my own pace.

Got social studies report back. Got an A - it will be & of my grade. My dad helped me a little. Took 4 weeks. I felt good about doing so well on it.

Spanish most important. Finished a lot of work. Am ahead now. Working on this for about a week. My grade depends on how much I get done. I tried out for cheerleader. We are learning another routine now.

Today found out that I was getting higher grade in math. Last year I didn't doo too well. Got B+, pretty good grade. It isn't just the grade, it makes me feel good knowing that I am doing better.

Comparison Group

Nothing today. Learned how to prove angles in math. Like this subject and you learn the most in it. I am in the play, Tom Sawyer, at the Children's Theater.

Most important thing was at lunch. More people signed up for election. I finished my work in arch drawing. Took final test in math. Think I did pretty good. Of course, this interview is important, too.

In band practice we marched with the band. Didn't go too well. The second day of doing it and its getting boring. Honor Band. Get out of school tomorrow for gymnastics. Had to find out all my asssignments from my teachers. I do this often, but my coach wants me to make sure I get in all my assignments so my teachers will not be upset. I am on the gym team.

Getting grades this week and last.
They were o.k. Got mostly 8's. Felt
good about this - only wish I could
have gotten a couple of A's. Looking
forward to getting grades, to know how
I did and what the teacher thought I did.

Grade in social studies of great concern. Usually don't get good grades and I was amazed at what I got. Just amazed! I am generally good at tests, but no good at oral work. Guess my teacher was an easy grader this time.

Social studies test. Had to finish it last night because it was due today. Want to get pretty good grade. Worked alone and took 5 hours.

2. WHAT WAS THE MOST BORING THING FOR YOU TODAY?

Spanish most boring thing. Just a repetition.

Most boring was German. Doesn't move very fast. It is the teacher I think - not especially good she tries, though.

Science class. Read on a subject that I didn't care for. Weather. Real boring for about 30 minutes.

Story problems in algebra. Did this by myself for 30 minutes. Finished them.

Science test. Math was boring, too.

Homemaking. Have no interest in it, not sewing. Teacher bugs me. Get bored in P.E. No one is good sport.

Science. Had to look through books on venereal disease. Latin is always boring. Lots of things to understand and I don't understand it. My friend and I feel the same way about Latin. In science, don't like to read about things I'm not interested in.

Puzzles in math. Couldn't do it.
Teacher yells if not perfect. It's not
all that thrilling. If I can do it, I
look forward to it. Teachers should
see it from our side, not only hers all
the time. So perfect!

Waste time in classes. Waste time here. Some classes get worse by end of day. Some days it is exciting. Social Studies book is always boring.

Social studies. Had to read a chapter. Took half of period. Book boring. Sometimes we do this once a week. No one in class likes to do it.

Math class. Math teacher drags things and I don't like math. This math teacher tries to entertain you - tell jokes and stuff like that. It has nothing to do with math. 14 people in the class and I know most of them,

Spanish class. Already had some of this and going over it bores me. Most of the class is bored. Social studies bored me a lot, too.

Typing. Too monotonous. Just sentences, just type, type, type.

English. Teacher read to us and it was boring. He likes to read to us. Just stands there and reads - even if the book is interesting, it is boring to have to sit there and hear him read all period. Teacher very interested in drama and he writes his own things about what we are going to learn and study about.

Home Ec. Making this dress and I am making a lot of mistakes.

English. Gave us tests - drills, verb worksheets. Got monotonous. Have to be completed in class.

Comparison Group

English, never too good at this. Teacher not too good. Have to give oral reports, not interesting. Don't like verbs, either. Always boring but depends on teacher. Don't like to listen to other people's oral reports either.

Movie in history. Not too boring but we have them about every third day.

English and I already knew what we were talking about and on top of it I didn't feel well. We had verbs. Like English most of the time.

French. ½ class working with slides, sorting - boring, trying to learn new dialogue. Do this every day for 10 min.

Social studies. Hypothesis, variables, worksheets, homework. Same old thing every day.

Social studies - went to library. Just sat there for 45 minutes.

Social studies - its the teacher. Just sits and talks about different subjects, sort of rambles. I'm not the only one who feels that way. Whole class bored.

Watched slides in social studies. It wasn't about what we have been studying.

Math class because we had substitute. Have had lots of subs lately. Don't learn anything.

German - boring every day. Had this same teacher for 3 years.

English - studying Shakespeare and going over plays, answering questions that are not too interesting. Teacher doesn't make it interesting.

Social studies. Read about people in Ohio and answered questions. Not always boring.

3. WHAT DID YOU THINK ABOUT OR IMAGINE TODAY?

Highly Gifted (Gr. 8)

Comparison Group

Athens in the trial of Socrates - a system a lot like ours. Accusing humans, he was accused of something he didn't do.

In social studies - Senate fillibustering. Showed what a farce student government was. Talk about going into old court files and learned what happened.

Handing in report in social studies, did a good job.

Just about everything is worth remembering. It could probably be one of the social studies books, Black Boy, really makes you think.

Talking to a friend at lunch time. Talking about boring English class. Like class where have more group participation and not have teacher do everything. Starting tennis soon. Don't know how to play. Can't hit the ball and wondered about that. Think I will like this better than basketball.

Thought about science quiz Friday.
I am anxious about science. Thought
about gymnastic demonstration.

Put myself in a book. Imagined being a character. Don't want to be like him though. About high school student who had everything going for him and flunked out.

Handing in story in English. Wrote a long story and worked on it a long time. It is a makeup grade and I hope to get a better grade with this story.

Gym meet - one week. Competing and I am nervous. Floor acts, balance beams. Got an A on English test. It was hard and I was pretty happy about it.

Thought about playing soccer. Thought about some plays and positions. Talking about friends - probably will use plays in the game. Coach didn't talk to us today.

4. THINKING BACK, WHAT WAS THE MOST EXCITING SCHOOL EXPERIENCE LAST SCHOOL YEAR?

Beginning new class - 4 hours a day and get credit for math, English and P.E. Just a free class. English and social studies tied in together. Do lot of group discussions and with one or two people. Some individual work.

Got to take Industrial Arts instead of homemaking.

Nothing has been all that exciting. Last year in social studies we did some fun and exciting things. Group participation and had visitors from other countries. Learn from others. Think we should do more of this - it makes you think.

Math - had a good teacher. My best. Did fairly good. Tried to learn instead of getting grade. This year can't stand math. Teacher last year had a lot of imagination.

English class. Had neat teacher. She was transferred to another school. We did debate, blind walking. She made this interesting. We did things, not just write about them. You made your own grade.

Sports - playing football. Played end. Made touchdown. Getting better positions in soccer because they think I can do better now than they thought.

Highly Gifted (Gr. 8) Comparison Group Photography class. Take pictures Making baseball team. Play outfield. and develop them and use them for yearbook. My dad got me started. Last year I found I would be in Getting out of school. Got best grades ever. Didn't really work harder. I was pleased. this class. After school sports most exciting. Fun and got out of last period to do this. Didn't like the teacher very much. This year's football games. Best one was when we won. Touchdowns really exciting for me. My dad coaches Pop Warner team. Friend and I teach kids cheerleading. Learning to use welding torch in metal class. Working in art metal class. Tried to get it again but couldn't. Second semester I will try again. Getting involved in sports. In 7th grade didn't go out for sports. This year classes better. Really pleased with classes. Double block system makes it so you can't get bored. I like my teachers in most every class. Playing football. On school team. Enjoyed this. Worked hard to get on team.

5. THINKING BACK, WHAT WAS THE MOST DIFFICULT OR DISAPPOINTING SCHOOL EXPERIENCE LAST YEAR?

Taking science class - boring. Teacher contradicts herself. She is new teacher.

Industrial arts - didn't get my project in on time and thought I deserved a better grade than I got.

Industrial arts - electricity. Did all that was required and got a C. Seemed I got a lot of low grades. Electricity was pretty bad for me. Because I know a lot about it, do it as a hobby. We were asked to construct motor and I was disappointed because I didn't get higher grade.

Wanted to be on soccer team but the coach didn't notice me. So I quit.

Math teacher. Got bad grade because I couldn't understand or learn from him. Just couldn't communicate.

Social studies teacher - couldn't understand her. Very poor teacher and cut me down. Had her for one quarter. Lots of other people felt the same. She was always watching over you.

Getting bad grades - most unhappy. Got C in social studies. Teacher hadn't taught junior high before and graded too hard. Class was boring.

Getting a C in English last year and this, too. English not that hard. Late getting in for a test, didn't get it finished. Teacher wouldn't let me make it up.

Getting my first C's in math, science and social studies. My parents did not like this too much but it didn't bother me that much because I knew I could bring them up again. This was the first quarter. Got an A in Spanish. I could have done much better.

In social studies - about government. People hypocritic. It is supposed to be democracy but people are going to get what they want. It is disappointing.

Disappointing when I don't understand what teacher is talking about. In math most of the time I don't understand. Can't get it right and I keep on trying. Don't like not to succeed. System old-fashioned.

Comparison Group

Getting my German teacher again. Can't choose German teacher here because she is the only one here.

Got behind in lab sheets in English. Had to take them home to catch up. Talked too much instead of doing work. Once I caught up it was not so bad. It was a loose class and you could work at your own rate but you had to get done. Got 4 warning notices. My parents were really mad. Got them in math.

Lousy grade in P.E. Lousy attitude grade. Didn't expect to get a good grade but I was doing just as good as others. Coach said he caught me running through the halls so he gave me a C.

Not passing tests in English and social studies. One teacher just gave tests. English spelling tests. Didn't like the subjects. This year is better.

Math - didn't do too good - always behind. Got mostly D's on tests. This year I like math - taking general math.

Math - not doing well. When I was called on I was silent and embarrassed. Had good teacher but didn't understand the work. Bad test grades. Everyone else was really smart. I'm doing better now - get A's.

English most difficult. Don't do too well. My worst subject. Little better this year. Teacher gave me C. Really doing more work and working harder at it but teacher was hard grader. Felt I was doing better than C; don't like English because I don't like to do a lot of writing.

Getting bad grades in German. Just didn't have the knack for it. Getting farther and farther behind. Couldn't drop it - just had to stick it out.

Losing last two football games. Won 45 in a row. Means we're knocked out of championship.

6. COMPARING WHAT HAPPENS IN SCHOOL AND OUT, WHAT IS DIFFERENT?

Highly Gifted (Gr. 8)

Out of school is more fun - people, no grades, more fun. In school for learning and grades.

In school don't get bored because you are learning things. Out of school have hobbies, try to balance things off.

Think more when in school. There are important things out, too.

Directed things in school.

School prepares you to learn more later on.

Comparison Group

Get grades in school - achievements in all you do. Outside you are with friends and have fun and sports.

School uses lots of books. Do the same thing - learn things. Outside you read pleasure books if you want to read.

In school I learn and enjoy. We have a pretty good curriculum here. Out of school I mostly do stuff with friends and family - this is important too.

In school play football and do sports. Try to get good grades. Out of school work at getting my money collected from paper route.

7. ARE THERE THINGS YOU VERY INTERESTED IN THAT YOU DON'T DISCUSS IN SCHOOL?

In Spanish we do not have enough time. I wouldn't have shop class.

Chemistry - none in school. Not very many people interested in chem. I do it independently. Talk about politics and government with friends outside. Don't like to do the same old thing that everybody is doing.

When in math you don't discuss art. I don't discuss my music. If there were clubs and groups, you could do this. To much time is wasted - My English teacher reads to us too much.

Like to have electronics club. Can't seem to do this. We do a lot of wiring and things in shop.

In history I would like to discuss what black history had to do with today. I don't care what people did 1,000 years ago.

Interested in Photography and as far as I'm concerned, they don't know much about it. No time for it.

There are some classes they do have that they shouldn't. I would like more freedom and electives.

I would like a course in business and finance. It couldn't be passed now. There wasn't enough demand for this now. Conflicts with electives.

Electronics - my hobby. Not being taught and some people would not understand. We could change that by being able to discuss electronic problem - get friends together in the field - not do it by myself all the time.

Build models out of school and am interested in this. But I wouldn't want to change the school because of this.

Comparison Group

In English - sometimes it helps and other times it doesn't.

Helps with English stories. Helps to comprehend somethings - an idea and then using it. If you didn't have it, you couldn't do certain things.

Helps in writing up assignments in story writing.

Helps me in writing compositions. Helps in having fun, talking not in in class, but talking to people.

Think of some heroes. Think about things you would like to be able to do. Just let yourself be somewhere else. Helps in writing, making a dress, helps a lot.

Creative writing, drawing, sometimes in football. In drawing it gives me ideas, thinking something that is original.

Helpful in writing; like to write imaginary stories, fiction and non-fiction. Really things that could happen. Like to imitate people. Like to animate people with animals.

Drawing, use if it is something I can't do. Get ideas from it. Use it when I want something and wish for it. My horse - I imagine about this too. What it would be like to be a cheerleader. In school I imagine how I will get the work done and what kind of grade.

Writing assignments. Helps too when I am at home discussing things with my parents. Helps when I am drawing.

Writing papers - think up ideas.

Writing skills, social studies and English. Writing High Times in Palo Alto TIMES. I am about to do this plays a large part in my life.

Imagined what would happen when I played football. I would win and be hero. It doesn't hurt me but I don't know if it helps me or not.

Comparison Group

Like teacher who keeps me busy with things I like.

Like teachers like my English teacher last year. Kept us busy but also did things that were fun.

Go in depth in a subject.

Glee Club - course where you sit in a circle on the floor. If obligated to come same time every day, it is a drag. Science experiements. You do things that have been discussed. Like a teacher who keeps his own standards and doesn't give into the kids. Let kids talk a little but when gets out of hand, understand teacher's strictness.

In social studies one that is good with kids - one that understands. Does what kids want to do. In math, not too much talking - you have to hear what the teacher has to say. In social studies, loose class where you can discuss points of view.

Like my Spanish teacher - if you don't know a word, he'll explain it. Learn more this way. Has to be fun, crack a few jokes, relaxed.

Where I can go and ask for help. A teacher who doesn't just make me read the text but gives me ideas to think about. Sit in circle better than in row.

Everyone at my level. Class that learns at same speed. Teacher who takes time to help and doesn't make you feel you are holding up the class.

In English, the teacher is strict and won't let you get out of class. He is nice and is funny the way he talks and acts. Uses perfect grammar. Casual setting. Social studies we sit in circle and I like this. We sit in rows in English and I don't like this as well.

Math should be harder because you have to learn math. Social Studies and English more free. Learn better if teacher is not strict.

More interesting when teacher is not going over same stuff all the time. One with imagaintion; takes class trips.

Flexible teacher; don't have to sit in seat all the time; go outside and hand in assignments late; chance to make up.

Work on projects at own time. Like class where you don't have to do certain things at certain times.

More freedom of choice. Like language labs. Teacher not really tough and lets us work at own pace just so we get work done. Think all school should be this way. Do not like being forced to do school work.

No set thing to do. Small classes and more teachers. Have 5 required subjects like English, math and the things you have to learn. Then let students choose other things like music, art, projects. Independent study and small group. I would like to teach - it would be interesting.

Basically like it is. We could have more interesting social studies and English textbooks. Have more teachers - not old and radical ones. Like having teachers open to both sides in discussion.

Comparison Group

Math in morning and do my own correcting. P.E., English and social studies in afternoon. Rather have specific assignments than work at own pace. Shorter classes and shorten time in school.

Learn necessary and basic things. Have more electives. Pick what you want to study. Longer lunch. Not have to worry about tardies. Rotate schedule so you don't have to get sick of doing the same thing at the same time.

No homework - do it in class. If problem, get help from teacher. I like this organization better than other schools I've attended. This school gives electives, summer school and field trips.

Learn another way instead of out of books. If you could go outside and learn from experiences. Longer lunch hour. Have activities during lunch. Locate mountains and where snow would be. Like a school in the mountains.

Teacher who keeps you interested. In English our teacher took us on an imaginary walk - had to close our eyes and imagine. Like school the way it is only have more interesting classes.

Individual conference with teacher after I do my work. Smaller classes, double block for some and single for others.

Like double block in P.E. and industrial arts. But for social studies its too long. Smaller classes - but not too small.

11. WHEN DO YOU LIKE TO LEARN ALONE? WITH OTHERS?

Highly Gifted (Gr. 8)	Comparison Group
English literature alone as I like to read very much. Would rather be with just 3 or 4 people in group studying.	Social studies with others - good to share thoughts. Math alone except when I need help from teacher. Some projects I would rather do alone.
Industrial arts in a group. English and art alone.	Read alone. Learn with others just about all the time.
Spanish alone. History with others. Lab work and projects. English alone but like to share what I know. Enjoy tutoring. Like to do social studies with others. Talk politics with others.	English and social studies alone. Math and science with small groups. Discussion in small groups.
	Reading assignments alone. Some English assignments and discussions are best with others.
	Reports by myself - easier to work at your own pace.
	Math with others - I can understand my friends better than my teacher. Learn English, social studies and spelling alone. Like to do worksheets with others. We can help each other.
	Learn math alone - also like to learn alone when I feel like being alone.
	Math alone, if I understand it.
	With others in game situations.
	Read by myself. Think I should be with someone else for help. Group of six instead of 31. Teacher would have more time.
	

Responses unavailable due to faulty transcriptions.

12. DO YOU HAVE SOME TEACHERS YOU LIKE TO TALK TO ABOUT THINGS?

Comparison Group

Oral work best. Too much written work in some classes.

Shop, drawing, math. Working problems. Like learning in creative way and interesting ways to do things and work them out. Fun atmosphere.

English literature best - like to read. Not much of school day goes into this - do in free time.

Creative Writing. Very limited in English. Generally have to write about a book - not creative.

Reading for information. Movies, films. Things that will help me. Learn on my own and do something interesting. Like history.

Like math but it depends on teacher. One period plus homework. This year I like my math teacher and I am doing well.

Like reading, writing, drawing. Like English, too. About 45-50 min. daily in drawing.

Creative writing. Good way to express yourself. Don't like the books they give in English. Like creative writing and math.

Like new and different assignments. English - autobiography - big portion of school work. Math and English favorites. Sometimes assignments don't sound interesting but then when you get into it, it gets interesting.

Like all subjects - best math and English. Would like them all better if they were set up like English where you work at your own pace. Like P.E. and math this year. Like all learning activities.

Some work in class - little homework but not too much. Like to discuss, learn what others have done. Like math and to work with a couple of kids. Do this 2/3 of the day.

Science is o.k. Instead of reading things you do them. Like written instead of oral. Do better this way. 2 hrs. daily.

The kind of work that makes me think - not just answer a question.

Reading things - history books, English. Because it is easy for me but I learn more from it. Last year we had lots of reading, but not this year.

Discussions, not a whole bunch of goofing off. Good topics where everyone wants to contribute - debate. I like debates because I like to listen what others have to say on certain topics.

Math because I get more out of this class than others. Math doesn't come easy. Learn more from group than from teacher. Try hard in math because it is hard for me.

P.E. and metal work. Reading sometimes, when I can pick what to read. Math fun sometimes.

Architecture class - learning how to make house plans - helping me towards what I want to do when I get out of school. Like P.E. - games.

English and Spanish. Good teacher in Spanish - always liked English.

Science worksheets. Creative writing. Feel proud when I find answers. I like to write. 4 hrs week doing things I like best.

Question #13 (con't)

Highly Gifted (Gr. 8)

Reading and English best. Writing, too, if I am feeling down.

Like reading - use it for everything.

Writing and science. Like doing research. Learn as you go along. Big satisfaction to know it is something that you had worked hard on.

Writing papers on subjects I can choose. Like creative writing. In my opinion just reading and then writing about what you read.

Comparison Group

Math - reading is fun. Science and woodshop. Feel free in these classes.

Like P.E. because it is not regular class setting - no desks or rows.

Writing, English, science, band - like playing drums. English teacher not too strict. Lab work in science.

Writing and typing - use my imagination - typing is a skill I should learn and is fun.

P.E. best.

Photo class - have freedom there.

14. WHAT KIND OF SCHOOL WORK DO YOU LIKE LEAST?

Language the least. Memorization, boring! Have this about 1 hour day.

Reading out of books. Not a great reader. Having an experience is much better and then write about it.

Math the way it is taught. Same thing over and over. Could learn in 2 instead of 20 problems.

Math because I don't like things that always have specific answer.

French where you are forced to go along.

Stocial studies - cut and dried - boring!

Vocabulary work - about 1/3 of every period. Drills, repetition. Not learning from each other. Learning from other people is important. Each has his own experiences.

Latin - boring and I cannot memorize. Have a hard time with spelling the words.

Reading things I don't like. Math goes too fast. Always have test on Monday so you have to study on weekend.

Grammar. Boring and no purpose. If I can express myself that is all I need to know. Languages would be good to go to country to learn it. Teachers do not make it interesting.

Math is boring.

Being forced to do things you don't like - like reading, verbs in English. Don't like doing same things in science.

Don't like history reports. Or creative writing. Right now we have to identify nouns and verbs and that kind of stuff.

Comparison Group

Drills and math the least. Too much repetition. About 1-2 hours.

Least is to read text and write it up. Do it 2 or 3 times a week.

No freedom in social studies class.

Busy work and drill the least. Like my math this year - teacher gives you problem and if we don't get it we do it over with some instruction.

Do not like monotonous lectures.

History - repeated all the time. Should have wider selection. We study Columbus in elementary school and then its brought up again. I think we should have wider selection - it would be better.

English grammar - don't need it anymore.

English - boring books.

American Political Behavior. Never wanted to get involved in politics, until this year. Don't care for science the way it is taught. Family life stuff. Rather have earth science.

Math the least - also reports and tests. Reports are lengthy and time consuming. Like to write because I want to write not because I have to. Oral tests I do well on but can't remember when I have to put the answers down. Like math but not the person teaching it.

Math and science the least -- too hard!

Too lazy to do reports and reading.

Math – just adding and subtracting. I know I can do it but the teacher just keeps going over the same old thing.

Oral stuff in math - boring.

Writing reports - don't like. I'm not a good speller.

15. IF YOU COULD HAVE ANY KIND OF SITUATION AT SCHOOL YOU WANTED, WHAT KIND OF THING WOULD YOU ASK FOR?

Different types of science. More specialized classes. Variation of languages - smaller classes.

More different kind and types of languages. Can't talk in class now. Would like sometimes to talk and to discuss different things. Let us tell about interest in hobbies.

Would like to branch off into the subjects we have now. Love to write and this could be included in English course. Like to do whatever I wanted and get extra credit.

General history - beginning to present. Films, books, teacher that knows a lot about it. Would be hard to please everyone. Lots of trips. Science and social studies in relation to other countriss. Lots of P.E. - water skiing.

School to come to your home. Gardening in school.

Everything elective. Then you wouldn't have to study the things you weren't interested in. More science and math. Like a teacher and 5 students going places and studying area in small groups. Study and meet wherever you wanted to -- outside instead of room with desks.

Horseback riding - go to beach on hot day. More debates because I like to hear what my friends and other students say.

Comparison Group

Ask for more architectural work. Do planning of things, buildings and things like that.

Would like more language lab work. Do not like school as it is but can't change it.

Would like to go off campus on a field trip for instance in taking cooking - go to restaurant and see people cook and then try it out for yourself. Learn about psychology. My mom is a child psychologist.

Come and go when you want. Have certain number of hours a month. Relevant to life. Just couldn't stay away from school all the time but if you knew a subject and you could do it in ½ hour, then go home and come back for another subject.

More physical science and electrical classes. Choose favorite things to do.

More science, music, zoology. Special music classes with about 5 people. Good curriculum is half what the student wants and half what is required. Good teachers are those who are concerned about students and give fair grades. Good student government is people who can improve the school.

Doing things in the mountains. Hiking and outdoor things. Travelling in Europe. Reading anything you want.

No science requirement. No P.E. rerequirement.

Horseback riding - I could ride all day. Ski with friends; field hockey; go to football games.

More sports; camping and outdoor stuff.

Fooling around and doing what you want.

Talk more with friends. Gymnastics, diving, shopping, eat more.

Backpacking - mountain climbing.

Literary writing class. More glee club and drivers training. Secretarial training and craft classes.

WHAT IS THE MOST IMPORTANT THING THAT HAPPENED IN SCHOOL TODAY?

Highly Gifted (Gr. 11)

Comparison Group

Physics presentation. Worth half our grade for the quarter. Had to talk in front of 3 physics teachers and explain what we've been doing. Written paper also; felt good after!

I was sick and just got here. Most important thing was being involved in jury for mock court. Found out how they cross examine people.

Found out what the spring musical might be. Didn't go to math or physics because I was singing. Probably want to major in something like music or drama so I need the experience.

Science fiction seminar. Discussed solutions to world problems. An interesting thought that never occurred to me before was the idea of a computer taking over the world. Seminar meets once a week and its interesting all the time.

One of my teachers in Alternative School is a student at Santa Clara and her advisor showed up to grade her. Really good because everyone had done their research and everyone came to class so she was happy. Good lesson and good discussion.

Meeting of Chess Club. Discussed methods for deciding who plays what placement. I'm one of the top men so I felt I should get involved. Been in the club since 8th grade.

Someone in biology gave report on raccoons. Kinda interesting. He has grown up taking care of them. He is Gilroy exchange student.

Experiment in physics. Demonstration on oscilloscope. Running computer program. Working on it for a week. My brother helping me. For my own personal use.

English essay test. Study old authors like Chaucer. Not too interesting. Got a B.

Physics test. Spent a lot of time preparing. Didn't do too hot on it. Didn't read enough of previous assignments. Too hard for me. Not important. I got in over my head.

Math test - got 13. Highest 18.

Movie on Black History with Bill Cosby narrating. Team teaching class of about 40-60 kids. Don't really like this class - don't like some of the assignments.

Don't have to go to math - don't like my math class that much. Its boring and teacher rambles on and on. Think most of the kids feel the same. I guess its because I understand things faster and she goes over it again and again so I daydream. I was in a harder math class, but that went too fast!

Seminar on what peace agreement really means. Pretty Good. part of a world conflict seminar. Set up by group of students who call themselves Students Against American Involvement in Indochina. I'm interested in U. S. politics.

History test. 3 pages long. Missed one question and got a B. Think that was unfair. Grades are important to me. You need good grades to get into college. Laned in high math and science and you have to get good grades or they lane you lower. Laning is good. Low history class, not too many smart people in the class.

Yesterday went to world conflict seminar. 3 movies - army indoctrination films. Required. Sort of break in day.

Comparison Group

Learned to write computer formal. Combined all the things we had learned in math. Computers are interesting.

Physics class. Got rid of the old teacher - he's in the hospital. New one is young - grad student at Santa Cruz. We were all happy with him but today found out he has a few faults. Every teacher has faults, but this one is really disorganized. It bothers me. It will be on my mind for a while.

Assembly was fun. Classical flute and piano music. Lasted for about an hour or so.

100% on math problems. Didn't expect to get 100 points of 400. This is optional thing, not a class. I didn't study - waited til the last day and did it!

Latin test. Important to me because of college entrance. I want to be better educated. They have proved that having college education doesn't help that much to get a job but I want to go on to graduate school.

Something new in math. Teacher explained problems. I was kept busy there - pretty small class.

Math important. Its the class I learn the most in. Purely lecture. About 20 people in class. Usually have to prepare a lot. Passed Latin test. Been under a lot of tension last few weeks. My grandfather has been ill and a few other things - didn't try to catch up on Latin. Teacher is really strict and expects a lot of work. For a class like that I think its the best way. Got a good grade on math test. Two teachers - one good, one bad.

Oral report in a group. Spent all week preparing for it. Did pretty well. Mirror image - parallax - like science. My dad is physicist. Don't like math but I like to understand what everyone is talking about.

Routine day. I like family life teacher is really good. Like the loose surroundings and open discussions. Women's history. Really good course.

2. WHAT WAS THE MOST BORING THING FOR YOU TODAY?

Last half of English class. Supposed to read a book and I already finished it.

History - hate history. Think I know all the history that is necessary at this time. Small class and I like small classes but U.S. History is boring - ancient history is o.k.

Going to school at 8:00. School is pretty boring except ceramics. U.S. History is very dull - teacher talks too much. She is afraid of little moments of silence. She handed out a survey and I told her I thought she talked too much but I don't think she is going to change.

Listening to French teacher talk.

Comparison Group

P.E. - taking measurements for weight training. Co-ed class. Boring because I knew the measurements already.

Listened to speaker on grand juries. Didn't understand what they were talking about. Think it was for a different class. Cold in class.

French - teacher unmotivated and today we had a movie so it wasn't too bad. Usually no one cares - everyone's mind wanders. Do learn but is slow.

Spanish - saw a movie about a girl's birthday party. It was hard to tell what they were saying. Usually do my math in Spanish class. Pay attention once in a while. Easy for me. Had Spanish in elementary school - mostly repetition.

Social studies - doesn't interest me. Large lecture class.

French - always boring. Teacher good but has to go at slow pace because some of the kids don't catch on fast.

Math - teacher unable to communicate. Repeats herself and doesn't seem to be able to answer things.

Physics - doing methodic things. New teacher this semester. Last semester really structured, not there's no pressure.

Test in math - finished early - sat around and wait for everyone to finish - usually happens in math - I'm good in math.

Clothing class - no project.

English always boring. Science Fiction - isn't interesting.

Had appointment and then study in German. History usually bores me.

Math slow because some kids catching up. I just sit around.

Toward end of day get tired of classes. MarkTwain English class particularly boring. I'm not too good in English and don't enjoy reading as much as others.

Taking physics test. Now that we have new teacher, it's not boring. Old teacher wouldn't answer questions and made you feel like a fool for asking.

French lab. Asked questions - kept going on all period - long and drawn out. We told teacher we were bored and she is trying to improve.

Math - review. Had been gone for 2 days and it was still the same old stuff. It seems stupid to be on one thing for so long.

There are some classes more boring than others. U. S. History most boring. Don't do anything - just talk among ourselves. Not learning - teacher isn't teaching just talking about his own problems and his family.

Working in chem class. All we do is work on labs - no lectures - pretty monotonous.

World conflicts seminar. Keep reading about world problems. Keep rehashing same thing over. Never anything new. Lasted about 1½ hours. 15 people. They were listening but I don't know if they were attentive.

French class - saw filmstrip and teacher talked - really boring! His voice tone is bad. Try to listen and give feedback but majority of class either talks or does other work.

English - partially because some of it is over my head. Partially because the teacher is boring. Speaking manner is boring. Don't spend a lot of time preparing as I have more exciting things to do and school just gets fitted in.

Hebrew - learning couple of words seems out of context.

3. WHAT DID YOU THINK ABOUT OR IMAGINE TODAY THAT SEEMS WORTH REMEMBERING?

Highly Gifted (Gr. 11)

Comparison Group

I thought I needed to start writing poetry again. I used to write a lot. I was upset with my style so I quit. Have no time. Taking 5 solids.

Taking AP exams. Preparing for them. Last year took biology test. Hope to get enough credit to get sophomore standing so I can have less pressure at college.

History. How loyal and patriotic they were at the turn of the century. I thought how nice it would be if we could be back to that now. Now the leaders aren't so good. I have faith though that we'll do o.k.

Tutoring in math. He's really far behind and I have to go back to basics. Today went badly. After we finished he said he was going up to the Cow Palace. I don't see how you get so far behind in math and then still have time for extra activities.

Film in Black History. Discussion interesting - best we've done.

Movie in social studies. On Black History. Bill Cosby narrated. Was different from usual movies.

4. WHAT WAS THE MOST EXCITING SCHOOL EXPERIENCE LAST SCHOOL YEAR?

Write an essay on significant points in a chapter on Reform Movements. Thought it was a stupid assignment so I turned in 2 blank pieces of paper. She asked me to write a paper on why I didn't think there were any significant points. I wrote on the insignificance of reporting. It was just a joke and she thought it was a good essay. She didn't realize it was a joke - I didn't make any impression on her at all.

History - Civil War. In English got into Shakespeare. Cancelled my second semester class to take independent study on Macbeth and King Lear. Really good teacher. Going to family life class. Different from most. More free and open. No homework - no books. Don't have to go if you don't want to.

History - get an A if you do well on test and then do extra assignment. I read a lot of biographies. Learned a lot more through self-initiated things.

Dropped out of English and that made it nicer. Never liked English. This is probably the first year since kindergarten that I haven't had English to do and its nice.

Comparison Group

Computer science. I still use it. Lot of free time after school. Could do anything I wanted.

Resource period. Informal - talk about whatever is on your mind. It is valuable because it gives four or five of us the opportunity to talk together about things we may not understand.

Journalism is always peak experience for me. Mock court in government good! Talked to a lot of people involved with court - judges, DA's, lawyers. All my English seminars were great.

History - teacher good. Class periods interesting and informal. Good book. Teacher tells stories about American History.

Physics class - hasn't necessarily been a pleasant experience but I would say I learned a lot. It varies the most. Always something undiscovered - something to look forward to.

Course in philsophy. Seemed really neat to have theories and philosophies presented. Opened my mind a lot.

WHAT WAS THE MOST DIFFICULT, UNHAPPY EXPERIENCE?

Could have done better on math half of PSAT. I'm in high lane and people expect high scores and keep asking you about them. Have reputation to uphold.

Physics experiment. People I was working with were goofing off. Really bad for me. People were hard to work with. Boring classes. History bad. Teacher talking on and on about nothing.

When I got a B on history report. Report on election of 1876. Teacher said the content was not right. I looked it over and sort of agreed with teacher. Hoped for A, usually get B, but I worked hard on this one.

German grade. Teacher didn't follow through like she said she would. Got a D at beginning and thought it wouldn't add into rest of grades which were all A's. I got a C and I was pretty upset. She's very strong-minded and I couldn't change it. Good teacher but she doesn't listen.

French - teacher disappointing. Only reason she is teaching is that she has tenure. Old fashioned methods. Slow, never studied for tests. Studied 5 minutes for finals. They put her in English department. Bored there, too!

Math - hated the teacher and didn't get anything out of class. Graded on wrong things like handwriting in notebooks. Geology in alternative school - couldn't get started. Switched to regular class and things are alright now.

I get bored easily. Can't remember anything really unhappy. History teacher lectured a lot and it was boring.

Physics waste of time. Could have learned by just experiencing in lab rather than talking first.

Had English paper to write and several other things piled up. Teachers seem to take advantage of 3-day weekend and pile up homework. Didn't get everything done.

Physics was awful. Always in fear of teacher. So worried about study guide questions I never did them. Teacher was really nice but I just couldn't talk to him about the class. New teacher now and things are more relaxed - better for me.

In social studies I worked my---off and got a 8+ when I knew the
material. She gives essay tests
and her questions unclear. Don't
seem to know what she wants. Know
the material and know it well but
don't know what she wants.

Physics teacher - been teaching for 30 years. No one can stand him. Main thing is attitude. Trying to teach life is really tough. That wasn't his job - should have been teaching physics.

Comparison Group

Math test - totally bombed. Didn't understand and not enough time.

Same history class. Got B for semester grade. Got all A's first quarter. She lectures all day -don't think you should grade on opinion questions.

D on history test. Knew the materials but didn't do well on test. Grades are important as far as going to college but for me personally.

Getting D's on tests. Haven't accomplished a lot - wish I had gotten better on PSAT. Not taking it to go to college because I'm not interested in going to college.

Psychology the first semester. At first, good, talked a lot. Then as it went on we saw it was phony - disappointing.

Physics lab boring. Teacher won't help you when you run out of ieas. Talk to my dad - he doesn't give answers but helps me get them on my own.

Comparison Group

Physics class - teacher not particularly pleasurable. Strict class. New teacher now, he's nice.

Physics - teacher bad. Didn't have our values and attitude toward us bad. Left to have an operation; said we could come over to his house and work if we wanted to. Realized how dedicated he was.

D in English. Supposed to write essay on Faulkner book. Didn't read the book and that's why I got a D.

Two-week minicourse. Couldn't get along with two teachers. One taught grammar and the other speech. It was like an assembly line. Even the best kids got turned off. Some kids were even smoking joints in class.

6. COMPARING WHAT HAPPENS IN AND OUT OF SCHOOL, WHAT IS DIFFERENT...?

Out side, work at Lockheed on computer. Different than computer at school. Atmosphere different, people looser, more chance to talk to people, whereas teachers don't spend time explaining what they want.

In school 2 parts: academic part and relating to people. I get an assignment, I do it. There isn't any real control over when I talk to peers. Out of school, shift into different world. Try to relate to family.

Not much difference. I like school. Do the same in and out. Like math pretty much so do a lot at home. Play with computers in school and then out also.

7. ARE THERE THINGS YOU ARE INTERESTED IN THAT YOU DON'T DISCUSS AT SCHOOL?

Highly Gifted (Gr. 11) Comparison Group Photography. Would prefer to take Interested in Jewish Culture. things that interested me. Don't know how it would work out in school. Had biology last year and really enjoyed it but can't take it this year because I have to finish physics and chem. There is a chain you can't break. Political aspects. Teachers don't like to get involved. They might be attacked for it. Teachers and students should still be more like friends but teachers must maintain authority. Only thing discussed in school is what the courses are about. I have no set hobbies or interests. Sewing - costume design. Can't stand having my work inspected. If there is something really important, I don't bring it to school. Poetry. I've never had English class that fully went into that.

8. WHAT PART DOES IMAGINATION PLAY IN YOUR LIFE?

Very important in school. Like physics experiment - we had to figure out an experiment to do. We have to use it in writing. You have to decide what to put in a sentence. Also for poetry.

I would like comprehensive poetry course - not mechanics. But I can always do it out of class.

Usually in English classes. You imagine the situation you may be writing about and possible variations and it helps to understand the problem.

When things get going in English, I imagine $I^{\dagger}m$ in a different place. Takes my mind off school. Outwardly it would appear I use it very much.

Circumvents labor. Use it to find easier way of doing something. For writing. Analytic thinking for social studies. Keeps me from getting bored and helps me write stories.

Gives me ideas for projects. Sometimes I can see a branch in a tree and imagine things about it. Ideas for English. Helps me be more unique in what I photograph. Imagine I'm somewhere else if I get bored.

Essays. I'm not very imaginative. It would help if I had more imagination.

Imagination hinders my performance though I do use it in English.

Helps in writing - use it in art, too.

Write stories. Like this but hate it when teacher writes all over paper with comments about clauses.

9. WHAT KIND OF CLASS SETTING OR WITH WHAT KIND OF TEACHER DO YOU LEARN BEST?

Highly Gifted (Gr. 11)

Comparison Group

Learn best with subject I like. Like history when taught a certain way. Teachers I like are really interested in their subjects and try to make kids like them. Have debates in history. Use my imagination.

Depends on course. Science, math, language need structured approach. Others more informal, more individual.

Depends on subject. English, government: knowing the teacher and liking the teacher. Science and math: more structured. If I'm motivated I learn better in unstructured setting. Seminars are my idea of unstructured class. Teacher is more of resource.

When I'm experiencing what I've learned. In history, through movies. Learned most in photography. Chem teacher enjoyable - nice guy. Not afraid to ask him questions cause he gives you real good answers.

European history. Learn best when involved in discussion. Do well after reading. In German just sat and talked. Mom and dad corrected papers. Not enough speaking.

Depends on subject. Like in photography he gave you assignment, gave you book, you come in for test once in a while and turn in assignments on time. Another class was with rigid teachers who taught everything the way he probably has been for 100 years. I learned in both classes.

10. HOW WOULD YOU ORGANIZE SCHOOL OR HAVE IT ARRANGED?

Don't think day could be lengthened. Not so much homework. Math especially guilty of too much homework. More time needed in sciences. Shorten English - teacher is just restating things anyway. More small groups. No required P.E. More math teachers, maybe one-to-one basis.

Similar to alternative school but not exactly. Not so much emphasis on credits or how much work you are doing. Individual conferences with teachers - less hassle with attendance. Small groups.

Get rid of tenure! Class fine - its just the teachers. Get student evaluations of teachers. More important than teacher evaluation of students. It doesn't matter if you are in rows or in a circle, its the teacher that creates the setting.

Present setup practical. Alternative School set up liked. Between the two you could find balance.

More comfortable atmosphere. Each person is different and needs different things. Like in history, you have to have it, but it doesn't really relate to you. I can relate better to teacher's experiences than a book or movie.

More classes like Family Life. Talk to teacher - leave class if you feel like it. You don't learn anything by staying in class and being super bored.

Comparison Group

Modular o.k. for college but set schedule needed for high school. Small groups for physics. Large groups for discussions.

Smart people laned together. Foreign Language small. Larger groups ok if everyone at same level of instruction.

Less required classes. Certain classes end up a waste of time. There should be better way for students to get to know ahead of time what a certain class would be like except to hear from other students - maybe like auditing the class the semester before you take it.

Have computers teach us. You could learn what you wanted. There is this basic chain. You do things in high school so that you can do something else in college so that you can do something else in grad school. I would love to take an art class but I have not time. I like a mixture of self-study and group study.

11. WHEN DO YOU LIKE TO LEARN ALONE? WITH OTHERS?

Discussions and analysis with others. Science alone. You need good texts but you don't need someone there to teach you.

History with others, English too. Alone with science and math.

In science with others. English or writing situations, its more individual thing.

English - individual relationship with teacher. Physics, need teacher. History learn more alone. The more solid the subject the more you need the group. Biology alone. Feel better working on experiments alone. Sometimes it can be beneficial to work with others. In some classes I do this.

Alone in English. Others in Social Studies. More opportunity to do things in groups.

History by myself. Can't read in groups. Motivated in history then I'm interested. Last year had lots of lectures and learned the most I ever had. Didn't read that much. Math and physics you need with others.

Comparison Group

Math alone. I can really understand on my own. Learning in a group would be advantageous like a discussion about a book. Get other opinions, varied opinions.

With others most of time. Useful to share ideas. Learn faster when you have inter-communication going on. Reading book not very good way to learn; it doesn't stick in my mind as well as interaction.

Math, science with others. English and history part alone, part with others. Creative arts and things with others. Writing and reading alone.

Analyze my thoughts on own.
Reports alone. Math with others
because its fun to see who gets
the work done first.

History discussions with others. In math it doesn't matter. Easier if one-to-one. Language alone; English, writing is awful but reading and discussing great! Like oral reports.

English with others to see what they are doing. Like to have examples from others.

Alone for math and science. With others to interact.

Alone when doing composition or taking test. Others for discussion.

12. DO YOU HAVE SOME TEACHERS YOU LIKE TO TALK TO ABOUT THINGS?

To English teachers about books, find out their ideas. Don't talk about anything personal. It seems you aren't important enough to a teacher for them to really care. You don't talk to people who don't feel interested. I have my parents for that -- who needs teacher!

English teacher, art teacher. Others sometimes. They know I like them and they like me. I'm not just a student, I'm a person.

Comparison Group

Math and science - more precise. Definite answer. Just seem more attracted to it. Most of day goes into it. Spend most of time doing it because it is more important to me.

More relevant to me and what I'm interested in. Rather go to English class than to stupid assembly. Enjoy school - especially this one. Went to school in foreign country for a year and really appreciate being back.

Science and math fun. History but not as much as science. 1/3 of day doing work I like best.

Don't mind reading textbooks. Rather not write essays.

If its something that's boring I just get it over with. Like creating theories and discovering theories.

Fond of history and math. Father always interested in history and I guess I inherited it. Fun to get solution. Quite a bit of day goes into these.

Math, physics. Given problems to solve. Really feel sense of accomplishment. Consolidate all your learning and do something useful with it. Math and physics seem closely related.

Math - always been good in it. formulas to work out; lots of stuff may not be relevant to everyday things. My father is engineer and he uses it.

Math comes easy to me. Like science better. Math doesn't really apply to real world unless you're a mathematician. Science helps you understand real world.

Reading but it depends on subject. Lecturing would be good way to learn but you need good lecturer.

Reading - learn something from it.

Doing research - writing essays.

Chemistry - makes you feel good when you can figure out things. Reading a lot.

Reading. Its easy and doesn't take much time. About an hour a day.

Written assignment because I do better on them than on oral. Like longer term assignments. Instead of doing 50 problems, I would rather do 2 hard ones. None of the school has this.

Writing essays. Don't like lectures and then test. Read chapter, take test. Don't learn from this. Having a reason to remember - not just for test.

Music - releases tension - more fun and challenging. Other classes just give you blurbs and facts and figures.

Gym - really like sports. Not busy work. Normal school day is a waste.

Auto mechanics, art and P.E. don't require much homework. I know them well. Don't pay attention to history dates.

Although U.S. History is pretty boring, its mighty interesting. You have to be open-minded enough to see through all the US propaganda to find out what the U.S. is really like. I like long term papers.

Comparison Group

Math and physical science. Kind of have a head for them. Like having the teacher propose a problem and have class rok it out on blackboard. Getting into class discussion on how to solve problem is fascinating.

English, reading. Enjoy writing papers. Don't like starting papers, but like them when I get into them. Discussion, if group is enthusiastic.

Writing reports - put things together so they are clear, organized and show what I'm thinking. Fun to juggle words and sentences. But I hardly spend any of the day doing this.

Science or social studies where you are doing project that is left open to you. I find I'm motivated by this type of assignment. Usually get more out of it if I can get into subject of my choice.

Biology - science always been something I wanted to do. Like outdoors and working with animals. Most of the classes I take I really enjoy.

Reading - always been compulsive reader. Get lots of new ideas from books. Like talking with others about new ideas - can get so much from one little book.

Sometimes math and French. Depends on teacher. Sometimes math is fun. Nice to work on problems if there are no pressures. Teacher is willing to help and there is no pressure to do homework. Like drama, choir and sports, also.

Math because its easiest. Nothing really above you. Learn it and listen. French takes more of a natural talent. Science and math I like a lot.

Comparison Group

Don't like memorizing spelling words and grammar. Don't have any trouble spelling and learned grammar in ninth grade. Dislike long lists of sentences in English. Math problems where they are drilling over and over. Spend 30% of the day on this.

Don't like English. Don't mind physics. Like to read but don't like what we have to do with the reading. Don't like to have to find why the person wrote the story. Just read for fun.

Don't like writing. Hard time expressing thoughts on paper. Don't like busy work. Its not challenging. Spend less than one hour a day on this.

Reading textbooks. Just can't get through them. Reading something that's really boring. Textbooks are boring. Right now we're reading essays - that's boring because I think they were written for someone with bigger vocabulary. Like reading novels, though.

Don't object to much of my school work. If my English assignment is one I don't like, then I have hard time doing it. Like essay on book I may have just read. Sometimes teacher asks for more than anyone could ever hope to cover.

French - filling in blanks on worksheets.

English - reading o.k. but don't like teacher. Gives own views, sets down outline and has you answer questions. Contradicts own viewpoint. French because I get flustered and really have to work. There is so much to learn. Don't have natural talent.

Chem is too hard. Learning easy things and keeping up with it.

Math homework. Reading books. Can't really get into reading unless its something I like. Don't remember things I have to read. When I'm forced to, I do. Actually very little of my day goes into this.

Grammar - don't like it. Can write things down automatically but I can't tell you if its a verb or noun or why its there. Teachers pick out a book and give you 2 weeks to read it. Teacher keeps saying some things are symbolic and they never tell you why. Don't like laning.

Math when I don't know what I'm doing and have to ask someone what's going on.

Reading. Its becoming increasingly hard for me. Used to read a lot but I read very slow and now I avoid reading. My mind wanders and its too hard to concentrate.

Writing essays because I don't know how. For history you do a lot. Tricky tests in history. Learn for test and then forget. Why does teacher trick you? It shouldn't be graded.

Comparison Group

Writing expository papers. English not my best subject. Don't seem to be able to write freely.

Lab writeups - long term projects. Hate doing art projects for English. Preparing oral or panel discuss - ions. Usually one person gets hooked into the whole thing and you don't really say anything more profound than if you had a class discussion.

English is boring right now. We're into vocabulary and things like that which are fairly simple and dull. Like literature, like to read.

Copying something or plugging in the formula is easy. Reading history is different, have to keep my mind on it. Half of my classes are just copying and plugging in answers.

English. You learn grammar in junior high and they keep on giving it to you. They think you forgot it. Make you analyze stories which are irrelevant. Spend one period of day doing this.

History and English. Writing essays and discussing philosophies turns me off. I don't see the purpose of literary analysis. Its ok to write fluent English and all but in history there is a lot of information I won't be using.

Comparison Group

Place little more value on individual talents. Instead of boring humdrum English or math, have computer class or class where people could learn enough just to do income tax. I couldn't work in alternative school. Have trouble pacing myself but my sister gets credit for taking her dog for a walk.

Not so much English. Been a waste of time for me. If you want to write poetry or read stories, you should be able to take elective. Have expository writing earlier. Eliminate stupid texts and teachers.

Exploratory Experiences. Worked in lab - helped veterinarian. Nice to see what an occupation is like before you actually go ahead on it. Nice to get outside and sit on grass once in a while. Combine learning and fun, like choir invited to LA. There are lots of things you can't learn in school - have to experience them.

First impulse is to take vacation. Then I would probably come back and do what I'm doing now. More emphasis on occupational things. Right now there are too many solids. A gym you go to anytime; nice to have a beach around; things would be pretty similar but I'm sure I would get bored with anything else pretty quickly.

Get someone who could help me with drama. They could show me how to act and how to perform in front of people. Probably spend all day working on drama and music. Like to read, too.

I would like more biology. We should have time to do what we want. Took biology last year and now there isn't any more. Like exploratory experiences but it doesn't work out for me. Alternative school too unstructured. Tried it and learned nothing. Have "funner" classes. Maybe requirements to get to college should be changed. You don't have time for fun classes when you have to take required college ones.

Like in England. Testing where its not all that important to do homework every night. Tested on material and if you know it, you pass.

Short, narrow subject classes. 4-week study in depth. Have many topics to choose from. Take as much time as needed. If you're discussing and bell rings, stay and continue discussing. I'd like not to have to hassle with attendance office about missing classes.

Police work with exploratory experiences. Given more choices. Let students pick how long their day should be. Large scale alternative school - seminar type. Some structured classes for those kids who learn better that way. Places to go when you need help.

Building something. Geometry classes should be able to plan baseball diamond or something like that. Get exposure to it and then you would learn. Do it instead of hearing it.

Living in different communities. Learn about survival in different places. Live off the land; learn about seacoast, mountains, etc. Learn to farm, live in San Francisco. Go to Mexico if you're learning Spanish. I'd like to work at a zoo.

Pick one subject and learn it completely. Way it is now you spread yourself too thin. If you direct all your energy to one goal, think it would be better.

School that travels around the country. Talk to different people. This school is pretty good; pretty hard to set up perfect situation. I get a lot out of the classes I like.