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THIS EXTENSIVE REPORT DESCRIBES A COUNTYWIDE SUKVEY OF EDUCATIONAL NEEDS TO DETERMINE WHAT CHANGES I: SCHOOL frograms were most necessafy and what priokity sioutld be assigned to each of these changes. educational need was defined as the degree of discrefancy between what various groups of feople think that the schools should teach and what THEY THINK THE SCHOOLS ARE TEACHING. NEAFLY 4 , OOO STUDENTS IN GRADES SIX, NINE, AND 12,18600 TEACHERS, ANE 850 FAKENTS COMPLETEC THE SURVEY FORMS. THE RESULTS OF THE SURVEY SHOWED OVERALL CONFIDENCE IN THE SCHOOL SYSTEM AND ITS ABILITY TO CORRECT ANY FRESENT DEFICIENCIES AND CONSIDEFABLE AGREEMENT among teachers, students, and farents on the most important NEED AREAS. HIGHEST PRIORITY WAS GIVEN TO DRUG EDUCATION, FAMILY LIFE EDUCATION, INSTFUCTION IN COMMUNICATIONS SKILLS: VOCATIONAL EDUCATION, PERSONAL ECONOMICS, CIVIC fegponsibility, and problem solving. many students feharked that the questionnaife dic not adequately deal with such PROBLEMS AS TEACHING METHOCS, TEACHEK-STUCENT RELATIONS: THE GRADING SYSTEM, AND SCHOOL RULES WHICH INHIBIT FREEDOM OF EXPRESSION. (EK)


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A SURVEY OF THE EDUCATIONAL NEEDS Of SANTA CLARA COUNTY

Paul P. Preising, Survey Director

The work presented or reported herein was performed pursuant to a grant from the United States Office of Education, Department of Health, Education, and Welfare.

## S. P. A. C. E.



PUBLIC SCHOOLS
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Dr. Gcorge Downing, Superintendent San Jose Unified School Dist. Area

Mr. Don Eddie, Superintendent
Los Gatos High Schcol Dist. Area
Mr. Frank Fiscalini, Superintendent East Side High School Dist. Area

Mr. Laurance Hiil, Superintendent Campbell High Scinool Dist. Area

Mr. Wendell Huxtable, Deputy Supt. Santa Clara Unified Schoci Dist. Area

Mr. Harold Delavan, Superintendent Mt. View-Los Altos High School Dist. Area

Dr. Charles Ńnight, Superintendent Fremont ligh School Dist. Area

Mr. William Keig, Superintendent -iryan Hill Unified School Dist. Area

Dr. Harold Santec, Superintendent Palo Alto Unificd School Dist. Area

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Miss Margarita Espinosa
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Mrs. Olivia Davies
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Mr. Clyde Arbuckle
Museums

Mr. George Farrier
Libraries
Father Joseph Pociask Art

Dr. Hal Todd Drama

Dr. Warren Wade
Educational Television
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5. Mr. Don Eddie, Los Gatos School District
6. Mr. Frank Fiscalini, East Side Union High School District
7. Dr. B. Frank Gillette, Los Gatos Joint Union High School District
8. Mr. Earl A. Goodell, Fremont Union High School District
9. Mr. Laurance J. Hill, Campbell Union High School District
10. Dr. Blaine A. Huntsman, Mountain View-Los Altos Union High School District
11. Mr. William R. Keig, Acting Superintendent, Morgan Hill Unified School District
12. Dr. Charles S. Knight, Cupertino Union School District
13. Mr. Neal Royer, Campbell Union Elementary District
14. Dr. Harold T. Santee, Palo Alto Unified School District

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## Part I - Planning and Administering the Need Survey

## Introduction and Statement of Purpose

The school taxes paid by residents of Santa Clara County are an invest. ment in the future of the County's young people. These tax monies are spent most effectively, and this investment is soundest when young peopie are taught the concepts and skills they will need for a productive and satisfying life. Schools would have a relatively simple job if the same concepts and skills were necessary and desirable year after year. Since American society is changing rapidly--and Santa Clara County society is changing even more rapidly--the schools' job is much more difficult; new concepts and skills must be taught, and the old ones, to remain useful, must be modified. In practice this means schools must first decide exactly which changes in their programs would be most beneficial to their students, and then, what priority should be assigned to each of the changes. These decisions are crucial if the County's investment in its young people is to be spent wisely.

The purpose of the educational need survey conducted by the S.P.A.C.E. Center was to give County educators useful information for making these crucial decisions. The need survey was conceived by the S.P.A.C.E. Center as part of a continuing effort to identify educational needs and to seek creative and innovative ways to meet those needs. One of the Center's first systematic attempts to sense educational needs was a two-day conference of eighty-four leaders representing diverse interest groups within the County. This conference reached a consensus about some general, county-wide educational needs.* The need survey brought educational needs still more clearly into focus by surveying a larger and more representative group of people, by

[^0]systematically looking for educational needs, and by documenting educational needs with reliable, objective information.

## The Value of Need Survey Information to Educational Decision Makexs

School officials are constantly seeking ways to improve the education of their students. They might decide some new programs should be added to the curriculum, some old ones should be omitted, some should be changed or some should remain the same. Whatever they decide, their decision is based on two kinds of judgments. One is a judgment about what, in fact, schools are teaching. This might be called the factual basis of decision making, since relatively reliable and objective measurements can be made of what is being taught. When the question of what schools should teach is raised, another dimension enters into the decision-making process. This dimension involves personai values and philosophies and is the subjective basis of decision making. It is necessary and inevitable because many of the most important decisions, especially in education, require choosing between competing values and philosophies.*

Ideally, an educator's professional judgment and his perception of the will of the school board and the comminity at large would provide the subjective basis for his decisions; a variety of test scores might represent the entire factual basis. In practice, educators do not have all the necessary test scores, nor do they have well-defined statements of wat the community expects of its schools. When the factual basis of a decision is incomplete, as it usuaily is, educators must rely on their intuition and perception. In the process, the role played by the subjective dimension of decision making is overemphasized. Furthermore, this subjective basis is not as accurate and well-founded as it might be simply because most educators have very little reliable and objective information regarding the demands of various

[^1]c.inent groups of the school. When this lack of information exists for both the subjective and factual bases, the validity of educators' perceptions is dependent upon the educators' profeesional training and experience, and upon their daily contact with the people most involved in the schcol system--students, teachers, and parents.

Of course, educators are anxious to increase the accuracy of their perceptions and to improve the bases of their decisions. Information cbtained through the educational need survey will provide them with both. Specifically, it will be of value in three ways:

1. By providing educators with factual information about what students, teachers, and parents think the schools are teaching, the results of the survey will add to the factual dimension of the educational decision-making process.
2. Conclusjions based on what students, teachers, and parents think the schools should teach will provide, for the first time, a comparatively well-defined statement of the expectations of these groups. These expectations either will reinforce educators' value judgments and philosopties, or they will demonstrate how these subjective judgments must be modified to bring them into line with somunity opinion.
3. The results of the survey will greatly enlarge the base of information on which educators' perceptions are founded, since more than six chousand parents, teachers, and students were given an opportunity to participate in the survey. Furthermore, there is evidence that the results of the survey can be generalized to Santa Clara County as a whole.*
[^2]Of all the various reference groups within the County's population, students, teachers, and parents were selected to participate in the need survey because they are the most relevant reference groups for educational decision making. Since the people in these groups are most directly involved in the educational system and, therefore, most concerned with it, their opinions tend to be better informed and more significant for the operaion of the schools. Consequently, the results of the survey are based upon the opinions of each of these three groups.

The Definition $0_{i}^{\dot{E}}$ an Educational Need and Its Relation to Educational Goals
In addition to providing valuable aids for all educational decisions, the results of the need survey specifically identified county-wide educational needs. An educational need might also be called an unattained educational goal. When schools do not attain an educational goal, an educational need exists. In this survey, an educational need was operationally defined as the degree of discrepancy between what various groups of people think the schools should teach and what they think the schools are in fact teaching. The larger the discrepancy, the greater the need, that is, the greater the difference between what schools are doing and what they should be doing, in the opinions of the groups polled.

For example, the first item on the survey questionnaire* asked a participant whether the "schools NOW teach or help students learn" the learning goal labeled "Solving simple arithmetic problems." The possible responses were "to no extent, to some extent, to a great extent," and "to a very great extent." The same range of responses was also provided for whether schools "SHOULD" teach or help students learn that particular goal. If a person checked the response labeled schools NOW teach that goal "to some extent" and SHOULD teach it "to a very great extent," this discrepancy would

[^3]indicate that person thought an educational need existed. If a person's. responses indicated no differences between what schools NOW and SHOULD teach, an attained educational goal would be revealed. By identifying educational attainments along with educational needs, the need survey presented a balanced picture of the relative.success of the County's educational system.

The results of the need survey are a measure of opinion, a measure of what people think the schools are teaching and should teach, rather than a direct measure of what students have learned. Although there may be a . difference between what these people think and what the facts are-if they were to be reported by an unbiased, outside observer--it is still extremely important for educators to know the opinions of these people. Their opinions may indicate a real educational need, or they may signify that these groups are simply unaware of what the schools actually are doing. It is up to the educational decision maker to interpret the meaning of meeds identified by the need survey; on1y he can decide whether they are real or whether they are evidence of a communications gap between the schools and their clients.

To assist the decision maker, the survey provided a frame of reference for systematically interpreting the significance of the discrepancy scores. By using the Taxonomy of Educational Objectives developed by B. S. Bloom and D. R. Krathwoh1, it was possible to assign each item on the questionnaire to a specific subject matter area and a specific learning process. To understand this point, it is necessary to explain the Taxonomy.

The Taxonomy differentiates two domains of educational objectives--"the cognitive" and "the affective." Within the cognitive domain, the various processes involved in acquiring and using knowledge are arranged in a hierarchy from the simplest category, "knowing," at the bot tom and progressing
through "comprehending, applying, analyzing," and "synthesizing" to the top and the most complex category, "evaluating." The affective domain contains categories referring to the various ways knowledge affects the person whe acquires it; these categories are "receiving, responding, valuing" and "characterization by a value of value complew."*

Each of the educational goals included in the survey was designed to fit into a given category under one of the domains and to refer, in addition, to one of the curriculum content areas. Hence, each item fit into a $20 \times 11$ matrix whose $X$ axis included twenty subdivisions of the curriculum content areas and whose $Y$ axis included the eleven learning processes subsumed under the affective and cognitive domains. (See page A-29 of the Appendix where the matrix is reproduced.)

Survey item No. 53, for example, "Using the scientific method in problem solving," falls within the "applying" category under the cognitive domain and refers to the content area of science. "Being aware of the fine arts," survey item No. 121 , on the other hand, falls within the "receiving" category under the affective domain and refers to the fine arts content area.

The matrix not only allowed a systematic and comprehensive development of items for the survey, but it also provided assistance in the interpretation of the survey results. To illustrate, if a large discrepancy was found for survey item No. 121, knowing where that item fell within the affective domain and that it was under the fine arts content area would enable the decision maker to become increasingly specific in identifyjing the key aspects of twe problem and to select the most feasible treatments for its solution.

No matter how useful the need survey results might be in theory, they will be useful in practice only if the opinions of the people who participated

[^4]in the survey are important to educational decision makers. How the need survey sample was chosen to include those people whose opinions are important is explained in the next chapter.

To understand the sampling methods used in this survey, three questions must be answered. First, "Why was the need survey conducted county-wide?" Second, "How were the respondents selected for participation in the survey." Third, "Was the survey sample characteristic of Santa Clara County schools?" Specifically, "Was it characteristic enough to permit making warranted generalizations about schools throug'ant the County?" Why Was the Need Survey Conducted County-wide?

When a given school district discovers an educational need, it marshalls its resources to resolve that need. Although neighboring school districts may have the same need, their solutions for the need are usually developed independently; often school districts simply are unaware of the solutions their neighbors have already developed. Since it is likely that school districts within a given region do, in fact, share certain educational needs, the best solution to those needs could be developed if each school district knew what its neighbors had done and were planning to do. But more imporiant, before solutions can be planned cooperatively, school districts in a given area need to know what problems they have in common. Hence, the educational needs shared by school districts throughout a region must be identified.

By golling groups throughout Santa Clara County, the S.P.A.C.E. Need Survey identified the educational needs which are shared by the County's schools. Because these are county-wide needs, the solution developed for a given need by one school district can benefit many other districts in the County, providing these other districts are kept well informed. Since all the County school districts which share a common need can benefit from a solution which is. demonstrated in one school district and made possible through federal assistance, the funds allocated for developing and demonstrating solutions to needs are spent more effectively.

The goal of the S.P.A.C.E. Center is to facilitate this efficient proce:3s of educational improvement in five specific ways: (1) by identifying critical need areas; (2) by helping local school districts develop creative and innovative solutions to these needs; (3) by assisting school districts in their applications for supplements to their own funds from federal monies made available for exemplary solutions to critical educational needs; (4) by evaluating the success of a given solution through the use of carefally controlled studies; and (5) by providing vital communication links between educators throughout the County who are concerned with attacking educational needs. Thus, the county-wide need survey is a long first step toward educational improvement in Santa Clara County. How Were Need Survey Participants Sielestod?

The need survey combined a broad county-wide perspective with an in-depth analysis of the County's educational system. An in-depth analysis would have been impossible if the survey had studitd only one grade level (e.go, ninth grade) or one group of people (e.g., students). Neither of these approaches would have aliowed more than a superficial view across the surface of Santa Clara County education. In contrast, the S.P.A.C.E. Need Survey probed deep beneath the surface: first, by identifying educational needs that exist at grade levels from kindergarten through high school, and second, by including as participants in the survey a cross section of the individuals whose opinions are most important to the operation cf the schools; namely, students, parents, and teachers.

In choosing student participants, it was reasoned that those students who had almost completed their elementary, junior high, or high school careers were most qualified to express opinions about the needs existing in each of these three types of schools. Accordingly, the survey polled sixth graders (representing grades $\mathrm{K}-6$ ), ninth graders (represerting grades 7-9), and
twelfth giaders (representing grades 10-12). A total of 3,829 students completed need survey answer forms, including 1,205 sixth graders, 1,343 ninth graders, and 1,281 tweifth graders.*

Teacher participants for the need study consisted of the entire faculty of each school where students were polled. A rotal of 1,609 teachers completed need survey answer forms. Of this total, 914 teachers were from high schools (including some from junior higls schools) and 695 were from elementary schools.

The method for selecting parent participants for the need study was determined primarily by a cost factor. Mailing questionnaires to a random sample of parents and asking the parents to complete and mail them back to the S.P.A.C.E. Center would have been more costly, it is estimated, than the return would have warranted. This cost was eliminated by having students deliver the survey forms to their parents and return the completed forms to the school. Since sixth graders could be relied upon to perform this service-while ninth and twelfth graders could not--the parents of each sixth grader who was polled were given the opportunity to participate in the survey. The many parents who have children in the sixth grade and in earlier and later grades further supports this method of selecting parents. A total of 848 parents completed need survey answer forms, which represents responses from almost seventy-five percent of the parents who were invited to participate.**

Once the general groups to be included in the survey had been selected, the following method was employed for determining the specific people to be polled. First, every Santa Clara County school district that has a high

[^5]school was identified.* Then, for each of these school districts, five percent of the total high school population was calculated. If this five percent number was very much over 250 , two high schools in that district were asked to participate; if the number was about 250 or less, only one high school was included. $* *$ To select the participating high schools from ail those in each participating district, a table of random numbers was used.

After the participating high schools had been selected, the attendance areas of those high schools were determined to identify the feeder elementary schools for each of the high schools in the sample. A five percent sample from the total population of the feeder elementary school districts was calculated. An estimate was made of how many sixth grade classes-assuming about thirty students per class--would be required to match this five percent number. Then, for each sixth grade class required, one elementary school was selected at random. ***

## How did the Sample Characterize the Gounty?

The aim of the sample was to characterize the individuals most involved with the County's schools in such a way that warranted generalizations about the entire County could be made from the responses of those in the sample. It was reasoned that the most relevant reference groups of the schools are students, teachers, and parents. Hence, the survey sample was designed to include individuals from each of these three groups.

After the sample had been selected, comparisons were made between the size of schools in the sample and the size of all schools in the County.

* Only one of the ten public school districts with a high schocl did not participate in the need survey. Because a similar study was being conducted on a large scale in the district, the San Jose Unified School District declined the invitation to participate.
\% \% If a sample of 250 students was desired for a given high school, for example, 125 ninth graders and 125 twelfth graders were polled.
\%*:* The same sampling procedure was followed for Catholic and public schools; all Catholic schojls within Santa Clara County were treated in the sampling procedure as if they constituted a single school district.

It was reasoned that the needs of schools will differ according to school size.* It was discovered that there was no significint difference between the size of schools ir the sample compared to those in the total population. Hence, it was concluded that, on the basis of size of school, the sample characterized the population of schools in Santa Clara County.** (See Chi Square tables on page A-37.)

ELEMENTARY SCHOOL SIZE
Number of Schools Percent

| Student <br> Population | Schools In <br> Sample | Schools In <br> Santa Clara County | Sample | County |
| ---: | :---: | :---: | :---: | :---: |
| I-499 | 19 | 158 | 51.4 | 44.8 |
| $500-700$ | 12 | 136 | 32.4 | 38.5 |
| Over 700 | 6 | 59 | 16.2 | 16.7 |

SECONDARY SCHOOL SIZE
Number of Schools
Percent

|  | Number of Schools |  |  | Percent |
| ---: | :---: | :---: | :---: | :---: | :---: |
| Student <br> Population | Schools In <br> Sample | Schools In <br> Santa Clara County | Sample | County |
| $1-1,000$ | 4 | 13 | 23.5 | 27.7 |
| $1,000-2,000$ | 11 | 29 | 64.7 | 61.7 |
| Over 2,000 | 2 | 5 | 11.8 | 10.6 |

A check of the school achievement levels of students in the sample indicated that the students represented the entire spectrum of school

[^6]achievement levels. The achievement levels of the students were determined by the teachers who administered the questionnaire to them. The following table indicates percentages of students in each of the achievement levels. The percentage breakdown shows that most students fall, as expected, into the middle achievement category.

SCHOOL ACHIEVEMENT LEVEL OF STUDENTS IN SAMPLE BY GRADE LEVEL

| School <br> Ach亡evement <br> Category | 6th | Grade Leve1 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Low | $27(2.3 \%)$ | $123(9.2 \%)$ | $74(5.8 \%)$ | $224(5.9 \%)$ |
| Middle | $1,003(83.2 \%)$ | $725(54.0 \%)$ | $1,023(79.9 \%)$ | $2,751(71.8 \%)$ |
| High | $175(14.5 \%)$ | $495(36.8 \%)$ | $184(14.3 \%)$ | $854(22.3 \%)$ |
| Total | $1,205(100 \%)$ | $1,343(100 \%)$ | $1,281(100 \%)$ | $3,829(100 \%)$ |

Additional information was gathered on the respondents in the sample. It was found that the family income* of the respondents was distributed as follows:

FAMILY INCOME OF RESPONDENTS IN SAMPLE*

| Income <br> Category | Percentage <br> of Sample |
| :---: | :---: |
| $\$ 0-\$ 4,000$ | $4.9 \%$ |
| $\$ 4,001-\$ 7,000$ | $19.7 \%$ |
| $\$ 7,001-\$ 10,000$ | $34.1 \%$ |
| Over $\$ 10,000$ | $41.3 \%$ |

* Family income was defined as the pooled income of all members of the family.

The racial/ethnic composition of the sample included the following categories and corresponding percentage:

RACIAL/ETHNIC COMPOSITION OF THE SAMPLE

| Racial/Ethnic <br> Category | Percentage <br> in Sample |
| :--- | :---: |
| Caucasiail | $87.2 \%$ |
| Mexican-Anerican | $6.5 \%$ |
| Negro | $0.7 \%$ |
| Oriental | $2.8 \%$ |
| Indian | $.3 \%$ |
| Other | $2.5 \%$ |

Because valid and comparable data on family income levels and racial/ ethnic composition on a county-wide basis were not available, comparisons between the sample and the County as a whole wore not possible. Further, it should be recognized that the validity of the data in the sample on each of these two variables is questionable. Nevertheless, these data are reported since they offer the best available information on the kinds of respondents included in the sample.

Since the purpose of the need survey was to identify pervasive, countywi.de needs, the sample should and did include a large cross section of the students, parents, and teachers of Santa Clara County, as documenced by the information cited above. Whether the sample was so characteristic of the County that warranted generalizations can be made from it is a relative question. On the one hand, the sample did not include each and every student, parent, and teacher in the County--the sample would then be the population--whicn would be the only absolutely representative sample. On the other hand, the sample did include a larger and more characteristic group of people than normally serve as the bases of information for educational decisions. Thus, from the results of the need survey, generalizations $c$ an be made which are more warranted than the usual generalizations
which buttress educators' decisions. While the results of the need survey are open to further study and modification, at the present time, they represent the best available information about the educational needs of Santä Clara County. Of course, the conclusions from any study are no better than the data on which they are based. If a study's data are not reliable, neither are its conclusions. The steps that were taken to insure that reliable data were collected for the need survey are discussed in the next chapter.

## CHAPTER THREE

## Administration of the Need Survey

## Development of the Need Survey Questionnaire

The questionnaire which was administered to all the participants in the need survey was the product of the team of educators.* Using the matrix composed of Bloom's Taxonomy and the curriculum content areas (explained in Chapter One), a long list of "student learning goals" was written. This list was pilot tested with sixth graders in Marin County. It was reasoned that if sixth graders could read and understand the questionnaire, older students, teachers, and parents could do likewise. After the pilot testing, many items were eliminated, and nearly all of the 127 items that were retained were rewritten. With the questionnaire ready to be administered, the next step was to obtain the approval of the school officials in the districts and schools that were to be sampled.

## Meetings with School District Administrators

Meetings were held with the superintendents and research directors of all the districts selected for sampling. At the meetings the purpose of the need survey was outlined, the method of administration was explained, and the questionnaire and answer form were examined by the administrators. In each of the sixteen districts contacted, the administrators gave their permission for the need survey to be conducted in their districts.

## Meetings with School Principals

Following approval of the survey at the district level, meetings were held with the principals of all the schools to be sampled. After a thorough explanation of the proposed study, each of the fifty-six principals gave permission for the study to be conducted in his school.

[^7]
## Identification of Teacher-Coordinators

After granting permission for the study to be conducted in thej.r schools, the principals identified teacher-coordinators. Eiementary school principals were asked to identify one sixth grade teacher, and hich school principals were asked to identify at least one ninth and one twelfth grade teacher* who were willing to administer the questionnaire to their students, to their schools' faculty, and--in the elementary schools--to parents. These teachers were required to attend an evening meeting at which the details of administering the questionnaire were explained to them. For their professional services the teachers were given an honorarium of twenty dollars. In addition to considering these criteria for selecting teasiner-coordinators, the principals were asked to choose teachers whose classes inclidded a range of ability levels or, if that was impractical, teachers of middle ability classes.

## Notification of Teacher-Coordinators

Principals were asked to inform the identified teachers of their selection and to find out if they were willing to participate in the study. A letter from the S.P.A.C.E. Center sent to the teacher's home officially notified him of his selection, briefly explained the purpose of the study and his role in it, and asked him--if he wanted to participate--to indicate on the enclosed postcard which training meeting he would attend, and to return the postcard to the S.P.A.C.E. Center. (A copy of this letter is in the Appendix on page A-14.)

## Meetings with Teacher-Coordinators

Four meetings were scheduled for training the teacher-coordinators to

[^8]administer the questionnaire.* Each teacher was required to attend one meeting; all but one of the eighty-four teachers attended.

When a teacher arrived at a meeting, he was given several envelopes containing all the materials he would need to administer the questionnaire along with detailed written instructions for the administration. it $^{\text {at }}$ the same time an honorarium voucner was distributed for the teacher's signature. The meeting was begun with a revjew of the purpose of the study, a description of the rationale and development of the questionnaire and answer sheet, and an outline of the proposed uses of the study's results. After this introduction, the procedures of administration were discussed.

## Administration to Students

1. Elementary school teachers administered the questionnaire to one sixth grade class and high school teachers to one or more of their classes, depending on the desired sample size.***
2. The questionnaire was administered during the regularly scheduled class time of a course required of all students. The students completed the questionnaire in about fifty minutes.
3. One questionnaire, one answer form, one instruction sheet, one No. 2 pencil, and one appropriately colored $3^{\prime \prime} \times 5^{\prime \prime}$ comment card**** were distributed to each student.
4. The purpose of the questionnaire was explained to the students.
5. The students were given their County/District/School number which was the official school number listed in the California Directory of
[^9]Public Schocls. They were asked to write it in the proper grid on both sides of their answer sheets and to darken the appropriate blanks.
6. Each student was assigned a number for the "Your Number" grid on the answer sheet. These numbers could be assigned in any manner so long as every student had a unique number; e.g., they mighic be assignea by seating order with one class using the Nos. 1-25, the next 26-50, and a third 51-75.
7. These numbers were necessary, as the students were told, to identify the two sides of a given answer sheet after the data had been read into a computer. The numb ?rs could in no way be used to identify an individual student.
8. Teachers were allowed to answer any student question about the study except for questions about the meaning of a particular item on the questionnaire. To these questions the teachers were instructed to reply that the students simply must do as well as they could.
9. When the students had completed the questionnaire, all the materials wrie collected. The teachers counted the completed answer forms and recorded tinat number along with any other pertinent information on a collection check list.

## Administration to Faculty

Two basic procedures were followed for administering the questionnaire to the faculty.

1. The preferred procedure was administration during a faculty meeting. This allowed a complete explanation of the purpose of the study and of the reasons for the numbering system used on the answer sheets. In addition, this procedure insured a greater percentage of faculty participation.
2. The other procedure was to put all the materials for taking the questionnaire into each faculty mailbox along with an explanatory cover letter signed by the teacher-coordinator and school principal. Eacin faculty member would then complete the qu-sstionnaire and return it to the principal's secretary.

Except for the method of distributing the questionnaires, the administration to faculty followed the same procedures as that to students.

Administration to Parents
Elementary school teacher-conrdinators gave each student in their sixth grade class a questionnaire, an answer form, an instruction sheet, a pencil, two comment sards, a letter to the parents, and a large envelope which could hold all these materials for the students to carry home. The letter to the parents explained the purpose of the stady and gave instructions for completing the questionnaire. It suggested the parent's child might be able to help on certain technical matters since the questionnaire already had been administered to him. Parents were asked to complete the questionnaire within two days and return it to school with their child. When all the paremt forms had been returned to school, reacher-coordinators wrote the appropriate numbers on each compieted answer form.

Completed forms were returned by seventy-four percent of public school parents and eighty percent of Catholic school parents. According to the reports of the teacher-coordinators, there were no significant differences between parents who responded and those who did not.* The one exception was

[^10]a small number of parents (forty-one) who could not read English; the questionnaire was not made available in Spanish.

## Collection of Completed Questionnaires

When all groups had compieted the questionnairc, the teacher-coordinator gave all the materiais to the principal's secretary and called the S.P.A.C.E. Center. A representative of the Center visited each school and picked up the materials. All materials we:re returned to the S.P.A.C.E. Center within about two weeks after they had buen distributed to the teacher-coordinators.

## Preparation of Completed Answer Forms for the Optical Scanner

Because over six thousand people participated in the survey, data processing machines had to be employed to record the 1.6 million individual pieces of data. An answer form, designed specifically for this survey, allowed the data to be read by an optical scanner; the scanner transferred the data from the answer forms to magnetic tape (for computer use) in less than seven hours. The use of these answer forms not only eliminated the delay and sizable expense of keypunching the data, but it also eliminated the errors that keypunching would have introduced.

Each set of completed answer forms underwent the following series of checks before they were sent to be read by the optical scanner.

1. The answer forms were counted. The number was recorded and compared with that reported on the corresponding collection check list.
2. The "County/District/School" and "Your Number" grids were checked to make sure the blanks $h_{\text {. }}$ d been darkened. Mistakes or omissions were corrected.
3. Categories III ("Type School"), IV ("What You Do"), and XII ("If You Are a Parent...") were checked to make certain they had beer. properly marked. Mistakes or omissions were corrected. This was possible since students, parents, and teachers were independently
identifiable by the range within which "Your Number" fell.*
4. The two boxes on side two of the answer form labeled "Darken These Boxes Now" were checked and filled in if they had been left blank.
5. Extraneous pencil marks were erased from messy answer forms.
6. A11 the answer forms wexe arranged so that side one faced up.
7. The answer forms from each school were arranged in consecutive numerical order from 1-999. (These numbers, of course, refer to "Your Number.")
8. After the answer forms from every school had been returned, checked, and put in numerical order; the forms were arran'ed according to their "County/District/Schoo1" number. That is, all the forms from the school with the lowest "County/District/Schoo1" number were put first, followed by all the forms from the school with the next highest "County/District/School" number, etc.

When these steps had been completed, the data could be read by the optical scanner. How the data was processed by the scanner and then analyzed by a computer is discussed in the next chapter.

[^11]CHAPTER FOUR<br>\section*{Analysis of the Need Survey Data}

## How the Need Survey Data Was Analyzed

The first step in analyzing the need survey data was to translate into numerical terms the responses marked by each survey participant. This was done automatically by the optical scanner machine which read the survey answer forms. The scanner gave a value of one for responses marked "to no extent," two for "to some extent," three for "to a great extent," and four for "to a very great extent." For each item on the answer form, the scanner read iwo numbers--one corresponding to the response for "schools NOW teach" a given goal and the other corresponding to the response for "schools SHOULD teach" that goal. These numbers were recorded on a magnetic tape.

From the tape, all of these numbers--some 1.6 million of them--were read into an IBM 7090 computer. The computer was programmed to perform the following computations:

1. First, for each response of every participant, the number corresponding to that participant's opinion of what schools NOW teach was subtracted from the number representing that participant's opinion of what schools SHOULD teach. In other words, if a participant indicated for item NO. 1 that schools NOW teach "Solving simple arithmetic problems" "to some extent" (2) and they SHOULD teach it "to a very great extent," (4), then the computer subtracted 2 from 4 and recorded the difference 2.\% If the "NOW teach" number was larger than the "SHOULD teach" number, the computer recorded a negative value. Thus, the range of possible differences or discrepancies ran from -3 to +3 ,

[^12]2. The second task of the computer was to calculate the algebraic sum of all the discrepancy scores for a given item. This sum was then divided by the number of respondents who marked that item to obtain the mean discrepancy score. The mean discrepancy score was the; primary determinant for the identification of educational needs. That is, if the mean discrepancy score for an item was greater than 0.700 , that item was referred to as an educational need item. If the mean discrepancy score for an item was less than 0.400 , most respondents had marked for that item that schools were teaching what they should teach; these items signified attained educational goals. Because the primary purpose of this study was to identify county-wide educational needs and because of the limitations of time and money, the data from the need study was subjected to the four following analyses:

1. Determination of Pooled Mean Discrepancies: The mean discrepancy scores were computed for every item using the responses of all 6,286 pariicipants. The frequency with which each of the possible discrepancies ( -3 to +3 ) occurred was also tabulated.*
2. Determination of the Pooled Student, Parent, and Teacher Mean Discrepancies: The mean discrepancy and frequency scores were computed for every item using first, the response of students alone, then the responses of parents alone, and, finally, the responses of teachers alone.
3. Determination of Mean Discrepancy Scores of the Students, Parents, and Teachers for Each Participating School: After the educational need items had been identified, the mean discrepancy scores for these items were computed for the students, parents, and teachers from each participating school.
\% A. sample of the computer output that was obtained for each item can be examined on pages A-30 and A-31.
4. Determination of the Criticality of Key Items: On those key items which earlier analyses had identified, a cross-tab analysis was run which computed the frequency with which a given pair of responses was made for each item by the three groups in each participating school district. Although the frequency with which a given score occurred on a certain ičem was tabulated earlier, this diun not, for example, differentiate between a score of 1 obtained from 1-0, 2-1, or 3-2. Since a 1 obtained from 3-2 would indicate a much higher need priority than a 1 obtained from 1-0, this differentiation was important, and the cross-tab analysis made it possible to locate where the discrepancy occurred. Probably the best way to understand the cross-tab analysis is to study the sample computer output for it which can be found on page A-31.

The type of analyses used and the sequence in which they were conducted first identified the pooled discrepancy scores. This general analysis was then refined by measuring how students, parents, and teachers compared with each other and with the pooled scores. The third analysis made it possible for individual school principals to see how the students, parents, and teachers from their schools compared with the county-wide groups. A similar comparison could be made by school districts using tine fourth analysis, the cross-ide. This cross-tab analysis also allowed one measure of the priority of a given reed. When this measure was evaluated along with (1) the magnitude of the mean discrepancy score obtained foi a given item, and (2) the extent to which students, parents, and teachers agreed about the criticality of that item (judgments made possible by the first and second analyses respectively), the identified educational needs could be ranked from the most critical, highest priority needs to the less critical, lower priority ones.

A discussion of the results of these various analyses begins with the next chapter of this report.

## CHAPTER FIVE

## Two Important General Observations

## Introduction

The need survey results, which will be discussed in the next two chapters, will be more meaninEfiil if they are viewed within the context of two general observations which are based on a close study of all the need survey data. The first observation is concerned with what the survey participants thought, in general, about the schouls of Santa Clara County; the second points out how students' perceptions of educational needs differed from those of parents and teachers.

## General Opinion of the Schools

Since a person's general opinion of ine school system inevitably will affect his assessment of educational needs, each survey participant was asked to indicate whether he thought the schools were doing a very good, good, poor, or very poor job. An overwhelming majority ( $87.8 \%$ ) of the participants thought the schools of Santa Clara County were doing either a good job or a very good job. Only twelve and two-tenths percent of the participancs rated the schools poor or very poor,* From this it is fair to conclude that by far most students, parents, and teachers in Santa Clara County think the schools are adequately performing their function. Therefore, the needs indicaied by these groups must be viewed within a framework of a general satisfaction with the present school system and an implied confidence in the schools' ability to make improvements in those areas where need exists. Student, Parent, and Teacher Differences

Since students constitute sixty one and one-tenth percent of the total number of respondents in the need survey, a corresponding proportion of the pooled mean discrepancy scores reflected student opinion. To fully evaluate

[^13]the opinions of parents ( $13.4 \%$ of the sample) and teachers ( $25.5 \%$ of the sample), mean discrepancy scores were computed separately for each of the three groups. These comparisons disclosed a significant theme which runs through all the data: As a group, students disagree substantially with parents and teachers.

Specifically, students identified fewer educational needs (high discrepancy items) and more attained educational goals (low discrepancy items) than parents and teachers. If all mean discrepancy scores greater than 0.700 are called educational needs, students identified seventeen need items, while parents identified forty-four and teachers foriy-six. However, students, parents, and teachers agreed on the top fifteen or twenty need items; the additional items identified by parents and teachers were given lower discrepancy scores than the items for which there was agreement among the three groups.* At the other end of the mean discrepancy scale, students identified forty items with a mean discrepancy of less than 0.400 , while parents indicated only fifteen and teachers sixteen such items. Thus, in terms of what they thought schools NOW teach and SHOULD teach, students tended to approve school efforts more than parents or teachers did. Of the students, sixth graders tended to be the most approving. Parents, in contrast, tended to be the least approving.

Several possible reasons might be advanced for this difference among students, parents, and teachers. Although the disagreement might be attributed to a communication gap, the fact that parents and teachers tend to agree with each other seems to rule out this possibility; if a communication problem did exist, students and teachers--the two groups most closely associated with the schools--would be expected to have more direct information about what schools
\# There were twenty-seven need items (discrepancy greater than 0.700 ) for the pooled respondents $(\mathrm{N}=6286)$. All seventeen student need items were included in this group, and all but one were in the top seventeen pooled items. All twenty-seven pooled items were included in the forty-four parent need items, and twenty of the top twenty-one parent items were also pooled items. Likewise, the forty-six teacher items included all twenty-seven pooled items, and twenty-four of the top twenty-five teacher items were pooled need items. These observations can be checked in the tables listing student, parent, and teacher need items in order of decreasing mean discrepancy on pages A-39 through A-44.
were doing and to agree in their opinions, while parents might be expected to have less direct information and to differ from the opinions of teachers and students. A more likely explanation is that the student, parent, teacher disagreement is a manifestation of the difference between younger people and older people in their expectations of the schools. Not only may the expectations differ for the different age groups, but the judgment about how well those expectations are met may differ. Thus it is possible that the three groups have similar expectations of the schools but that students believe the schools are more nearly living up to those expectations than do parents and teachers. Parents' and teachers' conclusions may have been based on their own experience of areas in which schools could have ketter educated them, or they might be an indication that they think their children or students are not learning some matters as well as the students themselves think they are, on the basis of their limited experience. Whatever the explanation, the difference between students' opinions and parents' and teachers' opinions exists and must be considered in evaluating the following educational needs identified by the need survey.

## Educational Needs

How Were Educational Needs Identified?
When the highest mean discrepancy scores were identified, the meanings of these scores were interpreted by referring to the matrix composed of the curriculum content areas and Bloom's Taxonomy.* By locating each high discrepancy item within the matrix, the curriculum content areas were identified which corresponded to each item. When several high discrepancy items referred to the same curriculum content area, a general educational need was indicated in that content area. This pattern of concentration of high discrepancy items was found for seven content areas. These seven areas of critical educational need are presented below. The first two need areas stand out above the rest as the most critical; although there are differences in criticality among the next five need areas, the differences between adjacent need areas (3 and 4, 4 and 5, etc.) are small or nonexistent while the differences between widely separated areas ( 3 and 6,4 and 7 , etc.) is sizeable. Thus, the order in which the need areas are presented is an approximation of their relative criticality.

[^14]Drug Education<br>(as defined by the following iterl)

126. Learning about drugs such as LSD and marijuana.

|  | I |  |  |  |  | II |  | ing by Score** | $\begin{gathered} \text { III } \\ \text { Intensity of } \\ \text { Expectationswnextent } \\ \text { (in percent) } \end{gathered}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | Stud. | Par. | Teac. | Pool. | 3 | P | T | Overall <br> Rank | S | P | T |  | P |
| 126. | 1.078 | 1.217 | 1.201 | 1.129 | 2 | 1 | 2 | 1 | 50 | 42 | 36 | 47 | (1) |

## Family Life Education <br> (as defined by the following item)

127. Learning facts about marriage, family, and the birth of children.

| I | II | III |
| :---: | :---: | :---: |
| Mean Discrepancy Score* | Gntensity of <br> Group Ranking by <br> Discrepancy Score** | (in percent) |

Overall

Item Stud. Par. Teac. Pool. $\quad$ S $\quad$ P $\quad$| T |
| :---: |

127. $\begin{array}{lllllllll}1.118 & 0.998 & 1.225 & 1.129 & 1 & 5 & 1 & 2\end{array}$
$\begin{array}{llll}47 & 33 & 45 & 44\end{array}$

* Mean discrepancy scores were explained earlier. The explanation and an illustrative example can be referred to on pages 23-24.
** To understand the numbers in the column headed, "Group Ranking by Discrepancy Score," consider the examp1e of Item 126. Students considered Item 126 the second most discrepant item; parents considered it first; and teachers second. The overall ranking was arrived at by summing the rank each of the three groups gave item 126--2+1+2--and then ordering these sums from highest to lowest. The number one in the "Overall Rank" colum means the sum for Item 126 was the lowest of all sums. All these rankings allow an assessment of the extent of agreement among groups. The priority assigned each item by each group can be seen and comparisons can be made. In addition, the overall rank, by being based on a sum of the group ranks, gives equal weight to the opinions of students, parents, and teachers and thus allows a just evaluation of the overall priority assigned to each item (in contrast to the pooled mean discrepancy scores in which students constitute sixty-one percent of the sample and their opinions are $k$ ighted accordingly).
*** The numbers in the column headed, "Ir'censity of Expectations" refer to the percent of the total respondents in a given group who marked "schools SHOULD teach" that item "to a very great extent," the highest expectation that couid be indicated on the answer form. The lists for these three groups can be found on pages $\mathrm{A}-45-46$. The numbers in parentheses in the column headed, "Pooled" refer to the rank of that (continued at bot tom of next page.)

Items 126 and 127 were identified as the most critical educational needs. Three criteria were used to arrive at this conclusion:

1. Mean Discrepancy Score: Both these items had the highest pooled mean discrepancy score $(N=6,286)$. They were aiso the only two items on the questi mnaire which were given a mean discrepancy greater than 1.0 by ail three of the groups (with the exeeption of parents on Item 127).
2. Extent of Agreement Among Groups: All three groups agreed that these items were of the highest priority. These items were at or near the top of the list when the discrepancy scores for each group were arranged from highest to lowest mean discrepancy. This is reflected by the 1,2 ranking in the "Rank for all Groups" column.
3. Intensity of Expectations: Nearly half, and in all cases more than one third, of all the respondents in each group indicated that schools SHOULD teach these items "to a very great extent," the highest expectation they could mark on the questionnaire. As demonstrated by the percentages for all respondents (in the "Pooled" column), these items were among the top three for percentage of respondents with the most intense expectatic is (these ranks are shown by the numbers in parentheses).

## Conclusion

As defined by the questionnais, items 126 and 127 , the two most critical educational need areas identified by this survey are:

NEED AREA 1: DRUG EDUCATION
NEED AREA 2: FAMILY LIFE EDUCATION
(cont.) item when all the high discrepancy items are s.rranged from the highest to lowest percentage of respondents who marked that "schools SHOULD teach" that item "to a very great extent." This list is on page A 45 . As an illustration, fifty percent of s. 11 students indicated schools SHOULD teach Item 126 "to a very great extent"; forty-two percent of all parents and thirty-six percent of $a 11$ teachers did likewise; and forty-seven and seven-tenths percent of all survey participants shared that expectation, more than for any other item, hence the number one in parentheses.
-31-

# NEED AREA THRTE <br> Communication Skills <br> (as defined by the following items) 

40. Expressing clearly one's poing of view.
41. Having a large speaking vocabulary.
42. Organizing ideas and statements while speaking.
43. Wanting always to speak effectively.

I
I.I

III Intensity of Expectations** (in percent)


* See the footnotes on page 30 which explain the meaning of the numbers in these columns.
** The rank 18 was assigned to all items which students gave discrepan:y scores lower than 0.700 .

The four i〔ems listed above identified commnication skills, especially oral communication skills, as a critical educational need area.

1. Mean Discrepancy Score: The mean discrepancy scores for parents and teachers are quite high (in three cases, over 1.0) and consistently higher than the scores of students; in fact, students did not give Items 52,75 , and 84 scores over 0.700 .
2. Extent of Agreement Among Groups: The three groups agreed on the importance of Item 40. Parents and teachers agreed closely on the ranks of the other items, while students did not include them among their indicated need items.
3. Intensity of Expectations: Although students gave these items lower discrepancy scores than parents and teachers, their intensities
of expectations on these items, though lower, were quite similar to those of parents and teachers (with the exception of teachers on Item 40). This indicates that students agree with parents and teachers in thinking these items SHOULD be taught by the schools to a very great extent but that the students think schools NOW teach them, while parents and teachers are more skeptical. Emphasis is given to this communication skills need area by the additional need items indicated by parents and teachers. Parents identified eight additional items in the language arts area and teachers indicated five more. These items with their mean discrepancy scores and discrepancy ranks are listed below:

| Item | I |  | II |  | III |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Discr Par. |  | $\begin{gathered} \text { Group } \\ \text { by Di } \\ \text { Sc } \\ \text { Par. } \end{gathered}$ | anking crep. re Teac. | Low Mean Discrep. Score Student |
| A. Communication Skills-- |  |  |  |  |  |
| Speaking and Writing |  |  |  |  |  |
| 106. Using principles of $\begin{array}{llllll}\text { public speaking. } 0.842 & 0.725 & 0.505 *\end{array}$ |  |  |  |  |  |
| 123. Knowing what makeswriting interesting. $0.7180 .635 \% ~$ 2 |  |  |  |  |  |
| 125. Wanting always to speak and write $\begin{array}{llllll}\text { effectively. } & 0.925 & 0.874 & 16 & 22 & 0.541 \%\end{array}$ |  |  |  |  |  |
| B. Communication Skills-- |  |  |  |  |  |
| Reading |  |  |  |  |  |
| 12. Being able to select a book based on good literary standards. | 0.751 | 0.687* | 38 | * | 0.490* |
| 58. Changing behavior from ideas learned through reading. | 0.547* | 0.775 | * | 30 | 0.496* |

[^15]I
II
III

| Item | Mean Discrepancy Par. Teac. |  | Group Ranking <br> by Discrep. <br> Score <br> Par. Teac. |  | Low Mean Discrep. Score Student |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C. English Grammar |  |  |  |  |  |
| 2. Knowing common rules of the English language. | 0.701 | 0.626* | 44 | * | $0.319^{*}$ |
| 22. Being able to determine if a sentence is written correctly. | 0.774 | 0.652* | 33 | * | 0.239* |
| 47. Knowing the importance of English grammar. | 0.773 | 0.597* | 34 | * | 0.294* |
| 105. Choosing the best grammatical usage. | 0.718 | 0.594* | 41 | * | 0.323* |
| D. Spelling |  |  |  |  |  |
| 109. Being able to spe11 basic words. | 0.463* | 0.725 | * | 41 | 0.316* |
| 120. Desiring the ability to spell correctly. | 0.672* | 0.730 | 8 | 38 | 0.406* |

* Not considered an educational need by this group.

Several observations can be made from this table. First, the importance assigned communication skills by parents and teachers is demonstrated especially by Item 125 , both in the high discrepancy score and low rank (relative to the others in the list) assigned it by both groups. As in the four earlier items, the emphasis is on oral communication skills (i.e., Items 106 and 125 have much higher discrepancy scores than Item 123). Second, parents consistently indicated the schools are not doing as much as they should in teaching English grammar; just as consistently, students indicated for these same items that schools were, in fact, doing about what , should do (student discrepancy scores for these items fell into the at. . aled educational goal category--scores below 0.400). Third, teachers,
who most frequently see student writing, think the schools should do more in teaching spelling; for one of these items, students indicate they think schools are achieving what is expected of them regarding learning to spell. Finally, the relatively low rank assigned all these items by parents and teachers is a reflection of the fact that the three groups agreed on the
items of highest discrepancy.

## Conc1usion

As defined by the items listed above, a critical educational need area is:

NEED AREA 3: COMMUNICATION SKILLS, ESPECIALLY ORAL COMMUNICATION SKILLS

## NEED AREA FOUR

Vocational Education
(as defined by the following items)
8. Having skills needed to get a good job.
13. Finding pleasure in doing work.
15. Being able to identify what skills are needed for a given job. 108. Willing to form judgments about one's own work.


F See the footnote on page 30 which explains the meaning of the numbers in these columns.

The four items listed above identified vocational education as a critical area in which schools are not now teaching what survey participants believe they should teach.

1. Mean Discrepancy Score: Parents, teachers, and most significantly, students as wel. 1 gave these items discrepancy scores in the high ranges of 0.800 and 0.900 (with only three exceptions: students on Item 8 ind students and parents on Item 108).
2. Extent of Agreement Among Groups: In general, each of the three groups ranked ṭhese items in approximateily the same range of rankings (with two exceptions: teachers on Item 15 and all groups on Item 108). The "Rank for all Groups" numbers for these items were in the middle of range of rankings (from 1-127).
3. Intensity of Expectacions: A11 three groups believe strongly that schools SHOULD teach (Item 8) the skills needed to get a good job; in fact, only one item (126) was above Item 8 in intensity of expectations for all respondents. The intensity of eypectations for the other three items is somewhat lower and the ranking of these items falls within the middle range of ranks for the 127 need items.

As before, parents and teachers indicatcd additional need items within the need area of vocational education. They were the following:

| Item | I <br> Mean <br> Discrep. Score <br> Par. Teac. | Group Ranking by <br> Discrep. Score <br> Par. |
| :---: | :---: | :---: | :---: | :---: |
| Teac. |  |  |

BNot considered an educe ionai need by tins group.
These items reinforce the importance parents and teachers, as well as students, assign to the nead area of vocational education.

## Conclusion

As defined by the items listed above, a critical educational need is:
NEED AREA 4: VOCATIONAL EDUCATION

NEED AREA FIVE<br>Personal Economics<br>(as defined by the following items)

16. Determining if tax dollars are spent wisely.
17. Being able to organize a family budget.
18. Knowing how our government is supported.
19. Planning a budget for own use.
20. Learning how to manage money.
21. Spending money wisely.

| I. | II |
| :---: | :---: |
| Mean Discrepancy Score* | Group Ranking by <br> Discrepancy Score* |

III
Intensity of Expectations* (in percent)


[^16]The six items listed above identified personal economics as a critical educational need area.

1. Mean Discrepancy Score: Most (2/3) of the discrepancy scores for the three groups were above 0.300 ; in fact: parents and teachers each gave two items scores greater than 1.000 .
2. Extent of Agreement Among Groups: The high discrepancy scores for these items are reflected in the high ranks they were given by each group; and especially by the overail rank scores. Frour of these items were in the top eleven items in overall rank. In other words, there was extensive agreement among students, parents, and teachers that these items outlined a critical educational need.
3. Intensity of Expectations: Given the high discrepancy scores and high rank scores discussed above, the intensity of expectations might be expected to be high also. A glance at the rank scores (the numbers in parentheses) in the "Pooled" column shows that, on the contrary, these items were near the low end of the scale regarding the percentage of respondents who thought schools SHOULD teach them "to a very great extent." The high discrepancy scores, then, must result from the respondents' opinion that schools NOW teach these items "to no extent" or "to some extent" while they SHOULD teach them "to a great extent," rather than "to a very great extent." Thus, while the discrepancy scores for these items indicate that the respondents thought schools were not fulfilling what is expected of them, intensity scores are evidence that the respondents' expectations for these items are not as high as they are for some other items.

Four other items which were concerned with practical economic decioions were ranked high1y discrepant by parents and teachers:

| Item | ```I Mean Discrep. Score Iar. Teac.``` |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 50. Applying standards or rules of design and quality in selecting things you use. | 0.745 | 0.736 | 39 | 36 |
| 68. Being ab1e to compare different economic systems. | 0.825 | 0.749 | 28 | 34 |
| 91. Deciding on the best place in which to live, based on available facts. | 0.592* | 0.708 | * | 44 |
| 114. Developing standards of a good home. | 0.693\% | 0.804 | * | 27 |

末 Not considered an educational need by this group.

## Conclusion

As identified by the items listed above, a critical educational need area is:

NEED AREA 5: PERSONAL ECONOMICS

NEED AREA SIX
Civic Responsibility
(as defined by the following items)
4. Appreciating America and all it means.
21. Accepting the importance of law in our daily life.
30. Being able to identify laws of most help to our country.
41. Understanding the Constitution of the United States.
64. Cooperating with the law.
72. Being able to make sound judgments about political issues.

I
II
Group Ranking by Discrepancy Score*

III
Intensity of Expectations*
(in percent)

| Item | Stud. | Par. | Teac. | Pool. | S P | T | Overa <br> Rank | S | P | T |  | P |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4. | 0.639 | 0.907 | 0.886 | 0.738 | 18** ${ }^{*}$ | 19 | 17 | 39 | 47 | 48 | 42 | (4) |
| 21. | 0.657 | 0.832 | 0.885 | 0.739 | $18 \stackrel{* *}{26}$ |  | 23 | 30 | 40 | 47 |  | (9) |

```
NEED AREA SIX (cont.)
```

| II |  |
| :---: | :---: |
| Mean Discrepancy Score* | Group Ranking by <br> Discrepancy Score* |

III
Intensity of Expectations* (in percent)

|  |  |  | Overall |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | Stud. | Par. | Teac. | Pool. | S | P | T | Rank | S | P | T |  | P |
| 30. | 0.142 | 0.835 | 0.831 | 0.777 | 15 | 23 | 24 | 22 | 25 | 21 | 24 | 24 | (23) |
| 41. | 0.704 | 0.968 | 0.760 | 0.753 | 17 | 9 | 32 | 18 | 36 | 37 | 38 | 36 | (8) |
| 64. | 0.603 | 0.790 | 0.890 | 0.701 |  |  | 18 | 25 | 34 | 41 | 46 | 38 | (6) |
| 72. | 0.793 | 0.940 | 1.080 | 0.887 | 14 | 13 | 4 | 9 | 24 | 19 | 39 | 27 | (17) |

* See the footnote on page 30 which explains the meaning of the numbers in these columns.
** The rank 18 was assigned to all items which students gave discrepancy scores lower than 0.700 .

The six items listed above indicate civic responsibility as an area of high priority educational need.

1. Mean Discrepancy Score: ine Jiscrepancy scores illustrate the pattern, familiar now, of parents and teachers giving the items significantly highly scores than students gave them.
2. Extent of Agreement Among Groups: The three groups agreed on the importance of Item 72, but students did not agree on the other items which parents and teack ars tended to give the same rank. With the exception of Item 72, which had a high overall rank, these items were in the lower middle range of overall rank. In other words, the degree to which the need exists (as indicated by the discrepancy scores on these items) is less than that for other items included in other need areas.
3. Intensity of Expectation: Although the discrepancy scores for these items are in the lower middle part of the spectrum, the intensity of expectation scores are near the top; in fact, four of the items are within the top nine. Parents and teachers in -40-
particular (as indicated by their percentage scores) think the schools SHOULD teach these items "to a very great extent." Thus, while the discrepancy scores indicate the need in this area is less than in some othe: areas, the intensity scores demonstrate that in this area the respondents had very high expectations for the schools.

Three additional items marked discrepant by parents and teachers emphasize the educational need in the area of civic responsibilicy:
$\left.\begin{array}{lllll}\text { Item } & \begin{array}{c}\text { I } \\ \text { Discrep. Score } \\ \text { Par. }\end{array} & \begin{array}{c}\text { Teac. }\end{array} & \begin{array}{c}\text { Group Ranking by } \\ \text { Discrep. Score } \\ \text { Par. }\end{array} \\ \text { Teac. }\end{array}\right]$

* Not considered an educational need by this group.


## Conclusion

As identified by the items listed above, a critical educational need area is:

NEED AREA 6: CIVIC RESPONSIBILITY

## (as defined by the following items)

18. Having the skill to use different methods to solve problems.
19. Being curious about everything and anything.
20. Using the scientific method in problem solving.

| I | II | III |
| :---: | :---: | :---: |
|  | Intensity of |  |
| Mean Discrepancy Score* | Group Ranking by | Expectations* |
| Discrepancy Score* | (in percent) |  |

Overall
Item Stud. Par. Teac. Pool. S P T Rank $\quad$ S $\quad$ P T $\quad$ P

| 18. | 0.565 | 0.966 | 1.016 | 0.734 | $18 * * 10$ | 9 | 13 | 34 | 39 | 43 | 37 | $(7)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 94. | 0.632 | 0.772 | 0.942 | 0.731 | $18 * * 36$ | 15 | 26 | 23 | 32 | 41 | 29 | $(14)$ |

53. $0.405 * * 0.773 \quad 0.810 \quad 0.557 \% * * 18 * * 35 \quad 26$ NR NR NR NR NR
$\%$ See the footnotes on page 30 which explain the meaning of the numbers in these columns.
**: The rank 18 was assigned to all items which students gave discrepancy scores lower than 0.700 .
*** Not considered an educational need by this group.
NR: Too low to include in ranking.
Items 18 and 94 reinforced Item 53 (which did not have a discrepancy over 0.700 for the fooled respondents, $N=6,286$ ), indicated a critical educational need in the area of identifying and soiving probiems.
54. Mean Discrepancy S:ore: Though students indicated quite low discrepancies, parents and teachers gave these items rather high discrepancy scores.
55. Extent of Agreement Among Groups: Parents and teachers agreed especially that Item 18 was a high priority need. Their rankings for the other two items were in the lower range of items they identificả as needs.
56. Intensity of Expectations: For Items 18 and 94 in particiular, a large percentage of the respondents thought schools SHOULD teach these items "to a very great extent." The unexpectedly high percentage of students who shared this expectation with parents
and teachers seems to mean that their low discrepancy score indicates they think schools are in fact doing rather well in living up to their high expectations.

## Conclusion

As defined by the items listed above, a critical educational need area is:

NEED AREA 7: IDENTIFYING AND SOLVING PROBLEMS

Additional High Discrepancy Items

General:
3. Having courage to meet challenges in life.
6. Enjoying life and being happy even when we have serious trouble.

## Conservation:

17. Wanting to ubey the laws of conservation.

I II
Group Ranking by
Mean Discrepancy Score* Discrepancy Score*

III
Intensity of Expectations* (in percent)

Overa11


6. $0.8040 .596 \quad 0.592 \quad 0.723 \quad 1145$ ***** 27
$\begin{array}{llll}18 & 16 & 17 & 17\end{array}(27)$
17. $\begin{array}{llllllllllll} & 0.801 & 0.737 & 0.994 & 0.842 & 13 & 40 & 12 & 24 & 26 & 25 & 33 \\ 28 & 28 & (16)\end{array}$

* See the footnotes on page 30 which explain the meaning of the numbers in these columns.
** The number 45 for parents and 47 for teachers are numbers assigned to all items which those groups gave discrepancy scores lower than 0.700 .


## Comments

The items in the "General" category are at either end of the mean discrepancy and intensity of expectation spectra. Notably, all three groups agreed on the importance of Item 3, while only students indicated a high discrepancy score for Item 6.

The 'Conservation' item was ranked relatively high by teachers and students, but relatively low by parents, giving it its low overall rank. The discrepancy scores of teachers and students, as well as the intensity of expectation for all three groups, place this item near the middie ranks of ail high disczepañcy itēus.

## Sumnary of Conclusions

The S.P.A.C.E. Educational Need Survey identified a series of items for which the survey participants indicated that the schoola are now NOW teaching what they think the schools SHOULD teach. These items can be conveniently organized into the following areas of critical educational need:

NEED AREA 1: DRUG EDUCATION
NEED AREA 2: FAMILY LIFE EDUCATION
NEED AREA 3: COMMUNICATION SKILLS, ESPECIALLY ORAL COMMUNICATION SKILLS
NEED AREA 4: VOCATIONAL EDUCATION
NEED AREA 5: PERSONAL ECONOMICS
NEED AREA 6: CIVIC RESPONSIBILITY
NEED AREA 7: IDENTIFYING AND SOLVING PROBLEMS

## Subsidiary Need Areas

Parents and teachers identified several additional high discrepancy items which were not given discrepancy scores greater than 0.700 by aid 6,286 respondents. These items can be grouped into two subsidiary need areas:

## SUBSIDIARY NEED AREA ONE

Practical Mathematics
(as defined by the following items)

| Item | ```I Mean Discrep. Score Par. Teac.``` |  | II <br> Group Ranking by <br> Discrep. Score <br> Par. Teac. |  |
| :---: | :---: | :---: | :---: | :---: |
| 43. Applying number skills in solving problems of everyday 1ife. | 0.800 | 0.743 | 29 | 35 |
| 49. Desiring to use mathematics effect:vely. | 0,835 | 0.717 | 24 | 42 |
| 69. Wanting to soive mathematical problems without help. | 0.832 | 0.753 | 25 | 33 |

## Comments

The remariable consistency evident in both parent and teacher moan discrepancy scores and rank scores give strength to the conclusion that they consider practical applications of mathematics a critical educational need area.

## SUBSIDIARY NEED AREA TWO

Health Education
(as defined by the following items)

| Item | I <br> Mean <br> Discrep. Score <br> Teachers. | II <br> Group Ranking by <br> Discrep. Score <br> Teachers |
| :---: | :---: | :---: |
| 25. Learning the rela- <br> tionship of diet, <br> exercise and rest <br> to good health. | 0.703 | 45 |
| 48. Respecting the <br> value of good <br> health habits. | 0.725 | 39 |

## SUBSIDIARY NEED AREA TWO (cont.)



## Comments

From the relatively low discrepancy and rank scores, it is clear that teachers put this need area low on their list of priorities. But, of course, it was higher for teachers than for parents and students.

## Introduction

Those items for which the smallest rean discrepancy scores were obtained (scores less than 0.400 ) have been called attained educational goals. For these items, the survey participants indicated that schools NOW teach just about what they SHOULD teach. The meaning of these responses is open to two interpretations: (1) Although schools NOW teach a certain item only "to some extent," according to the participants, they SHOULD teach it only "to some extent." In this instance, the participants identified the attainment of a low priority educational goal. (2) If the respondents marked schools NOW teach "to a very great extent," a certain item which they thought schools SHOULD teach "to a very great extent," then they identified the attainment of a high priority educational goal.

One way of differentiating high priority goals from low priority goals, within the constraints of the available time and money, was to compare the mean values for the extent to which schools SHOULD teach those items that were given low discrepancy scores. For example, when a person had marked schools SHOULD teach an item "to a very great extent," the computer read the value 4 ; when all 6,286 values for that "SHOULD teach" item were summed and divided by 6,286 , a mean value was obtained. If that mean value was 2.4 , a high priority goal was identified; if it was 1.1, a low griority goal was indica_ed.

Using this criterion, the twenty items for which the pooled ( $N=6286$ ) mean discrepancy scores were less than 0.400 were divided into ten high priority and ten low priority attained educational goais.

The degree to winich the goals have been attained is indicated by the mean discrepancy score; the lower the score, the less the difference between what schools NOW and SHOULD teach.

## Disagreement Between Students and Parents and Teachers

As was mentioned earlier,* students approved the schools' present programs much more than parents and teachers did. Accordingly, students gave low discrepancy scores to forty i.tems compared to fifteen such items for parents and sixteen for teachers. $\% \%$ In general, the disagreement was most marked on the high priority items; in fact, the oniy reason that most of these items had pooled mean discrepancies less than 0.400 was the low score given the items by students, coupled with the fact that students constituted sixty-one percent of the respondents. For most of the high priority attained goals, teachers and parents indicated discrepancy scores over 0.400 . In contrast, on tl. Low priority items, there was a widespread agreement among groups that these low priority goals were being attained.

## High Priority Attained Educational Goals

When the low discrepancy items are ranked in order of the mean value for the extent to which schools SHOULD teach each item (rank $1=$ highest mean "SHOULD teach" value), the top ten items (the high priority attained educational goais) clustered under four curriculum content areas. $\%$ *

[^17]HIGH PRIORITY ATTAINED GOAL AREA 1: Mathematics, as Defined by the Following Items:

1. Solving simple arithmetic problems.
2. Knowing there is more than one number system.
3. Being able to add, subtract, multiply, and divide numbers.
4. Discovering different ways to solve mathematical problems.


* I: Mean discrepancy scores have the same meaning and derivations given before on page 30. II: The discrepancy scores were ranked in order of increasing discrepancy; therefore, the lowest overall rank scores indicate. the more nearly attained goals. See the list on page.A-47. III: Priority scores and ranking have been explained before on page 30.
** The score 16 was assigned to those parent items for which parents had given discrepancy scores greater than 0.400 . The score 17 was assigned to certain teacher items for the same reason.
$\therefore \%$ Not considered an educational goal by this group.
ND: Too high to include in ranking.
Comments
The above items referring to the content area of mathematics include the two items which the respondents thought were the most important educational goals (among all the low discrepancy items). It is significant that for items 1 and 36 there was a large difference between the discrepancy scores for students and those for parents and teachers. In fact, only the very low scores given these items by the students were responsible for the items bejng among the low discrepancy items. Item 95 is another manifestation of the students' belief that schools are accomplishing what they should, regarding those aspects of mathematics to which the items refer. Since the judgments of parents and teachers widely contradict those of students, the only fair conclusion is that all groups agree that these items refer to a high priority educational goal, but students alone think the schools are presently attaining that goal.

HIGH PRTORITY ATTAINED GOAL AREA 2: Language Arts, as Defined by the Following Items:
34. Identifying related facts in a story.
88. Using rules of granmar in writing.
99. Identifying what one likes about a book.
118. Being able to explain the rules of punctuation.

|  | I <br> Mean Discrepancy Score* |  |  |  | II <br> Ranking by pancy Score* |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | Stud. | Par. | Teach. | Pool. | S | P T | Overall Rank | "SHOULD teach" Mean Value $\mathrm{N}=6286$ | $\begin{gathered} \text { Priority } \\ \text { Rank } \end{gathered}$ |
| 34. | 0.242 | 0.514 | 0.532 | 0.352 | 10 | 16**17** | 12 | 1.732 | 6 |
| 88. | 0.224 | 0.604 | 0.548 | 0.359 | 8 | 16**17** | 11 | 1.934 | 3 |
| 99. | 0.289 | 0.446 | 0.488 | 0.361 | 13 | 16** $17 * *$ | 15 | 1.708 | 9 |
| 118. | 0.211 | 0.568 | 0.282 | 0.300 | 6 | 16**10 | 5 | 1.710 | $\delta$ |

* These items are exnlained on the previous page 30 .
whese scores are explained on the previous page.


## Comments

As before, witi: the exception of item 18, students alone were responsible for these items having discrepancy scores less than 0.400 . The agreement of students and teachers on item 118, in the face of parent disagreement, suggests either that parents are unaware that their children can explain the rules of punctuation or that many parents judged the item using themselves as a guidde for answering. Again, 111 groups agreed that the content area of language arts, to which these items referred, was a high priority educational goal; but only students thought the schools were attaining the goal satisfactorily.

Students' confidence in the language arts efforts of the schools is given additional emphasis from their indications on the following items:

Grammar
2. Knowing comnon rules of the English Ianguage.
0.319

22
47. Knowing the importance
of Enginish grammar.
0.294

15
66. Willing to follow the rules of grammar in speaking and writing. 0.279 12
105. Choosing the best
grammatical usage.
0.323

## Speling

92. Desiring correct spelling in writing. 0.31821
93. Being able to spell basic words.

$$
0.316
$$

$$
20
$$

116. Enjoying the correct use of spelling.
0.34529
117. Being able to use root words to make new words. 0.323 25

## General

9. Knowing that specific information can be found in reference books. 0.290 14
10. Being able to determine if a sentence is being written correctly. 0.2399
11. Recognizing the parts of a good speech.
0.363

31
high Priority attained goal area 3: History, as Defined by the Following Items:
60. Knowing major periods of history.
33. Knowing that people in other lands have contributed to how we live.
37. Knowing how the past has affected our way of life.
65. Identifying the things in the past that benefit our way of life.
97. Making generalizations from historical facts.


* These numbers arc explained on the first chart in this chapter. ** Not considered an attained goal by this group. NR: Too high to include in ranking.


## Comments

The pattern here is not different from the first two high priority attained goal areas: Students think the schools NCW teach what they SHOULD; while in the judgment of parents and teachers, the items SHOULD be taught, but more satisfactorily than the schools are NOW teachins, them.
high priority attained goal area 4: Science, as Defined by the Following Items:
20. Knowing the earth has physical features.
71. Knowing how oceans and physical features of the earth change climate.
67. Being aware of the variety of living things.
80. Be.1ieving that scientific methods can solve problems.

| Mean | I |  | II |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Discrepancy |  | Group Ranking by Discrepancy Score |  |  |  | Priority |  |
|  | Par. Teach | Pool. | S | P | T | Overa11 <br> Rank | "Should teach" Mean Value $\mathrm{N}=6286$ | Priority Rank |
| 0.180 | 0.3100 .319 | 0.233 | 4 | 7 | 15 | 4 | 1.869 | 5 |
|  |  |  |  |  |  |  |  |  |


| 71. 0.296 | 0.408 | 0.439 | 0.347 | 16 | $16 *$ | $17 *$ | 16 | 1.664 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 67. | 0.397 | 0.396 | $0.517 * * 0.427 * * 40$ | 15 | $17 \%$ | NR | NR | NR |  |
| 80. 0.331 | $0.577 * * 0.607 * * 0.434 * * 26$ | $16 *$ | $17 *$ | NR | NR | NR |  |  |  |

[^18]
## Comments

On item No. 20, there is agreement amon' all three groups and ca item No. 67, between students and parents, which is unusual in the light of the previously reviewed attained goal areas. Items Nos. 71 and 80 demonstrate the familiar pattern.

## Summary

The high priority attained goals, which were primarily determined by student responses, fell into four major curriculum areas:

Attained Goal Area 1: Mathematics
Attained Goal Area 2: Language Arts
Attained Goal Area 3: History
Attained Goal Area 4: Science
Although students were the most important contributors to the low dis~ crepancy scores in these areas, all groups agreed that these items referred to high priority goals--that schools SHOULD teach them to a great extent.

## Low Priority Attained Edrucational Goals

When the low discrepancy items are ranked in order of the mean value for the extent to whick schools SHOJLD teach each item, the last ten items (the low priority attained educational goals) clustered under three curriculum content areas.

LOW PRIORITY ATTAINED GOAL AREA 1: Art, as Defined by the Following Items:
14. Being able to mix colors to make a new color.
38. Enjoying work with clay.
55. Understanding the use of color in art.
87. Receiving enjeyment by working with paints.

| Item | I <br> Mean Discrepancy Score |  |  |  | II <br> Group Ranking by Discrepancy Score |  |  |  | ```III Priority "SHOULD teach"``` |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stud. | Par. | Teach. | Pool. | S | P | Ti | Overa11 Rank | $\begin{gathered} \text { "SHOULD teach" } \\ \text { Mean Value } \\ N=6286 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Priority } \\ \text { Rank } \\ \hline \end{gathered}$ |
| 14. | 0.170 | 0.193 | 0.114 | 0.158 | 2 | 2 | 2 | 1 | 1.285 | 18 |
| 38. | 0.375 | 0.185 | 0.185 | 0.300 | 33 | 1 | 4 | 8 | 1.133 | 20 |
| 55. | 0.361 | 0.266 | 0.316 | 0.336 | 30 | 5 | 14 | 17 | 1.412 | 11 |
| 87. | 0.392 | 0,219 | 0.264 | 0.336 | 37 | 4 | 9 | 18 | 1.375 | 13 |

## Comments

All three groups agree that schools NOW teach what they should with regard to item No. 14 ; the other items reflect on agreement between parents and teachers that schools are presently teaching those items, while students are somewhat less certain. Of all the groups, parents are the most emphatic in indicating that the schools are teaching these items satisfactorily. The feelings of parents are given additional weight by the following items which they alone gave low discrepancy scores:

I
Mean Discrepancy

Item
Parent
Group Ranking by Discrepancy
$\qquad$

$$
0.387
$$

14
45. Forming judgments about art forms.
0.370

13
104. Understanding the differences in art forms: such as painting, music, etc. 0.338 11
115. Wanting always to enjoy art.

$$
0.288
$$

6

LOW PRIORITY ATTAINED GOAL AREA 2: Music, as Defined by the Following Items:

```
    82. Knowing the basic notes in music.
-102. Playing a musical score with a musical instrument.
    93. Being able to mrite a simple piece of music.
```

I
Mean Discrepancy Score

II
Group Ranking by Discrepancy Score

III
Priority
"suourin teach:"
Mean Value Priority

Item Stud. Par. Teacin Pcol. S P T Overall Mank Mean Value $\quad$ N $\mathrm{S}=6286 \quad$| Ranl: |
| :---: |

$\begin{array}{llllllllll}\text { 82. } & 0.337 & 0.370 & 0.312 & 0.336 & 27 & 12 & 13 & 20 & 1.317\end{array}$
102: $\begin{array}{llllllllll}0.339 & 0.337 & 0.252 & 0.316 & 28 & 10 & 8 & 14 & 1.276 & 19\end{array}$
93. $0.4430 .451 \quad 0.311 \quad 0.410$ NR $1612 \quad$ NR 120 NR

NR: Too high to include ir ranking.
Comments
Though the three groups agreed that schools are NOW teaching what they SHOULD regarding these items, teachers seemed the most satisfied with the present efforts of the schools in this area.

LOW PRIORITY ATTAINED GOAL AREA 3: Foreign Language, as Defined by the Following Items:
83. Knowing when a foreign language is spoken correctly.
113. Judging when the grammar of a foreign linguage is correct.
76. Understanding a simple foreign phrase.
107. Appreciating foreign languages.

| Item | $\mathbf{I}$ <br> repancy Score |  |  |  | II <br> Group Ranking by Discrepancy Score |  |  |  | $\begin{gathered} \text { III } \\ \text { Priority } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stud. | Par. | Teactio | Pool. | S | P | T | Overa11 <br> Rank | "SHOULD teach" <br> Mean Value $N=6286$ | $\begin{gathered} \text { Priority } \\ \text { Rank } \\ \hline \end{gathered}$ |
| 83. | 0.378 | 0.466 | 0.285 | 0.366 | 34 | 16 | 11 | 19 | 1.371 | 14 |
| 113. | 0.315 | 0.426 | 0.227 | 0.307 | 19 | 16 | 5 | 10 | 1.288 | 17 |
| 76. | 0.394 | 0.479 | 0.404 | 0.407 | 39 | 16 | 17 | NR | NR | NR |
| 107. | 0.394 | 0.573 | 0.481 | 0.440 | 38 | 16 | 17 | INR | NR | NR. |

NR: Too high to include in ranking.
Comments
Students and teachers agreed that schools were attaining the goals set
forth in these items. This student, teacher, and parent disagreement nay -55-
suggest a communications problem; parents may not know how competent their children are with foreign languages.

ADDITIONAL LOW PRIORITY, LOW DISCREPANCY ITEMS:

| Item | I <br> Mean Discrepancy Score |  |  |  | II <br> Group Ranking by Discrepancy Score |  |  |  | III <br> Priority |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stud. | Par. | Teach | Pool. | S | P | T | Overall Rank | $\begin{gathered} \text { "SHOULD teach" } \\ \text { Mean Value } \\ \mathrm{N}=6286 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Priority } \\ \text { Rank } \\ \hline \end{gathered}$ |
| 70. | 0.064 | 0.455 | 0.138 | 0.135 | 1 | 16 | 3 | 2 | 1.354 | 15 |
| 101. | 0:383 | 0.203 | 0.076 | 0.280 | 36 | 3 | 1 | 9 | 1.378 | 12 |
| 73. | 0.426* | 0.327 | 0.379 | 0.401* | NR | 8 | 16 | NR | NR | NR |

NR: Too high to be ranked.

* Not considered an attained goal by this group.

Summary
In general, in the low priority attained educational goals areas, parents and teachers indicated the schools were teaching what they should teach. In a few cases, teachers and students agreed, possibly identifying areas in which parents are not as well informed as they are in other areas. Although all respondents indicated that schools SHOULD teach these items to a lesser extent than the high priority items, they likewise indicated that schools were now teaching about what they stould for the items falling into the following general areas:

Low Priority Attained Goal Area 1: Art
Low Priority Attained Goal Area 2: Music
Low Priority Attained Goal Area 3: Foreign Language

## A Summary of Remarks from Respondent Comment Cards

Each perso: who participated in the need survey was given a $3^{\prime \prime} x$ g't card on which he was asked to write any comment he might have about the need survey itself or about important educational needs which the survey over looked.

A total of 1,744 respondents $(28 \%$ of all survey participants) used the comment cards. This total included 1,312 students, 174 parents, and 258 teachers. Since the cards given each group were a different colcr, the comments from each of the various groups could be separated by group. Tables giving a complete breakdown by group for the most frequently mentioned items are on pages A-54 through A-53. They may be useful supplements to the following discussion.

Two assumptions were made about the persons who actualiy wrote comments on their cards. First, it is common knowledge that dissatisfied people are more likely to respond to an opportunity for open-ended comment than are satisfied people. Therefore, if the cards that were returned are biased in any way, they may reflect a more negative opinion toward the survey and the schools than was held by all the survey participants. Second, the people who used the comment cards are also likely to be the more articulate people, the people who can take widely shared but vague feelings and organize those feelings into an explicit statement. Therefore, even though the comments may be biased and represent only about one-fourth of the total sample, the feelings expressed on the cards may be more widely shared than the number of returned cards would suggest.

The remarks from the comment cards were of two general types Remarks of the first type were concerned with the questionnaire itself. Remarks of the second type were specific suggestions for improving present school programs.

## Comment Card Criticisms of the Need Survey Questionnaire*

The most frequent comment card remark was that the questionnaire was repetitous. More than anything else, this probably indicates that most survey participants were not aware of the differences between questions which referred to the same curriculum content area, but to different domains of Bloom's Taxonomy; most participants apparently read the items as if they simply referred to a curriculum content area.

Many comment cards said the survey was simply ridiculous, a waste of time and money. More measured remarks said the items were ambiguous and poorly phrased. Several respondents complained that the questionnaire concentrated too much on the areas of art, music, health, and physical education. Other comment cards mentioned the need for more elaboration on the answers and for a broader range of answer categories. Cards from all groups, particularly high school students and facult: expressed a desire to be able to indicate the grade level or achievement level of the students they were referring to when they responded to the questionnaire items.

Many student comment cards specifically said they thought the survey was "good." High school teachers, on the other hand, were suspicious of the validity of the conclusions that might be drawn from their responses. Several twelfth grade students commented that the questionnaire did not cover the real school problems. What they, and others, thought these problems were is discussed in the next section.

## Comment Card Suggestions for Educational Improvements**

Most ©f the suggestions for ways to improve the present educational program came from students, high school students in particular. Teachers, and to a lesser extent, parents were curiously silent.

[^19]Many student suggestions called for an expanded curriculum offering in a specific curriculum content area. The most frequent suggestion of sixth graders was for more art. Twelfth graders shared this concern for art, and with ninth graders, indicated a strong desire for more family life and drug education. Catholic school students also mentioned the need for family life and drug education while just as frequently pointing out their desire for more physical education, a concern shared by Catholic school parents. The frequency with which each group mentioned the other content areas can be checked in the table on page A-55.

Other student suggestions were criticisms of present school policies which are not directly related to curriculum offerings. The remarks were pointed and poignant. It would be a mistake to write them off as flippant, irresponsible statements; in fact, their moderate tone and their sincerity were impressive. They mentioned four different areas of school policy. Present teaching methods constituted the most frequently criticized area of school policy. Students called for better prepared teachers and more rigorous programs for evaluating a teacher's effectiveness. They mentioned a need for more teachers who respect them and express a concern for them. Others indicated that student-teacher relations are too formal, and actually inhibit learning. (A student-teacher lounge and small group meetings, whose content and direction were set by students, were suggested to ameliorate this.) Parents who made remarks about teachers suggested schools concentrate their expenditure on getting and keeping the best teachers; they also expressed a need for more communication hetween teachers as we11 as between parents and teachers.

Grading policies came in for substantial student criticisms, Many students said that the emphasis on high grades was so intense that students competed fiercely to get the grades, and in the process, lost sight of
learning as the real purpose of education. They felt that grades should be given less emphasis and should more accurately reflect what students have learned. There were several complaints that students who get low grades in a high achievement level ciass are treated unfairly since, if they had been in a class of lower achievement level, the same amotiat of progress would have earned a higher grade.

A third area of student criticism was concerned with school rules. In the eyes of the students, many schooi rules are simply measures designed to make them conform to standards that have no relationship to the process of learning. Rules enforcing certain standards of dress and grooming, rules against smoking, and rules prohibiting an "open campus" were frequently mentioned examples of such measures.

Related to these criticisms were the general remarks students made about the education they are offered. They expressed a strong sentiment for more freedcm of expression, for more opportunity for individual development, and for a more creative educational program. They specifically mentioned a desire for fewer required courses and correspondingly more electives which cover a wider variety of content areas. Several indicated an interest in a more experimental educational program.

The general conclusion drawn from these student criticisms is that students seok a more influential role in determining the kind of education they receive. They believe, and not unjustly, that their opinions are at least as valid as other people's and that they must be considered when the educational decisions are made which most directly affect their lives as students and their future lives as citizens.

Asst. Director--Research
Mr. Clarence B. Wadleigh, Jr. Asst. Director--Program

WHAT IS YOUR OPINION OF EDUCATIONAL GOALS IN SANTA CLARA COUNTY? (study 非1)

This questionnaire is part of a continuing effort to improve education in Santa Clara County. The information will be used to he?

Identify important educational needs, and
Decide some priorities for new educational programs.

Your answers will be combined with the answers of many other persons in the County. Therefore, please do not sign your name.

The instruction sheet will help you in filling out this questionnaire; please follow it carefully so that your opinion can te given its full value. Please answer each statement.

We look forward to sharing the results of this study with you. Thank you for participating.

## OUR SCHOOLS

What should they teach?
What do they teach?


IMPROVEd EDUCATION FOR YOUTH AND CHILDREN IN SANTA CLARA COUNTY

## SIRECTIONS

In Colum I beiow are many kixds of learring goals for students.
In Part I please check kow mach you think schools Now teach or help students learn che thenge in column I.

In Part II piease check how much you think schools SHOULD teach or help students learn che things in Column I.

COLUMTI I PART I
Io schools NOW teach or help students learn the things in Column I?

1. Solving simple arithmetic problems.
2. Knowing common rules of the English language.
3. Having courage to meet challenges in life.
4. Appreciating America and all it means.
5. Being a good person that everyone likes.
6. Enjoying life and being happy even wher we have serious trouble
7. Keeping the law and not getting into trouble.
8. Having skills needed to get a good job.
9. Knowing that specific information can be found in reference boolss.
10. Being able to recognize high quality in stories.
11. Knowing there is more than one number system.

47-48

Some Student 1
LEARNING GOALS are: cc

|  |  | To A |  |
| :--- | :--- | :--- | :--- |
| To | To | To A | Very |
| No | Some | Great | Great |
| Extent | Extent | Extent | Extent |

27-28

PART II
SHOULD schools teach or help students learn the things in Column I?

PART I
Do schools NOW teach or help students leara the things in Column I?

Some Student LEARNTNG GOALS are: $+$
2. Being able to select a book based on good literary standards.
13. Finding pleasure in doing work.
14. Being able to mix colors to make a new color.
15. Being able to idencify what skills axe needed for a given job.
16. Determiaing if tax dollars are spent wisely.
17. Wanting to obey the laws of conservation.
18. Having the skill to use different methods to solve problems.
19. Wanting to explore new forms of art.
20. Knowing the earth has physical features.
21. Accepting the importance of law in our daily life.
22. Being able to determine if a sentence is written correctly.
23. Knowing about the different viewpoints of art.
24. Being able to read simple music.
25. Learning the relationship of diet, exercise and rest to good health.
26. Being able to organize a family budget.

COLUMN I

## Some Student LFARIING COALS are:

|  | students learn the things in Column I? |  |  |  | thiugs in Column I? |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Some Student LEARUING GOALS are: | To <br> No <br> Extent | To Some Extent | To A Great Extent | $\begin{aligned} & \text { To A } \\ & \text { Very } \\ & \text { Great } \\ & \text { Extent } \\ & \hline \end{aligned}$ | To <br> Nu <br> Exでent | To <br> Some <br> Extent | To A Great Extent | $\begin{aligned} & \text { To A } \\ & \text { Very } \\ & \text { Great } \\ & \text { Fritent } \end{aligned}$ |
| 27. Knowing why different languages are spoken.$13-14$ | a | b | c | 0 | A | B | C | D |
|  |  |  |  |  |  |  |  |  |
| 28. Identifying different styles in the arts. $15-16$ |  |  |  |  |  |  |  | - |
| 29. Being able to read a map. $17-18$ |  |  |  |  |  |  |  |  |
| 30. Being able to identify laws of most help to our country. |  |  |  |  |  |  |  |  |
| 31. Being able to judge types of music. |  |  |  |  |  |  |  |  |
| 32. Preparing food for a family. $23-24$ |  |  |  |  |  |  |  |  |
| 33. Knowing that people in other lands have contributed to how we live. 25-26 |  |  |  | : | , |  |  | \% |
| 34. Identifying related facts in a story. |  |  |  |  |  |  |  |  |
| 35. Knowing the basic rules for physical fitness. |  |  |  |  |  |  |  | \% |
| 36. Being able to add, subtract, multiply and divide numbers. 31-32 |  |  |  |  |  |  |  |  |
| 37. Knowing how the past has affected our way of life. |  |  |  |  |  |  |  | 1 |
| 38. Enjoying work with clay. $35-36$ |  |  |  |  |  |  |  |  |
| 39. Knowing the parts of the body. |  |  |  |  |  |  |  |  |
| 40. Expressing clearly one's point of view. $39-40$ |  |  |  |  |  |  |  | 8 |
| 41 . Understanding the Constitution of the United States. |  |  |  |  |  |  |  | \% |

28. Identifying different styles in the arts.

15-16
29. Being able to read a map.
30. Being able to identify laws of most help to our country.
31. Being able to judge types of music.
32. Preparing food for a family.
33. Knowing that people in other lands have contributed to how we live. 25-26
34. Identifying related facts in a story.
35. Knowing the basic rules for physical fitness.
36. Being able to add, subtract, multi.ply and divide numbers.
37. Knowing how the past has affected our way of 1ife.
38. Enjoying work with clay.
39. Knowing the parts of the body.
40. Expressing clearly one's point of view.

4 . Understanding the Constitution of the United States.

Do schools NOW teach or help students learn the things in Column I?

| COLUMN I | PART IDo schools NOW teach or helpstudents learn the things inColumn I? |  |  |  | PART II <br> SHOUTD schools teach or help students learn the things in Column I? |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Some Student 2 <br> LEARNING GOALS are:  | To <br> No <br> Extent | To Some Extent | To A Great Extent | To A Very Great Extent | To No Extent | To Some Extent | To A Greai Extent | To A Very Greati Extent |
|  | a | b | c | d | A | B | C | D |
| 42. Planning a good physical exercise aciivity. $43-44$ |  |  |  |  |  |  |  |  |
| 43. Applying number skills in solving problems of everyday life. $45-46$ |  |  |  |  |  |  |  |  |
| 44. Appreciating many styles of writing. $47-48$ |  |  |  |  |  |  |  |  |
| 45. Forming judgments about art forms. 49-50 |  |  |  |  |  |  |  |  |
| 46. Knowing how our government is supported. $51-52$ |  |  |  |  |  |  |  |  |
| 47. Knowing the importance of English grammar. 53-54 |  |  |  |  |  |  |  |  |
| 48. Respecting the value of good health habits, $55-56$ |  |  |  | . |  |  |  |  |
| 49. Desiring to use mathematics effectively. |  |  |  |  |  |  |  |  |
| 50. Applying standards or rules of design and quality in selecting things you use. |  |  |  |  |  |  |  |  |
| 51. Learning to identify quality in art works. $61-62$ |  |  |  |  |  |  |  |  |
| 52. Having a large speaking vocabulary. $63-64$ |  |  |  |  |  |  |  |  |
| 53. Using the scientific method in problem soiving. |  |  |  |  |  |  |  |  |
| 5'. Knowing the value of physical fitness in daily life. |  |  |  |  |  |  |  |  |
| 55. Understanding the use of color in art. $69-70$ |  |  |  |  | $\cdot$ |  |  |  |
| 56. Planning a budget for own use. $71-72$ |  |  |  |  |  |  |  |  |

## COLUMN

| COLUM 1 | PARI IDo schools NOW teach or helpstudents learn the things inColumn I? |  |  |  | PART II <br> SHOULD schools teach or help students learn the things in Column I? |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Some Student 2 <br> LEARNING GOALS are: ce | To No Extent | To <br> Some <br> Extent | To A Great Exzent | To A Very Great Extent | To No Extent | To <br> Scmo <br> Extent | To A Great Extent | To A <br> Very <br> Great <br> Extenc |
|  | a | 3 | c | d | A | B | C. | D |
| 57. Being aware of good health habits. $73-74$ |  |  |  |  |  |  |  |  |
| 58. Changing behavior from ideas learned through reading. $75-76$ |  |  |  |  |  |  |  |  |
| 59. Being able to plan or map out a trip across the country. |  |  |  |  |  |  |  |  |
| 60. Knowing major periods of 3 history. |  |  |  |  |  |  |  |  |
| 61. Learning how to manage money ${ }^{\text {d }}$ 15-16 |  |  |  |  |  |  |  |  |
| 62. Being able to tell others about what one reads in a newspaper. |  |  |  |  |  |  |  |  |
| 63. Being aware of beauty in sculpture. $19-20$ |  |  |  |  |  |  |  |  |
| 64. Cooperating with the law. 21-22 |  |  |  |  |  |  |  |  |
| 65. Identifying the things in the past that benefit our way of life. $\qquad$ |  |  |  |  |  |  |  |  |
| 66. Willing to follow the rules of grammar in speaking and writing. 25-26 |  |  |  |  |  |  |  |  |
| 67. Being aware of the variety of living things. $27-28$ |  |  |  |  |  |  |  |  |
| 68. Being able to compare different economic systems. $29-30$ |  |  |  |  |  |  |  |  |
| 69. Wanting to solve mathematical problems without help. |  |  |  |  |  |  |  |  |
| 70. Being able to diagram a sentence, $\begin{array}{r}\text { 33-34 }\end{array}$ |  |  |  |  |  |  |  |  |
| 71. Knowing how oceans and physical features of the earth change climate. |  |  |  |  |  |  |  | , |
| 72. Being able to make sound judgnents about political issues. $37-38$ |  |  |  |  |  |  |  |  |

57. Being aware of good health habits.
58. Changing behavior from ideas learned through reading.
59. Being able to plan or map out a trip across the country.
60. Knowing major periods of history.
61. Learning how to manage money.
62. Being able to tell others about what one reads in a newspaper.
63. Being aware of beauty in sculpture.
64. Cooperating with the law.
65. Identifying the things in the past that benefit our way of life.
66. Willing to follow the rules of grammar in speaking and writing.

25-26
. Being aware of the variety of living things.

27-28
68. Being able to compare different economic systems. problems without help.
70. Being able to diagram a sentence.
71. Knowing how oceans and physical features of the earth change climate. about political issucs. 37-38

| COLUM I | PART I <br> Do schools NOW teach or help students learn the things in Column I? |  |  |  | PART II <br> SHOULD schools teach or help students learn the things in Column I? |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Some Student 3 <br> LEARNING GOALS are: cc | To <br> No <br> Exieni | To <br> Some <br> Exterit | To A Great Extent | To A Very Great Extent | To <br> No <br> Extent | To Some Extent | Tc A Great Extent | To A <br> Very <br> Great <br> Ertent |
|  | a | b | c | d | A | B | C | D |
| 73. Being able to take part in sports activities for enjoyment. $39-40$ |  |  |  |  |  |  |  |  |
| 74.Using informetion from the past to solve problems of today. $41-42$ |  |  |  |  |  |  |  |  |
| 75. Organizing ideas and statements while speaking. $43-44$ |  |  |  |  |  |  |  |  |
| 76. Understanding a simple foreign phrase. $45-46$ |  |  |  |  |  |  |  |  |
| 77. Working with simple tools to produce a product of some kind. |  |  |  |  |  |  |  |  |
| 78. Spending money wisely. 49-50 |  |  |  |  |  |  |  |  |
| 79. Enjoying the expression of ideas in writing. $51-52$ |  |  |  |  |  |  |  |  |
| 80. Believing the scientific method can solve problems. 53-54 |  |  |  |  |  |  |  | ; |
| 81. Being able to identify those things in art that give pleasure |  |  |  |  |  |  |  |  |
| 82. Knowing the basic notes in music $57-58$ |  |  |  |  |  |  |  |  |
| 83. Knowing when a foreign lanr,uage is spoken correctly. $59-60$ |  |  |  |  |  |  |  |  |
| 84. Wanting always to speak effectively. $61-62$ |  |  |  |  |  |  |  |  |
| 85. Applying good health habits. 63-64 |  |  |  |  |  |  |  |  |
| 86. Knowing how a law is made. 65-66 |  |  |  |  |  |  |  |  |
| 87. Receiving enjoyment by working with paints. |  |  |  |  |  |  |  |  |
| 88. Using rules of grammar in writing. 69 |  |  |  |  |  |  |  |  |
| 89. Wanting to follow good health habits. $71-72$ |  |  |  |  |  |  |  |  |


| COLUMN I |
| :--- |
| Some Student <br> LEARNING <br> GOALS |

COLUMN I
PART I
Do schools NOW teach or help students learn the things in Column I?

|  | Column I? |  |  |  | things in Colum I? |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Some Student 4 <br> LEARNING GOALS are: cc | To <br> No <br> Extent | To <br> Some <br> Extent | To A Great Extent | To A <br> Very <br> Great <br> Extent | To <br> No <br> Exyenic | To <br> Some <br> Extent | To A Great Bxtent | To A Very Great品tent |
|  | a |  | c | d | A | B | C | D |
| 105. Choosing the best grammatical usage. $37-38$ |  |  |  |  |  |  |  |  |
| 106. Using principles of public speaking. $39-40$ |  |  |  |  |  |  |  |  |
| 107. Appreciating foreign languages, $41-42$ |  |  |  |  |  |  |  |  |
| 108. Willing to form judgments about one's own work. |  |  |  |  |  |  |  |  |
| 109. Being able to spell basic words. $45-46$ |  |  |  |  |  |  |  |  |
| 110. Recognizing the parts of a good speech. |  |  |  |  |  |  |  |  |
| 111. Enjoying the music of different cultures - past and present. $49-50$ |  |  |  |  |  |  |  |  |
| 112. Knowing good health habits. 51-52 |  |  |  |  |  |  |  | 崖 |
| 113. Judging when the grammar of a foreign language is correct. |  |  |  |  | . |  |  | , |
| 114. Developing standards of a good home |  |  |  |  |  |  |  |  |
| 115. Wanting always to enjoy art. 57-58 |  |  |  |  |  |  |  |  |
| 116. Enjoying the correct use of spelling. |  |  | . |  |  |  |  |  |
| 117. Being able to use root words to make new words. |  |  |  |  |  |  |  | , |
| 118. Being able to explain the rules of punctuation. |  |  |  |  |  |  |  |  |
| 119. Wantiag to be physically fit ${ }_{65-66}$ |  |  |  |  |  |  |  | \% |
| 120. Desiring the ability to spell correctly. |  |  |  |  |  |  |  |  |
| 121. Being aware of the fine arts. ${ }_{69-70}$ |  |  |  |  |  |  |  | , |


| COLUMN I |  |  |  |  | PART II <br> SHOULD schools teach or help students learn the things in Column I? |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Some Student IEARNING GOALS are: | To No Extent | To Some Extent | To A Great Extent | To A Very Great Extent | To No Extent | To <br> Some <br> Extent | To A Great Extent | To A Very Great Extent |
|  | a | b | c | d | A | B | C | D |
| 122. Becoming familiar with different types of food. $71-72$ |  |  |  |  |  |  |  |  |
| 123. Knowing what makes writing interesting, $73-74$ |  |  |  |  |  |  |  |  |
| 124, Expressing ideas using drawing, music, painting, clay, etc. |  |  |  |  |  |  |  |  |
| 125. Wanting al.ways to speak and write effectively. $77-78$ |  |  |  |  |  |  |  |  |
| 126. Learning about drugs such as LSD and marijuana. |  |  |  |  |  |  |  |  |
| 127. Learning facts about marriage, family, and the birth of children. $15-16$ |  |  |  |  |  |  |  |  |

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S.P.A.C.E./3•22-67

## INTRODUCTION

The answer sheet for this study is called an "Optically Scanned Mark Sense Response Form," which means that it can be "read" by a machine called an Optical Scanner and understood by a computer. Of course, to make it work properly, we must be very exact and careful when we fill it out. A soft, dark pencil should be used, because anything else--colored pencils, ball point pens, or hard lead pencils--won't leave the kind of mark that the Optical Scanner can read. We must also be careful when filling in the boxes to fill the box completely, but not to go outside of the lines of the box. Do not make stray marks and remember to erase mistakes completely.

## INSTRUCTIONS

START WITH SIDE ONE. In the upper left hand corner you will see the Roman numeral I that says, "COUNTY/DISTRICT/SCHOOL." First, write the number that has been given to you by the person who gave you this set in the blank spaces at the top of each column; then darken the box corresponding to each number. You should have darkened nine boxes--two for COUNTY CODE, three for DISTRICT CODE, and four for your SCHOOL number.

For Roman numeral II, you have been assigned "your" number. Write it in the three blank spaces and then darken the corresponding bcx in each column.

For Roman numexal III, you will see one column with response boxes titled, "TYPE OF SCHOOL." Fill in the correct box from the following school types:

Darken "NONE" if you do not attend school.
Darken 1 if your school is a public high school.
Darken 2 if your school is a public junior high school.
Darken 3 if your school is a public elementary school.
Darken 4 if your school is a non-public, sectarian high school.
Darken 5 if your school is a non-public, sectarian junior high school.
Darken 6 if your school is a non-public, sectarian elementary school.
Darken 7 if your school is a non-public, non-sectarian high school.
Darken 8 if your school is a non-public, non-sectarian junior high school.
Darken 9 if your school is a non-public, non-sectarian elementary school.
For Roman numeral IV, there is another column of response boxes titled, 'WHAT YOU DO." Fill in the box that most closely describes your primary activity.

Darken 1 if you are a student.
Darken 2 if you are a teacher or counselor,
Darken 3 if you are a parent not conzected with education.
Darken 4 if you are a superintendent or assistant superintendent.
Darken 5 if you are a principal or ofher administrator.
Darken 6 if you are a special services nuese or psychologist.
Darken 7 if you are a custodian, gardener: or maintenance man.
Darken 8 if you are one of a businces office personnel.
Darken 9 if you are none of the above.
Continue with Roman numeral V through YI darkening the correct box for each.

The rest of Side One contains 80 statements. Each statement has two parts. PART I is headed "SCHOOLS NOW TEACF" and has four ( 4 ; columns marked "a, b, c, d." FART II is headed "SCHOOLS SHOULD "'EACI" and has four (4) columns marked "A, B, C, D."

For example, refer to Statement 1 , "Solving simple arithmetic problems." Darken the box in PART I that describes the extent to which you believe schools now teach students to solve simple arithuetic problems.

If you think "To No Extent," darken box "a."
If you think "To Some Extent," darken box "b."
If you think "To A Great Extent," darken box "c."
If you think "To A Very Great Extent," darken box "d."
Darken the box in PART II of Statement 1 that describes the extent to which you believe schools should be teaching students to solve simple arithmetic problems.

If you think "To No Extent," darken box "A." If you think "To Some Extent," darken box "B." If you think "To A Great Extent," darken box "C." If you think "To A Very Great Extent," darken box "D."

Darken only one box in each of the parts.
Now do the same thing for the remaining statements on Side One. After you complete Side One, turn the response form over to Side Two and do these things:

1. Copy the COUNTY/DISTRICT/SCHOOL CODE into the blank spaces provided on Side Two and darken the corresponding boxes in each column.
2. Copy "your" number into the blank spaces provided and darken the corresponding boxes.
3. Darken the two boxes below "THIS IS SIDE TWO, DARKEN THESE TWO BOXES NOW."
4. If you are a parent, darken the boxes that apply to you under Roman numeral XI.

Now finish marking PART I and PART II for statements 81 through 127 in the same way that you completed statements 1 through 80 on the other side.

Check once again to be sure that you have correcily written and marked the corresponding boxes for the COUNTY/DISTRICT/SCHOOL CODE and "your" number on BOTH sides of the response form, review your marking for neatness and return the set of forms to the person who gave it to you.


April 10, 1967

## Dear Teacher:

Money exists to attack educational problems in Santa Clara County. The question is, "What are the problems?" We think teachers know. We also think students and parents know. The enclosed questionnaire has been carefully designed by a team of educato::s to help us collect this information.

The questionnaire has already been pilot tested in Marin County. Bloom's taxonomy was used to provide a framework for developing items systematically. Each item is tied to a given level of the taxonomy. The most up-to-date techniques, including use of the optical scanner and computerized data processing, will be used to analyze the results.

An honorarium of $\$ 20.00$ will be paid to you for helping us to administer the questionnaire. (You were recommended to us for this service by your principal.)

To brief you on how to administer the questionnaire, it will be necessary for you to attend one of the following briefings:

$$
\begin{aligned}
& \text { 1. 4:00-5:30 p.m., Tuesday, April 18, } 1967 \\
& \text { 2. 7:00-8:30 p.m., Wednesday, April 19, } 1967 \\
& \text { 3. 7:00-8:30 p.m., Thursday, April 20, } 1967
\end{aligned}
$$

The meeting will be held at the Supplementary Education Center, 1110 North Tenth Street, San Jose.

Enclosed is a postcard indicating each of the scheduled neeting times. Please indicate which meeting you will attend and mail the card back to us today.


DLB: PPP: ag
Enclosures

$$
A-i^{\prime}+
$$

## 1. Teacher Instructions for Polling Studente <br> (All Teacher Coordinators)

## 1. To Whom Will the Questionnaire be Administered

A. Elementary:

Studento of one 6th grade clase
B. Secondary:

Students in $\qquad$ class(es) (Use the same questionnaires in eacin of your ciasisē ix youi have morit thein on clase.)
2. Distribution of Materials to the Students
A. Make certain each student has:

1. One questionnaliee
2. One answer forin
3. One No. 2 pencil
4. One $\qquad$ comment card
B. Announce that the use of the coument card is optional for each student,
5. Inetructions to the Student
A. Read aloud the statement of purpose on the front of the answer sheet and ask the students to follow along with yovi.
B. Do the same with the introductory paragraph on the instruction aheet.
C. Your County/District/School number is $\qquad$ -

Write it on the board at the top of ample grid.
D. Read aloud the first paragraph under the heading InsTRJCTIONS.
E. On the ample grid demonstrate how to darken in the proper blanks for the County/District/Schooi number.
P. Ask the students to do this now on both sides of the answer sheet.
G. You are to use numbers beginning with to number your students. Starting with that number, essign consecutive numbers to the students by rows. (For example, the first class might start with the numbers 1-25, the second with $26-52$, and the third with 53-73.)
H. Ask the atudents to write the number you assigned them in the space provided under "Your Number," Roman numeral II. Have them write this on both sides of the answer sheet now. Explain that this number wi.11 in no way identify them. The number is necessary to tie the front and back sides of the answer sheet together after data procesoing. fithout it our data will be chaotic.
I. Continue reading aloud the Instruction Sheat until finished.
J. Caution the students not to fold or mutilate the snswer form.
R. After all general infommation has been completed, ask the students to begin answering the questionnaire.
4. While the Students are Taking the Questionnaixe
A. While the students are busy, complete the collection Checkliat--Students for that class. Copies of that form are in your envelope.

## 5. Time Reguired to Complete the Questionnaire

A. Pifty minutes should be enough to allow every student to complete the questionnaire. If few students need more time, please make every effort to allow them to complete the entire form.
6. Collection of Materials From the Studeate
A. When all students have completed the questionnalre, ask then to:

1. Pass in the queationnaire with the cover page up.
2. Pass in the optical scan answer form with Sicie One up.
3. Pase in the No. 2 pencils.
4. Pass in only those comment cards containing commente.
D. Count the añoic forme to mace gextain you here the numer iadicated on the Collection Check?ist-oStudents. Then atore the cowpieted anower form and the Collaction Checklist--Students in your envelope.

## 7. After Completion of Student Quentionnaires

A. Elementary: Store the student answer sheets. Turn to. III of this forn for intruitione on how to proceed with the parent • questionnaires.
B. Secondary: Turn in all materials to the principal's eecretary.
S.P.A.C.E. NEED SJRVEY

Please return this along with the completed forms for each class.

Data Collection Checkilst--Students

Teacher:

County/District/School Number:

Date:
Grade Level: 69 12
(Circle appropriate one)

General Ability level: High Middle Low

Total lumber of Answer Sheets Distributed: $\qquad$

Number of Sheets Completed:

Number of Sheets Not Returned:

Please indicace any comments that might help us evaluate the results from your class.

## 1. Distribution of Questionnaires to Earenta

A. After faculty and studenta have been polled, give each student the following:

1. One queationnaire
2. One answer form
3. Two witite cômient cā̃ā
4. One No. 2 peacil
5. One letter to parents
B. One large envelope to coatain all the materiala
B. Ask the stadents to put the matorials in the envelope, being careful not to fold or mutilate the answer form.
6. Instructions to Students About Parent Forms
A. Tell each student to make sure the envelope and its conients get to his parents that afternoon. Ank the studente to show their parente hosy to fill out the anawer sheet. Aok tha students to urge their parents to complete the answer aheet in time for the student to returis it within the next two aray.
7. Collecting Returned Parent Forme
A. Collect parent envelopes from students. Please try to have all parent forms returned within five daye.
8. Ozganizilng Returned Parent Porms
A. The following steps whould be observed with each returned parent form:
9. Take all the materials from the parent envelope.
10. Piat the queationnaires cover side up in a parant envelope which has been marked QUESTIOMnsIKRS.
11. Put the answer sheets Side one up in a parent envelope which has been marked PAREITT ANSWER FORMS.
12. Put the pencils in with the questionnaires to avoid marking up the answer forms.
13. Put the comsent cards in with the answer forms.
B. Aftar five days, when sil parent forms have been returned, mark on each parent answer sheet:
14. The Councy/District/School number
15. "Your Number" assigned to the auswer sheets consecutively beginning with the number 700
16. The spaces on Side two of the anower sheet labeled "Darken These Two Boxes Now"
C. Complete the Collection Checklist--Parents, apy of which is enclosed in your materials.
17. after all of the answer forms from students, faculty, and parents are completed, leave your materials with the principal's secretary. Then call S.P.A.C.E. at 299-3731. A member of the S.P.A.C.E. staff will pick up the completed answer sheeta and other materials.

## 1. Distribution of Questionnaires to Parents

A. After faculty and studenta have been polled, give each atudent the following:

1. One questionnaire
2. One answer form
3. Two white coument cards
4. One No. 2 pencil
5. One letter to parents
6. One large envelope to contain all the materials
B. Ask the students to put the materials in the envelope, being careful not to fold or matilate the answer form.
7. Instructions to Students About Parent Forms
A. Tell each student to make sure the envelope and its contents get to his parents that afternoon. Ask the students to show their parents how to fill out the answer sheet. Ask the students to urge their parents to complete the answer sheet in time for the student to return it within the next two dayg,
8. Collecting Returned Parent Forms
A. Collect parent envelopes from students. Please try to have all parent forms retursed within five days.
9. Organizing Returned Parent Forms
A. The following steps should be observed with each returued parent form: 1. Taj: all the materials from the parent envelope.
10. Put tir questionnaires cover side up in a parent envelope which has been marned QUESTIONNAIRES.
11. Put the answer sheets side One up in a parent envelope which has been maxiked PARENI ANSWER FORMS.
12. Put the pencils in with the questionnaires to avoid marking up the answer forms.
13. Put the comment cards in with the answer fornis.
B. After five days, when all parent forms have been returned, mark on each parent answer sheet:
14. The County/District/School number
15. "Your Number" assigned to the answer sheets consecutively beginning with the number 700
16. The spaces on Side Two of the answer sheet labeled "Darken Tnese Two Boxes Now"
C. Complete the Collection Checkilst--Parents, a copy of which is enclosed in your materials.
17. After all of the answer forms from students, faculty, and parents are completed, leave your materials with the principal's secretary. Then call S.P.A.C.E. at 299-3731. A member of the S.P.A.C.E. staff will pick up the completed answer sheets and other materiale.
```
S.P.A.C.E. NESD SURVEY
Plesse return this along with
the completed parent forc3s.
Data Collection CheckIist-mParents
Teacher:
County/D1etrict/School Number:
Date:
Total Number of Answer Sheets Sent Out to Parents:
Total Number of Answer Sheets Returned:
Total Number of Answer Sheets Not Returned:
Please circle the differences if any between the parents and children who returned auswer sheets and those who did not.
```


## Parents <br> Childran

$\qquad$

``` No difference.
``` \(\qquad\)
``` No difference.
Older, Younger? Non-respondent differed on age.
More, Less? Children diffeŕed on depenciability
\begin{tabular}{|c|c|c|c|}
\hline Hizher, Lower? & Non-respondents differed on income. & H, gher, Lower? & Children differea on school achievement. \\
\hline Higher, Lower? & Non-respondents differed on education level. & Male, Female? & Children differed on se \\
\hline
\end{tabular}
Write in Difference
``` \(\qquad\)
``` Other (please 1ist)
Non-respondents differed on race.
Farm, Town, City? Non-respondents differed on where they live.
Pos., Neg.? Non-respondents differed on attitude toward achool.
Other (piease \(1: t\) )
```

Santa Clara County<br>SUPPLEMENTARY EDUCATION CENTER<br>1110 North Tenth Street<br>San Jose, California 95112

April 24, 1967

## Dear Parents:

Constant efforts are being made in Santa Clara County to improve the education of our children. We ask you to help us further this important effort by filling out the enclosed questionnaire. Your answers will identify some of the strengths and weaknesses of education throughout the County. New programs based upon the results of this study will be developed for the benefit of your child and his classmates.

If you would like to participate in this effort, please follow the instructions below:

1. Use the answer sheet to record your answers. Do not use the questionnaire itself.
2. Leave blank the boxes on the answer sheet labeled "COUNTY/DISTRICT/SCHOOL" and "YOUR NUMBER."
3. Use the $3 \times 5$ cards to make any additional comments.
4. If you need help, ask your child to assist you. He has already completed the questionnaire.
5. Try not to fold or mutilate the answer form.
6. Use the envelope to return the questionnaire, the answer sheet and all materials with your child within the next two days or sooner.

Your child's sixth grade teacher will insure that your answers will be forwarded for data processing.

Thank you for your cooperation.
Sincerely,

PRINCIPAL

TEAEHER COORDINATOR


TI. Teacher Instructions for Polling Faculty
(This set of instructions is needed by every clementary teacher coordinator and by only one of the secondany teacher coordinators.)

1. Please schedula a conferance with your principal. Discuss with bim the following two suggested procedures for administering the questionaice to your stafy. (Note to elementary teachers: You should also ask your principal to approve and sign the letter to tine parentio.
A. Preferred Procedure - Administration During a Faculty Meeting
2. Ait same time during tise month of April, have the faculty complete the questionnaires duritg a faculty maeting.
3. The purpose of the questionnaire should be explained to the assembled staff.
4. The following should be passed out to each staff menter present:
a. One questionnaire
b. One answer form
c. One No. 2 pencil
d. One $\qquad$ comment card e. One cover letter
5. Announce that the use of the comment card is optional with each staff member. Request that only one comment be written on each card, and explain that extra cards are available.
6. Write the County/District/School number on the board and give it verbally. Using a sampie grid, explain how to darken the proper blanks for this number.
7. Beginning with che number 800 , assign consecutive number to individual staff members. Explain that this number vill in no way ie used to identify them. The number is necessary to tie the front and back. sides of the answer sheet together after data processing. Without it the data would be chaotic.
8. Ask each staff member to write the number assigned to him in the space provided for "Your Number" and also to darken the proper blanks on both sides of the answer sheet.
9. Tell them further instructions are attached to the questionnaire.
10. Ask if there are any final questions.
11. After all questions have been answered, ask the faculty to begin completing the questionnaire.
12. After the staff has completed the quastionnaire, ask them to:
a. Pass in the questionnaires with the ccuer page up.
b. Pass in the answer forms with Side One ung-
c. Pass in the pencils.
d. Fass in only those comment cards containing comments.
iiz. When all the materials have been collected, fill out the form lebeled "Collection Checkiist--Staff," copy of which is included in your envelope.
13. Store all the materials including the Collection Checklist in your envelope. Then if you are:
a. Secondary: Give the envelope to your princlpal's secretary. After all questionnaires for both staff and siadents are completed, call S.F.A.C.E. at 299-3731. A member of the S.P.A.C.E. staff will pick up the completed answer sheets and other material.

Elementary: See Roman numeral IIf, "Taacher Inatruction for Polling Parents," of this handout.

## B. Second Suggested Procedure

1. Discuss with your principal the suggested cover letter for the staff. If it meets his approval, have him sign it. If it does not meet his approval, please feel free to rewrite the letrer as necessazy.
2. In the space provided on the covar letter write your County/District/ School number. Begiming with the number 800, write a consecutive number on each cover letter in the space provided for "Your Number."
3. Distribute to each staff member the following:
a. One questicnaire
b. One answer form
c. One No. 2 pencil
d. One $\qquad$ comment card e. One cover letter
4. Give the principal's secretary an envelope in which to collect the forms when they are returned to her. A note on the teachers' bulletin board reminding the teachers to return their formo smmediately would help assure $100 \%$ participation.
5. All forms and other materials should be returned to the principal's secretary within two days after they are distribuced.
6. When all the forms are returned, check them to make certain all answes forms are turned co that Side one is facing up.
7. Complete the Collection Checklist--StaEf, a copy of which is incluaded in your envelope.
8. Store all materialb, including the Collection Checklist, in your envelope. Then if you are:
a. Elewentary: See Rcman numeral III, "Teacher Instruction for Polifing Parents," of this handout.
$b_{\text {. Secondary: Give the envelope to your primipal's eecretary. }}$ After all queationnaires for both staff and stadents are completed, call S.P.A.C.E. at 299-3731. A member of the S.P.A.C.E. staff will pick up the completed answer sheete and other materials.
S.P.A.C,E. NEED SURVEY

Please return this along with the completed staff forms.

Data Collection Checiklist--Staff

Staff Mexber:

County/District/School Number: $\qquad$

Date: $\qquad$

Total Number of Answer Sheets Given Out:

Number of Answer Sheets Completed: $\qquad$

Number of Arswer Sheets Not Returned: $\qquad$

If more than $20 \%$ of the staff failed to complete the questionaaire, pleaze indicate the major differences if any between respondents and non-respondents.

# S.P.A.C.E. NEED SURVEY <br> Addendum - Teacher Instructions (To be observed by teachers when completing the questionnaire) 

Please complete $a 11$ of the boxes as indicated on the instruction sheet except for the following:

VI Age Group - Dariken in the one category that best describes the age range of all of the chilaren you teach. For example, if three of your sections are seniors and two freshmen, darken in the blank labeled, "17-19 years."

VII School Ackievement - Darken in the one blank that best describes the ability level of all of the classes you teach. For example, if you teach two above average, one everage, and two below average classes, darken in the blank labeled, "average."

IX Family Income - Darken in the one blank that best describes the income category of all of the children you teach. For example, if you think that the mean family income level of all of the children you teach is about $\$ 8,000.00$, dariken in ihe blank labeled, " $\$ 7,001$. $\$ 10,000 . "$

Santa Clara County SUPPLEMENTARY EDUCATION CENTER<br>1110 North Tenth Street San Jose, California 95112

April 24, 1967

## Dear Teacher:

Money exists to attack educational problems in Santa Clara County. The question is, "What are the problems?" We think teachers know. That is why we want you to participate in this Countywide effort by completing the questionnaire in front of you.

This questionnaire was developed by a team of educators and pilot tested in Marin County. Bloon's taxonomy was used to provide a conceptual framework for developing questionnaire items systematically. Each item is tied to a specific level of the taxonomy. The most up-to-date techniques, including use of optical scannïng and computerized data processing, will be used to analyze the results.

You will be given the "COUNTY/DISTRICT/SCHOOL" naiber anid a number for the box labeled "YOUR NUMBER" on your answer sheet.

Complete instructions accompany rhe answer sheet. Nevertheless, if you have questions, please feel free to ask them. Your principal or the teacher he appointed to assist in this task will help you.

Thank you for your participation.
Sincerely,

PRINCI PAL

TEACHER COORDINATOR


Supplementary Education Center

DLB: PDP:ps
Enclosures

Santa Clara County<br>SUPPLEMENTARY EDUCATION CENTER<br>1110 North Tenth Street<br>San Jose, California 95112

April 24, 1967

Dear Teacher:
Money exists to attack educational problems in Santa Clara County. The question is, "What are the problems?" We think teachers know. That is why we want you to par-. ticipate in this Countywide effort by completing the attached questionnaire.

This questionnaire was developed by a team of educators and pilot tested in Marin County. Bloom's taxonomy was used to provide a framework for developing items systematically. Each item is tied to a specific level of the taxonomy. The most up-to-date techniques, including use of optical scanning and computerized data processing, wili be used to analyze the results.

If you would like to participate:, please follow the instructions below:

1. Use the answer sheet to record your answers. Do not use the questionnaire itself.
2. In the boxes on the answer sheet labeled "COUNTY/DISTRICT/SCHOOL" and "YOUR NUMBER," write the numbers listed below. Darken in the appropriate blanks for these numbers. Be sure to do this on both sides of the answer form. These numbers cannot identify you; they are needed to identify the two sides of a given answer form during data processing.
3. Use the $3 \times 5$ card to make any additional comments. Please write only one comment on each card. Additional cards are available should you need them.
4. Follow the complete instructions furnished with the questionnaire.
5. When you have completed the questionnaire, please return it, your answer form, and your comment card(s) to the principal's secretary. Please complete and turn in your materials this afternoon or tomorrow morning at the latest.

Sincerely,

## PRINCIPAL

County/District/School No. $\qquad$
Your Number $\qquad$
TEACHER COORDINATOR


DUANE L. BAY, Director
Supplementary Education Center

DLB: PPP: ag
Enclosures

## 

Packet Contents Checklist--High Schools

Every high school teacher shiuld have:
One large (12" $\times 16^{\prime \prime}$ ) earelope marked with your County/District/School number. It should contain:
$\qquad$ questionaires
$\qquad$ anower fomp
$\qquad$ penci:s
$\qquad$ green (9th grade) $3^{\prime \prime} \times 5^{\prime \prime}$ cards
$\qquad$ cherry (12th grade) $3^{\prime \prime} \times 5^{\prime \prime}$ cards
$\qquad$ Collection Checklist--Students
1 10" $\times 12^{\prime \prime}$ envelope
1 "Teacher Instructions for Polling Students"
One (12th) grade teacher from each high school should have in addition:
$\qquad$ answer forms
$\ldots \ldots$ canary (staff) $3^{\prime \prime} \times 5^{\prime \prime}$ cards
_ letters to staff
1 Collection Checkilst--Staff
1 "Yeacher Instructions for Polling Staff"

## S.P.A.C.E. REED SURVEY



Every elementary school teacher should have:
Zwo large ( $12^{\prime \prime} \times 16^{\prime \prime}$ ) envelopes marked with your County/District/School number.
One of these envelopes should contain:
35 questionnaires

## 110 anawer forms

70 pencils
30 10" $\times 12^{\prime \prime}$ envelopes
70 white (for parents) $3^{\prime \prime} \times 5^{\prime \prime}$ cards
35 buff (for staff) $3^{\prime \prime} \times 5^{\prime \prime}$ cards
35 blue (for 6th grade atudents) $3^{10} \times 5^{11}$ cards
35 letters to faculty
35 letters to parents
3 Collectimn Checklists (one Students, one Staff, one Paxents)
1 -ryeacher Iastructions for Polling Studeats ${ }^{\text {is }}$
1 "Teacher Instructions for Polling 8taff"
1 "Teacher Instructions for Polling Parenta"
Process and Content Matrix

S C NeEd study side 2
FREQUENCY OISTRIBUTIONS


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## S.P.A.C.E. ASILOMAR CONFERENCE - A REPORT

The Santa Claia Cornty Projects to Advance Creativity in Education (S.P.A.C.E.) Asilomar Conference was designed to provide finformation to the S.P.A.C.E. Board of Directors to assist them in determining the educationel needs upon which S.P.A.C.E. activities from July to December oi igob woina focus. Thim specipic objectives of the Conference included the following:

1. To identify twenty-five perceived educational needs of Santa Clara County,
2. To rank in order of priority the educational needs that were identified.
3. To provide conferees with information about the Supplementary Education Center.
4. To gain a favorable report from conferees regarding the Conference.
5. To gain a favorable report from the S.F.A.C.E. Board conferees regarding the Cmference.
6. To involve seventy-five percent or more of the S.P.A.C.E. Board or their siternates in the Conference.

## Background

The Asilomar Conference site in California was selected because its location is psychologically removed from the din of San Tose. Yet, the coumuting distance of ninety pilles was reasonable for all conferees. We were fortunate to obtain this facility on short notice.

Hiving obtained a site for the Conference, the next task was to select conferees. Througia the guidance of the S.P.A.C.E. Board, a subcomittiee on conferee selection was created. At the request of this subcommittee, the S.P.A.C.E. staff visited community leaders who had indicated an interest in educational problems.

These comunity leaders were asked to generate a list of potential conferees who represented a cross section of interests and affiliations and who also met tice fol: lowing criteria: (1) interest in broad educational concerns, (2) articulate, and (3) able to persuade friends and other individuals of the comminity. Tae attempt was made to obtain individurils who met the above criteria rather than to secure specific representatives of orgenizations. It was recognized that each conferee represented several organizations. Our injunction to conferees was to react as informed people rather than as represel jatives of organizations. A rather extensive listing of occupations and organizations represented at the Conference was compiled.

Ii was recognized from the beginning that it would be impossible to bring to gether a truly representative sample of county citizens for the Conference. In the lirst place, we lacked coraplete information regarding who to invite. In the second place, even if a representative cross section of the county could have been devised, not all of the persons identified. would in fact attend the Conference.

Of the one humdred and seventy-five invitations mailed out, ninety-four people contacted regreed to attend. Eighty-four conferees, including seventeen S.P.A.C.E. Board members actually attended the Conference.

## The Conference

The Friday evening session began witr an address by Dr. Duane L. Bay, S.P.A.C.E. Director, in which he outlined the pripose and guidelines of the Conference. Following Dr . Bay's remarks, five of the conferees presented ${ }^{\mathrm{i}}$ walk-ons ${ }^{\mathrm{i}}$ to stimulate interest and provoke thought.

Mrsp Ruky Deranja, cultural leader, pleaded for the school to establish a climate, not just an image of culture. She stressed that "children need to be taught now to see, hear, and touch so that they will come to learn beauty."

Dr. Louis Fein, computer consultant, argued that the most relevant curriculum for a rapidly changing society is a curriculum based upon the concept of teaching people to "learn to learn." Fein claimed that all students will require this approach if they are to live effectiveiy in tomorrow's society.

Mr. Frank Fiscalini, school superintendent, reminded the conferees present that almost one-third of the county's student population is below the minimm standard achievement. Fngaging the disinterested, he suggested, may well help to reduce some of the crimes and hardsnips that occur in Santa Clara County.

Mr. Lino Lopez, Director of the MexicannAmerican Project, pointed out that the Mexican-Americans of Santa Clara County had the largest school dropout, crime, and dependency rates of any population segment of the county. Iopez stressed that although remarkable progress had been made in automation and space technology, the culturally disadvantaged still lack proper opportunities and status.
Di. Fannie Shaftel, Stanford University Professor, cited the need to instill in pupils the attitude of human commitment toward people. Shaftel claimed that automation, the computer, and change have spawned a tendency in people to remove themselves from interaction with the lives of others. Regardiess of what direction the new curricula or school programs will take, they shoula always be in terms of the humen dimension "so that people will learm to make more life possible for more roople in its richest form."

Following the "walkwons," small group brainstorming sessions were held. At the termination of these sessions, each conferee submitted five writton need statements. However, in many cases conferees continued to discuss educational needs far into the night. The S.P.A.C.E. staff compiled and prepared a report of the needs identified. This list was completed in time for the swall group sessions on Saturday mornings.

During Saturday morning each small group reached a consensus regarding three needs considered of highest priority. On Saturday afternoon the results of the morning sessions were made available to the conferees who met as a large groum. After discussing these need statements, each conferee was given a final chence to write what he thought to be the most critical need identified.

## Conference Outcomes

Slome of the first set of needs statements focused upon a concern for specific culturally disadvantaged groups. Subsequent needs statements focused upon the
educational needs of all students.
One of the threads that ran throughout the Conference seemed to be that the notion of learning to learn had general application to many of the specific needs suggested. Another thread that appeared relevant to many of the specific needs was the ider that pupils need to experience the sestbetical effects of art, music, and culture. Still another thread bearing upon most of the specific needs identified
 interaction of the lives of others.

It was possible to make some policy decisions shortiy after the Conference regarding deadlines for the submission of ideas, critical aspects of proposals, and criteria of proposal evaluation. Districts submitting proposals were urged to focus upin the educational need identified as being the most feasible, high priority need for the Septeilier 1, 1966, deadine.

## COMPIETED NEED SURVEY ANSWER FORMS

|  |  | Public <br> Schools | Catholic <br> Schools | Total |
| :---: | :---: | :---: | :---: | :---: |
| Students: | 12th Grade | 1,147 | 134 | 1,281 |
|  | 9th Grade | 1,218 | 125 | 1,343 |
|  | 6th Grade | 940 | 265 | 1,205 |
| TOTAL |  | 3,305 | 524 | 3,829 |
| Teachers: |  | $860$ | 54 | 914 |
|  | Elementary School | 636 | 59 | 695 |
| TOTAL |  | 1,496 | 113 | 3,609 |
| Parents: |  |  |  |  |
|  |  | 657 | 191 | 848 |
| GRAND 'IOT |  | 5,458 | 828 | 6,286 |

## Chi Square Test for Elementary Schocin Size

| Category Size <br> (ADA) | 1-475 | 476-699 | Over 700 | Total |
| :---: | :---: | :---: | :---: | :---: |
| Observed Frequency | 19.0 | 13.0 | 6.0 | 38.0 |
| Expected Frequency | 16.5 | 15.2 | 6.3 | 38.0 |
| $X^{2}=.718$, not significant at $P=.05$ |  |  |  |  |
| Chi Square Test for Secondary School Size |  |  |  |  |
| Category Size (ADA) | 1-1,550 | 1,551-1,999 | Over 2,000 | Total |
| Observed <br> Frequency <br> 5 <br> 11 <br> 2 <br> 18 |  |  |  |  |
| Expected <br> Frequency 4.7 10.4 1.8 18 |  |  |  |  |
| $X^{2}=.033$, not significant at $P=.05$ |  |  |  |  |

IN YOUR OPINION, ARE OUR SCHOOLS DOING:

|  | Number of <br> Respondents | Percent of <br> Total Respondents |
| :--- | :---: | :---: |
| Very Good Job | 1,100 | 17.5 |
| Good Job | 4,419 | 70.3 |
| Poor Job | 679 | 10.8 |
| Very Poor Job | 88 | 1.4 |

Pooled Discrepancy Scores - More Than . 700
(INDICATED NEEDS)

| Item No. | $\begin{gathered} \text { Pooled } \\ \text { H } \\ \text { Mean } \\ \text { Discrep. } \end{gathered}$ |  |  |  |  |  |  | D <br> Sum or Rank of of Students Teachers, and Parents |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  | Students |  | Parents |  | Teachers |  |  |
|  |  | E | A | F | B | G | c |  |
|  |  | MD | Rank | MD |  | MD |  |  |
| 1) 126 | 1.129 | 1.078 | 2 | 1.217 | 1 | 1.201 | 2 | 5 |
| 2) 127 | 1.129 | 1.118 | 1 | . 998 | 5 | 1.225 | 1 | 7 |
| 3) 16 | . 997 | . 960 | 3 | 1.059 | 2 | 1.051 | 6 | 11 |
| 4) 40 | . 953 | . 884 | 7 | 1.014 | 4 | 1.086 | 3 | 14 |
| 5) 61 | . 953 | . 915 | 5 | 1.035 | 3 | 1.002 | 10 | 18 |
| 6) 3 | . 968 | . 936 | 4 | . 908 | 19 | 1.075 | 5 | 28 |
| 7) 26 | . 918 | . 890 | 6 | . 971 | 8 | . 953 | 14 | 28 |
| 8) 13 | . 895 | . 827 | 10 | . 965 | 11 | 1.021 | 7 | 28 |
| 9) 72 | . 887 | . 793 | 14 | . 940 | 13 | 1.080 | 4 | 31 |
| 10) 75 | . 809 | . 686 | 18** | . 976 | 6 | 1.016 | 8 | 32 |
| 11) 78 | . 914 | . 874 | 8 | . 959 | 12 | . 986 | 13 | 33 |
| 12) 15 | . 881 | . 859 | 9 | . 973 | 7 | . 884 | 21 | 37 |
| 13) 18 | . 734 | . 565 | 18 | . 966 | 10 | 1.016 | 9 | 37 |
| 14). 56 | . 836 | . 802 | 12 | . 924 | 17 | . 873 | 23 | 52 |
| 15) 8 | . 789 | . 710 | 16 | . 866 | 2.1 | . 938 | 16 | 53 |
| 16) 84 | . 725 | . 609 | 18 | . 923 | 18 | . 899 | 17 | 53 |
| 17) 4 | . 738 | . 639 | 18 | . 907 | 20 | . 886 | 19 | 57 |
| 18) 41 | . 753 | . 704 | 17 | . 968 | 9 | . 760 | 32 | 58 |
| 19) 52 | . 720 | . 634 | 18 | . 935 | 15 | . 816 | 25 | 58 |
| 20) 108 | . 737 | . 612 | 18 | . 794 | 30 | . 997 | 11 | 59 |
| 21) 46 | . 708 | . 618 | 18 | . 937 | 14 | . 803 | 28 | 60 |
| 22) 30 | . 777 | . 742 | 15 | . 835 | 23 | . 831 | 24 | 62 |
| 23) 21 | . 739 | . 657 | 18 | . 832 | 26 | . 885 | 20 | 64 |
| 24) 17 | . 842 | . 801 | 13 | . 737 | 40 | . 994 | 12 | 65 |
| 25) 64 | . 701 | . 603 | 18 | . 790 | 31 | . 890 | 18 | 67 |
| 26) 94 | . 731 | . 632 | 18 | . 772 | 36 | . 942 | 15 | 69 |
| 27) | . 723 | . 804 | 11 | . 596 | 45 | . 592 | 47** | 110 |

[^20]
## SIUDANTS

High Discrepancy Items Ranked
From Highest to Inwhst Mean Discrepancy

| Student <br> Rank | Item No. | Mean <br> Discrep. | Included Among <br> Pooled High <br> Discrep. Items | Overal1 <br> Rank <br> N | 127 |
| :---: | :---: | :---: | :---: | :---: | :---: |

# PARENTS <br> High Discrepancy Items Ranked <br> From Highest to Lowest Mean Discrepancy 

| Parent Rank | Item No. | $\begin{gathered} \text { Mean } \\ \text { Discrep. } \end{gathered}$ | Included Among Pooled High Discrep. Items | Overall <br> Rank $N=6,286$ | Need Area |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1) | 126 | 1.217 | * | 1 | Drug Education |
| 2) | 16 | 1.059 | * | 3 | Personal Economics |
| 3) | 61 | 1.035 | * | 5 | Personal Economics |
| 4) | 40 | 1.014 | * | 4 | Communication Skills |
| 5) | 127 | 0.998 | * | 2 | Family Life Education |
| 6) | 75 | . 976 | * | 10 | Communication Skills |
| 7) | 15 | . 973 | * | 12 | Vocational Education |
| 8) | 26 | . 971 | * | 7 | Personal Economics |
| 9) | 41 | . 968 | * | 18 | Civic Responsibility |
| 10) | 18 | . 966 | * | 13 | Ident, and Solving Problems |
| 11) | 13 | . 965 | * | 8 | Vocational Education |
| 12) | 78 | . 959 | * | 11 | Personal Economics |
| 13) | 72 | . 940 | * | 9 | Civic Responsibility |
| 14) | 46 | . 933 | * | 21 | Personal Economics |
| 15) | 52 | . 932 | * | 19 | Communication Skills |
| 16) | 125 | . 925 |  |  | Communiration Skills |
| 17) | 56 | . 924 | * | 14 | Personal Economics |
| 18) | 84 | . 923 | * | 16 | Communication Skills |
| 19) | 3 | . 908 | * | 6 | General |
| 9) | 4 | . 907 | * | 17 | Civic Responsibility |
| 21) | 8 | . 866 | * | 15 | Vocational Education |
| 22) | 106 | . 842 |  |  | Communication Skills |
|  |  |  |  |  | (continued on next pg.) |

## PARENTS (cont.) <br> High Discrepancy Items Ranked From Highest to Lowest Mean Discrepancy

| Parent Rank | Item No. | $\begin{gathered} \text { Mean } \\ \text { Discrep. } \end{gathered}$ | ```Included Among Pooled High Discrep. Items``` | Overall <br> Rank $\mathrm{N}=6,286$ | Need Ȧrea |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 23) | 30 | . 835 | * | 22 | Civic Responsibility |
| 24) | 49 | . 835 |  |  | Practical Math |
| 25) | 69 | . 832 |  |  | Practical Math |
| 26) | 21 | . 832 | * | 23 | Civic Responsibility |
| 27) | 86 | . 830 |  |  | Civic Responsibility |
| 28) | 68 | . 825 |  |  | Personal Economics |
| 29) | 43 | . 800 |  |  | Practical Math |
| 30) | 108 | . 794 | * | 20 | Vocational Education |
| 31) | 64 | . 790 | * | 25 | Civic Responsibility |
| 32) | 98 | . 776 |  |  | Vocational Education |
| 33) | 22 | . 774 |  |  | Communication Skills |
| $34)$ | 47 | . 773 |  |  | Communication Skills |
| 35) | 53 | . 773 |  |  | Ident, and Solving Problems |
| 36) | - 94 | . 772 | * | 26 | Ident. and Solving Problems |
| 37) | $\checkmark 7$ | . 752 |  |  | Civic Responsibility |
| 38) | 12 | . 751 |  |  | Communication Skills |
| 39) | 50 | . 745 |  |  | Personal Economics |
| 40) | 17 | . 737 | * | 24 | Conservation |
| 41) | 105 | . 718 |  |  | Communication Skills |
| 42) | 123 | . 718 |  |  | Rommunication Skills |
| 43) | 90 | . 708 |  |  | Vocational Education |
| 44) | 2 | . 701 |  |  | Communication Skills |

## TEACHERS

## High Discrepancy Items Ranked

From Highest to Lowest Mean Discrepancy

| Teacher Rank | Item No. | $\begin{gathered} \text { Mean } \\ \text { Discrep. } \end{gathered}$ | Included Among Pooled High Discrep. Items | Overall <br> Rank $N=6,286$ | Need Area |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1) | 127 | 1.225 | * | 2 | Family Life Education |
| 2) | 126 | 1.201 | * | 1 | Drug Education |
| $3)$ | 40 | 1.086 | * | 4 | Communication Skills |
| 4) | 72 | 1.080 | * | 9 | Civic Responsibility |
| 5) | 3 | 1.075 | * | 6 | General |
| 6) | 16 | 1.051 | * | 3 | Personal Economics |
| 7) | 13 | 1.021 | * | 8 | Vocational Education |
| 8) | 75 | 1.016 | * | 10 | Communication Skills |
| 9) | 18 | 1.016 | * | 13 | Ident. and Solving Problems |
| 10) | 61 | 1.002 | * | 5 | Personal Economics |
| 11) | 108 | . 997 | * | 20 | Vocational Education |
| 12) | 17 | . 994 | * | 24 | Conservation |
| 13) | 78 | . 986 | * | 11 | Personal Economics |
| 14) | 26 | . 953 | * | 7 | Personal Economics |
| 15) | 94 | . 942 | * | 26 | Ident. and Solving Problem: |
| 16) | 8 | . 938 | * | 15 | Vocational Education |
| 17) | 84 | . 899 | * | 16 | Communication Skills |
| 18) | 64 | . 890 | * | 25 | Civic Responsibility |
| 19) | 4 | . 886 | * | 17 | Civic Responsibility |
| 20) | 21 | . 885 | * | 23 | Civic Responsibility |
| 21) | 15 | . 884 | * | 12 | Vocational Education |
| 22) | 125 | . 874 |  |  | Communication Skills |
| 23) | 56 | . 873 | * | 14 | Personal Economics <br> (continued on next page) |

# TEACHERS (cont.) <br> High Discrepancy Items Ranked From Highest to Lowest Mean Discrepancy 

| Teacher <br> Rank | Item No. | Mean <br> Discrep. | Included Among <br> Pooled High <br> Discrep. Items | Overall <br> Rank $N=6,286$ |
| :---: | :---: | :---: | :---: | :---: |
| 24) | 30 | .831 | $*$ | 22 |

## INTENSITY OF EXPECTATIONS

## Ranked by Group in Order of Decreasing Percentage of Respondents Who Indicated

Schools SHOULD teach a given item "to a very great extent"

STUDENIS $\mathrm{N}=3,829$

| Rank | Item | Percentage |
| :---: | ---: | :---: |
|  |  |  |
| 1) | 126 | 50.4 |
| 2) | 8 | 48.61 |
| 3) | 127 | 47.0 |
| 4) | 4 | 39.08 |
| 5) | 40 | 37.96 |
| $6)$ | 41 | 35.52 |
| $7)$ | 15 | 34.36 |
| $8)$ | 52 | 34.34 |
| $9)$ | 64 | 33.76 |
| $10)$ | 18 | 33.67 |
| $11)$ | 3 | 31.21 |
| $12)$ | 21 | 29.73 |
| $13)$ | 46 | 28.51 |
| $14)$ | 84 | 26.8 |
| $15)$ | 78 | 26.10 |
| $16)$ | 17 | 26.02 |
| $17)$ | 75 | 25.36 |
| $18)$ | 61 | 25.27 |
| $19)$ | 30 | 24.67 |
| $20)$ | 72 | 24.28 |
| $21)$ | 16 | 23.33 |
| $22)$ | 13 | 23.01 |
| $2.3)$ | 94 | 22.9 |
| $24)$ | 26 | 21.98 |
| $25)$ | 108 | 21.1 |
| $26)$ | 56 | 19.13 |
| $27)$ | 6 | 17.68 |

PARENTS $N=848$

| Rank | Item | Percentage |  |
| ---: | ---: | ---: | :--- |
|  |  |  |  |
| 1) | 4 | 47.06 |  |
| $2)$ | 126 | 42.2 |  |
| $3)$ | 64 | 40.89 |  |
| $4)$ | 21 | 39.97 |  |
| 5) | 40 | 39.71 |  |
| $6)$ | 52 | 39.54 |  |
| $7)$ | 8 | 39.30 |  |
| $8)$ | 18 | 39.18 |  |
| $9)$ | 41 | 36.72 |  |
| $10)$ | 127 | 33.0 |  |
| $11)$ | 94 | 31.9 |  |
| $12)$ | 13 | 30.56 |  |
| $13)$ | 3 | 30.37 |  |
| $14)$ | 84 | 29.7 |  |
| $15)$ | 46 | 27.54 |  |
| $16)$ | 15 | 27.38 |  |
| $17)$ | 108 | 24.5 |  |
| $18)$ | 17 | 24.48 |  |
| $19)$ | 30 | 21.21 |  |
| $20)$ | 61 | 20.19 |  |
| $21)$ | 75 | 20.09 |  |
| $22)$ | 78 | 19.63 |  |
| $23)$ | 72 | 19.41 |  |
| $24)$ | 16 | 18.91 |  |
| $25)$ | 6 | 15.85 |  |
| $26)$ | 56 | 14.61 |  |
| $27)$ | 26 | 14.32 |  |

## INTENSITY OF EXPECTATIONS

## Ranked by Group in Order of Decreasing

 Percentage of Respondents Who IndicatedSchools SHOULD teach a given item "to a very great extent"

TEACHERS $\mathrm{N}=1,609$

| Rank | Item | Percentage |
| ---: | ---: | ---: |
| 1) | 40 | 52.47 |
| 2) | 4 | 47.54 |
| 3) | 21 | 46.51 |
| $4)$ | 3 | 46.39 |
| 5) | 64 | 45.83 |
| 6) | 127 | 45.3 |
| $7)$ | 8 | 43.47 |
| 8) | 18 | 42.89 |
| $9)$ | 94 | 41.0 |
| 10) | 72 | 39.0 |
| $11)$ | 41 | 38.39 |
| $12)$ | 108 | 35.8 |
| $13)$ | 126 | 35.7 |
| $14)$ | 13 | 34.33 |
| $15)$ | 17 | 32.76 |
| $16)$ | 52 | 32.26 |
| $17)$ | 46 | 31.58 |
| $18)$ | 84 | 29.5 |
| $19)$ | 15 | 27.31 |
| $20)$ | 61 | 27.19 |
| $21)$ | 75 | 27.17 |
| $22)$ | 78 | 26.96 |
| $23)$ | 30 | 24.44 |
| $24)$ | 26 | 23.90 |
| $25)$ | 16 | 21.66 |
| $26)$ | 56 | 21.53 |
| $27)$ | 6 | 16.50 |

## POOLED $N=6,286$

| Rank | Item | Percentage |
| :---: | :---: | :---: |
| 1) | 126 | 47.73 |
| 2) | 8 | 46.05 |
| 3) | 127 | 43.57 |
| 4) | 4 | 42.31 |
| 5) | 40 | 41.92 |
| 6) | 64 | 37.81 |
| 7) | 18 | 36.77 |
| 8) | 41 | 36.41 |
| 9) | 21 | 35.39 |
| 10) | 3 | 34.97 |
| 11) | 52 | 34.50 |
| 12) | 15 | 31.62 |
| 13) | 46 | 29.20 |
| 14) | 94 | 28.78 |
| 15) | 84 | 27.9 |
| 16) | 17 | 27.54 |
| 17) | 72 | 27.26 |
| 18) | 13 | 26.92 |
| 19) | 78 | 2.5 .46 |
| 20) | 108 | 23.38 |
| 21) | 75 | 25.12 |
| 22) | 61 | 25.09 |
| 23) | 30 | 24.15 |
| 26) | 16 | 22.34 |
| 25) | 26 | 21.20 |
| 26) | 56 | 19.14 |
| 27) | 6 | 17.14 |

(ATMAINED GOALS)

| İciem Nō. |  | $\begin{gathered} \mathrm{I} \\ \operatorname{Rank} \end{gathered}$ |  |  |  | II <br> Mean Discrepancy |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | A <br> Stưuents | B <br> Parents | C <br> Tachers | $\begin{gathered} D \\ A+B+C \\ \hline \end{gathered}$ | E <br> Students | F <br> Parents | G <br> Teachers | $\begin{gathered} \text { H } \\ \text { Yooled } \\ \hline \end{gathered}$ |
|  | 14 | 2 | 2 | 2 | 5 | . 170 | . 193 | . 114 | . 158 |
| 2) | 70 | 1 | 16* | 3 | 20 | . 064 | . 455 | . 138 | . 135 |
| $3)$ | 11 | 7 | 9 | 7 | 23 | . 224 | . 330 | . 240 | . 242 |
| 4) | 20 | 4 | 7 | 15 | 26 | . 180 | . 310 | . 319 | . 233 |
|  | 118 | 6 | 16 | 10 | 32 | . 211 | . 568 | . 282 | . 300 |
| 6) | 60 | 3 | 16 | 17* | 36 | . 177 | . 495 | . 457 | . 291 |
| 7) | 36 | 5 | 16 | 17 | 38 | . 198 | . 633 | . 544 | . 345 |
| 8) | 38 | 33 | 1 | 4 | 38 | . 375 | . 185 | . 185 | . 300 |
| 9) | 101 | 36 | 3 | 1 | 40 | . 383 | . 203 | . 076 | . 280 |
| 10) | 113 | 19 | 16 | 5 | 40 | . 315 | . 426 | . 227 | . 307 |
| 11) | 88 | 8 | 16 | 17 | 41 | . 224 | . 60.4 | . 548 | .359 |
| 12) | 34 | 10 | 36 | 17 | 43 | . 242 | . 514 | . 532 | . 352 |
| 13) | 1 | 11 | 16 | 17 | 44 | . 277 | . 618 | . 477 | . 374 |
| 14) | 102 | 28 | 10 | 8 | 46 | . 339 | . 337 | . 252 | . 316 |
| 15) | 99 | 13 | 16 | 17 | 46 | . 289 | . 446 | . 488 | . 361 |
| 16) | 71 | 16 | 16 | 17 | 49 | . 296 | . 408 | . 439 | . 347 |
| 17) | 55 | 30 | 5 | 14 | 49 | . 361 | . 266 | . 316 | . 336 |
| 18) | 87 | 37 | 4 | 9 | 50 | . 392 | . 219 | . 264 | . 336 |
| 19) | 83 | 34 | 16 | 11 | 51 | . 378 | . 466 | . 285 | . 366 |
| 20) | 82 | 27 | 12 | 13 | 52 | . 337 | . 370 | . 312 | . 336 |

$\dot{*}$ The lowest rank scores signify the goal.s that have been most adequately attained.
The score 15 was assigned to those items in the parent category which had a higher discrepancy score than the 15 items which fell below. 399. The score 17 was assigned to similar items in the teacher category for the same reason.

## STUDENTS (cont.)

Attained Goals--Low Discrepancy Items in Order of Increasing Discrepancy

| Students' Rank | Item No. | Mean Discrep. | Incladed Among <br> Pooled Low <br> Discrep. Items | Overall Rank | Curriculum Content Area |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 21) | 92 | . 318 |  |  | Language Arts |
| 22) | 2 | . 319 |  |  | Language Arts |
| 23) | 37 | . 319 |  |  | History |
| 24) | 105 | . 323 |  |  | Language Arts |
| 25) | 117 | . 323 |  |  | Language Arts |
| 26) | 80 | . 331 |  |  | Science |
| 27) | 82 | . 337 | * | 20 | Music |
| 23) | 102 | . 339 | * | 14 | Music |
| 29) | 116 | . 345 |  |  | Language Arts |
| 30) | 55 | . 361 | * | 17 | Art |
| 31) | 110 | . 363 |  |  | Language Arts |
| 32) | 65 | . 365 |  |  | History |
| 33) | 38 | . 375 | * | 8 | Art |
| 34) | 83 | . 378 | * | 19 | Foreign Language |
| 35) | 33 | . 382 |  |  | History |
| 36) | 101 | . 383 | * | 7 | Mhysical Education |
| 37) | 87 | . 392 | * | 18 | Art |
| 38) | 107 | . 394 |  |  | Fcreign Language |
| 39) | 76 | . 394 |  |  | Foreign ianguage |
| 40) | 67 | . 397 |  |  | Science |

## PARENPS

## Attained Goals--Iow Discrepancy Items

in Order of Increasing Discrepancy

| Parents' Rank | It?m No. | Mean Discrep. | Included Among Pooled Low Discrep. Items | Overall <br> Rank | Curriculum Content Area |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1) | 38 | . 185 | * | 8 | Art |
| 2) | 14 | . 193 | * | 1 | Art |
| 3) | 101 | . 203 | * | 9 | Physical Education |
| 4) | 87 | . 219 | * | 18 | Art |
| 5) | 55 | . 266 | * | 17 | Art |
| 6) | 115 | . 288 |  |  | Art |
| 7) | 20 | . 310 | * | 4 | Art |
| 8) | 73 | . 327 |  |  | Physical Education |
| 9) | 11 | . 330 | * | 3 | Math |
| 10) | 102 | . 337 | * | 14 | Music |
| 11) | 104 | . 338 |  |  | Art |
| 12) | 82 | . 370 | * | 20 | Music |
| 13) | 45 | . 370 |  |  | Art |
| 14) | 19 | . 387 |  |  | Art |
| 15) | 67 | . 396 |  |  | Science |

## TEACHERS

## Attained Goals--Low Discrepancy Items

 in Order of Increasing Discrepancy| $\begin{aligned} & \text { Teachers' } \\ & \text { Rank } \end{aligned}$ | Item No. | Mean Discrep. | Inc1uded Among Pooled Low Discrep. Items | Overall <br> Rank | Curriculum Content Area $\qquad$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1) | 101 | . 076 | * | 9 | Physical Education |
| 2) | 14 | . 114 | * | 1 | Art |
| 3) | 70 | . 138 | * | 2 | Language Arts |
| 4) | 38 | . 185 | * | 8 | Art |
| 5) | 113 | . 227 | * | 10 | Foreign Language |
| 6) | 5 | . 238 |  |  | General |
| 7) | 11 | . 240 | * | 3 | Math |
| 8) | 102 | . 252 | * | 14 | Music |
| 9) | 87 | . 264 | * | 18 | Art |
| 10) | 118 | . 282 | * | 5 | Language Arts |
| 11) | 83 | . 285 | * | 19 | Foreign Language |
| 12) | 93 | . 311 |  |  | Music |
| 13) | 82 | . 312 | * | 20 | Music |
| 14) | 55 | . 316 | * | 17 | Art |
| 15) | 20 | . 319 | * | 4 | Science |
| 16) | 73 | . 379 |  |  | Physical Education |


| Priority Rank | Item No. | "SHOULD teach" Mean Value | Overall Rank |  Content Area |
| :---: | :---: | :---: | :---: | :---: |
| 1) | 36 | 2.463 | 7 | Math |
| 2) | 1 | 2.083 | 13 | Math |
| 3) | 88 | 1.934 | 11 | Language Arts |
| 4) | 60 | 1.887 | 6 | History |
| 5) | 20 | 1.869 | 4 | Science |
| 6) | 34 | 1.732 | 12 | Language Arts |
| 7) | 11 | 1.724 | 3 | Math |
| 8) | 118 | 1.710 | 5 | Language Arts |
| 9) | 99 | 1.708 | 15 | Language Arts |
| 10) | 71 | 1.664 | 6 | Science |
| 11) | 55 | 1.412 | 17 | art |
| 12) | 101 | 1.378 | 9 | Physical Education |
| 13) | 87 | 1.375 | 18 | Art |
| 14) | 83 | 1.371 | 19 | Foreign Language |
| 15) | 70 | 1.354 | 2 | Language Arts |
| 16) | 82 | 1.317 | 20 | Music |
| 17) | 113 | 1.288 | 10 | Foreign Language |
| 18) | 14 | 1.285 | 1 | Art |
| 19) | 102 | 1.276 | 14 | Music |
| 20) | 38 | 1.133 | 3 | Art |

## Comment Cards Totals

Respondent GroupRespondents WhoUsed Comment Cards
Sixth Grade ..... 167
Ninth Grade ..... 473
Iwe1fth Grade ..... 524
High School Faculty (HSF) ..... 179
Elementary School Faculty ..... 63
Parents (P) ..... 125
Catholic School Faculty ..... 16
Catholic School Parents (CP) ..... 49
Catholic School Students (CS) ..... 148
TOTAL

## Comment Cards'Salient Points Frequently Mentioned

| Criticisms of Survey | 6th | 9th | 12th | HSF | ESF | P | CS | CP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Repttitious | 19 | 83 | 140 | 45 | 10 | 12 | 21 | 4 |
| Ambiguous |  | 11 | 20 | 20 | 4 | 11 |  | 1 |
| Stupid |  | 38 | 33 | 11 | 1 | 2 |  | 2 |
| Waste of time and money |  | 11 | 34 | 21 | 7 | 10 | 1 |  |
| Good | 24 | 55 | 43 | 1 | 1 | 2 |  |  |
| Bad |  |  | 29 | 3 |  |  |  |  |
| Should be able to indicate school level or student group referred to | 8 | 21 | 53 | 46 | 3 | 11 | 3 | 1 |
| More elaboration on answers |  | 2 | 16 | 8 |  |  |  |  |
| Better answer categories |  | 4 | 9 | 7 | 2 |  |  |  |
| Too long | 4 | 9 | 29 | 9 | 1 | 7 | 2 |  |
| Not valid |  |  |  | 24 | 7 |  |  |  |
| Items too traditional |  |  |  | 5 |  |  |  |  |
| Too much art, health, PE, music | 10 | 19 | 24 | 14 |  | 2 | 7 |  |
| Doesn't cover real school problems |  |  | 13 | 1 | 1 |  |  |  |
| Poorly phrased questions |  | 9 | 18 | 10 | 1 | 3 |  |  |
| Purpose? |  |  |  | 2 | 3 |  |  |  |


| Suggestions for Schools | 6th | 94h | 12th | HSF | ESF | $\underline{P}$ | CS | CP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subject Areas: |  |  |  |  |  |  |  |  |
| More arts | 30 | 10 | 15 |  |  | 7 | 3 | 1 |
| More masic | 11 | $?$ |  |  |  | 3 | 2 | 1 |
| More family life education | 9 | 25 | 15 | 2 | 2 | 3 | 11 | 2 |
| More drug education | 9 | 35 | . 5 | 1 |  | 2" | 11 | 4 |
| Foreign language and culture | 2 | 6 | 12 |  |  | 2 | 6 | 6 |
| Mose physical education | 7 | 6 |  |  |  | 3 | 11 | 5 |
| More math | 3 | 4 |  |  |  | 5 | 1 | 1 |
| More science |  | 3 | 3 |  |  | 3 | 1 |  |
| More humanities |  | 3 | 9 |  |  |  |  |  |
| More Englisiz |  | 3 | 7 |  |  | 6 | 1 | 2 |
|  |  |  |  |  |  |  |  |  |
| Grading criticisms |  | 25 | 7 |  |  |  | 14 |  |
| Teacher criticisms | 2 | 49 | 20 |  |  | 8 | 3 |  |
| Rules criticisms | 1 | 12 | 24 |  |  |  |  |  |
| More creative, individual development, personalized education, less pressure to conform |  | 26 | 34 | . |  |  |  |  |
| No segregation of sexes |  |  |  |  |  |  | 11 |  |

## Infrequent But Insightful Comments

| Comments: | 6th | 9th | 12th | HSF | ESF | $\underline{p}$ | CS | CP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Meaning of "extent" |  |  | 4 | 4 |  |  |  | 1 |

More questions about extra curricular school atmosphere, environment, taaching methods, hcmework, etc.

Mora time to answer thought fully

2
4
5
Questions hard to understand

Questions for grownups or older students 8

Administrators should know their answers

Invasion of privacy


[^0]:    * A summary report of this conference is in the Appendix on pages A-33 through A-35.

[^1]:    * This analysis was based on the decisicn-making model developed by March and Simon.

[^2]:    * An explanation of the method of sampling used in the survey is contained in Chapter Two.

[^3]:    * A copy of the survey questionnaire is in the Appendix on pages A-1 through A-10.

[^4]:    \% A convenient, brief explanation of these categories is cont:ained in the segments of the original Taxcnomy reprinted in Edwin Fenton, ed., Teaching the New Social Studies in Secondary Schools (New York, 1966), pp. 20-62.

[^5]:    * A table Iisting the number of completed need survey answer forms for each category of respondents is listed on page $A-36$.
    \%* There was a seventy-four percent return from public school parents, eighty percent from Catholic school parents.

[^6]:    * That this is an important variable has been documented in a recent study which found that school size is directly related to the perception of educational need and the creation of changes to resolve those needs. See Paul P. Preising, "The Relationship of Staff Tenure and Administrative Succession to Structural Innovation," unpublished, Ed.D. manuscript, (Stanford University, 1967).
    ** Of the 373 ,. ementary schools in the County, the survey included 38. Of the 60 junior hi.gh and senior high schools in the County, the survey included 18.

[^7]:    The team included Mr. Paul P. Preising, Research Director (S.P.A.C.E.), and Mr. Donald Kase and Mr. Leonard Heid from the North Bay PACE Center. The same questionnaire used in the S.P.A.C.E. Survey was also used in a fourcounty North Bay PACE Survey.

[^8]:    Seven public high schools identified two teachers, four identified three ceachers, one identified four teachers, and two identified six teachers. The two Catholic high schools for boys identified one teacher each, and the Catholic high school for girls identified two teachers. The total number of teacher-coordinators, including one from every elementary school, was eightyfour.

[^9]:    * Public school teacher-coordinators were trained on Tuesday afternoon, April 18, from 4:00 to 5:30 p.m. and on Wednesday and Thursday evenings, April 19 and 20, from 7:00 to 8:30 p.m. The meeting for the Catholic school teachercoordinators was held Thursday evening, May 4, from 7:00 to 8:30 p.m.
    ** Copies or all these materials are in the Appendix beginning with page A-11.
    $\dot{x} * *$ Twenty-seven high school tearhers gave it to one of their classes, twelve gave it to two or three classes, and seven administered it to four or five classes.
    ***** Each group surveyed was given a different colored $3^{\prime \prime} \times 5^{\prime \prime}$ card. This allowed the comments of the different groups to be categorized by group.

[^10]:    * Teacher-coordinators were asked to indicate how nonmr sinding parents differed from responding parents with respect to age (ona teacher said nonrespondents were older), income (no differences insicated), education level (one teacher said non-respondents were lower; one said they were higher), race (no differences indicated), location of home (no differences indicated), and attitude toward school (seven teachers indicated that non-respondents: were more negative). Twenty-six of the thirty-eight elementary teachercoordinators marked no differences between responding and non-responding parents.

[^11]:    $\ddagger$ Teacher-coordinators were instructed to assign all student numbers within the range of $1-600$, all parent numbers within $700-799$, and all faculty numbers within 800-999.

[^12]:    * An educational need was operationally defined in this survey, as stated earlier, as the degree of discrepancy between what various groups of people think the schools should teach and what they think the schools are in fact teaching.

[^13]:    * See the table of this data on page A-38. -26-

[^14]:    \# This matrix was discussed earlier; see page 6. ** "Criticality" refers to three specific criteria by which need areas were evaluated. By other criteria, not applicable to the need survey data, the criticality given a need area might be different.

[^15]:    * Not considered an educational need by this group.

[^16]:    * See footnote on page 30 which explains the meaning of the numbers in these columns.
    ** The rank 18 was assigned to all items which students gave discrepancy scores lower than 0.700.

[^17]:    * See page 27.
    *\% The possible interpretations of this disagreement have been outlined on page 28.
    Nifre The list of low discrepancy items according to the vaiue of the "SHOULD reach" mean is on pages A-43 through A-44.

[^18]:    These numbers are explained on the tirst chare in this chapter. ** Not considered an attained goal by this group. NR: Too high to include in ranking.

[^19]:    * See the table on page $A-54$ for a group-by-group tabulation of remarks in this category.
    $\therefore *$ See the table on page $A-55$ for a group-by-group tabulation of remarks in this category.

[^20]:    * The lowest rank scores indicate the highest degree of discrepancy--the greatest need.
    ** The score 18 was assigned to those items in the student category which had a lower discrepancy score than the 17 which were above .700. The 45 in the parent category and the 47 in the teacher category have similar explanations.

