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ABSTRACT

The primary emphasis of the Texas Junior High School Study was the investigation of process-outcome relationships in 136 junior high school math and English classes. A total of 68 teachers were observed in nine junior high schools in a large urban school district. Teachers also responded to a questionnaire and an interview focusing on presage variables such as teachers' beliefs, expectations, assumptions about teaching, and self-reports of instructional practices. Two outcome measures were used: an achievement test reflecting the subject matter taught, and student ratings of teachers. Volume I presents relationships among teacher self-report variables measured by the questionnaire and interview, and the two outcome measures. The findings for mathematics teachers indicated that successful teachers are committed to a structured, whole-class teacher- and textbook-centered approach. The findings for English teachers indicated a strong interaction between teacher effectiveness and student entering ability, and a lack of correspondence between cognitive and affective measures of teacher effectiveness. Other results are discussed in detail, and these findings are compared with previous studies of presage variables. (Author/BW)

Texas Junior High School Study:

Teacher Self-reports and Student Outcomes

Executive Summary

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Texas Junior High School Study:

Teacher Self-reports and Student Outcomes

Executive Summary

This report presents relationships between variables measured by a teacher questionnaire and interview and two outcome measures of the Texas Junior High School Study, a large process-outcome field study conducted by the Correlates of Effective Teaching Program, Research and Development Center for Teacher Education, The University of Texas at Austin. This summary is intended to give the highlights of the findings from that study and to suggest implications for teaching and research. Readers interested in the details of the methodology and the relationships of specific classroom variables are urged to examine the full report (Evertson, Sanford, & Brophy, Note 1). Volume I of that report describes the background and methodology of the study and presents the teacher questionnaire and interview results with respect to math teachers and for English teachers. Volumes II and III present the multiple regression models in tabular form. Appendix A includes the instruments used. This report will summarize and discuss the teacher questionnaire and interview data. The first section will briefly review the methodology of the study as a whole. The second section will summarize and evaluate the questionnaire and interview results.

Background and Methodology

In a 1974 study of teaching effectiveness at the second- and third-grade levels (Brophy & Evertson, 1976; Evertson & Brophy, Note 2), questionnaires and interviews similar to those used in this study were administered to elementary school teachers. The presage variables found to be positively related to student achievement gains in that study were summarized as the

expression of a "can do" attitude, suggesting that more effective teachers took personal responsibility and had positive expectations for students' learning. They also expressed the belief that it was up to them to find other ways to teach their students, if their initial methods failed.

The Texas Junior High School Study (TJHSS) was conducted by the Correlates of Effective Teaching Program at The University of Texas Research and Development Center for Teacher Education. The primary emphasis of this study was the investigation of process-outcome relationships in 136 junior high school math and English classes. Relationships among classroom process measures and student outcomes in the TJHSS were reported by Evertson, Anderson, and Brophy (Note 3). Other reports from the study discussed the stability of and contextual influences upon process measures (Emmer, Evertson, & Brophy, 1979). A total of 68 teachers (39 English and 29 math) were observed in nine of the 11 junior high schools in a large urban school district. Two sections were observed for each teacher. Two observers alternated visits to each of these classes, for an average of 20 1-hour observations throughout the school year 1974-75. During their visits, the observers collected both high- and low-inference data on classroom processes. At the end of the year, teachers responded to a questionnaire and participated in an interview focusing on presage variables such as teachers' beliefs, expectations, assumptions about teaching, and self-reports of instructional practices.

Two outcome measures were used in this study. The first was an achievement test designed to reflect the subject matter taught in the observed classrooms. Students' scores on the math and English subtests of the California Achievement Test (CAT) given in the spring of the preceding school year were used to assess entering ability. The second outcome measure was Student

Ratings of Teachers, completed by the students at the end of the school year. These two outcome measures enabled us to assess teaching effectiveness in both cognitive and affective terms.

The class was used as the unit of analysis for reporting of all results. When data were collected for individual students, all of the available scores were averaged for each of the 136 classes. Tests of presage- and process-outcome relationships were conducted using linear regression equations for each of the potentially predictive teacher or classroom variables. The equations tested the degree of simple relationship of the variable to achievement gain or student ratings of teachers, and showed the degree of the variable's interaction with initial student ability.

A more extensive discussion of the background of this study, characteristics of the sample, or other reports using this data base, was reported in Volume I of the full report (Evertson et al., Note 1).

Summary of Results

Considered as a whole, the findings resulting from the teacher questionnaire and interview data were not consistently meaningful and useful. Interpretation of the 386 statistically significant variables was made very difficult by contradictions, isolated findings, interactions with ability levels of classes, some ambiguous questions, and some even more ambiguous responses. While some limitations were inherent in the teacher self-report format, others could be attributed to weaknesses in the procedures and instruments used in gathering and transforming the data. A number of questionnaire and interview questions were poorly chosen or ambiguously worded. In addition, in order to reduce lengthy teacher interviews to manageable units of information, interview data were subjected to several transformations. Information may have been lost or obscured as interviewers condensed teachers' responses to take

notes (no tape recorders were used), or as responses were later analyzed and categorized to produce a response coding system for scoring these responses.

Despite these recognized limitations, the questionnaire and interview study resulted in a number of clear findings. In this section we will summarize what our results have to say about the characteristics and self-reported teaching practices of "good" junior high school teachers, with respect to both students' achievement and students' attitudes toward teachers. First we will summarize the results for math teachers, then we will discuss the results for English teachers. We will also consider differences in the results with respect to ability levels of classes for both subject areas. Finally, we will assess the extent to which these presage findings compare with and/or add to previously reported results obtained with the process measures in this study.

Findings for Mathematics Teachers

Linear regression analysis of the 598 questionnaire and interview variables for math teachers resulted in 87 variables significantly related to math achievement and 115 variables significantly related to student attitudes toward teachers. There was a relatively high correspondence between results with respect to the two product measures (achievement and student attitude) in the math classes. Presage variables associated with high achievement were never also associated with negative student attitudes toward teachers in our math sample: Teachers having high average gains in math achievement were also rated high in generalized likability by their students. A plausible interpretation of this trend is that students recognize the goals of mathematics study and respond positively to those teachers who help them meet those goals.

In general, results for both achievement and attitude measures indicated that successful math teachers are likely to voice commitments to a structured,

whole-class, teacher- and textbook-centered approach. Results clearly did not support the use of ability grouping, small group instruction, or peer tutoring. Results did support the use of a "no frills" program featuring regular textbooks and homework. Effective math teachers reported self-confidence and self-reliance with respect to classroom control and behavioral problems. They reported that they accept personal responsibility for management and discipline in their classes. They indicated that they communicate rules and clear expectations to their students, and that they enforce due dates for student work.

Effective math teachers in our sample also reported they were self-reliant diagnosticians, and saw themselves as objective evaluators and graders. They reported using teacher-made or commercial instruments to diagnose student learning problems and progress. They did not favor reliance on subjective criteria or opinions of other teachers, counselors, or parents.

Math teachers who indicated that they valued affective relationships with students, and teachers who emphasized trust, caring, and affective objectives of teaching, were likely to be well-esteemed by their students. This general trend seemed reasonable but was not related to achievement results. Teachers' expressed willingness to work with counselors was also related to student liking of the teacher, but not particularly related to achievement.

Effective teachers expressed realistic attitudes and expectations about parents' roles. They said they did not rely on parents' tutoring students, and they said they viewed the most important parent role as that of providing a warm, supportive home atmosphere.

Math teachers with more progress toward a graduate degree appeared to be less effective in producing achievement gains among their students. Improperly placed or discontented professionals may see graduate study as a way out

of the classroom. At any rate, it appears to be associated with lessened commitment to or effectiveness in producing students' learning in math.

Findings for English Teachers

Multiple-regression analysis of the questionnaire and interview variables for English teachers resulted in 73 variables significantly related to achievement in English classes, and 111 variables significantly related to student liking of the teacher. In general, results for English classes were harder to interpret than those for math classes. One reason for this difference is that in English classes, the pretest (CAT) accounted for an extremely high proportion (85%) of the variance on the posttest. Students' success on the achievement test appeared to depend more on students' background than on learning in the English classroom. Perhaps this fact was not surprising considering the wide range of entering ability of students in the study. Many of the students were not native English speakers. Another interpretation is that our English achievement test may have failed to measure what was actually taught in many classes.

The English data were further complicated by the presence of a large number of interaction effects, particularly with respect to achievement. Over half of the 73 variables significantly related to achievement were differentially related with respect to mean entering ability of classes. This pattern of results itself has significance: Teacher characteristics or teaching practices which appear to work with high-ability classes do not necessarily work for low-ability classes. Effective English instruction appears to vary more with ability levels of students than does effective math instruction.

Another generalization clear from the English data is that in English classes, liking of the teacher does not seem to depend on academic success in the class. There appeared to be little correspondence between variables

related to cognitive and affective measures. A number of variables describing teachers' attitudes and practices showed clearly contrasting relationships with achievement and student liking of the teacher. Such lack of correspondence may reflect confusion about the goals and purposes of English instruction. Certainly, English curriculum varies much more than does math curriculum. There is often little consensus, even among teachers within a single school; a wide range of activities may be justified as legitimate parts of an English class. Students enjoy and respond positively to many activities and teachers, without respect to whether they help in passing standardized exams.

Because of the lack of correspondence between cognitive and affective measures, we will describe "good" English teachers in terms of two separate categories: those that appear to effect achievement gains among their students and those that are well-liked by their students. In general, effective English teachers (in terms of achievement) are likely to express a fairly traditional orientation. They reported using a whole-class approach and district-adopted textbooks. They said they stress punctuation and capitalization in student papers. They do not report using very much peer tutoring, small class discussions, acting, or role-playing in their classes. They said they prefer structured classroom environments with assigned seating and rules against bringing food or gum to class. They reported being fairly demanding with respect to students' paying attention to instructions and making up missed work. Like effective math teachers, they reported that they stress the importance of objective evidence in testing and evaluation of students. They indicated a willingness to work with school counselors when necessary. Experience in teaching was positively related to achievement, especially among low-ability students.

The picture that our results gave us of well-liked English teachers was very different than that for teachers with high-achieving students. Well-liked teachers were somewhat less formal and traditional. They reported using some peer tutoring and role-playing in their classes, and they said they do not stress a lot of spelling activities and objectives. They saw their role as teachers as very active. They said they were not very concerned with maintaining formal or "proper" teacher roles in the class. They reported they used some form of individualizing, with different assignments and expectations to cope with varying student ability in their classes. They stressed the use of objective criteria for evaluation, especially among high-ability classes. Progress towards a graduate degree was negatively related to student attitude toward teachers.

Interactions With Ability Levels of Classes

The number and nature of interactions with ability levels of classes were very different when results for math classes and English classes were compared. As noted previously, teaching objectives and strategies of effective teachers appeared to vary more with ability levels of students in English classes than in math classes. However, there were some interesting commonalities and contrasts.

Interactions with respect to the English data showed that when high-ability and low-ability classes were compared, effective teachers of low-ability classes were more likely to report the use of district-adopted textbooks, peer tutoring, more relaxed classroom atmosphere, working with counselors, and a "team" faculty structure. One important pattern was that in low-ability classes, students appeared to benefit more from teachers' persistence in dealing with students who were nonparticipants or nonworkers. This pattern was in direct contrast to results with math classes. In lower-ability

math classes, variables describing persistent teacher pressure on nonworkers and nonparticipants were related to low achievement. In addition, in low-ability math classes reported high teacher expectations and high pressure situations were associated with negative student ratings of teachers. These trends may be related to the high incidence of "math anxiety" among lower-ability students. One commonality between English and math interactions was the importance of reports of using district-adopted textbooks with students in lower-ability classes.

Comparison of Presage-outcome Results with Process-outcome Results

In general, results obtained for the questionnaire and interview data were consistent and supportive of those found with the process measures in the study (Evertson et al., Note 3). This general consistency lends credence to the teacher self-reports of instructional practices in the questionnaire and interview. For example, both the process-product and presage-product results for math classes supported a whole-class approach, a structured, task-oriented environment, and teachers who were active and dominant. In both sets of results, there was a relatively high correspondence between variables related to achievement and to student liking of the teacher in that classroom. Both sets of data indicated that in low-ability math classes, students liked and benefited from a more relaxed classroom atmosphere than in high-ability classes.

Comparison of process-product and presage-product findings in English classes resulted in less clear patterns, but some overall consistency. Both sets of data suggested that effective English teachers used different patterns of teaching with high-ability versus low-ability classes. Both showed relatively little correspondence between cognitive and affective measures, with

students liking teacher characteristics and teaching strategies not always associated with achievement gains.

In comparing results achieved with the process measures and the presage measures, it became clear that the two approaches, well-used, are complementary. The process-product approach yielded many specific findings not reliably investigated with the presage-product approach. On the other hand, the presage-product approach resulted in some significant patterns of findings not obvious from the process-product data. For example, significant results were obtained for a number of questionnaire and interview variables relating to teachers' attitudes toward and contacts with school counselors, other teachers, and parents of students. Process measures probably would provide little evidence concerning these areas. Process measures might also miss some aspects of teachers' strategies for coping with nonworkers. Another area in which significant patterns of results were found with the presage data and teacher self-reports was that of diagnosing learning problems, evaluating student progress, and grading. Some, but not all, of the potentially important information in this area would be accessible by process instruments. Presage variables relating to such teacher characteristics as years of experience and graduate training, and teachers' attitudes toward their effective relationships with students also contributed some information which would have been missed had only process measures been relied upon.

On the other hand, a large number of the questionnaire and interview variables described teaching practices more accurately measured by the process approach: instructional organization, presentation and enforcement of rules, and the nature and number of teacher-student interactions in class. Where discrepancies exist between process-product and presage-product findings for specific classroom practices, the process-product results are presumably more

reliable. Some discrepancies might be expected and explained by lack of teacher awareness an /or objectivity in assessing classroom events. Results of this study, however, lend some support for confidence in the general accuracy of teacher self-reports.

Implications for Teacher Research

A long history of educational research has proven that research on presage and teacher self-report variables is an inadequate approach to the study of teaching. Previous research utilizing presage measures (Dunkin & Biddle, 1974) defined presage variables as those relating to "teacher formative experiences, teacher-training experiences, and teacher properties," properties being "measurable personality characteristics the teacher takes with him/her into the teaching situation." As many reviewers have pointed out, research on presage variables of teaching has been abundant, but not very productive, overall. Variables investigated have included training procedures or programs, ratings and inventory scores of personality traits or teaching ability, academic background, demographic variables, attitudes toward pupils, and teachers' expectations for pupils' achievement (Dunkin & Biddle, 1974; Getzels & Jackson, 1963; Hook & Rosenshine, 1979). The Minnesota Teacher Attitude Inventory has been used repeatedly to investigate teachers' personality characteristics and beliefs and their relationship to effective teaching, but findings are not impressive (Dunkin & Biddle, 1974; Getzels & Jackson, 1963). However, results obtained with the questionnaire and interview in this study indicate that presage measures may be used fruitfully in conjunction with other measures of classroom process.

Taking into account results reported herein, the following seven aspects of teaching are recommended for further study with presage-product approaches and (where applicable) process-product strategies. Each area was selected for

recommendation because it met two criteria: First, it was an aspect of teaching for which significant presage-product relationships were found with the questionnaire and interview in this study, and second, it encompasses teacher characteristics or teaching practices not always easily assessed through direct observation.

1. Teacher contacts with and attitudes toward school counselors, principals, other teachers in the school, and parents. Teachers' reliance on school counselors and on parents was significantly related to one or both of the product measures in both math and English classes. The significance of team faculty structures encouraging teacher-to-teacher cooperation appeared to vary with the ability level of classes. Teachers' contact with principals was not investigated in this study, but probably should have been. Information about all such teacher contacts would be difficult to obtain by direct observation.

2. Teachers' attitudes toward and strategies for dealing with nonworkers and nonparticipants. A number of variables related to this aspect of teaching were significantly related to one or both of the product measures in both math and English. In both subject areas, ability levels of classes appeared to be a significant factor in this respect. While some aspects of these teaching behaviors could be measured by classroom observation, others could not.

3. Evaluating and grading students and diagnosing learning problems. Significant relationships were found for both math and English classes in this area. While some aspects of this teaching activity can be assessed through observation, others cannot.

4. Objectives of teaching and selection criteria. Several related variables were found to be significant in both math and English classes. In English classes, variables related to composition criteria (reflections of teach-

ing objectives) were found to be differentially significant according to entering ability of class.

5. Curriculum materials used. Use of district-adopted textbooks appeared to be a significant factor in both math and English classes. This area of teaching is most easily investigated through teacher self-reports.

6. Teacher characteristics such as teaching experience and graduate education. Some interesting relationships were found for these two simple presage variables. The negative relationship found between teachers' level of graduate education and achievement in math classes, and between graduate education and students' liking of teachers in English classes, bear further study.

7. Preparation and attitude toward substitute teachers. While the import of this aspect of teaching is not readily apparent, clear relationships were found between related variables in both achievement and student attitude in math classes, as well as student attitude in English classes. Teacher preparation for substitutes may be a good indicator of teachers' commitments to students' using time productively. It may also say something about teachers' attitudes toward their job.

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2. Evertson, C., & Brophy, J. The Texas Teacher-Effectiveness Project: Questionnaire and interview data, Final report (R&D Rep. No. 4005). Austin: The research and Development Center for Teacher Education, The University of Texas at Austin, 1974. (ERIC Document Reproduction Service No. ED 099 346)

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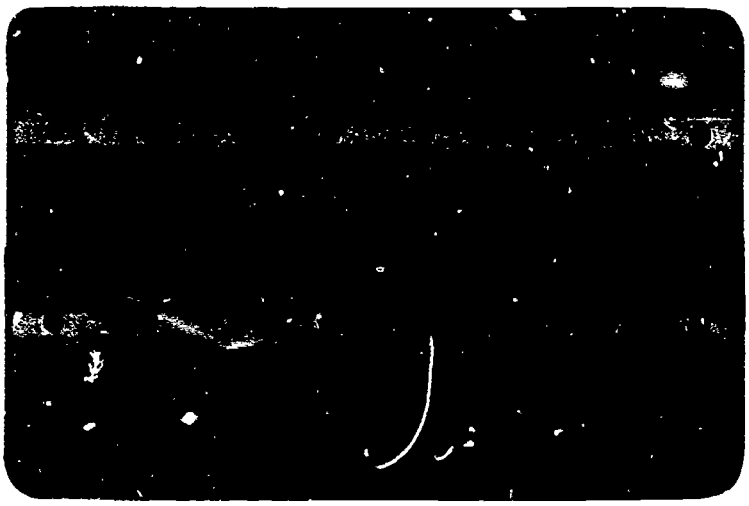

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Texas Junior High School Study:

Teacher Self-reports and Student Outcomes

Volume I

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TEXAS JUNIOR HIGH SCHOOL STUDY:

TEACHER SELF-REPORTS AND STUDENT OUTCOMES

CHAPTER 1

BACKGROUND AND METHODOLOGY

This report presents relationships among teacher self-report variables measured by a teacher questionnaire and interview and two outcome measures from the Texas Junior High School Study (TJHSS), conducted by the Correlates of Effective Teaching Program at the Research and Development Center for Teacher Education, The University of Texas at Austin (1974-75). The questionnaire and interview data consisted primarily of presage variables: data about teachers' characteristics, experience, expectations, attitudes, and assumptions, as well as teachers' reports of their instructional practices. These data were included in the larger study of junior high math and English classes for two reasons. First, it was assumed that teachers' statements about their instructional practices (accurate or not) would reflect their commitments and assumptions concerning teaching/learning within the real context of their junior high classes. Second, it was hoped that teachers' self-reports of instructional practices related to planning, evaluation, grading, and teacher-teacher or teacher-parent interactions would provide information which might otherwise be unobtainable through direct classroom observation. For the sake of convenience, all the data gathered with the teacher questionnaire and interview shall be referred to in this report as presage data.

Previous research utilizing presage measures (Dunkin and Biddle, 1974) defined presage variables as those relating to "teacher formative experiences, teacher-training experiences, and teacher properties," properties being "measurable personality characteristics the teacher takes with him/her into the

teaching situation." As many reviewers have pointed out, research on presage variables of teaching has been abundant, but not very productive, overall. Variables investigated have included training procedures or programs, ratings and inventory scores of personality traits or teaching ability, academic background, demographic variables, attitudes toward pupils, and teachers' expectations for pupils' achievement (Dunkin & Biddle, 1974; Getzels & Jackson, 1963; Hook & Rosenshine, 1979). The Minnesota Teacher Attitude Inventory has been used repeatedly to investigate teachers' personality characteristics and beliefs and their relationship to effective teaching, but findings are not impressive (Dunkin & Biddle, 1974; Getzels & Jackson, 1963).

Dunkin and Biddle (1974) offered several alternate explanations for the historical failure to get useful results from presage research. One was that much presage research has concentrated on weak variables, such as personality traits measured by psychological inventories focusing on factors other than the processes of teaching, ratings (often of questionable validity) by supervisors or others, and experimental training procedures reflecting commitments unsupported by empirical data. In discussing the kinds of presage variables most likely to be related to classroom events, the authors proposed:

> Much of teaching is presumably coping behavior on the part of the teacher and is thus subject to beliefs held by the teacher concerning the curriculum, the nature and objectives of the teaching task, expectations for pupils, and norms concerning appropriate classroom behavior. (p. 412)

The variables suggested above correspond quite accurately to the categories of presage variables included in the Texas Junior High School Study questionnaire and teacher interview.

In a 1974 study of teaching effectiveness at the second- and third-grade levels (Brophy & Evertson, 1976; Evertson & Brophy, Note 1), questionnaires and interviews similar to those used in this study were administered to

elementary school teachers. The presage variables found to be positively related to student achievement gains in that study were summarized as the expression of a "can do" attitude, suggesting that more effective teachers took personal responsibility and had positive expectations for students' learning. They also expressed the belief that it was up to them to find other ways to teach their students, if their initial methods failed.

The presage instruments for the Texas Junior High School Study were designed to assess the extent to which similar teacher attitudes were related to both cognitive and affective student outcomes at the junior high level. These variables also differed from those in other presage-outcome studies in that variables were limited for the most part to those clearly related to curriculum decisions, instructional practices, or classroom management.

Background: The Texas Junior High School Study

The full study was conceived as a replication and extension of an earlier study of teaching effectiveness conducted at the second- and third-grade levels (Brophy & Evertson, Note 2). The earlier study suggested several effective strategies for teaching elementary school students, but it did not support several variables popular among educational researchers, such as indirect teaching, extensive use of class discussion, small group format, and pupil talk. One question arising from these results was that even though such strategies were not related to achievement in the early grades, would they become more important at the later grades when most "tool" skills should have been mastered and students are learning to apply them? Another question was, to what extent do contextual influences, such as subject matter or heterogeneity of student characteristics, affect such relationships? Therefore, the Texas Junior High School Study was designed as an effort at replication of the earlier process-outcome study, but at different grade

levels, and also as a more extensive examination of teaching variables that were related to both cognitive and affective student outcomes.

Relationships among classroom process measures and student outcomes in the TJHSS have been reported previously (Evertson, Anderson, & Brophy, Note 3). Other reports from the study have discussed the stability of and contextual influences upon process measures (Emmer, Evertson, & Brophy, 1979).

Methodology

The full study was designed to permit investigation of a large number and variety of variables which might be related to effective teaching at the junior high level: presage variables, context variables, and both low-inference and high-inference process measures. These were all linked to two different outcome measures. In all, 136 classes in nine schools were observed. They were chosen so that:

1. Two different but important school subject areas were included--math and English--making it possible to investigate differences in effective teaching strategies or teacher variables in different settings.

2. The nine junior high schools represented a wide range of socioeconomic status (SES) and achievement levels, making it possible to examine differences in effective teaching strategies for low- versus high-ability classes.

3. Each participating teacher was observed in two separate sections of his or her subject matter (math or English), allowing systematic attention to the question of teacher stability in process behaviors across classroom settings, as well as to the central question of teaching effectiveness as it was affected by grade, subject matter, student sex, and other context differences.

Subjects

Description of teachers in the sample. A total of 68 teachers (39 English and 29 math) were observed in nine of the 11 junior high schools in a large urban school district. (Two other junior high schools were not included because they were using an exclusively self-paced mathematics program that allowed for very little public teacher-student interaction.) Because two sections were observed for each teacher, there were 136 classrooms in all. Two observers alternated visits to these classes, throughout the school year 1974-1975. (The actual range was from 16 to 22 observations.) Table 1.1 shows the distribution of observed math and English classes by grade levels. Table 1.2 shows the distribution of teacher sex and ethnicity.

Teachers selected for the study were those with at least one previous year of experience in their subject matter area. Student teachers, first-year teachers, or teachers who shifted into these areas from some other subject matter areas were not included.

The resulting teacher sample was unusually complete, and was reasonably free of volunteer effects or other sample bias effects, since nearly all the eligible faculty from each of the nine junior high schools participated.

Instruments

A variety of instruments was used to collect data in this study. They included process measures used by classroom observers to describe classroom events, two outcome measures assessing teaching effectiveness in terms of achievement in mathematics or English and attitudes of students toward the teacher and class, and two presage measures focusing on teachers' beliefs, expectations, and self-reports of instructional practices. (Examples of these are found in Appendix A.) This report focuses on the relationships between presage and outcome measures within each of the two subject areas.

Table 1.1

Distribution of Observed Math and English Classes by Grade Level

Grade Level	Math	English	Total
7th Grade	31	44	75
8th Grade	27	34	61
Total	58	78	136

Note: Three teachers taught in both grades for math and two teachers taught in both grades for English.

Table 1.2

Distribution of Teacher Sex and Ethnicity

Teacher Sex

	Math (%)	English (%)	Total (%)
Male	11 (38%)	5 (13%)	16 (23%)
Female	18 (62%)	34 (87%)	52 (76%)
Total	29 (100%)	39 (100%)	68 (99%)

Teacher Ethnicity

	Math (%)	English (%)	Total (%)
Anglo	25 (86%)	29 (74%)	54 (80%)
Mexican-american	0 (---)	7 (18%)	7 (10%)
Black	4 (14%)	3 (8%)	7 (10%)
Total	29 (100%)	39 (100%)	68 (100%)

Description of Presage Measures

Teacher interview. The interviews were conducted individually by the classroom observers in May, 1975 at the end of the data collection period. The interview consisted of 88 questions. Math and English teachers answered identical questions, with the exception of six special items for each group. Interviewers manually recorded the teachers' answers during the interview. Later all teachers' responses were analyzed to find recurring answers and categories of answers for each interview item. In this manner, a response coding system was produced and then used to score all interview data for key-punching. The process yielded 483 response categories or variables.

Teacher questionnaire. The questionnaire consisted of 89 questions yielding 116 variables. Most of the items were in a multiple choice or Likert scale format and seven items requested biographical data. The teacher questionnaire was left with each teacher upon completion of the teacher interview, which was conducted at the end of the school term in which their classes were observed. All of the teachers in the study filled out and returned their questionnaires.

Description of Outcome Measures

Two outcome measures were administered to the students at the end of the year: achievement tests in each subject area and Student Ratings of Teachers. In addition, the students' scores on the California Achievement Test (CAT) taken in the spring of the preceding school year were used as covariables in any analyses involving the outcome measures. This combination of cognitive and attitudinal (or affective) measures was chosen in order to examine two important but different objectives that teachers might set for students in junior high school. Using these data, it is possible to examine any possible

"trade-off" between cognitive learning and attitudes toward school and teachers that might exist.

Cognitive outcome measures: Achievement tests and CAT scores. Students' average scores on the math and English subtests of the California Achievement Tests given in the spring prior to observation were used to estimate entering ability. The scores for each class section were then averaged.

To obtain an estimate of achievement at the end of the year, tests were specially constructed for use in this study to measure knowledge of English grammar, word usage, punctuation, and spelling, and to measure knowledge of mathematical computation and reasoning.

These tests, which were administered during the first weeks of May, were designed to be content valid to the extent that the items reflected the subject matter being taught in the observed classrooms. Information on the subject matter covered was gathered from the content formats on observers' coding sheets. Also, observers were given copies of the tests, and they noted for each item whether or not its content was covered during their observation periods. Copies of the district-adopted texts were also consulted.

The tests were piloted in two math and two English classes in another school district, in order to judge the amount of time required to complete the tests, to adjust the item wording, and to clarify instructions. After the tests were revised and final copies were prepared, they were administered to students in each of the 136 classes.

Prior to the administration of the tests, students were asked to fill out the student rating forms mentioned previously. These were collected, and then the achievement tests were distributed. Students were allowed approximately 45 minutes to take their respective tests. No student received a perfect score, and only a small percentage of students completed their entire tests.

While each student received a single total score, the individual test items were also scored. This information was preserved so that item analyses could be performed. Items that did not discriminate were eliminated before students' aggregate scores were computed.

Affective outcome measures: Student Ratings of Teachers. At the end of the school year, students were asked to fill out nine 5-point rating scales about their teachers. These scales included essentially two types of items: those assessing general liking of the teacher ("I would go to this teacher if I had a problem.") and those assessing the degree to which the student felt he/she learned the subject matter ("I learned a lot from this teacher."). All students filled out these assignments. When the nine items were factor-analyzed, one general factor emerged which was named "generalized likability" or general liking of the teacher. This general factor was used as an affective or attitudinal criterion to which all other measures could be compared.

Analytic Methodology

Examination of various prediction models through multiple regression techniques led us to single out "class mean CAT" (adjusted achievement scores from a given classroom for the average CAT for the classroom) as the covariable to be used for testing additional regression models constructed to determine which teacher or classroom variables were related to gain in mathematics and English achievement and to student attitude. The class mean CAT control allowed us to use all available scores and to control for school differences, tracking within schools, and grade levels. In other words, once class mean CAT was entered into the prediction equation, these latter variables did not add to the prediction of class mean achievement or student ratings of teachers. For a more detailed explanation of the process and rationale for selection of the class mean CAT covariable, see Evertson et al. (Note 3).

Preliminary analyses revealed that two of the math classes had extremely high entering CAT scores and math achievement test scores, thus reducing variance between entering and exiting measures. In addition, three English classes had scores at the top of the CAT's possible range. These five classes were dropped from subsequent analyses.

In order to determine the degree and direction of presage-outcome relationships, to determine whether the relationships were comparable to different levels of initial ability, and to determine whether the relationships depended on subject matter, each class section was treated separately in the analyses, and all analyses were conducted separately for math (n = 56) and English (n = 75).

Data analyses treated each class as a distinct unit rather than pooling the two classes for each teacher, because inferences about teacher effects were restricted to those specific to individual classes. This was considered necessary in view of marked differences between classes of the same teacher, where a teacher might be effective with one group and not with another. Pooling the two classes for each teacher could mask these possible differences.

Tests of presage-outcome relationships were conducted using linear regression equations for each of the potentially predictive teacher self-report variables. The equations tested the degree of simple relationship of the variable to achievement gain or student rating of the teacher and also the degree of the variable's interaction with initial student ability. The three regression equations used are shown below. As indicated, each produces a squared multiple correlation coefficient, and selected comparisons of these R^2 values yield F-ratios and associated probability values that test whether particular variables improve the prediction of class mean achievement.

$$\text{Post Ach} = \text{Pre CAT} + \text{CB} + (\text{CB})\ (\text{CAT}) + E_1 \qquad R_1^2$$

$$\text{Post Ach} = \text{Pre CAT} + \text{CB} + E_2 \qquad R_2^2$$

$$\text{Post Ach} = \text{Pre CAT} + E_3 \qquad R_3^2$$

Test 1: Interaction Effect

$$F_I = \frac{(R_1^2 - R_2^2)}{(1 - R_1^2)/(N - 4)} \qquad \underline{df} = 1, (N = 4)$$

Test 2: Main Effect

$$F_s = \frac{(R_2^2 - R_3^2)}{(1 - R_2^2)/(N - 3)} \qquad \underline{df} = 1, (N = 3)$$

Where:

"Post" is the criterion achievement test given at the end of the school year;

"Pre" is the CAT measure of initial ability;

"CB" is the particular teacher variable being assessed; and

"E" represents errors of prediction.

Each equation is solved for a set of weights that minimize the E values, thus maximizing $\underline{R}^2$, which is an index of the amount of criterion variance associated with the predictor variables in the equation.

The $\underline{R}^2$ associated with the first equation must equal or exceed that of the second, which must in turn equal or exceed that of the third, because each equation contains successively less information (i.e., fewer variables). The product variable in the first equation represents the interaction of initial ability and teacher characteristics or behavior, and the first F-test therefore assesses whether the relationship is the same at all levels of initial ability. The second model assumes the relationship is the same at all ability levels, and then tests whether the elationship is significantly different from zero. Because the class pretest mean appears in all equations, initial differences between the achievement levels of the classes are "statistically

controlled.". For example, the second comparison asks whether the posttest is predictable from the teacher characteristic or behavior beyond what is predictable from the pretest score.

In the event that the interaction is found to be statistically significant ($p \leq .05$), expected values for the posttest are calculated for particular combinations of pretest level and classroom behavior, in order to explicate the nature of the interactions. Four combinations are presented:

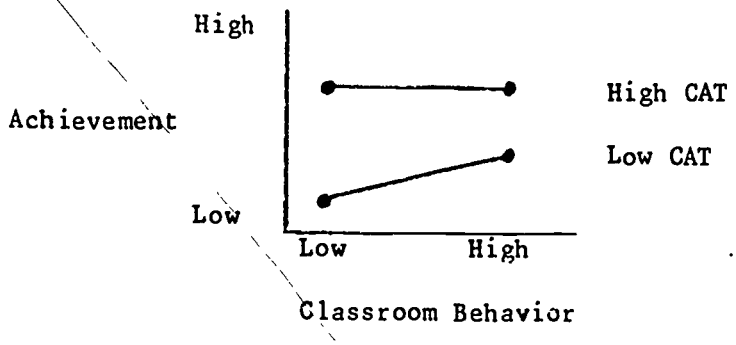
Low Pre with low CB;

Low Pre with high CB;

High Pre with low CB; and

High Pre with high CB

where "high" and "low" are plus and minus one standard deviation from the mean of the variables concerned. To facilitate comparisons across classroom behavior variables, these values are scaled as z scores ($\bar{x} = 0$, $SD = 1$). In the example below, we see the behavior is positively related to gain, but that its effect is restricted to classes whose initial ability is low (low CAT). The achievement of classes whose initial CAT scores are high do not appear to be influenced by the behavior. It is important to note that the regression lines do not represent actual results for groups of classes, but predicted values for classes at two preselected levels of ability.



The second test, which forces the implicit regression lines to be parellel, may or may not be significant, independent of any interaction effect. If both tests are significant, we still can make a general statement about the classroom behavior's effect, but with a qualification recognizing its interaction with initial ability.

In the event that only the second test is significant, we can determine the direction of the effect of the teacher characteristics or behavior simply by examining the sign of the CB beta weight in the second equation.

Each predictor was analyzed in the manner shown in Figure 1 for both student ratings and achievement and for each subject area. For ease in reporting, the tables are reproduced as they come from the computer printout (Veldman & Linsley, Note 4). The example shown in Figure 1 is presented to aid the reader in understanding the data tables in Volumes II and III of this report.

The following interpretation can be made from the example output. The teachers' preference for a high level of errorless performance in class discussion is significantly related to student attitude as assessed by the Student Ratings of the Teacher (SRT). However, this effect differs depending upon whether their students were low or high in initial ability. In this case, the higher the teachers' responses on this questionnaire item, the less facilitative for students' attitudes in classes of low average entering ability. This trend is reversed for students' attitudes in high-ability classes, however. Here, the higher the teachers' response to the question of the ideal percentage of correct oral responses, the more positive the students' attitudes.

Variable label (Teacher Characteristic)

Criterion of interest (Student Ratings of Teachers)

Difference in R^2 between models 1 & 2 (test for interaction)

Difference in R^2 between models 2 & 3

Beta weight represents change in criterion (z-scaled) per one standard deviation increase in rating of the teacher characteristic. Sign indicates direction of change. If interaction is significant, best prediction, is obtained from Model 1.

Range in raw score points of the teacher characteristic at + or - one standard deviation

TEACHER LIKES HIGH LEVEL OF ERRORLESS PERFORMANCE IN CLASS DISCUSSIONS

CB VARIABLE 18 ID # 66018
NUMBER OF VALID SCORES = 52

MODEL 1: SRT = CAT + CB + CAT*CB R2 = .2628

DIFFERENCE = .1918 P = .0013

MODEL 2: SRT = CAT + CB R2 = .0719

DIFFERENCE = .0271 P = .2356

MODEL 3: SRT = CAT R2 = .0448

BETA FOR CB IN MODEL 2 = -.1646

HI CB = 3.9777 LO CB = 2.0869

EXPECTED VALUES FROM MODEL 1: (Z-SCALED)
LO CAT, LO CB = .4816
LO CAT, HI CB = -.6049
HI CAT, LO CB = -.1719
HI CAT, HI CB = .3334

Variable ID# used in the text

$p \leq .05$ will result in the plotted interaction shown above

$p \leq .05$ would indicate a significant simple relationship between the teacher characteristic and the criterion.

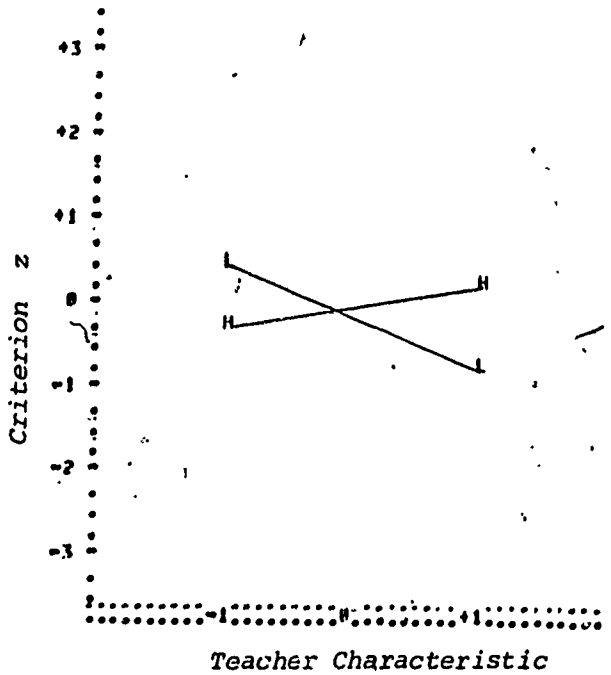


Figure 1. Example of data tables with explanatory notes

Presage-outcome Results

The presage-outcome relationships found in this study will be presented and discussed in the following chapters. Only those relationships significant at the $p \leq .05$ level will be noted. For clarity, we will attempt to describe patterns that make interpretive sense and to emphasize, not so much significant individual variables, as the patterns that emerge from clusters of variables with similar relationships. Some findings, while statistically significant, show very weak relationships. This is more often true for those process variables that interact with entering ability. Because of this, an arbitrary cutoff point has been established to determine when a relationship is strong enough to discuss. This is a difference of .40 standard deviation units (or more) between the criterion scores predicted from +1 versus -1 sigma values of the classroom behavior variable in the equation. All data are presented in the tables, however, and readers are free to establish their own criteria.

Chapter 2 will present in tabular and narrative form the relationships between presage variables and both cognitive and affective outcomes for math classes only. Chapter 3 will present data with respect to English classes. Chapter 4 will consist of summary and discussion of the presage-outcome data as a whole.

CHAPTER 2

RELATIONSHIPS OF TEACHER ...-REPORTS WITH MATH ACHIEVEMENT AND STUDENT ATTITUDE

The 29 math teachers in the Texas Junior High School Study responded to an 89-item questionnaire and an 88-question interview covering teachers' attitudes and assumptions about teaching and self-reports of instructional practices. The 598 variables resulting from these presage data are listed in Tables 2.1 and 2.2 (beginning on page 19) with mean scores, standard deviations, and range of scores for each variable.

Linear regression equations were used to test the extent to which each separate variable was related to (or predictive of) class mean achievement and/or class mean student rating of the teacher. Volumes II and III of this report contain tables showing results of the two analyses for each of the 598 variables. These analyses resulted in 87 variables s... ...icantly ($p \leq .05$) related to math achievement and 115 variables significantly related to student attitudes toward math teachers. In both cases, the number of significantly related variables far exceeded that which would be expected from chance.

Tables 2.3 through 2.7 (beginning on page 101) summarize significant relationships with respect to questionnaire and interview variables for math teachers. The tables can be read as follows:

Variable Number	Variable Description	Relationship with Achievement		Relationship with Attitude	
		Main	Interaction	Main	Interaction
Teaching Strategies					
06091	Teachers agree that too much reliance on the text makes effective teaching harder	-		-	Hi + Lo -

Column 1: Variable Number. This column lists the variable identification numbers which correspond to the regression analyses in Volumes II and III.

Column 2: Variable Description. A brief description of each presage variable is given. For complete descriptions and exact wording of the items see the questionnaire and interview text in Appendix A of this report.

Column 3: Relationship with Achievement. This column contains symbols indicating significant relationships with class mean achievement. A "+" or "-" in the subcolumn headed "Main" indicates a significant ($p \leq .05$) positive or negative relationship with achievement without respect to possible interaction with class mean entering ability (class mean CAT scores). Symbols in the subcolumn headed "Interaction" indicate differential effects for higher mean ability versus lower mean ability classes.

Column 4: Relationship with Attitude. In a similar fashion, this column indicates relationships between the teacher self-report variables and student attitudes toward teachers.

As an example, in Table 2.6 on page 117, Variable 06091, "Teachers agree that too much reliance on the text makes effective teaching harder" was negatively related to both achievement and student attitude in math classes. However, there were interaction effects with respect to student attitude; i.e., the variable was associated with low student ratings of teachers (Lo -) in lower mean ability classes, but not in high-ability classes (Hi +). In this case a strong negative effect among low-ability classes, combined with a weak positive effect among higher-ability classes, resulted in an overall negative main effect for attitude. In summary, Variable 06091 indicates that according to our data, reported willingness to rely strongly on the textbook is

Table 2.1

Summary Statistics for Teacher Questionnaire:

Math Teachers

PCT OF STUDENTS TEACHER EXPECTS TO MASTER CURRICULUM

	MEAN	SIGMA	RANGE	N
ID = 06001	77%	18%	30 - 99%	28

PCT OF GRADES BASED ON OBJECTIVE EVIDENCE

	MEAN	SIGMA	RANGE	N
ID = 06002	85%	16%	30 - 99%	27

PCT OF GRADES BASED ON SUBJECTIVE EVIDENCE

	MEAN	SIGMA	RANGE	N
ID = 06003	40%	19%	10 - 70%	27

PCT OF
DISCIPLINE PROBLEMS ARE DUE TO LACK OF INTEREST IN SUBJECT

	MEAN	SIGMA	RANGE	N
ID = 06004	62%	22%	10 - 99%	27

PCT OF
DISCIPLINE PROBLEMS ARE DUE TO LAXITY IN ENFORCING RULES

	MEAN	SIGMA	RANGE	N
ID = 06005	41%	20%	10 - 99%	27

PCT OF
DISCIPLINE PROBLEMS ARE DUE TO FACTORS INTRINSIC IN STUDENT

	MEAN	SIGMA	RANGE	N
ID = 06006	38%	20%	10 - 99%	26

PCT OF
CLASS TIME SHOULD BE SPENT IN LECTURES, DEMONSTRATIONS

	MEAN	SIGMA	RANGE	N
ID = 06007	39%	10%	10 - 50%	28

Table 2.1-Continued

PCT OF
CLASS TIME SHOULD BE SPENT IN QUESTIONS, DISCUSSIONS

	MEAN	SIGMA	RANGE	N
ID = 06008	42%	17%	10 - 70%	28

PCT OF
CLASS TIME SHOULD BE SPENT IN SEATWORK

	MEAN	SIGMA	RANGE	N
ID = 06009	59%	18%	10 - 99%	28

TEACHER LIKES HIGH LEVEL OF ERRORLESS PERFORMANCE IN CLASS DISCUSSIONS

	MEAN	SIGMA	RANGE	N
ID = 06010	83%	15%	30 - 99%	25

TEACHER LIKES HIGH LEVEL OF ERRORLESS PERFORMANCE IN SEATWORK

	MEAN	SIGMA	RANGE	N
ID = 06011	89%	15%	50 - 99%	25

TEACHERS SPEND HIGH PCT OF TIME TEACHING INDIVIDUALS

	MEAN	SIGMA	RANGE	N
ID = 06012	52%	18%	10 - 70%	27

TEACHERS SPEND HIGH PCT OF TIME TEACHING SUBGROUPS

	MEAN	SIGMA	RANGE	N
ID = 06013	33%	15%	10 - 50%	27

TEACHERS SPEND HIGH PCT OF TIME TEACHING WHOLE CLASS

	MEAN	SIGMA	RANGE	N
ID = 06014	59%	20%	10 - 99%	27

FREQUENCY OF HOMEWORK ASSIGNED

	MEAN	SIGMA	RANGE	N
ID = 06015	2.32	1.31	0.00 - 4.00	28

Table 2.1-Continued

MOST VALUABLE INFORMATION ABOUT STUDENTS COMES FROM GRADES

	MEAN	SIGMA	RANGE	N
ID = 06016	.21	.41	0.00 - 1.00	28

MOST VALUABLE INFORMATION ABOUT STUDENTS COMES FROM ACHIEVEMENT TESTS

	MEAN	SIGMA	RANGE	N
ID = 06017	.29	.45	0.00 - 1.00	28

MOST VALUABLE INFORMATION ABOUT STUDENTS COMES FROM SUBJECTIVE EVALUATION

	MEAN	SIGMA	RANGE	N
ID = 06018	.57	.49	0.00 - 1.00	28

TEACHERS TRY TO DRESS UP LESSONS TO MAKE THEM INTERESTING

	MEAN	SIGMA	RANGE	N
ID = 06019	.86	.35	0.00 - 1.00	28

TEACHERS ASSUME STUDENTS WILL ENJOY LESSON WITHOUT SPECIAL EFFORTS

	MEAN	SIGMA	RANGE	N
ID = 06020	.14	.35	0.00 - 1.00	28

STUDENTS APPEARING TO UNDERSTAND THE MATERIAL

	MEAN	SIGMA	RANGE	N
ID = 06021	.75	.43	0.00 - 1.00	28

STUDENTS ASKING FEWER QUESTIONS

	MEAN	SIGMA	RANGE	N
ID = 06022	.25	.43	0.00 - 1.00	28

STUDENTS BEGINNING WORK IMMEDIATELY

	MEAN	SIGMA	RANGE	N
ID = 06023	.54	.50	0.00 - 1.00	28

Table 2.1--Continued

SLOWER STUDENTS APPEARING TO UNDERSTAND

	MEAN	SIGMA	RANGE	N
ID = 06024	.68	.47	0.00 - 1.00	28

CORRECTLY DONE SEATWORK ASSIGNMENTS

	MEAN	SIGMA	RANGE	N
ID = 06025	.68	.47	0.00 - 1.00	28

A WELL-BEHAVED CLASS

	MEAN	SIGMA	RANGE	N
ID = 06026	.61	.49	0.00 - 1.00	28

STUDENTS APPEARING TO ENJOY SCHOOL

	MEAN	SIGMA	RANGE	N
ID = 06027	.54	.50	0.00 - 1.00	28

STUDENTS BEING ABLE TO WORK ON THEIR OWN

	MEAN	SIGMA	RANGE	N
ID = 06028	.68	.47	0.00 - 1.00	28

PARENTS ARE BEST UTILIZED AS TUTORS AT HOME

	MEAN	SIGMA	RANGE	N
ID = 06029	.46	.50	0.00 - 1.00	28

PARENTS ARE BEST UTILIZED IN PTA AND PROJECT PARTICIPATION

	MEAN	SIGMA	RANGE	N
ID = 06030	.25	.43	0.00 - 1.00	28

PARENTS ARE BEST UTILIZED FOR HELP IN FIELD TRIPS

	MEAN	SIGMA	RANGE	N
ID = 06031	.50	.50	0.00 - 1.00	28

Table 2.1-Continued

PARENTS ARE BEST UTILIZED IN EXTRACURRICULAR ACTIVITIES

	MEAN	SIGMA	RANGE	N
ID = 06032	.18	.38	0.00 - 1.00	28

PARENTS ARE BEST UTILIZED IN DISCIPLINING STUDENTS AT HOME

	MEAN	SIGMA	RANGE	N
ID = 06033	.96	.19	0.00 - 1.00	28

PARENTS ARE BEST UTILIZED BY SEEING THAT HOMEWORK, PROJECTS GET DONE

	MEAN	SIGMA	RANGE	N
ID = 06034	.79	.41	0.00 - 1.00	28

PARENTS ARE BEST UTILIZED TO PROVIDE WARM, POSITIVE HOME ENVIRONMENT

	MEAN	SIGMA	RANGE	N
ID = 06035	.86	.35	0.00 - 1.00	28

PARENTS ARE BEST UTILIZED TO PROVIDE ENRICHMENT, BOOKS, ETC.

	MEAN	SIGMA	RANGE	N
ID = 06036	.46	.50	0.00 - 1.00	28

ABILITY TO EXPLAIN OR SHOW HOW

	MEAN	SIGMA	RANGE	N
ID = 06037	3.52	.63	2.00 - 4.00	27

ABILITY TO INITIATE OR DIRECT

	MEAN	SIGMA	RANGE	N
ID = 06038	2.92	.78	1.00 - 4.00	26

ABILITY TO DIAGNOSE LEARNING PROBLEMS

	MEAN	SIGMA	RANGE	N
ID = 06039	3.19	.67	2.00 - 4.00	27

Table 2.1-Continued

ABILITY TO MAKE CURRICULUM MATERIALS

	MEAN	SIGMA	RANGE	N
ID = 06040	2.46	.73	1.00 - 4.00	28

ABILITY TO ORGANIZE THE CLASSROOM

	MEAN	SIGMA	RANGE	N
ID = 06041	2.64	.93	1.00 - 4.00	28

ABILITY TO INVOLVE STUDENTS IN DISTRESSING ASPECTS OF SUBJECTS

	MEAN	SIGMA	RANGE	N
ID = 06042	.65	.97	0.00 - 3.00	27

ABILITY TO PROVIDE MATERIALS TO EVERY STUDENT

	MEAN	SIGMA	RANGE	N
ID = 06043	1.00	1.15	0.00 - 4.00	27

ABILITY TO GAIN STUDENTS UNDIVIDED ATTENTION

	MEAN	SIGMA	RANGE	N
ID = 06044	2.46	1.18	0.00 - 4.00	28

ABILITY TO ENCOURAGE STUDENTS TO ATTEMPT HARD PROBLEMS

	MEAN	SIGMA	RANGE	N
ID = 06045	2.11	.96	0.00 - 4.00	27

ABILITY TO MAKE STUDENTS AWARE THAT THEY ARE IN SCHOOL TO LEARN

	MEAN	SIGMA	RANGE	N
ID = 06046	2.68	.76	1.00 - 4.00	28

ABILITY TO ENGAGE STUDENTS IN PEER TUTORING

	MEAN	SIGMA	RANGE	N
ID = 06047	2.64	.97	0.00 - 4.00	28

Table 2.1-Continued

ABILITY TO FORM WARM PERSONAL RELATIONSHIPS WITH STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 06048	3.04	.94	1.00 - 4.00	28

HAVING A GOOD SENSE OF HUMOR

	MEAN	SIGMA	RANGE	N
ID = 06049	3.25	.69	2.00 - 4.00	28

ABILITY TO CONTROL CLASSROOM

	MEAN	SIGMA	RANGE	N
ID = 06050	3.71	.45	3.00 - 4.00	28

ABILITY TO GIVE CLEAR INSTRUCTIONS

	MEAN	SIGMA	RANGE	N
ID = 06051	3.50	.57	2.00 - 4.00	28

ABILITY TO DO REMEDIAL WORK WITH SLOW LEARNERS

	MEAN	SIGMA	RANGE	N
ID = 06052	3.29	.70	1.00 - 4.00	28

ABILITY TO MOTIVATE STUDENTS TO ENJOY SCHOOLWORK

	MEAN	SIGMA	RANGE	N
ID = 06053	3.21	.62	2.00 - 4.00	28

HAVING ENTHUSIASM

	MEAN	SIGMA	RANGE	N
ID = 06054	3.43	.62	2.00 - 4.00	28

BEING WARM TOWARD OTHERS

	MEAN	SIGMA	RANGE	N
ID = 06055	3.25	.63	2.00 - 4.00	28

Table 2.1-Continued

PRAISING FREQUENTLY

	MEAN	SIGMA	RANGE	N
ID = 06056	3.39	.67	2.00 - 4.00	28

ABILITY TO GET STUDENT RESPECT

	MEAN	SIGMA	RANGE	N
ID = 06057	3.32	.71	2.00 - 4.00	28

ABILITY TO EQUIP STUDENTS TO DO WELL ON STANDARDIZED TESTS

	MEAN	SIGMA	RANGE	N
ID = 06058	1.04	.94	0.00 - 4.00	28

KNOWING AND USING BEHAVIOR MODIFICATION TECHNIQUES

	MEAN	SIGMA	RANGE	N
ID = 06059	2.14	1.03	0.00 - 4.00	28

PRAISE

	MEAN	SIGMA	RANGE	N
ID = 06060	3.15	.72	2.00 - 4.00	26

PUBLIC RECOGNITION (ANNOUNCEMENT OF ACHIEVEMENTS)

	MEAN	SIGMA	RANGE	N
ID = 06061	2.46	.91	1.00 - 4.00	28

EXEMPTION FROM TESTS

	MEAN	SIGMA	RANGE	N
ID = 06062	.74	.97	0.00 - 3.00	27

SPECIAL PRIVILEGES

	MEAN	SIGMA	RANGE	N
ID = 06063	1.96	1.05	0.00 - 4.00	28

Table 2.1-Continued

CONTESTS AND COMPETITIVE GAMES

	MEAN	SIGMA	RANGE	N
ID = 06064	1.96	1.05	0.00 - 4.00	28

NOTES TO PARENTS

	MEAN	SIGMA	RANGE	N
ID = 06065	2.57	1.08	0.00 - 4.00	28

WRITTEN COMMENTS ON PAPERS

	MEAN	SIGMA	RANGE	N
ID = 06066	2.93	.00	1.00 - 4.00	28

OTHER TECHNIQUES USED WHICH ARE NOT LISTED PREVIOUSLY

	MEAN	SIGMA	RANGE	N
ID = 06067	3.00	.02	2.00 - 4.00	3

WORD GAMES OR STUDENT COMPETITION IN FRONT OF THE CLASS

	MEAN	SIGMA	RANGE	N
ID = 06068	1.56	1.24	0.00 - 4.00	28

KNOWLEDGE OF FACTS SHOULD PRECEDE GENERALIZATIONS

	MEAN	SIGMA	RANGE	N
ID = 06069	2.96	.63	1.00 - 4.00	28

TEACHERS SHOULD BE FREE TO ADMIT IGNORANCE OPENLY

	MEAN	SIGMA	RANGE	N
ID = 06070	2.78	1.07	0.00 - 4.00	27

TEACHERS SHOULD TEACH SUBJECTS INSTEAD OF ATTITUDES

	MEAN	SIGMA	RANGE	N
ID = 06071	1.71	1.03	0.00 - 4.00	28

Table 2.1-Continued

STUDENTS CAN LEARN MATHEMATICS AS WELL AS ANY OTHER SUBJECT

	MEAN	SIGMA	RANGE	N
ID = 06072	2.86	1.12	0.00 - 4.00	28

SCHOOLING SHOULD PRIMARILY TRAIN STUDENTS TO HANDLE SOCIAL ADJUSTMENT

	MEAN	SIGMA	RANGE	N
ID = 06073	2.04	1.05	0.00 - 4.00	28

TEACHING SHOULD BE ORIENTED TOWARD HELPING STUDENTS DO WELL ON NORMED TEST

	MEAN	SIGMA	RANGE	N
ID = 06074	.89	.98	0.00 - 4.00	28

WORTHWHILE LEARNING IS TIRING AND DIFFICULT

	MEAN	SIGMA	RANGE	N
ID = 06075	1.39	1.23	0.00 - 4.00	28

WITHOUT PROPER TRAINING STUDENTS MENTAL ABILITIES REMAIN UNDEVELOPED

	MEAN	SIGMA	RANGE	N
ID = 06076	2.36	1.01	1.00 - 4.00	28

SOME STUDENTS ASK TOO MANY QUESTIONS

	MEAN	SIGMA	RANGE	N
ID = 06077	2.11	1.18	0.00 - 4.00	28

T. SHOULD HAVE DISC. GROUPS SINCE STUDENTS LEARN FROM PEER INTERACTION

	MEAN	SIGMA	RANGE	N
ID = 06078	2.75	.95	0.00 - 4.00	28

IT IS NATURAL FOR STUDENTS TO RESIST TEACHERS

	MEAN	SIGMA	RANGE	N
ID = 06079	1.15	.93	0.00 - 3.00	27

Table 2.1-Continued

TEACHERS SHOULD TALK TO STUDENTS AS THEY WOULD TO ADULTS

	MEAN	SIGMA	RANGE	N
ID = 06000	1.50	.94	0.00 - 4.00	28

STUDENTS SHOULD EXPECT SCHOOLING TO BE INTERESTING

	MEAN	SIGMA	RANGE	N
ID = 06001	2.46	.87	1.00 - 4.00	28

UNLESS EXPLANATIONS ARE SHORT, STUDENTS LOSE INTEREST

	MEAN	SIGMA	RANGE	N
ID = 06002	3.04	.68	1.00 - 4.00	28

LETTING FASTER STUDENTS HELP SLOWER ONES IS A GOOD STRATEGY

	MEAN	SIGMA	RANGE	N
ID = 06003	2.79	1.01	0.00 - 4.00	28

STUDENTS SHOULD HAVE A GREAT DEAL OF PRACTICE AT THE BLACK BOARD IN MATH

	MEAN	SIGMA	RANGE	N
ID = 06004	1.96	.94	0.00 - 4.00	28

TRS. NEED NOT SPEND TIME WITH BRIGHT STUDENTS SINCE THEY CAN LEARN ALONE

	MEAN	SIGMA	RANGE	N
ID = 06005	1.46	1.12	0.00 - 4.00	28

THE MORE DIFFICULT THE TASK THE BETTER FOR THE STUDENT

	MEAN	SIGMA	RANGE	N
ID = 06006	1.43	.90	0.00 - 4.00	28

HAVING A WIDE VARIETY OF WORK FOR DIFFERING ABILITY LEVELS IS NOT WORKABLE

	MEAN	SIGMA	RANGE	N
ID = 06007	1.25	1.02	0.00 - 4.00	28

TEACHERS SHOULD DISCOURAGE STUDENTS FROM MOVING AROUND THE ROOM FREELY

	MEAN	SIGMA	RANGE	N
ID = 06088	2.32	1.04	0.00 - 4.00	28

ONE SHOULD EXPECT STUDENTS TO FORGET MUCH THAT IS TOLD THEM

	MEAN	SIGMA	RANGE	N
ID = 06089	1.79	1.05	0.00 - 3.00	28

PRACTICE MAKES PERFECT - SUMS UP LEARNING

	MEAN	SIGMA	RANGE	N
ID = 06090	1.69	.94	0.00 - 3.00	28

TOO MUCH RELIANCE ON THE TEXT MAKES EFFECTIVE TEACHING HARDER

	MEAN	SIGMA	RANGE	N
ID = 06091	1.82	.93	1.00 - 4.00	28

TEACHERS MAKE IT A POINT TO BE WRONG OCCASIONALLY, THEN ACKNOWLEDGE IT

	MEAN	SIGMA	RANGE	N
ID = 06092	1.75	1.09	0.00 - 4.00	28

TEACHNG SHOULD BE EVALUATED IN ITS OWN RIGHT REGARDLESS OF WHAT IS LEARNED

	MEAN	SIGMA	RANGE	N
ID = 06093	1.82	1.04	0.00 - 4.00	28

A GOOD TEACHER SHOULD BE DETERMINED

	MEAN	SIGMA	RANGE	N
ID = 06094	3.11	.66	0.00 - 4.00	28

TEACHER IMPACT IS MORE IMPORTANT THAN ANY OTHER PHASE OF SCH. ENVIRONMENT

	MEAN	SIGMA	RANGE	N
ID = 06095	2.54	1.15	0.00 - 4.00	28

TEACHER PERSONALITY IS THE MOST IMPORTANT QUALIFICATION

	MEAN	SIGMA	RANGE	N
ID = 06096	2.36	.93	0.00 - 4.00	28

TEACHERS SHOULD USE SOME OF THE STUDENTS SLANG

	MEAN	SIGMA	RANGE	N
ID = 06097	2.00	.96	0.00 - 3.00	28

TEACHERS SHOULD REWARD (AND PENALIZE LACK OF) EFFORT DESPITE ACHIEVEMENT

	MEAN	SIGMA	RANGE	N
ID = 06098	2.56	.96	0.00 - 4.00	27

KEEPING STANDARDS HIGH AND APPLYING PRESSURE IS BEST WAY FOR ST. TO LEARN

	MEAN	SIGMA	RANGE	N
ID = 06099	1.69	1.01	0.00 - 4.00	28

DESPITE RISK OF BORING SOME, TEACHERS SHOULD EXPLAIN THOROUGHLY

	MEAN	SIGMA	RANGE	N
ID = 06100	2.64	.97	0.00 - 4.00	28

LECTURE ON RATIONAL INSIGHT OF NUMBERS WILL NOT REDUCE NEEDED MATH DRILL

	MEAN	SIGMA	RANGE	N
ID = 06101	2.50	.82	1.00 - 4.00	28

CITING ACCOMPLISHMENTS OF OTHERS DOES NOT STIMULATE ACHIEVEMENT

	MEAN	SIGMA	RANGE	N
ID = 06102	1.75	.83	1.00 - 4.00	28

GIVING FAILING GRADES DOES LITTLE TO PROMOTE ACHIEVEMENT

	MEAN	SIGMA	RANGE	N
ID = 06103	2.18	.97	1.00 - 4.00	28

Table 2.1-Continued

IT IS BETTER TO ERR BY UNDEREXPLAINING THAN BY OVEREXPLAINING

	MEAN	SIGMA	RANGE	N
ID = 06104	1.25	.91	0.00 - 3.00	28

HIGH GRADES REINFORCE EFFORT, MAKING STUDENTS WORK HARDER

	MEAN	SIGMA	RANGE	N
ID = 06105	2.43	.76	1.00 - 4.00	28

STRICTER RULES WOULD HELP ELIMINATE DISCIPLINE PROBLEMS

	MEAN	SIGMA	RANGE	N
ID = 06106	2.21	1.11	0.00 - 4.00	28

IQ TESTS MERELY LABEL STUDENTS AND SHOULD NOT BE USED

	MEAN	SIGMA	RANGE	N
ID = 06107	1.93	1.07	0.00 - 4.00	28

TEACHER LEVEL OF EDUCATION (POST GRADUATE WORK)

	MEAN	SIGMA	RANGE	N
ID = 06108	2.04	1.40	0.00 - 4.00	27

GRADUATE DEGREE FROM MAJOR UNIVERSITY OR COLLEGE

	MEAN	SIGMA	RANGE	N
ID = 06109	.17	.37	0.00 - 1.00	6

TOTAL YEARS TEACHING EXPERIENCE

	MEAN	SIGMA	RANGE	N
ID = 06110	1.21	1.42	0.00 - 4.00	28

TOTAL YEARS TEACHING EXPERIENCE AT JUNIOR HIGH SCHOOL

	MEAN	SIGMA	RANGE	N
ID = 06111	.96	1.38	0.00 - 4.00	28

Table 2.1-Continued

TOTAL YEARS TEACHING PRESENT SUBJECT MATTER

	MEAN	SIGMA	RANGE	N
ID = 06112	.75	1.09	0.00 - 4.00	28

MEMBERSHIP IN TEXAS STATE TEACHERS ASSOCIATION (TSTA)

	MEAN	SIGMA	RANGE	N
ID = 06113	.75	.43	0.00 - 1.00	28

MEMBERSHIP IN NEA

	MEAN	SIGMA	RANGE	N
ID = 06114	.71	.45	0.00 - 1.00	28

MEMBERSHIP IN AMERICAN FEDERATION OF TEACHERS (AFT)

	MEAN	SIGMA	RANGE	N
ID = 06115	.11	.31	0.00 - 1.00	28

MEMBERSHIP IN OTHER ORGANIZATIONS NOT LISTED

	MEAN	SIGMA	RANGE	N
ID = 06116	.50	.50	0.00 - 1.00	28

Table 2.2

Summary Statistics for Teacher Interview:

Math Teachers

SEVERAL ABILITY LEVELS IN ONE CLASSROOM PRESENTS A PROBLEM

	MEAN	SIGMA	RANGE	N
ID = 07001	1.80	.40	1.00 - 2.00	25

COPE WITH ABILITY LEVELS BY 1) ABILITY GROUPING

	MEAN	SIGMA	RANGE	N
ID = 07002	1.58	.49	1.00 - 2.00	26

2) INDIVIDUALIZED WORK, SELF-PACED; LEARNING CENTERS; IGE; CONTRACT WORK

	MEAN	SIGMA	RANGE	N
ID = 07003	1.31	.46	1.00 - 2.00	26

3) DIFFERENT LEVEL MATERIALS AND ASSIGNMENTS SUPPL MATERIAL INSTRUCT GAMES

	MEAN	SIGMA	RANGE	N
ID = 07004	1.50	.50	1.00 - 2.00	26

04) MORE SPECIAL ATTENTION CONFERENCES WORK AFTER SCHOOL

	MEAN	SIGMA	RANGE	N
ID = 07005	1.12	.32	1.00 - 2.00	26

5) PEER TUTORING ALLOW STUDENTS TO WORK TOGETHER

	MEAN	SIGMA	RANGE	N
ID = 07006	1.23	.42	1.00 - 2.00	26

6) DIFFER TESTING AND GRADING EXPECT LESS FROM STUDENTS EXTRA CREDIT WORK

	MEAN	SIGMA	RANGE	N
ID = 07007	1.23	.42	1.00 - 2.00	26

7) WHOL CLSS APPR TEACH TO HI OR MID HOPE OTH CATCH ON NGLCT SOM IGNR PROB

	MEAN	SIGMA	RANGE	N
ID = 07008	1.13	.36	1.00 - 2.00	26

8) OTHER: RESOURCE TEACHER STUDENT TEACHER TEACHER AIDE

	MEAN	SIGMA	RANGE	N
ID = 07009	1.27	.44	1.00 - 2.00	26

TEACHER COPES WITH ABILITY LEVELS HERSELF IN CLSS RATHER THAN AVOIDING PROB

	MEAN	SIGMA	RANGE	N
ID = 07010	2.69	.54	1.00 - 3.00	26

METHODS FOR COPING WITH ABILITY LEVELS IN CLASS WERE SUCCESSFUL

	MEAN	SIGMA	RANGE	N
ID = 07011	3.12	.85	1.00 - 4.00	26

GROUP STDTS IN CLSS ON BASIS OF 1) ABILITY BASED ON DIAGNOS TEST CAT SCORE

	MEAN	SIGMA	RANGE	N
ID = 07012	1.53	.50	1.00 - 2.00	17

2) ABILITY BASED ON OBSERVATION ASSESSMENT OF WORK TALK WITH STUDENT

	MEAN	SIGMA	RANGE	N
ID = 07013	1.41	.49	1.00 - 2.00	17

3) ABILITY (NO OTHER RESPONSE GIVEN)

	MEAN	SIGMA	RANGE	N
ID = 07014	1.41	.49	1.00 - 2.00	17

4) RANDOM OR BALANCED GROUPS FOR SOME ACTIVITIES OR WORKING TOGETHER

	MEAN	SIGMA	RANGE	N
ID = 07015	1.00	0.00	1.00 - 1.00	17

SOME GROUPS FIVEN TO HI ABILITY GROUPS AS OPPOSED TO LOW

	MEAN	SIGMA	RANGE	N
ID = 07016	1.67	.47	1.00 - 2.00	27

TEACHER INDIVIDUALIZES ON REGULAR BASIS

	MEAN	SIGMA	RANGE	N
ID = 07018	1.83	.90	1.00 - 3.00	18

TEACHER INDIVIDUALIZES BY 1) SELFPACED WRK CONTRACT PACKET LRNING STATION

	MEAN	SIGMA	RANGE	N
ID = 07019	2.14	.83	1.00 - 3.00	28

2) DIFFERING EXPECTANCIES TEST LESS WORK FOR SLOW SPECIAL ASSIGNMENTS

	MEAN	SIGMA	RANGE	N
ID = 07020	1.33	.47	1.00 - 2.00	18

3) ABILITY GROUPS HAVING DIFFERENT ASSIGNMENTS

	MEAN	SIGMA	RANGE	N
ID = 07021	1.43	.49	1.00 - 2.00	21

4) OTHER : EXTRA HELP CONFERENCES USE RESOURCE TEACHER AIDE

	MEAN	SIGMA	RANGE	N
ID = 07022	1.56	.50	1.00 - 2.00	18

TEACHER USES GROUPS AND ALSO INDIVIDUALIZES

	MEAN	SIGMA	RANGE	N
ID = 07023	1.15	.36	1.00 - 2.00	20

TEACHER INDIVIDUALIZES ONLY (DOES NOT GROUP)

	MEAN	SIGMA	RANGE	N
ID = 07024	1.46	.50	1.00 - 2.00	28

Table 2.2-Continued

TEACHER GROUPS ONLY (DOES NOT INDIVIDUALIZES)

	MEAN	SIGMA	RANGE	N
ID = 07025	1.21	.41	1.00 - 2.00	28

TEACHER NEITHER GROUPS NOR INDIVIDUALIZES

	MEAN	SIGMA	RANGE	N
ID = 07026	1.18	.38	1.00 - 2.00	28

FREQUENCY OF TESTS

	MEAN	SIGMA	RANGE	N
ID = 07027	1.14	.35	1.00 - 2.00	28

USES BOTH TEACHER-MADE AND PREPARED TESTS AS OPPOSED TO TEACHER-MADE ONLY

	MEAN	SIGMA	RANGE	N
ID = 07028	2.61	.86	1.00 - 4.00	28

ADVANT OF SELF-MADE TEST:1) TEST WHAT IS TAUGHT KIDS FAMILIAR W/MATERIAL

	MEAN	SIGMA	RANGE	N
ID = 07029	1.25	.43	1.00 - 2.00	28

2) CAN GIVE DIFFERENT TESTS TO ABILITY GROUPS; MORE INDIVIDUALIZATION

	MEAN	SIGMA	RANGE	N
ID = 07030	1.93	.26	1.00 - 2.00	27

3) BETTER FORM INSTRUCTIONS USE TERMS KIDS KNOW SIMILAR TO HOMEWORK

	MEAN	SIGMA	RANGE	N
ID = 07031	1.15	.36	1.00 - 2.00	27

4) OTHER ADVANTAGES TO SELF-MADE TESTS

	MEAN	SIGMA	RANGE	N
ID = 07032	1.22	.42	1.00 - 2.00	27

Table 2.2-Continued

DISADVANT OF SELF-MADE TEST: 1) VALIDITY RELIABILITY ALL SKILLS NOT COVRD

	MEAN	SIGMA	RANGE	N
ID = 07033	1.07	.26	1.00 - 2.00	27

2) TAKES MUCH TIME EFFORT WORK TO MAKE TEST

	MEAN	SIGMA	RANGE	N
ID = 07034	1.54	.50	1.00 - 2.00	24

3) OTHER DISADVANTAGES TO SELF-MADE TESTS

	MEAN	SIGMA	RANGE	N
ID = 07035	1.54	.50	1.00 - 2.00	24

BEGINNING ABILITY LEVEL FOUND BY 1) OBSERVATION OF WORK AND BEHAVIOR

	MEAN	SIGMA	RANGE	N
ID = 07036	1.04	.20	1.00 - 2.00	24

2) CHECKING PERSONAL FILE: ASK COUNSELOR OTHER TEACHERS

	MEAN	SIGMA	RANGE	N
ID = 07037	1.33	.47	1.00 - 2.00	27

3) DOING ORAL WORK, READING ALOUD

	MEAN	SIGMA	RANGE	N
ID = 07038	1.15	.36	1.00 - 2.00	27

4) GETTING WRITING SAMPLE, PARAGRAPH

	MEAN	SIGMA	RANGE	N
ID = 07039	1.07	.26	1.00 - 2.00	27

5) USING STANDARD DIAGNOSTIC TEST

	MEAN	SIGMA	RANGE	N
ID = 07040	1.00	0.00	1.00 - 1.00	27

Table 2.2-Continued

6) USING DIAGNOSTIC TEST- UNSPECIFIED IF STANDARD OR SELF-MADE

	MEAN	SIGMA	RANGE	N
ID = 07041	1.19	.39	1.00 - 2.00	27

7) USING SELF-MADE DIAGNOSTIC TEST

	MEAN	SIGMA	RANGE	N
ID = 07042	1.41	.49	1.00 - 2.00	27

8) OTHER WAYS TO FIND ABILITY LEVEL

	MEAN	SIGMA	RANGE	N
ID = 07043	1.30	.46	1.00 - 2.00	27

FIND CAUSE OF LEARNING PROBLEM BY 1) ANALYSIS OF WORK BEHAVIOR

	MEAN	SIGMA	RANGE	N
ID = 07044	1.15	.36	1.00 - 2.00	27

2) REFERRING KID TO COUNSELOR, RESOURCE TEACHER, SPECIAL ED

	MEAN	SIGMA	RANGE	N
ID = 07045	1.23	.42	1.00 - 2.00	26

3) CONSULTING PERMANENT FILE, COUNSELOR, OTHER TEACHERS

	MEAN	SIGMA	RANGE	N
ID = 07046	1.35	.48	1.00 - 2.00	26

4) WORKING WITH STUDENT; CONFERENCE WITH STUDENT

	MEAN	SIGMA	RANGE	N
ID = 07047	1.27	.44	1.00 - 2.00	26

5) DIAGNOSTIC TEST

	MEAN	SIGMA	RANGE	N
ID = 07048	1.46	.50	1.00 - 2.00	26

6) CONTACTING PARENTS

	MEAN	SIGMA	RANGE	N
ID = 07049	1.23	.42	1.00 - 2.00	26

7) OTHER METHODS TO DIAGNOSE LEARNING PROBLEMS

	MEAN	SIGMA	RANGE	N
ID = 07050	1.03	.27	1.00 - 2.00	26

TEACHER HAS A STEP-BY-STEP PROCEDURE TO DIAGNOSE LEARNING PROBLEMS

	MEAN	SIGMA	RANGE	N
ID = 07051	1.31	.46	1.00 - 2.00	26

STDNTS NEEDING REMEDIAL WORK OR ENRICH GIVEN 1) SUPPL PACKETS WRKBKS KITS

	MEAN	SIGMA	RANGE	N
ID = 07052	1.23	.42	1.00 - 2.00	26

2) DIFFERENT LEVEL TEXTS READERS

	MEAN	SIGMA	RANGE	N
ID = 07053	1.54	.50	1.00 - 2.00	28

3) TEACHER-MADE MATERIALS: DITTOS HANDOUTS

	MEAN	SIGMA	RANGE	N
ID = 07054	1.57	.49	1.00 - 2.00	28

4) PUZZLES GAMES

	MEAN	SIGMA	RANGE	N
ID = 07055	1.29	.45	1.00 - 2.00	28

5) AUDIO-VISUAL AIDS LISTENING STATION ANALOG COMPUTER AID

	MEAN	SIGMA	RANGE	N
ID = 07056	1.21	.41	1.00 - 2.00	28

6) EXTRA CREDIT ASSIGNMENTS PROJECTS

	MEAN	SIGMA	RANGE	N
ID = 07057	1.14	.35	1.00 - 2.00	28

7) RESOURCE TEACHER SPECIAL HELP

	MEAN	SIGMA	RANGE	N
ID = 07058	1.14	.35	1.00 - 2.00	28

8) OTHER: READING CLASS EASIER ASSIGNMENTS

	MEAN	SIGMA	RANGE	N
ID = 07059	1.11	.31	1.00 - 2.00	28

9) ENRICHMENT ACTIVITIES

	MEAN	SIGMA	RANGE	N
ID = 07060	1.11	.31	1.00 - 2.00	28

TEACHER STRESSES EFFORT RATHER THAN ACHIEVEMENT IN DECIDING GRADES

	MEAN	SIGMA	RANGE	N
ID = 07061	1.29	.45	1.00 - 2.00	28

TEACHER REGULARLY USES CURVE IN GRADING

	MEAN	SIGMA	RANGE	N
ID = 07062	1.93	.65	1.00 - 3.00	28

TO AVOID CONFUSION W/ NEW MATERIAL TEACHER 1) USES CONCRETE GRAPHIC EXMPLE

	MEAN	SIGMA	RANGE	N
ID = 07063	1.68	.80	1.00 - 3.00	28

2) EXPLAINS DIFFERENT WAYS USES SMALL STEPS REPEATS/DETAILED LECTURES

	MEAN	SIGMA	RANGE	N
ID = 07064	1.25	.43	1.00 - 2.00	28

Table 2.2-Continued

3) USES VISUAL AND AUDITORY AIDS

	MEAN	SIGMA	RANGE	N
ID = 07065	1.39	.49	1.00 - 2.00	28

4) RELATES TO AND BUILDS FROM PREVIOUS MATERIAL

	MEAN	SIGMA	RANGE	N
ID = 07066	1.14	.35	1.00 - 2.00	28

5) GENERATES INTEREST MOTIVATION RELATES TO REAL WORLD IS ENTERTAINING

	MEAN	SIGMA	RANGE	N
ID = 07067	1.14	.35	1.00 - 2.00	28

6) ASKS FOR QUESTIONS DISCUSSES W/ STUDENTS WATCHES FOR PUZZLED FACES

	MEAN	SIGMA	RANGE	N
ID = 07068	1.11	.31	1.00 - 2.00	28

7) GIVES ORAL EXPLANATION LECTURE

	MEAN	SIGMA	RANGE	N
ID = 07069	1.11	.31	1.00 - 2.00	28

8) CHECKS COMPREHANSION W/ TEST DRILL EXERCISES BOARD WORK

	MEAN	SIGMA	RANGE	N
ID = 07070	1.18	.38	1.00 - 2.00	28

9) GIVES HANDOUT WRITTEN INSTRUCTIONS EXPLANATIONS OUTLINE

	MEAN	SIGMA	RANGE	N
ID = 07071	1.18	.38	1.00 - 2.00	28

10) USES PRIVATE CONTACTS WORKS WITH STUDENTS INDIVIDUALLY

	MEAN	SIGMA	RANGE	N
ID = 07072	1.11	.31	1.00 - 2.00	28

Table 2.2-Continued

11) USES ACTIVE STUDENT PARTICIPATION TAKES NOTES WORK PROBLEMS W/ STDNTS

	MEAN	SIGMA	RANGE	N
ID = 07073	1.11	.31	1.00 - 2.00	28

12) OTHER: TEACHES VOCABULARY PEER TEACHING

	MEAN	SIGMA	RANGE	N
ID = 07074	1.18	.38	1.00 - 2.00	28

WHEN STUDENT HIDES CONFUSION TEACHER 1) AVOIDS EMBARASSMENT BUILDS TRUST

	MEAN	SIGMA	RANGE	N
ID = 07075	1.25	.43	1.00 - 2.00	28

2) GIVES HELP IN CLASS WORKS WITH STUDENT RETEACHES

	MEAN	SIGMA	RANGE	N
ID = 07076	1.29	.45	1.00 - 2.00	28

3) GIVES HELP TALKS WITH STUDENTS OUTSIDE CLASS

	MEAN	SIGMA	RANGE	N
ID = 07077	1.68	.47	1.00 - 2.00	28

4) CALLS ON STUDENTS IN CLASS GETS STUDENTS INVOLVED AT BOARD ANSWERING QES

	MEAN	SIGMA	RANGE	N
ID = 07078	1.14	.35	1.00 - 2.00	28

5) LEAVES STUDENT TO TAKE INITIATIVE SEEK HELP FORGETS THOSE NOT TRYING

	MEAN	SIGMA	RANGE	N
ID = 07079	1.14	.35	1.00 - 2.00	28

6) GETS HELP INFO FROM COUNSELOR PRINCIPAL PARENTS CHECKS RECORDS

	MEAN	SIGMA	RANGE	N
ID = 07080	1.11	.31	1.00 - 2.00	28

7) STUDENT HIDING CONFUSION NOT A PROBLEM DOESNT HAPPEN MUCH

	MEAN	SIGMA	RANGE	N
ID = 07081	1,14	,35	1,00 - 2,00	28

8) OTHER: USES CONTRACTS PEER TUTORS CALL ME AT HOME

	MEAN	SIGMA	RANGE	N
ID = 07082	1,07	,26	1,00 - 2,00	28

9) USES STEP-BY-STEP PROCESS

	MEAN	SIGMA	RANGE	N
ID = 07083	1,21	,41	1,00 - 2,00	28

TEACHER HAS ESTABLISHED CLASS RULES AND PROCEDURES FOR APPROPRIATE BEHVR

	MEAN	SIGMA	RANGE	N
ID = 07084	1,18	,38	1,00 - 2,00	28

RULES INCLUDE 1) STUDENTS MUST COME PREPARED WITH HOMEWORK AND SUPPLIES

	MEAN	SIGMA	RANGE	N
ID = 07085	1,93	,26	1,00 - 2,00	28

2) MUST BE ON TIME IN SEAT AT BELL NO TARDINESS

	MEAN	SIGMA	RANGE	N
ID = 07086	1,54	,50	1,00 - 2,00	28

3) MUST SIT IN ASSIGNED SEAT

	MEAN	SIGMA	RANGE	N
ID = 07087	1,50	,50	1,00 - 2,00	28

4) MUST NOT LEAVE WITHOUT PERMISSION

	MEAN	SIGMA	RANGE	N
ID = 07088	1,11	,31	1,00 - 2,00	28

5) MUST NOT INTERUPT TEACH OR OTHER STDT MUST RAISE HAND TALK ONE AT TIME

	MEAN	SIGMA	RANGE	N
ID = 07089	1.39	.49	1.00 - 2.00	28

6) MUST NOT DISRUPT TALK LOUD BOTHER OTHERS

	MEAN	SIGMA	RANGE	N
ID = 07090	1.68	.47	1.00 - 2.00	28

7) MUST NOT FIGHT HORSEPLAY THROW THINGS

	MEAN	SIGMA	RANGE	N
ID = 07091	1.32	.47	1.00 - 2.00	28

8) MUST NOT CHEW GUM OR EAT FOOD

	MEAN	SIGMA	RANGE	N
ID = 07092	1.14	.35	1.00 - 2.00	28

9) MUST SHOW MUTUAL RESPECT COURTESY RESPECT RIGHTS OF OTHERS

	MEAN	SIGMA	RANGE	N
ID = 07093	1.18	.38	1.00 - 2.00	28

10) OTHER: MUST USE NO PROFANITY OBEY SCHOOL RULES CLEAN UP ROOM

	MEAN	SIGMA	RANGE	N
ID = 07094	1.14	.35	1.00 - 2.00	28

TEACHER HAS RULES FOR TURNING IN HOMEWORK AND SEATWORK

	MEAN	SIGMA	RANGE	N
ID = 07095	1.29	.45	1.00 - 2.00	28

1) TEACHER DISTINGUSHES EXCUSED AND UNEXCUSED IN ACCEPTING LATE WORK

	MEAN	SIGMA	RANGE	N
ID = 07096	1.82	.38	1.00 - 2.00	28

Table 2.2-Continued

2) TEACHER PENALIZES GRADE WHEN WORK IS LATE

	MEAN	SIGMA	RANGE	N
ID = 07097	1.24	.43	1.00 - 2.00	25

3) TEACHER SETS DEADLINE BEYOND ORIGINAL DUE DATE LOOSE ON DUE DATES

	MEAN	SIGMA	RANGE	N
ID = 07098	1.40	.49	1.00 - 2.00	25

4) WORK IS DUE ON DUE DATE

	MEAN	SIGMA	RANGE	N
ID = 07099	1.24	.43	1.00 - 2.00	25

5)TEACHER HAS PROCEDURAL RULES:USE INK PENCIL PUT IN TRAY GRADE OWN PAPER

	MEAN	SIGMA	RANGE	N
ID = 07100	1.64	.48	1.00 - 2.00	25

6)OTHER: OCCASIONALLY CHECHS WORK FOR COMPREHENSION

	MEAN	SIGMA	RANGE	N
ID = 07101	1.28	.45	1.00 - 2.00	25

TEACHER HAS RULES FOR MAKING UP MISSED WORK

	MEAN	SIGMA	RANGE	N
ID = 07102	1.28	.45	1.00 - 2.00	25

1) TEACHER SETS TIME LIMIT FOR TURNING IN MISSED WORK

	MEAN	SIGMA	RANGE	N
ID = 07103	1.68	.47	1.00 - 2.00	28

2) STUDENT HAS RESPONSIBILITY TO MAKE UP MISSED WORK

	MEAN	SIGMA	RANGE	N
ID = 07104	1.65	.48	1.00 - 2.00	23

3)TEACHER PENALIZES GRADE FOR UNEXCUSED ABSENCE OR EXCEEDING MAKE-UP DATE

	MEAN	SIGMA	RANGE	N
ID = 07105	1.48	.50	1.00 - 2.00	23

4) TEACHER TAKES SOME RESPONSIBILITY TO SEE STUDENT MAKES UP WORK

	MEAN	SIGMA	RANGE	N
ID = 07106	1.13	.34	1.00 - 2.00	23

5)OTHER: LAISSEZ-FAIRE ATTITUDE MISSED WORK MUST BE MAKE UP

	MEAN	SIGMA	RANGE	N
ID = 07107	1.09	.28	1.00 - 2.00	23

RULES AND PROCEDURES DIFFER IN EACH CLASS

	MEAN	SIGMA	RANGE	N
ID = 07108	1.35	.48	1.00 - 2.00	23

1) MINOR VARIATIONS IN STRICTNESS IN EACH CLASS

	MEAN	SIGMA	RANGE	N
ID = 07109	1.39	.49	1.00 - 2.00	28

2) CLASS STRUCTURE DETERMINED BY ABILITY LEVEL

	MEAN	SIGMA	RANGE	N
ID = 07110	1.18	.39	1.00 - 2.00	11

3) CLASS STRUCTURE DETERMINED BY STUDENT BEHAVIOR

	MEAN	SIGMA	RANGE	N
ID = 07111	1.27	.45	1.00 - 2.00	11

4) RULES AND PROCEDURES DIFFER IN TERMS OF ACADEMIC EXPECTATIONS FOR STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07112	1.45	.50	1.00 - 2.00	11

Table 2.2-Continued

CLASSROOM CONTROL IS ORGANIZED 1) BY ASSIGNING SEATS AT FIRST OF YEAR

	MEAN	SIGMA	RANGE	N
ID = 07113	1.36	.48	1.00 - 2.00	11

2) BY BEING STRICT AT FIRST LOOSEN UP LATER

	MEAN	SIGMA	RANGE	N
ID = 07114	1.11	.31	1.00 - 2.00	27

3) BY HANDING OUT OR POSTING RULES; STUDENTS COPY THEM

	MEAN	SIGMA	RANGE	N
ID = 07115	1.46	.50	1.00 - 2.00	28

4) BY ENFORCING RULES NO HESITATION TO PUNISH MAKE EXAMPLE OF STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07116	1.29	.45	1.00 - 2.00	28

5) BY USING STUDENT INPUT TO ESTABLISH AND ENFORCE RULES

	MEAN	SIGMA	RANGE	N
ID = 07117	1.18	.38	1.00 - 2.00	28

6) BY ANNOUNCING RULES AND CONSEQUENCES OF BREAKING THEM

	MEAN	SIGMA	RANGE	N
ID = 07118	1.14	.35	1.00 - 2.00	28

7) EXPLAINING EXPECTATIONS; LOW-KEY DISCUSSIONS WITH STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07119	1.61	.49	1.00 - 2.00	28

8) BY BUILDING STRUCTURE GRADUALLY INFORMALLY NO FORMAL PRESENTATION

	MEAN	SIGMA	RANGE	N
ID = 07120	1.18	.38	1.00 - 2.00	28

9) OTHER METHODS

	MEAN	SIGMA	RANGE	N
ID = 07121	1.04	.19	1.00 - 2.00	28

CLASSROOM CONTROL METHODS SUCCESSFUL

	MEAN	SIGMA	RANGE	N
ID = 07122	1.32	.47	1.00 - 2.00	28

OTHER CONTROL METHODS TEACHER MIGHT TRY 1)NONE SATISFIED W/ PRESENT SYSTEM

	MEAN	SIGMA	RANGE	N
ID = 07123	2.46	.73	1.00 - 3.00	28

2) MIGHT TRY STRICTER ENFORCEMENT; MORE CONSISTENCY FOLLOW THROUGH

	MEAN	SIGMA	RANGE	N
ID = 07124	1.42	.49	1.00 - 2.00	26

3) MIGHT TRY REALITY THERAPY BEHAVIOR CONTRACTS BEHAVIOR MODIFICATION

	MEAN	SIGMA	RANGE	N
ID = 07125	1.19	.39	1.00 - 2.00	26

4) MIGHT LET STUDENTS HELP MAKE ENFORCE RULES PUNISHMENTS

	MEAN	SIGMA	RANGE	N
ID = 07126	1.23	.42	1.00 - 2.00	26

5) OTHER: USE F FACTOR OPEN TO NEW IDEAS MORE PARENT CONTACT GROUPING

	MEAN	SIGMA	RANGE	N
ID = 07127	1.12	.32	1.00 - 2.00	26

STUDENTS CAN MOVE TO ANOTHER SEAT IF THEY WANT

	MEAN	SIGMA	RANGE	N
ID = 07128	1.27	.44	1.00 - 2.00	26

Table 2.2-Continued

TALKING IS A PROBLEM WITH FLEXIBLE SEATING FIXED SEATING CONTROLS TALKING

	MEAN	SIGMA	RANGE	N
ID = 07129	2.27	.86	1.00 - 3.00	26

CONFUSION DISRUPTION FROM FLEXIBLE SEATING FIXED CONTROLS CONFUSION

	MEAN	SIGMA	RANGE	N
ID = 07130	1.56	.50	1.00 - 2.00	27

CONTROL DISCIPLINE DIFFICULT W/ FLEXIBLE SEATING EASIER W/ FIXED SEATING

	MEAN	SIGMA	RANGE	N
ID = 07131	1.19	.39	1.00 - 2.00	27

NAMES CALLING ROLL DIFFICULT W/ FLEXIBLE SEATING EASIER W/ FIXED SEATING

	MEAN	SIGMA	RANGE	N
ID = 07132	1.19	.39	1.00 - 2.00	27

SUBST TCHR HAS MORE DIFFICULTY W/FLEXIBLE SEATS FIXED SEATS EASIER FOR HER

	MEAN	SIGMA	RANGE	N
ID = 07133	1.30	.46	1.00 - 2.00	27

STUDENTS HAPPY RELAXED W/FLEXIBLE SEATING STIFLED BORED W/ FIXED SEATING

	MEAN	SIGMA	RANGE	N
ID = 07134	1.19	.39	1.00 - 2.00	27

CLIQUES FORM W/ FLEXIBLE SEATING FIXED SEATING BREAKS CLIQUES UP

	MEAN	SIGMA	RANGE	N
ID = 07135	1.37	.48	1.00 - 2.00	27

OTHER ADVANTAGES AND DISADVANTAGES OF FLEXIBLE AND FIXED SEATING

	MEAN	SIGMA	RANGE	N
ID = 07136	1.11	.31	1.00 - 2.00	27

Table 2.2-Continued

MAXIMAL LEARNING OCCURS WITH FIXED SEATING

	MEAN	SIGMA	RANGE	N
ID = 07137	1.07	.26	1.00 - 2.00	27

PERSONAL DEVELOPMENT PEER RELATIONS BETTER WITH FIXED SEATING

	MEAN	SIGMA	RANGE	N
ID = 07138	1.25	.43	1.00 - 2.00	16

PREPARATIONS FOR SUBSTITUTE 1) LESSON PLANS REGULARLY SCHEDULED MATERIALS

	MEAN	SIGMA	RANGE	N
ID = 07139	1.20	.40	1.00 - 2.00	10

2) SPECIAL LESSON PLANS DRILL BUSY WORK REVIEW TEST READING ASSIGNMENTS

	MEAN	SIGMA	RANGE	N
ID = 07140	1.43	.49	1.00 - 2.00	28

3) GENERAL INFORMATION RULES BELL SCHEDULE MATERIALS FORMS

	MEAN	SIGMA	RANGE	N
ID = 07141	1.68	.47	1.00 - 2.00	28

4) SEATING CHART CLASS ROOL

	MEAN	SIGMA	RANGE	N
ID = 07142	1.25	.43	1.00 - 2.00	28

5) NOTES ON RELIABLE AND PROBLEM STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07143	1.46	.50	1.00 - 2.00	28

6) TEACHER WONT LET SUBSTITUTE DO SOME THINGS MENTIONS LIMITATIONS OF SUBS

	MEAN	SIGMA	RANGE	N
ID = 07144	1.43	.49	1.00 - 2.00	28

7) OTHER THINGS PREPARED FOR SUBSTITUTE TEACHER: PUZZLES GAMES

	MEAN	SIGMA	RANGE	N
ID = 07145	1.21	.41	1.00 - 2.00	28

TEACHER HAS PROBLEM W/STUDENTS WAVING HANDS BLURTING OUT CALL-OUT ANSWERS

	MEAN	SIGMA	RANGE	N
ID = 07146	1.21	.41	1.00 - 2.00	28

HANDLES THIS BY 1) REPRIMAND RESPOND NEGATIVELY NON-VERBAL INTERVENTION

	MEAN	SIGMA	RANGE	N
ID = 07147	2.32	.89	1.00 - 3.00	28

2) BY TELLING STUDENTS TO RAISE HAND TO STOP WAIT TAKE TURNS

	MEAN	SIGMA	RANGE	N
ID = 07148	1.29	.45	1.00 - 2.00	28

3) BY EMPHASIZING GOOD MANNERS RESPECT OTHERS GIVE OTHERS A CHANCE

	MEAN	SIGMA	RANGE	N
ID = 07149	1.39	.49	1.00 - 2.00	28

4) BY IGNORING CALL-OUT ANSWERS

	MEAN	SIGMA	RANGE	N
ID = 07150	1.18	.38	1.00 - 2.00	28

5) SOMETIMES CALL-OUTS NOT CONSIDERED A PROBLEM CALL-OUTS SHOW ENTHUSIASM

	MEAN	SIGMA	RANGE	N
ID = 07151	1.07	.26	1.00 - 2.00	28

6) CALL-OUTS NOT CONSIDERED A PROBLEM NOT DEALT WITH NOT ACCEPTED

	MEAN	SIGMA	RANGE	N
ID = 07152	1.18	.38	1.00 - 2.00	28

7) OTHER WAYS TO DEAL WITH CALL-OUT ANSWERS

	MEAN	SIGMA	RANGE	N
ID = 07153	1.14	.35	1.00 - 2.00	28

STUDENT WHO DO NOT VOLUNTEER 1) TEACHERS CALLS ON THEM USES PATTERN TURN

	MEAN	SIGMA	RANGE	N
ID = 07154	1.29	.45	1.00 - 2.00	28

2) TEACHER CALLS ON THEM IF SURE THEY KNOW ASKS EASY JUEST NO EMBARRASSMNT

	MEAN	SIGMA	RANGE	N
ID = 07155	1.50	.50	1.00 - 2.00	28

3) TEACHER LEAVES ALONE ESP IF TIRED UPSET SHY JUST GRADES WRITTEN WORK

	MEAN	SIGMA	RANGE	N
ID = 07156	1.32	.47	1.00 - 2.00	28

4) TEACHER DRAWS THEM OUT GIVES XTR ATTENTION TALKS PRIVATELY ASKS OPINION

	MEAN	SIGMA	RANGE	N
ID = 07157	1.21	.41	1.00 - 2.00	28

5) OTHER: PUTS THEM WITH A SMART KID PRAISE CORRECTS PARTS OF ANSWERS

	MEAN	SIGMA	RANGE	N
ID = 07158	1.21	.41	1.00 - 2.00	28

STUDENT WHO DOES NOT RESPOND 1) TEACHER GOES ON TO ANOTHER STUDENT

	MEAN	SIGMA	RANGE	N
ID = 07159	1.07	.26	1.00 - 2.00	28

2) GOES ON TO ANOTHER BUT CONTACTS LATER FOR PRIVATE CONFERENCE

	MEAN	SIGMA	RANGE	N
ID = 07160	1.11	.31	1.00 - 2.00	28

3) TEACHER HAS A PRIVATE CONFERENCE TO DISCUSS THE PROBLEM

	MEAN	SIGMA	RANGE	N
ID = 07161	1.11	.31	1.00 - 2.00	28

4) TEACHER EVENTUALLY IGNORES LEAVES STUDENT ALONE AFTER OTHR STRTGY FAILS

	MEAN	SIGMA	RANGE	N
ID = 07162	1.21	.41	1.00 - 2.00	28

5) TEACHER REPEATS REPHRASES GIVES TIME TO THINK ASKS LEADING QUESTIONS

	MEAN	SIGMA	RANGE	N
ID = 07163	1.11	.31	1.00 - 2.00	28

6) TEACHER AVIODS EMBARASSING STUDENT PUTS HIM AT EASE

	MEAN	SIGMA	RANGE	N
ID = 07164	1.43	.49	1.00 - 2.00	28

7) NO RESPONSE SELDOM HAPPENS NOT A PROBLEM

	MEAN	SIGMA	RANGE	N
ID = 07165	1.07	.26	1.00 - 2.00	28

8) OTHER: TEACHER REFERS TO COUNSELOR OFFICE GIVES INDIVIDUAL WORK

	MEAN	SIGMA	RANGE	N
ID = 07166	1.36	.48	1.00 - 2.00	28

STUDENT WHO DOES NOT PAY ATTENTION 1) TEACHER CALLS OUT STUDENTS NAME

	MEAN	SIGMA	RANGE	N
ID = 07167	1.14	.35	1.00 - 2.00	28

2) TEACHER CALLS ON STUDENT ASKS A QUESTION

	MEAN	SIGMA	RANGE	N
ID = 07168	1.07	.26	1.00 - 2.00	28

3) TEACHER REPRIMANDS CALLS DOWN SCOLDS CRITICIZES EMBARASSES PUNISHES

	MEAN	SIGMA	RANGE	N
ID = 07169	1.39	.49	1.00 - 2.00	28

4) TEACHER USES MANAGEMENT SAYS PAY ATTENTION KNOCK IT OFF GET TO WORK

	MEAN	SIGMA	RANGE	N
ID = 07170	1.50	.50	1.00 - 2.00	28

5) TEACHER USES NON-VERBAL INTERVENTION

	MEAN	SIGMA	RANGE	N
ID = 07171	1.21	.41	1.00 - 2.00	28

6) TEACHER TALKS PRIVATELY DISCUSSES PROBLEM WITH STUDENT

	MEAN	SIGMA	RANGE	N
ID = 07172	1.21	.41	1.00 - 2.00	28

7) TEACHER SEEKS OUTSIDE HELP PARENT COUNSELOR OFFICE

	MEAN	SIGMA	RANGE	N
ID = 07173	1.07	.26	1.00 - 2.00	28

8) TEACHER DOES NOTHING LEAVES ALONE ESP IF NON-DISRUPTIVE TIRED UPSET

	MEAN	SIGMA	RANGE	N
ID = 07174	1.14	.35	1.00 - 2.00	28

9) OTHER: TEACHER VARIES ACTIVITIES TO KEEP INTEREST

	MEAN	SIGMA	RANGE	N
ID = 07175	1.14	.35	1.00 - 2.00	28

CAUSE OF ALIENATION AS 1) LANGUAGE SES CULTURE RACE MINORITY STATUS

	MEAN	SIGMA	RANGE	N
ID = 07176	1.32	.47	1.00 - 2.00	28

Table 2.2-Continued

2) CONSISTENT FAILURE REPEATERS (OLDER STUDENTS)

	MEAN	SIGMA	RANGE	N
ID = 07177	1.21	.41	1.00 - 2.00	28

3) POOR SELF-CONCEPT LACK OF CONFIDENCE FEAR OF FAILURE

	MEAN	SIGMA	RANGE	N
ID = 07178	1.43	.49	1.00 - 2.00	28

4) LACK OF ABILITY OR BASIC SKILL TOO FAR BEHIND LOW ACHIEVER

	MEAN	SIGMA	RANGE	N
ID = 07179	1.25	.43	1.00 - 2.00	28

5) INAPROPRIATE, IRRELEVANT MATERIALS

	MEAN	SIGMA	RANGE	N
ID = 07180	1.50	.50	1.00 - 2.00	28

6) EMOTIONAL-PERSONAL ADJUSTMENT; PHYSICAL DISABILITY, ETC

	MEAN	SIGMA	RANGE	N
ID = 07181	1.11	.31	1.00 - 2.00	28

7) HOME PROBLEMS, FAMILY LIFE, HOME ENVIRONMENT

	MEAN	SIGMA	RANGE	N
ID = 07182	1.32	.47	1.00 - 2.00	28

8) LACK OF PARENTAL INTEREST; ENCOURAGEMENT, OR GOOD INTEREST

	MEAN	SIGMA	RANGE	N
ID = 07183	1.57	.49	1.00 - 2.00	28

9) PEER PROBLEM, LACK OF FRIENDS

	MEAN	SIGMA	RANGE	N
ID = 07184	1.29	.45	1.00 - 2.00	28

80

Table 2.2-Continued

10) SOCIAL INVOLVEMENT WITH PEERS, OPPOSITE SEX

	MEAN	SIGMA	RANGE	N
ID = 07185	1.18	.38	1.00 - 2.00	28

11) LACK OF INTEREST; DONT VALUE EDUCATION; BORED DONT CARE

	MEAN	SIGMA	RANGE	N
ID = 07186	1.07	.26	1.00 - 2.00	28

12) BEING ANTI-AUTHORITY, DISRUPTIVE; HATE TEACHER; BELLIGERENT

	MEAN	SIGMA	RANGE	N
ID = 07187	1.18	.38	1.00 - 2.00	28

13) TEACHERS FAULT; FAIL TO MOTIVATE; GIVE BAD SELF-IMAGE; NOT WORK W/ THEM

	MEAN	SIGMA	RANGE	N
ID = 07188	1.18	.38	1.00 - 2.00	28

14) OTHER: DRUGS ABSENCE BUSING

	MEAN	SIGMA	RANGE	N
ID = 07189	1.18	.38	1.00 - 2.00	28

STUDENT WHO DOES NOT DO ASSIGNMENT: TEACHER 1) NAG THREATEN FUSS PRAISES

	MEAN	SIGMA	RANGE	N
ID = 07190	1.43	.49	1.00 - 2.00	28

2) ADJUSTS MATERIALS ACTIVITIES TO STUDENTS ABILITY INTEREST BUILDS THERE

	MEAN	SIGMA	RANGE	N
ID = 07191	1.25	.43	1.00 - 2.00	28

3) HAS CONFERENCE WITH STUDENT TO DISCUSS PROBLEM

	MEAN	SIGMA	RANGE	N
ID = 07192	1.29	.45	1.00 - 2.00	28

Table 2.2-Continued

4) GIVES EXTRA ATTENTION HELP AFTER OR IN CLASS MOVES STUDENT NEARBY

	MEAN	SIGMA	RANGE	N
ID = 07193	1.32	.47	1.00 - 2.00	28

5) CONTACTS PARENTS

	MEAN	SIGMA	RANGE	N
ID = 07194	1.18	.38	1.00 - 2.00	28

6) REFERS TO COUNSELOR OFFICE CONFERENCE WITH COUNSELOR AND/OR PARENTS

	MEAN	SIGMA	RANGE	N
ID = 07195	1.43	.49	1.00 - 2.00	28

7) FAILS FORGETS STUDENT DOES NOTHING GIVES NO OTHER RESPONSE

	MEAN	SIGMA	RANGE	N
ID = 07196	1.18	.38	1.00 - 2.00	28

8) FAILS FORGETS STUDENT AFTER OTHER STRATEGIES FAIL

	MEAN	SIGMA	RANGE	N
ID = 07197	1.14	.35	1.00 - 2.00	28

9) DISCUSSES PROBLEM WITH COUNSELOR OR OTHER TEACHERS

	MEAN	SIGMA	RANGE	N
ID = 07198	1.36	.48	1.00 - 2.00	28

10) OTHER: ASSIGNS DETENTION GUARD RELATIONSHIP WITH STUDENT

	MEAN	SIGMA	RANGE	N
ID = 07199	1.11	.31	1.00 - 2.00	28

11) TEACHER HAS STEP-BY-STEP PROCESS TO COPE W/STUDNT WHO DOESNT DO ASSIGN

	MEAN	SIGMA	RANGE	N
ID = 07200	1.14	.35	1.00 - 2.00	28

Table 2.2-Continued

STUDENT WHO DOESNT UNDERSTAND DIRECTIONS TEACHER 1) EXPLAIN DISCUS REPEATS

	MEAN	SIGMA	RANGE	N
ID = 07201	1.57	.49	1.00 - 2.00	28

2) PRIVATELY EXPLAINS DISCUSSES REPEATS READS DIRECTIONS

	MEAN	SIGMA	RANGE	N
ID = 07202	1.57	.49	1.00 - 2.00	28

3) HAS STUDENT READ REREAD REPEAT DIRECTIONS TO TEACHER

	MEAN	SIGMA	RANGE	N
ID = 07203	1.25	.43	1.00 - 2.00	28

4) USES DEVELOPMENTAL OR PREVENTIVE APPROACH

	MEAN	SIGMA	RANGE	N
ID = 07204	1.36	.48	1.00 - 2.00	28

5) REACTS NEGATIVELY WILL NOT GIVE HELP PENALIZES GRADE

	MEAN	SIGMA	RANGE	N
ID = 07205	1.25	.43	1.00 - 2.00	28

6) OTHER: TEACHER SENDS STUDENT TO COUNSELOR QUESTION STUDENT

	MEAN	SIGMA	RANGE	N
ID = 07206	1.29	.45	1.00 - 2.00	28

BOTH TEACHER AND STUDENT ARE RESPONSIBLE FOR MOTIVATION TO LEARN LEARN

	MEAN	SIGMA	RANGE	N
ID = 07207	1.07	.26	1.00 - 2.00	28

TEACHER GIVES REASONS WHY STUDENTS NEED EXTERNAL MOTIVATION

	MEAN	SIGMA	RANGE	N
ID = 07208	1.37	.48	1.00 - 2.00	27

Table 2.2-Continued

TEACHER CONSISTENTLY REWARDS GOOD BEHAVIOR AND GOOD WORK

	MEAN	SIGMA	RANGE	N
ID = 07209	1.56	.50	1.00 - 2.00	27

TEACHER REWARDS WORK AND BEHAVIOR WITH 1) GRADES BONUS POINTS

	MEAN	SIGMA	RANGE	N
ID = 07210	2.50	.68	1.00 - 3.00	28

2) VERBAL PRAISE

	MEAN	SIGMA	RANGE	N
ID = 07211	1.25	.43	1.00 - 2.00	28

3) WRITTEN COMMENTS ON PAPER

	MEAN	SIGMA	RANGE	N
ID = 07212	1.50	.50	1.00 - 2.00	28

4) PUBLIC RECOGNITION: DISPLAY WORK USE AS EXAMPLE

	MEAN	SIGMA	RANGE	N
ID = 07213	1.29	.45	1.00 - 2.00	28

5) OUT-OF-CLASS PRIVILEGES: LIBRARY FIELD TRIPS EAT OUT RUN ERRANDS

	MEAN	SIGMA	RANGE	N
ID = 07214	1.14	.35	1.00 - 2.00	28

6) IN-CLASS PRIVILEGES: GAMES FILMS TALK NO TEST OR HOMEWORK

	MEAN	SIGMA	RANGE	N
ID = 07215	1.25	.43	1.00 - 2.00	28

7) TIME OFF FREE TIME FREE DAYS PERMISSION TO LEAVE EARLY

	MEAN	SIGMA	RANGE	N
ID = 07216	1.29	.45	1.00 - 2.00	28

8) CONCRETE REWARDS: CANDY AWARDS CERTIFICATE CUM GIFTS

	MEAN	SIGMA	RANGE	N
ID = 07217	1.32	.47	1.00 - 2.00	28

9) APPROVAL LOVE PERSONAL ATTENTION PHYSICAL AFFECTION

	MEAN	SIGMA	RANGE	N
ID = 07218	1.07	.26	1.00 - 2.00	28

10) COMPLIMENTARY NOTES TO PARENTS CALL PARENTS TO BRAG

	MEAN	SIGMA	RANGE	N
ID = 07219	1.11	.31	1.00 - 2.00	28

TEACHER CLOSENESS TO STUDENTS IS A PLUS FOR BUILDING RAPPORT

	MEAN	SIGMA	RANGE	N
ID = 07220	1.14	.35	1.00 - 2.00	28

SOCIAL RELATIONSHIP W/STUDENT MORE IMPORTANT THAN ACADEMIC PROGRESS

	MEAN	SIGMA	RANGE	N
ID = 07221	3.14	.83	1.00 - 4.00	28

RELATION W/ STUDENT IMPORTANT SINCE MORE TEACHER KNOWS BETTER IS TEACHING

	MEAN	SIGMA	RANGE	N
ID = 07222	1.85	.65	1.00 - 3.00	27

RELATIONSHIP IS STRONG MOTIVATOR STUDENT WILL WORK TO PLEASE TEACHER

	MEAN	SIGMA	RANGE	N
ID = 07225	1.07	.26	1.00 - 2.00	28

RELATIONSHIP TEACHER STUDENT MORE COMFORTABLE RECEPTIVE

	MEAN	SIGMA	RANGE	N
ID = 07224	1.11	.31	1.00 - 2.00	28

Table 2.2-Continued

TEACHER HANDLES DISRUPTIVE STUDENT BY 1) CONFERENCE

	MEAN	SIGMA	RANGE	N
ID = 07225	1.10	.38	1.00 - 2.00	28

2) REALITY THERAPY CONTRACTS

	MEAN	SIGMA	RANGE	N
ID = 07226	1.43	.49	1.00 - 2.00	28

3) MANAGEMENT THREAT CRITICIZE WARN

	MEAN	SIGMA	RANGE	N
ID = 07227	1.25	.43	1.00 - 2.00	28

4) ISOLATING MOVING STUDENT UP FRONT, INTO HALL

	MEAN	SIGMA	RANGE	N
ID = 07228	1.21	.41	1.00 - 2.00	28

5) KEEPING AFTER SCHOOL, AFTER CLASS

	MEAN	SIGMA	RANGE	N
ID = 07229	1.43	.49	1.00 - 2.00	28

6) CONTACTING PARENTS, SENDING NOTE HOME

	MEAN	SIGMA	RANGE	N
ID = 07230	1.18	.38	1.00 - 2.00	28

7) REFERRING TO COUNSELOR; CONFERENCE W/ PARENT, COUNSELOR, STUDENT

	MEAN	SIGMA	RANGE	N
ID = 07231	1.36	.48	1.00 - 2.00	28

8) SENDING TO PRINCIPAL, OFFICE

	MEAN	SIGMA	RANGE	N
ID = 07232	1.11	.31	1.00 - 2.00	28

Table 2.2-Continued

9) SENDING TO DETENTION, ISS, OCS,

	MEAN	SIGMA	RANGE	N
ID = 07233	1.75	.43	1.00 - 2.00	28

10) OTHER: IGNORING STDT, HAVING STDT DO SPECIAL ERRANDS, WRITING SENTENCE

	MEAN	SIGMA	RANGE	N
ID = 07234	1.18	.38	1.00 - 2.00	28

TEACHER HAS SETP-BY-PROCESS FOR HANDLING DISRUPTIVE STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07235	1.32	.47	1.00 - 2.00	28

STUDENTS DISCIPLINED FOR 1) DISRUPTION, DISOBEDIENCE, BOTHERING OTHERS

	MEAN	SIGMA	RANGE	N
ID = 07236	1.00	.40	1.00 - 2.00	25

2) PROFANITY, SWEARING, VULGAR LANGUAGE

	MEAN	SIGMA	RANGE	N
ID = 07237	1.61	.49	1.00 - 2.00	28

3) LACK OF RESPECT, CONSIDERATION FOR TEACHER, OTHER STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07238	1.32	.47	1.00 - 2.00	28

4) CONSTANT TALKING, INTERRUPTING, CALLING OUT, WILL NOT SHUT UP

	MEAN	SIGMA	RANGE	N
ID = 07239	1.57	.49	1.00 - 2.00	28

5) ROUGHHOUSING, FIGHTING, THROWING, DESTRUCTION OF PROPERTY

	MEAN	SIGMA	RANGE	N
ID = 07240	1.25	.43	1.00 - 2.00	28

Table 2.2-Continued

6) DISREGARDING SCHOOLWORK: TARDY, NOT BRINGING MATERIALS, NOT DOING WORK

	MEAN	SIGMA	RANGE	N
ID = 07241	1.54	.50	1.00 - 2.00	28

TO ESTABLISH CREDIBILITY TEACHER 1) MUST BE CONSISTENT FOLLOW THROUGH

	MEAN	SIGMA	RANGE	N
ID = 07242	1.25	.43	1.00 - 2.00	28

2) MUST BE FAIR; TREAT ALL THE SAME, DO NOT PLAY FAVORITES

	MEAN	SIGMA	RANGE	N
ID = 07243	1.46	.50	1.00 - 2.00	28

3) MUST BE HONEST, SINCERE

	MEAN	SIGMA	RANGE	N
ID = 07244	1.14	.35	1.00 - 2.00	28

4) MUST MAINTAIN TEACHER ROLE: KNOW SUBJECT; CORRECT IN MANNER, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07245	1.29	.45	1.00 - 2.00	28

5) MUST SHOW TRUST, CARING RESPECT FOR STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07246	1.11	.31	1.00 - 2.00	28

6) MUST ADMIT MISTAKES, BE A REAL PERSON

	MEAN	SIGMA	RANGE	N
ID = 07247	1.14	.35	1.00 - 2.00	28

7) OTHER: GO BY EXPERIENCE; SET GOOD EXAMPLE; STDT KNOWS TCHRS REPUTATION

	MEAN	SIGMA	RANGE	N
ID = 07248	1.25	.43	1.00 - 2.00	28

Table 2.2-Continued

TEACHER THINKS STUDENT RATINGS OF TEACHERS AND CLASSES ARE VALID

	MEAN	SIGMA	RANGE	N
ID = 07249	1.46	.50	1.00 - 2.00	28

TEACHER THINKS RATINGS INVALID 1) STUDENTS IMMATURE, EMOTIONAL, DONT THINK

	MEAN	SIGMA	RANGE	N
ID = 07250	2.21	.86	1.00 - 3.00	28

2) STUDENTS RESPOND TO IRRELEVANT FACTORS: REVENGE, PEER PRESSURE, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07251	1.45	.50	1.00 - 2.00	11

3) FAULTY PROCEDURE: POORLY WORDED, TIMED; NOT EXPLAINED, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07252	1.45	.50	1.00 - 2.00	11

4) STUDENTS CAN DISTINGUISH ABILITY TO TEACH VERSUS ESTABLISH RAPPORT

	MEAN	SIGMA	RANGE	N
ID = 07253	1.18	.39	1.00 - 2.00	11

TEACHER CONTRADICTS HERSELF IN QUESTION

	MEAN	SIGMA	RANGE	N
ID = 07254	2.19	.86	1.00 - 3.00	27

THE WHOLE CLASS IS INVOLVED IN CLASS DISCUSSION

	MEAN	SIGMA	RANGE	N
ID = 07255	1.81	.39	1.00 - 2.00	27

FREQUENCY OF CLASS DISCUSSIONS

	MEAN	SIGMA	RANGE	N
ID = 07256	1.50	.50	1.00 - 2.00	10

Table 2.2-Continued

ADVANTAGES OF CLASS DISCUSSION 1) STUDENTS LEARN BY HEARING OTHERS

	MEAN	SIGMA	RANGE	N
ID = 07257	2.38	.78	1.00 - 3.00	16

2) TEACHER CAN FIND PROBLEM AREAS; SEE IF UNDERSTAND; CATCH QUESTIONS

	MEAN	SIGMA	RANGE	N
ID = 07258	1.25	.43	1.00 - 2.00	28

3) EFFECTIVE USE OF TEACHER TIME; WHOLE CLASS HEARS WHAT IS SAID

	MEAN	SIGMA	RANGE	N
ID = 07259	1.29	.45	1.00 - 2.00	28

4) STIMULATES MOTIVATION, INTEREST; BETTER ATTENTION, BEHAVIOR

	MEAN	SIGMA	RANGE	N
ID = 07260	1.32	.47	1.00 - 2.00	28

5) LEARN COMMUNICATION SKILLS; CHANCE FOR INTERACTION, SELF-EXPRESSION

	MEAN	SIGMA	RANGE	N
ID = 07261	1.29	.45	1.00 - 2.00	28

6) ESTABLISH IDENTITY, GAIN CONFIDENCE; ALL PARTICIPATE, SHY STDTS TALK

	MEAN	SIGMA	RANGE	N
ID = 07262	1.14	.35	1.00 - 2.00	26

7) OTHER; BRIGHT STUDNT LEARN TOLERANCE SAVES PAPERWORK DISCUSSIONS ARE FUN

	MEAN	SIGMA	RANGE	N
ID = 07263	1.21	.41	1.00 - 2.00	28

DISADVANTAGES OF CLASS DISCUSSIONS 1) MANY DONT WONT PARTICIPATE

	MEAN	SIGMA	RANGE	N
ID = 07264	1.11	.31	1.00 - 2.00	28

2) TIRING FOR TEACHER; HARD TO GIVE ALL A CHANGE; MUST ATTEND CLOSELY

	MEAN	SIGMA	RANGE	N
ID = 07265	1.21	.41	1.00 - 2.00	28

3) CONTROL, BEHAVIOR PROBLEMS MAY DEVELOP

	MEAN	SIGMA	RANGE	N
ID = 07266	1.07	.26	1.00 - 2.00	28

4) DISC MAY GET MISDIRECTED, PETTY, TRIVIAL; MAY START ARGUMENT

	MEAN	SIGMA	RANGE	N
ID = 07267	1.18	.38	1.00 - 2.00	28

5) HARD TO DO WITH DIFFERENT LEVEL STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07266	1.07	.26	1.00 - 2.00	28

6) LOSS OF ATTENTION; STUDENTS TUNE OUT; DONT LISTEN TO EACH OTHER

	MEAN	SIGMA	RANGE	N
ID = 07269	1.43	.49	1.00 - 2.00	28

7) NO DISADVANTAGES TO CLASS DISCUSSIONS

	MEAN	SIGMA	RANGE	N
ID = 07270	1.14	.35	1.00 - 2.00	28

8) OTHER; REWARDS COMPETITIVENESS; CANT TEACH TO INDIVIDUALS, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07271	1.14	.35	1.00 - 2.00	28

TEACHER TARGETS QUESTIONS TO BRIGHTER SLOWER STUDENTS ETC

	MEAN	SIGMA	RANGE	N
ID = 07272	1.07	.26	1.00 - 2.00	28

Table 2.2-Continued

TEACHER EQUALIZES QUESTIONS TARGETS FOR SPECIFIC REASONS

	MEAN	SIGMA	RANGE	N
ID = 07273	1.50	.50	1.00 - 2.00	28

TEACHER DOES NOT SAY WHETHER OR NOT QUESTIONS ARE TARGETED

	MEAN	SIGMA	RANGE	N
ID = 07274	1.36	.48	1.00 - 2.00	28

TEACHER DIRECTS MORE QUESTIONS TO BRIGHTER STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07275	1.14	.35	1.00 - 2.00	28

TEACHER GOES TO STUDENT DURING SEATWORK PERIODS

	MEAN	SIGMA	RANGE	N
ID = 07276	1.64	.48	1.00 - 2.00	14

BOOKS TEACHER USED AND PROGRESS 1) IN LITERATURE:0PROJECTIONO COUNTRPOINT

	MEAN	SIGMA	RANGE	N
ID = 07277	3.35	1.04	1.00 - 5.00	26

2) IN LITERATURE: EASIER SUPPLEMENTARY MATERIALS

	MEAN	SIGMA	RANGE	N
ID = 07278	-0.00	-0.00	-0.00 - -0.00	-0

3) IN SPELLING: 0BASIC GOALS IN SPELLING0

	MEAN	SIGMA	RANGE	N
ID = 07279	-0.00	-0.00	-0.00 - -0.00	-0

4) IN GRAMMAR: ONEW APPROACHES0 (ADOPTED TEXT)

	MEAN	SIGMA	RANGE	N
ID = 07280	-0.00	-0.00	-0.00 - -0.00	-0

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Table 2.2-Continued

5) IN GRAMMAR: SUPPLEMENTARY MATERIALS WORKBOOKS SELF-MADE

	MEAN	SIGMA	RANGE	N
ID = 07281	-0.00	-0.00	-0.00 - -0.00	-0

6) PROGRESS IN SPELLING

	MEAN	SIGMA	RANGE	N
ID = 07282	-0.00	-0.00	-0.00 - -0.00	-0

7) PROGRESS IN GRAMMAR

	MEAN	SIGMA	RANGE	N
ID = 07283	-0.00	-0.00	-0.00 - -0.00	-0

8) PROGRESS IN LITERATURE

	MEAN	SIGMA	RANGE	N
ID = 07284	-0.00	-0.00	-0.00 - -0.00	-0

9) IN MATH: @MODERN SCHOOL MATHEMATICS@ ONLY

	MEAN	SIGMA	RANGE	N
ID = 07285	-0.00	-0.00	-0.00 - -0.00	-0

10) TEACHER USES HIGHER LEVEL MATERIAL IN ADDITION TO ADOPTED TEXT

	MEAN	SIGMA	RANGE	N
ID = 07286	1.39	.49	1.00 - 2.00	28

TEACHER USES EASIER MATERIALS IN ADDITION TO ADOPTED TEXT

	MEAN	SIGMA	RANGE	N
ID = 07287	1.25	.43	1.00 - 2.00	28

GROUPS INDIVIDUALS IN CLASS ACCOMPLISH DESIRED OBJECTIVES

	MEAN	SIGMA	RANGE	N
ID = 07288	1.50	.50	1.00 - 2.00	28

Table 2.2-Continued

TEACHER EVALUATES SUBGROUPS WITHIN THE CLASS

	MEAN	SIGMA	RANGE	N
ID = 07289	1.58	.49	1.00 - 2.00	24

ENGLISH TEACHER OBJECTIVES CONCENTRATED ON: 1) WRITING SKILLS COMPOSITION

	MEAN	SIGMA	RANGE	N
ID = 07290	1.67	.47	1.00 - 2.00	27

2) SPELLING VOCABULARY

	MEAN	SIGMA	RANGE	N
ID = 07291	-0.00	-0.00	-0.00 - -0.00	-0

3) GRAMMAR SENTENCE STRUCTURE

	MEAN	SIGMA	RANGE	N
ID = 07292	-0.00	-0.00	-0.00 - -0.00	-0

4) READING COMPREHENSION SKILLS

	MEAN	SIGMA	RANGE	N
ID = 07293	-0.00	-0.00	-0.00 - -0.00	-0

5) LITERATURE MYTHOLOGY EXPOSURE AND APPRECIATION

	MEAN	SIGMA	RANGE	N
ID = 07294	-0.00	-0.00	-0.00 - -0.00	-0

6) VERBAL COMMUNICATION DISCUSSION ABILITY

	MEAN	SIGMA	RANGE	N
ID = 07295	-0.00	-0.00	-0.00 - -0.00	-0

7) SELF-RELIANCE RESPONSIBILITY INDEPENDENCE

	MEAN	SIGMA	RANGE	N
ID = 07296	-0.00	-0.00	-0.00 - -0.00	-0

Table 2.2-Continued

8) OTHERS LIBRARY RESEARCH DICTIONARY RELEVANCE OF CLASSWORK

	MEAN	SIGMA	RANGE	N
ID = 07297	-0.00	-0.00	-0.00 - -0.00	-0

MATH TEACHER OBJECTIVES CONCENTRATED ON 1) 4 OPERATIONS DECIMALS PER CENT

	MEAN	SIGMA	RANGE	N
ID = 07298	-0.00	-0.00	-0.00 - -0.00	-0

2) GEOMETRY ALGEBRA HIGH SCHOOL PREPARATION

	MEAN	SIGMA	RANGE	N
ID = 0729	1.68	.47	1.00 - 2.00	28

3) UNDERSTANDING MATH RELATING TO REAL WORLD

	MEAN	SIGMA	RANGE	N
ID = 07300	1.21	.41	1.00 - 2.00	28

4) PERSONAL AND INTELLECTUAL GROWTH

	MEAN	SIGMA	RANGE	N
ID = 07301	1.18	.38	1.00 - 2.00	28

REASONS FOR THESE ENG MATH TEACHING OBJECTIVES: 1)IMPORTANT FOR LATER LIFE

	MEAN	SIGMA	RANGE	N
ID = 07302	1.14	.35	1.00 - 2.00	28

2) IMPORTANT FOR OTHER CLASSES HIGH SCHOOL COLLEGE

	MEAN	SIGMA	RANGE	N
ID = 07303	1.52	.50	1.00 - 2.00	27

3) NEEDED THIS MOST PREVIOUSLY NEGLECTED FAR BEHIND

	MEAN	SIGMA	RANGE	N
ID = 07304	1.37	.48	1.00 - 2.00	27

4) DISTRICT GUIDELINES STANDARD OBJECTIVES

	MEAN	SIGMA	RANGE	N
ID = 07305	1.22	.42	1.00 - 2.00	27

5) OTHER: EXPAND INTELLECT LAST CHANCE AT THIS PERSONAL READING

	MEAN	SIGMA	RANGE	N
ID = 07306	1.04	.19	1.00 - 2.00	27

ENGLISH TEACHER ASSIGNS LESS IMPORTANCE TO 1) GRAMMAR LINGUISTICS

	MEAN	SIGMA	RANGE	N
ID = 07307	1.22	.42	1.00 - 2.00	27

2) LEARNING OR MEMORIZATION OF SPECIFIC FACTS

	MEAN	SIGMA	RANGE	N
ID = 07308	1.00	0.00	1.00 - 1.00	1

3) SPELLING VOCABULARY LITERATURE

	MEAN	SIGMA	RANGE	N
ID = 07309	1.00	0.00	1.00 - 1.00	1

MATH TEACHER ASSIGNS LESS IMPORTANCE TO 1) GEOMETRY ALGEBRA TRIG

	MEAN	SIGMA	RANGE	N
ID = 07310	1.00	0.00	1.00 - 1.00	1

2) BASES

	MEAN	SIGMA	RANGE	N
ID = 07311	1.62	.99	1.00 - 2.00	21

3) NUMBER THEORY, PROBABILITY STATISTICS SETS PROPERTIES

	MEAN	SIGMA	RANGE	N
ID = 07312	1.29	.85	1.00 - 2.00	21

4) OTHER: PER CENT FRACTION DECIMALS WORD PROBLEMS FLOW CHARTS

	MEAN	SIGMA	RANGE	N
ID = 07313	1.33	.47	1.00 - 2.00	21

REASONS FOR MATH ENG ASSIGNING LESS IMPORTANCE 1) LESS IMPORTANT USEFUL

	MEAN	SIGMA	RANGE	N
ID = 07314	1.40	.49	1.00 - 2.00	20

2) LACK OF TIME

	MEAN	SIGMA	RANGE	N
ID = 07315	1.50	.50	1.00 - 2.00	20

3) TOO DIFFICULT ABSTRACT STUDENTS NOT PREPARED

	MEAN	SIGMA	RANGE	N
ID = 07316	1.15	.36	1.00 - 2.00	20

4) MEMORIZING NOT AS IMPORTANT AS UNDERSTANDING CONCEPTS

	MEAN	SIGMA	RANGE	N
ID = 07317	1.20	.40	1.00 - 2.00	20

5) STUDENTS DONT NEED IT NOW ALREADY HAD IT GET IT LATER

	MEAN	SIGMA	RANGE	N
ID = 07318	1.05	.22	1.00 - 2.00	20

6) ALL AREAS ARE IMPORTANT NONE GIVEN LESS IMPORTANCE

	MEAN	SIGMA	RANGE	N
ID = 07319	1.20	.40	1.00 - 2.00	20

7) OTHER: MATERIAL FORGOTTON QUICKLY TRY NOT TO PUSH TOO HARD

	MEAN	SIGMA	RANGE	N
ID = 07320	1.09	.29	1.00 - 2.00	22

BUSING ACHIEVES DESIRED GOALS FOR MINORITIES

	MEAN	SIGMA	RANGE	N
ID = 07321	1.05	.22	1.00 - 2.00	20

ADVANTAGES OF BUSING: 1)EXPOSES STUDNT TO DIFFERNT IDEAS CULTURE LIFESTYLE

	MEAN	SIGMA	RANGE	N
ID = 07322	2.11	.90	1.00 - 3.00	28

2) BREAKS DOWN PREJUDICE STUDNTS LEARN TOLERANCE UNDERSTANDING

	MEAN	SIGMA	RANGE	N
ID = 07323	1.65	.48	1.00 - 2.00	26

3) MINORITIES GET BETTER EDUCATION FACILITIES MORE OPPORTUNITIES

	MEAN	SIGMA	RANGE	N
ID = 07324	1.19	.39	1.00 - 2.00	26

4) NO ADVANTAGES TO BUSING

	MEAN	SIGMA	RANGE	N
ID = 07325	1.27	.44	1.00 - 2.00	26

5) OTHER: SATISFY COURTS POLITICAL ADVANTAGES INTEGRATES NEIGHBORHOOD

	MEAN	SIGMA	RANGE	N
ID = 07326	1.19	.39	1.00 - 2.00	26

DISADVANTAGES OF BUSING: 1) TIME SPENT ON BUSES MAKES STUDNTS TIRED UPSET

	MEAN	SIGMA	RANGE	N
ID = 07327	1.19	.39	1.00 - 2.00	26

2) DOWNGRADES EDUCATION HURTS CAPABLE STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07328	1.29	.45	1.00 - 2.00	28

3) MINORITIES FEEL INFERIOR FRUSTRATED COMPETING W/ ADVANTAGED WHITES

	MEAN	SIGMA	RANGE	N
ID = 07329	1.14	.35	1.00 - 2.00	28

4) STUDNTS PARENTS CANT BE IN EXTRACURRICULAR ACTIVITIES PTA ETC ETC.

	MEAN	SIGMA	RANGE	N
ID = 07330	1.21	.41	1.00 - 2.00	28

5) DESTROYS NEIGHBORHOOD CONCEPT STUDNTS DONT IDENTIFY WITH NEW SCHOOL

	MEAN	SIGMA	RANGE	N
ID = 07331	1.21	.41	1.00 - 2.00	28

6) BUSED STUDENTS FEEL ANGRY RESENTFUL HOLD NEGATIVE ATTITUDES

	MEAN	SIGMA	RANGE	N
ID = 07332	1.36	.48	1.00 - 2.00	28

7) CAUSES DISRUPTION TENSION RACIAL CONFLICT

	MEAN	SIGMA	RANGE	N
ID = 07333	1.14	.35	1.00 - 2.00	28

8) ONE-WAY BUSING WONT WORK UNFAIR ONLY BLACKS ARE BUSED

	MEAN	SIGMA	RANGE	N
ID = 07334	1.21	.41	1.00 - 2.00	28

9) OTHER: BLACKS MISS OUT ON OWN CULTURE TEACHER CANT COPE

	MEAN	SIGMA	RANGE	N
ID = 07335	1.21	.41	1.00 - 2.00	28

TEACHER WORKS WITH FELLOW TEACHERS IN HIS SUBJECT MATTER

	MEAN	SIGMA	RANGE	N
ID = 07336	1.11	.31	1.00 - 2.00	28

Table 2.2-Continued

WORKS WITH FELLOW TEACHERS 1) BY SHARING IDEAS MATERIALS PLANNING

	MEAN	SIGMA	RANGE	N
ID = 07337	1.59	.78	1.00 - 3.00	27

2) BY FORMAL STRUCTURED MEETINGS CURRICULM DAY DEPARTMENT MEETINGS

	MEAN	SIGMA	RANGE	N
ID = 07338	1.63	.48	1.00 - 2.00	16

3) BY MEETING INFORMALLY IN LOUNGE HALLS

	MEAN	SIGMA	RANGE	N
ID = 07339	1.19	.39	1.00 - 2.00	16

4) CONTACT LIMITED BY COMMUNITY/TEAM STRUCTURE OF FACULTY

	MEAN	SIGMA	RANGE	N
ID = 07340	1.31	.46	1.00 - 2.00	16

5) BY MEANS OF SUPERVISORY ROLE DEPARTMENT CHAIRMAN COORDINATOR

	MEAN	SIGMA	RANGE	N
ID = 07341	1.50	.50	1.00 - 2.00	16

TEACHER WORKS WITH SCHOOL COUNSELOR: 1) AS LITTLE AS POSSIBLE NOT AT ALL

	MEAN	SIGMA	RANGE	N
ID = 07342	1.00	0.00	1.00 - 1.00	16

2) FOR ACADEMIC SCHEDULING CHOOSING HIGH SCHOOL COURSES

	MEAN	SIGMA	RANGE	N
ID = 07343	1.25	.43	1.00 - 2.00	28

3) TEACHER REFERS BEHAVIOR OR EMOTIONAL PROBLEMS FOR COUNSELING

	MEAN	SIGMA	RANGE	N
ID = 07344	1.14	.35	1.00 - 2.00	28

Table 2.2-Continued

4) GETS ADVICE BACKGROUND INFORMATION TEST DATA ON STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07345	1.39	.49	1.00 - 2.00	28

5) COUNSELOR LEADS GROUP DISCUSSION HUMAN RELATIONS PROGRAM CAREERS

	MEAN	SIGMA	RANGE	N
ID = 07346	1.46	.50	1.00 - 2.00	28

6) COUNSELOR HAS CONFERENCES WITH TEACHER STUDENT PARENT

	MEAN	SIGMA	RANGE	N
ID = 07347	1.14	.35	1.00 - 2.00	28

7) OTHER: WORK WITH COUNSELOR DURING RETREATS OVER LUNCH

	MEAN	SIGMA	RANGE	N
ID = 07348	1.29	.45	1.00 - 2.00	28

ADVANTAGES OF STUDENT TEACHER: 1) TEACHER HAS HAD A STUDENT TEACHER

	MEAN	SIGMA	RANGE	N
ID = 07349	1.18	.38	1.00 - 2.00	28

2) TEACHER GETS NEW IDEAS LEARNS FROM STUDENT TEACHER

	MEAN	SIGMA	RANGE	N
ID = 07350	1.46	.50	1.00 - 2.00	28

3) TEACHER HAS INCREASED TEACHING CAPACITY; DOUBLES TEACHER-STUDENT RATIO

	MEAN	SIGMA	RANGE	N
ID = 07351	1.33	.47	1.00 - 2.00	15

4) TEACHER HAS MORE TIME FOR PLANNING, CLERICAL WORK

	MEAN	SIGMA	RANGE	N
ID = 07352	1.53	.50	1.00 - 2.00	15

Table 2.2-Continued

5) PROFESSIONAL DUTY TO HELP NEW TEACHER; TCHR GETS GOOD REWARDING FEELING

	MEAN	SIGMA	RANGE	N
ID = 07353	1.33	.47	1.00 - 2.00	15

6) GOOD FOR STUDENTS TO BE EXPOSED TO NEW PERSON, DIFFERENT TECHNIQUES

	MEAN	SIGMA	RANGE	N
ID = 07354	1.20	.40	1.00 - 2.00	15

7) OTHER: SEE HOW STUDENTS REACT WITH SOMEONE ELSE

	MEAN	SIGMA	RANGE	N
ID = 07355	1.20	.40	1.00 - 2.00	15

DISADVANTAGES OF STDT TCHR: 1) TEACHER HAS NEG EXPECT OF EFFECT OF ST TCHR

	MEAN	SIGMA	RANGE	N
ID = 07356	1.47	.50	1.00 - 2.00	15

2) DISCIPLINE PROBLEMS DEVELOP WITH A STUDENT TEACHER

	MEAN	SIGMA	RANGE	N
ID = 07357	1.21	.41	1.00 - 2.00	14

3) STUDENT TEACHERS ARE TIME CONSUMING, REQUIRE MORE WORK FROM TEACHER

	MEAN	SIGMA	RANGE	N
ID = 07358	1.29	.45	1.00 - 2.00	14

4) STUDENTS HAVE PROBLEMS ADJUSTING TO NEW TEACHER

	MEAN	SIGMA	RANGE	N
ID = 07359	1.50	.50	1.00 - 2.00	14

5) TEACHER LOSES CONTACT WITH STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07360	1.29	.45	1.00 - 2.00	14

6) OTHER DISADVANTAGES

	MEAN	SIGMA	RANGE	N
ID = 07361	1.21	.41	1.00 - 2.00	14

CAT MATH TEST 1) TEACHER IS FAMILIAR WITH MATERIAL OF TEST

	MEAN	SIGMA	RANGE	N
ID = 07362	1.43	.49	1.00 - 2.00	14

2) TEACHER REGARDS TEST AS ADEQUATE MEASURE OF STUDENTS MATH ABILITY

	MEAN	SIGMA	RANGE	N
ID = 07363	2.32	.00	1.00 - 3.00	28

DROPPED

	MEAN	SIGMA	RANGE	N
ID = 07364	1.96	.61	1.00 - 3.00	23

TEACHER USE REMEDIAL TECHNIQUE TO TEACH MATH TO STUDNTS WHO CANT READ WELL

	MEAN	SIGMA	RANGE	N
ID = 07365	1.46	.50	1.00 - 2.00	28

TEACHER USES AVOIDANCE TECHNIQUES 1) TEACHER STUDNTS READ TO NON-READER

	MEAN	SIGMA	RANGE	N
ID = 07366	1.32	.47	1.00 - 2.00	28

2) GIVE ORAL DIRECTIONS, EXPLAIN VERBALLY, DISCUSS

	MEAN	SIGMA	RANGE	N
ID = 07367	1.54	.50	1.00 - 2.00	28

3) NO WORD PROBLEMS, TAKE READING OUT OF ASSIGNMENTS

	MEAN	SIGMA	RANGE	N
ID = 07368	1.39	.49	1.00 - 2.00	28

4) OTHER: GAMES, PACKETS, PUZZLES, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07369	1.36	.48	1.00 - 2.00	28

USES BOTH REMEDIATION AND AVOIDANCE TECHNIQUES

	MEAN	SIGMA	RANGE	N
ID = 07370	1.39	.49	1.00 - 2.00	28

AMOUNT OF PROGRESS MADE BY SLOWER STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07371	1.68	.71	1.00 - 3.00	28

DROPPED

	MEAN	SIGMA	RANGE	N
ID = 07372	1.36	.48	1.00 - 2.00	28

TEACHER DIFFERENTIATES PROGRESS AMONG SLOWER STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07373	1.32	.47	1.00 - 2.00	28

TEACHER ATTRIBUTES PROGRESS OR LACK OF PROGRESS TO 1) AMT OF CONTACT

	MEAN	SIGMA	RANGE	N
ID = 07374	1.54	.50	1.00 - 2.00	28

2) AFFECTIVE VARIABLES MOTIVATION CONFIDENCE PRAISE TRUST

	MEAN	SIGMA	RANGE	N
ID = 07375	1.39	.49	1.00 - 2.00	28

3) ACADEMIC FACTORS: METHODS, MATERIALS STUDENT ABILITY

	MEAN	SIGMA	RANGE	N
ID = 07376	1.18	.38	1.00 - 2.00	28

Table 2.2-Continued

4) OTHER REASONS FOR PROGRESS OR LACK OF PROGRESS

	MEAN	SIGMA	RANGE	N
ID = 07377	1.50	.50	1.00 - 2.00	26

TEACHER GAVE REASONS FOR STUDENTS PROGRESS

	MEAN	SIGMA	RANGE	N
ID = 07378	-0.00	-0.00	-0.00 - -0.00	-0

TECHNIQUES FOR TEACHING SPELLING 1) GOING OVER PRONUNCIATION MEANING

	MEAN	SIGMA	RANGE	N
ID = 07379	-0.00	-0.00	-0.00 - -0.00	-0

2) DIVIDING WORDS INTO SYLLABLES

	MEAN	SIGMA	RANGE	N
ID = 07380	-0.00	-0.00	-0.00 - -0.00	-0

3) USING IN SENTENCES, IN CONTEXT

	MEAN	SIGMA	RANGE	N
ID = 07381	-0.00	-0.00	-0.00 - -0.00	-0

4) DOING DRILL, WRITTEN EXERCISES

	MEAN	SIGMA	RANGE	N
ID = 07382	-0.00	-0.00	-0.00 - -0.00	-0

5) DOING PUZZLES, WORD GAMES, USING FLASH CARDS

	MEAN	SIGMA	RANGE	N
ID = 07383	-0.00	-0.00	-0.00 - -0.00	-0

6) DOING ORAL WORK, REPETITION, BOARD WORK, SPELLING BEES

	MEAN	SIGMA	RANGE	N
ID = 07384	-0.00	-0.00	-0.00 - -0.00	-0

7) TEACHING RULES, PHONETIC CONCEPTS

	MEAN	SIGMA	RANGE	N
ID = 07385	-0.00	-0.00	-0.00 - -0.00	-0

8) STRESSING RECOGNITION OF WORK-ROOT

	MEAN	SIGMA	RANGE	N
ID = 07386	-0.00	-0.00	-0.00 - -0.00	-0

9) GIVING TESTS; EITHER PRETEST OR END OF UNIT TEST

	MEAN	SIGMA	RANGE	N
ID = 07387	-0.00	-0.00	-0.00 - -0.00	-0

10) OTHER: GIVING ORAL DIRECTIONS; READ TO STUDENT, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07388	-0.00	-0.00	-0.00 - -0.00	-0

11) USING INDIVIDUAL SEATWORK ONLY TO TEACH SPELLING

	MEAN	SIGMA	RANGE	N
ID = 07389	-0.00	-0.00	-0.00 - -0.00	-0

12) USING WHOLE CLASS ACTIVITIES ONLY TO TEACH SPELLING

	MEAN	SIGMA	RANGE	N
ID = 07390	-0.00	-0.00	-0.00 - -0.00	-0

13) USING BOTH SEATWORK AND CLASS ACTIVITIES TO TEACH SPELLING

	MEAN	SIGMA	RANGE	N
ID = 07391	-0.00	-0.00	-0.00 - -0.00	-0

TECHNIQUES FOR STUDNTS WHO CANT READ WELL GRADE LEVEL 1) USE SPECIAL MTRLS

	MEAN	SIGMA	RANGE	N
ID = 07392	-0.00	-0.00	-0.00 - -0.00	-0

2) TEACHER USES INDIVIDUAL HELP EXTRA ORAL READING SPECIAL ATTENTION

	MEAN	SIGMA	RANGE	N
ID = 07393	=0.00	=0.00	=0.00 = =0.00	=0

3) TEACHER USES PEER TUTORS COLLEGE STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07394	=0.00	=0.00	=0.00 = =0.00	=0

4) TEACHER USES RESOURCE TEACHER, READING SPECIALIST, READING SKILLS LAB

	MEAN	SIGMA	RANGE	N
ID = 07395	=0.00	=0.00	=0.00 = =0.00	=0

5) TEACHER USES AUDIOVISUAL AIDS

	MEAN	SIGMA	RANGE	N
ID = 07396	=0.00	=0.00	=0.00 = =0.00	=0

6) OTHER: GIVES ORAL DIRECTIONS; READ TO STUDENT, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07397	=0.00	=0.00	=0.00 = =0.00	=0

7) TEACHER USES TECHNIQUES TO REMEDIATE READING PROBLEM

	MEAN	SIGMA	RANGE	N
ID = 07398	=0.00	=0.00	=0.00 = =0.00	=0

TEACHER USES PEER TUTORING

	MEAN	SIGMA	RANGE	N
ID = 07399	=0.00	=0.00	=0.00 = =0.00	=0

ADVANTAGES OF PEER TUTORING 1) MAXIMIZES TEACHER TIME AND EFFORT

	MEAN	SIGMA	RANGE	N
ID = 07400	=0.00	=0.00	=0.00 = =0.00	=0

Table 2.2-Continued

2) HAS ACADEMIC ADVANTAGES FOR TUTEE

	MEAN	SIGMA	RANGE	N
ID = 07401	-0.00	-0.00	-0.00 - -0.00	-0

3) HAS AFFECTIVE ADVANTAGES FOR TUTEE

	MEAN	SIGMA	RANGE	N
ID = 07402	-0.00	-0.00	-0.00 - -0.00	-0

4) HAS ADVANTAGES FOR TUTOR BOTH ACADEMIC AND AFFECTIVE

	MEAN	SIGMA	RANGE	N
ID = 07403	-0.00	-0.00	-0.00 - -0.00	-0

DISADVANTAGES OF PEER TUTORING 1)STDTS SKILLS AND KNOWLDG LIMITS EFFCTVNSS

	MEAN	SIGMA	RANGE	N
ID = 07404	-0.00	-0.00	-0.00 - -0.00	-0

2) TUTORING SESSION MAY TURN INTO SOCIALIZING

	MEAN	SIGMA	RANGE	N
ID = 07405	-0.00	-0.00	-0.00 - -0.00	-0

3) TUTOR-TUTEE INTERPERSONAL PROBLEMS MAY ARISE

	MEAN	SIGMA	RANGE	N
ID = 07406	-0.00	-0.00	-0.00 - -0.00	-0

4) PEER TUTOR PENALIZED ACADEMICALLY TAKES TIME FROM OWN WORK

	MEAN	SIGMA	RANGE	N
ID = 07407	-0.00	-0.00	-0.00 - -0.00	-0

TEACHER HAS STUDENTS READ ALOUD

	MEAN	SIGMA	RANGE	N
ID = 07408	-0.00	-0.00	-0.00 - -0.00	-0

Table 2.2-Continued

TEACHER HAS STUDENTS READ ALOUD 1) TO ASSESS ABILITY CATCH PROBLEMS

	MEAN	SIGMA	RANGE	N
ID = 07409	-0.00	-0.00	-0.00 - -0.00	-0

2) TO INSURE THAT ALL UNDERSTAND TO AID POOR READERS

	MEAN	SIGMA	RANGE	N
ID = 07410	-0.00	-0.00	-0.00 - -0.00	-0

3) BECAUSE STUDENTS ENJOY READING ALOUD

	MEAN	SIGMA	RANGE	N
ID = 07411	-0.00	-0.00	-0.00 - -0.00	-0

4) TO FACILITATE PARTICIPATION INCREASE INTEREST

	MEAN	SIGMA	RANGE	N
ID = 07412	-0.00	-0.00	-0.00 - -0.00	-0

5) TO FACILITATE DISCUSSION QUESTIONS

	MEAN	SIGMA	RANGE	N
ID = 07413	-0.00	-0.00	-0.00 - -0.00	-0

6) AS TEACHING TOOL GIVES PRACTICE

	MEAN	SIGMA	RANGE	N
ID = 07414	-0.00	-0.00	-0.00 - -0.00	-0

7) OTHER REASONS TO HAVE STUDENTS READ ALOUD

	MEAN	SIGMA	RANGE	N
ID = 07415	-0.00	-0.00	-0.00 - -0.00	-0

APPROPRIATE COMPOSITION CRITERIA: 1) PUNCTUATION CAPITALS

	MEAN	SIGMA	RANGE	N
ID = 07416	-0.00	-0.00	-0.00 - -0.00	-0

2) SPELLING

	MEAN	SIGMA	RANGE	N
ID = 07417	-0.00	-0.00	-0.00 - -0.00	-0

3) GRAMMAR

	MEAN	SIGMA	RANGE	N
ID = 07418	-0.00	-0.00	-0.00 - -0.00	-0

4) COMPLETE SENTENCES GOOD SENTENCE STRUCTURE

	MEAN	SIGMA	RANGE	N
ID = 07419	-0.00	-0.00	-0.00 - -0.00	-0

5) PARAGRAPHS, TOPIC SENTENCES

	MEAN	SIGMA	RANGE	N
ID = 07420	-0.00	-0.00	-0.00 - -0.00	-0

6) SPECIFIED LENGTH

	MEAN	SIGMA	RANGE	N
ID = 07421	-0.00	-0.00	-0.00 - -0.00	-0

7) OTHER COMPOSITION CRITERIA

	MEAN	SIGMA	RANGE	N
ID = 07422	-0.00	-0.00	-0.00 - -0.00	-0

8) ORGANIZATION,COHERENCE,STRUCTURE,UNITY

	MEAN	SIGMA	RANGE	N
ID = 07423	-0.00	-0.00	-0.00 - -0.00	-0

9) CONTENT,SUBJECT THAT CHALLENGES,INTERESTS STUDENT

	MEAN	SIGMA	RANGE	N
ID = 07424	-0.00	-0.00	-0.00 - -0.00	-0

10) CREATIVITY,ORIGINALITY,SELF-EXPRESSION

	MEAN	SIGMA	RANGE	N
ID = 07425	-0.00	-0.00	-0.00 - -0.00	-0

11) MECHANICS ONLY

	MEAN	SIGMA	RANGE	N
ID = 07426	-0.00	-0.00	-0.00 - -0.00	-0

12) CONTENT-STURCTURE

	MEAN	SIGMA	RANGE	N
ID = 07427	-0.00	-0.00	-0.00 - -0.00	-0

GAMES FUN DEVICES USED 1) FOR INSTRUCTION SOCIAL INTERACTION

	MEAN	SIGMA	RANGE	N
ID = 07428	-0.00	-0.00	-0.00 - -0.00	-0

2) AS INSTURCIONAL SUPPLEMENTS

	MEAN	SIGMA	RANGE	N
ID = 07429	-0.00	-0.00	-0.00 - -0.00	-0

3) FOR PROMOTING SOCIAL INTERACTION GETTING TO KNOW STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07430	-0.00	-0.00	-0.00 - -0.00	-0

4) RARELY DURING THE YEAR

	MEAN	SIGMA	RANGE	N
ID = 07431	-0.00	-0.00	-0.00 - -0.00	-0

WAYS NON-WRITTEN LANGUAGE IS USED TO TEACH 1) ORAL REPORTS : SPEECHES DEBATE

	MEAN	SIGMA	RANGE	N
ID = 07432	-0.00	-0.00	-0.00 - -0.00	-0

Table 2.2-Continued

2) ACTING,ROLE-PLAYING,PANTOMIME

	MEAN	SIGMA	RANGE	N
ID = 07433	-0.00	-0.00	-0.00 - -0.00	-0

3) READING ALOUD STORIES,PLAYS,POETRY

	MEAN	SIGMA	RANGE	N
ID = 07434	-0.00	-0.00	-0.00 - -0.00	-0

4) ART,BULLETIN BOARDS,POSTERS

	MEAN	SIGMA	RANGE	N
ID = 07435	-0.00	-0.00	-0.00 - -0.00	-0

5) OTHER; GAMES,LISTENING STATION

	MEAN	SIGMA	RANGE	N
ID = 07436	1.25	.43	1.00 - 2.00	28

REASON FOR DIFFERES BETWEEN CLASSES OBSERVED: 1) SIZE OF CLASS

	MEAN	SIGMA	RANGE	N
ID = 07437	1.25	.43	1.00 - 2.00	28

2) TIME OF DAY

	MEAN	SIGMA	RANGE	N
ID = 07438	1.11	.31	1.00 - 2.00	28

3) DIFFERENT ABILITY LEVELS DUE TO TRACKING OR ABILITY GROUPING

	MEAN	SIGMA	RANGE	N
ID = 07437	1.50	.50	1.00 - 2.00	28

4) DIFFERENCE IN ABILITY LEVEL: SOME CLASSES BRIGHTER THAN OTHERS

	MEAN	SIGMA	RANGE	N
ID = 07440	1.21	.41	1.00 - 2.00	28

Table 2.2-Continued

5) EXTREMES OF ABILITY W/IN CLASS VERSUS HOMOGENEOUS ABILITY

	MEAN	SIGMA	RANGE	N
ID = 07441	1.50	.50	1.00 - 2.00	26

6) DIFFERENCES IN STUDENT MOTIVATION MATURITY WORK HABITS COOPERATION

	MEAN	SIGMA	RANGE	N
ID = 07442	1.52	.50	1.00 - 2.00	27

7) DIFFERENCES IN BEHAVIOR PROBLEMS,NUMBER OF TROUBLESOME KIDS, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07443	1.50	.50	1.00 - 2.00	28

8) DIFFERENCES IN CLASS PERSONALITY,INTERPERSONAL RELATIONS

	MEAN	SIGMA	RANGE	N
ID = 07444	1.11	.31	1.00 - 2.00	28

9) DIFFERENCES IN TEACHER-STUDENT RELATIONSHIP TEACHER AFFECT

	MEAN	SIGMA	RANGE	N
ID = 07445	1.11	.31	1.00 - 2.00	28

10) DIFFERENCES IN BACKGROUND,SES,HOME ENVIRONMENT

	MEAN	SIGMA	RANGE	N
ID = 07446	1.14	.35	1.00 - 2.00	28

11) NO DIFFERENCES,OR CHANCE ACCOUNTS FOR DIFFERENCES

	MEAN	SIGMA	RANGE	N
ID = 07447	1.14	.35	1.00 - 2.00	28

12) BY SEX AND RACE MAKE-UP

	MEAN	SIGMA	RANGE	N
ID = 07448	1.18	.38	1.00 - 2.00	28

13)OTHER: ROOM IS HOT,; ATTENDANCE PATTERNS,ETC.

	MEAN	SIGMA	RANGE	N
ID = 07449	1.61	.49	1.00 - 2.00	28

STUDENTS RANDOMLY ASSIGNED TO CLASSES AT THIS SCHOOL

	MEAN	SIGMA	RANGE	N
ID = 07450	1.18	.38	1.00 - 2.00	28

TEACHER RESPONSIBILITIES TO DIFF KINDS OF STUDNTS:1) TEACH DOESNT SAY

	MEAN	SIGMA	RANGE	N
ID = 07451	1.39	.49	1.00 - 2.00	28

2) TEACHER VARIES METHODS BUT NOT CURRICULUM

	MEAN	SIGMA	RANGE	N
ID = 07452	1.07	.26	1.00 - 2.00	28

3) TEACHER VARIES CURRICULUM MATERIALS EMPHASIS BUT NOT METHODS

	MEAN	SIGMA	RANGE	N
ID = 07453	1.25	.43	1.00 - 2.00	28

4) TEACHER VARIES BOTH CURRICULUM AND METHODS

	MEAN	SIGMA	RANGE	N
ID = 07454	1.32	.47	1.00 - 2.00	28

5) TEACHER VARIES STRUCTURE DISCIPLINE CONTROL

	MEAN	SIGMA	RANGE	N
ID = 07455	1.04	.19	1.00 - 2.00	28

6) OTHER: TEACHER DOES NOT ADJUST REACH EVERYONE WITH BASICS

	MEAN	SIGMA	RANGE	N
ID = 07456	1.47	.50	1.00 - 2.00	15

7) TEACHER ADJUSTS IN RESPONSE TO ABILITY LEVEL,OR INDIV. DIFF. IN ABILITY

	MEAN	SIGMA	RANGE	N
ID = 07457	1.20	.40	1.00 - 2.00	15

8) TO CLASS PERSONALITY,INTERESTS,ATTITUDES,EMOTIONAL NEEDS ONLY

	MEAN	SIGMA	RANGE	N
ID = 07458	1.33	.47	1.00 - 2.00	15

9) TO BOTH ABILITY AND PERSONALITY OF THE CLASS

	MEAN	SIGMA	RANGE	N
ID = 07459	1.04	.19	1.00 - 2.00	28

FACTORS ABOUT WHICH TEACHER CAN DO LITTLE:1) LACK OF PARENT CONCERN INTRST

	MEAN	SIGMA	RANGE	N
ID = 07460	1.18	.38	1.00 - 2.00	28

2) HOME PROBLEMS,HOME ENVIRONMENT

	MEAN	SIGMA	RANGE	N
ID = 07461	1.18	.38	1.00 - 2.00	28

3) LEARNING DISABILITY,LOW IQ,HYPERACTIVE,NON-READERS,ETC.

	MEAN	SIGMA	RANGE	N
ID = 07462	1.14	.35	1.00 - 2.00	28

4) EMOTIONAL PROBLEMS,ADOLESCENCE,POOR PEER RELATIONSHIPS

	MEAN	SIGMA	RANGE	N
ID = 07463	1.25	.43	1.00 - 2.00	28

5) DISCIPLINE,BEHAVIOR PROBLEMS,DISRUPTIVE,ANTOGONISTICS STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07464	1.43	.49	1.00 - 2.00	28

Table 2.2-Continued

6) LACK OF INTEREST,MOTIVATION:SOME HAVE GIVEN UP;ALIENTATED STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07465	1.14	.35	1.00 - 2.00	28

7) STUDENT PERSONALITY,OR TEACHER-STUDENT PERSONALITY CONFLICT

	MEAN	SIGMA	RANGE	N
ID = 07466	1.11	.31	1.00 - 2.00	28

8) RACIAL,ETHNIC,CULTURAL BACKGROUND AND VALUES

	MEAN	SIGMA	RANGE	N
ID = 07467	1.25	.43	1.00 - 2.00	28

9) CLASSROOM GIVENS: SIZE,TIME OF DAY,AVAILABLE MATERIALS,ETC.

	MEAN	SIGMA	RANGE	N
ID = 07468	1.11	.31	1.00 - 2.00	28

10) CAN ALWAYS TRY TO DO SOMETHING; CAN DOG ATTITUDE

	MEAN	SIGMA	RANGE	N
ID = 07469	1.21	.41	1.00 - 2.00	28

11) OTHER; ABSENCE,SCHOOL POLICIES,GET STUCK W/ PROBLEM KIDS, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07470	1.37	.48	1.00 - 2.00	27

MOST IMPORTANT ATTRIBUTES A TEACHER NEEDS 1) PATIENCE FORTITUDE

	MEAN	SIGMA	RANGE	N
ID = 07471	1.11	.31	1.00 - 2.00	28

2) SENSE OF HUMOR

	MEAN	SIGMA	RANGE	N
ID = 07472	1.18	.38	1.00 - 2.00	28

Table 2.2-Continued

3) ENERGY HEALTH

	MEAN	SIGMA	RANGE	N
ID = 07473	1.07	.26	1.00 - 2.00	28

4) HONESTY SINCERITY

	MEAN	SIGMA	RANGE	N
ID = 07474	1.21	.41	1.00 - 2.00	28

5) GOOD CONSISTENT FAIR DISCIPLINE AND CONTROL

	MEAN	SIGMA	RANGE	N
ID = 07475	1.59	.49	1.00 - 2.00	27

6) UNDERSTANDING CONCERN CARING INVOLVEMENT WITH STUDENTS THEIR PROBLEMS

	MEAN	SIGMA	RANGE	N
ID = 07476	1.29	.45	1.00 - 2.00	28

7) LIKE CHILDREN AND TEACHING DEVOTION ENTHUSIASM DESIRE

	MEAN	SIGMA	RANGE	N
ID = 07477	1.14	.35	1.00 - 2.00	28

8) COMMUNICATION SKILLS

	MEAN	SIGMA	RANGE	N
ID = 07478	1.15	.36	1.00 - 2.00	27

9) FLEXIBILITY OPENNESS TO NEW IDEAS METHODS

	MEAN	SIGMA	RANGE	N
ID = 07479	1.48	.50	1.00 - 2.00	27

10) GOOD KNOWLEDGE OF SUBJECT MATTER

	MEAN	SIGMA	RANGE	N
ID = 07480	1.30	.46	1.00 - 2.00	27

Table 2.2-Continued

11) GOOD TEACHING SKILLS ABILITY TO EXPLAIN PREPARE MOTIVATE

	MEAN	SIGMA	RANGE	N
ID = 07481	1.14	.35	1.00 - 2.00	28

12) CONCEPT OF APPROPRIATE TEACHER/STUDENT RELATIONSHIP

	MEAN	SIGMA	RANGE	N
ID = 07482	1.26	.44	1.00 - 2.00	27

associated with a decrement in attitudes and achievement, especially in classes of low average ability.

Comparison of Cognitive and Affective Math Results

One aspect of the teacher self-report results for math classes is the relatively high correspondence between results with respect to achievement and student attitude. Tables 2.3 through 2.7 include 25 variables that had similar relationships with these two different product measures. (Seven of these included interactions with either attitude or achievement, but when interaction occurred, the overall trend was the same for both achievement and attitude.)

Teachers whose classes had high average gains in math achievement were also rated high (in generalized likability) by students. It is not surprising then that many teacher characteristics or self-reported practices which were also associated with high math achievement were associated with high student ratings of the teacher. None of the pairs of tests of relationships resulted in opposite or contrasting findings with respect to achievement and attitude, i.e., self-report variables associated with high achievement were never associated with negative student attitude toward teachers in our math sample. The findings for both attitude and achievement will be grouped and discussed under several headings or categories. Variable numbers accompany the variable labels to facilitate reference to the tables.

Instructional Organization

Table 2.3 shows findings with respect to instructional organization. In general, results favor math teachers with reported commitments to a structured, whole-class, teacher- and textbook-centered approach. The following variables were both associated with high average achievement:

06014 Teachers report spending high percentage of time teaching the class as a whole; and

07255 Teachers report that almost all class discussion involves whole class.

Teachers report spending a high percentage of time teaching subgroups (Variable 06013) was negatively related to student ratings of the teacher. The implication is for active teaching focused on the class as a whole, not small groups or seatwork.

Teachers think a high percentage of class time should be spent in class discussion (Variable 06008) was related positively to achievement, but reported preference for use of detailed lecture (Variable 07064) was associated with low achievement and low student ratings of the teacher.

Consistent with findings for a whole-class approach were results relating to ability grouping. Teachers' use of ability groups with different assignments was associated with low achievement and low student liking of teachers (07021 and 07025). Results were more positive for individualizing, however. Teachers cope with different ability levels in class by differential testing, grading, and expectations (07007) was positively related to achievement; and Teachers individualize only (do not group) (07024) was positively related to attitude.

There were a number of interactions with student attitudes which bear mentioning. High-ability students appeared to like classes where teachers indicated high expectations for performance. The following four variables show patterns of positive relationships for the high-ability students, but negative ones (or none) for low-ability students.

06010 and 06011 Teachers prefer a high level of errorless performance in class discussions and seat work;

07256 Teachers report use of frequent class discussion; and

06001 Teachers expect high percentage of students to master the curriculum.

One interpretation here is that teachers who maintain high expectations and perhaps a rapid pace in their classrooms are able to produce exciting and interesting class experiences with high-ability students, but lose the low-ability students. Perhaps low-ability students are not able to cope quite as well in classes where teachers hold these kinds of expectations.

Variable 07001, Teachers report that having a variety of ability levels in one room is a problem, was associated with low student ratings of the teacher for both ability groups. Interpretation of this finding is difficult, especially in view of results obtained for teacher self-reports of strategies they use to cope with range of ability in their classes. Variable 07267, Teachers report that class discussions have disadvantages because the discussions do not go well or get misdirected, was related to low student ratings among low-ability students only. Possibly this indicates that at least in low-ability classes, teachers have not had much success in coping with class discussion and have not been able to bring this off effectively, hence, the negative relationship for low-ability students for this variable.

Two variables suggest that attempts to water down the curriculum, or slow the pace, may be negatively related to student attitude for high-ability students:

07008 Teachers cope with different ability levels in class by using a whole class approach and teaching to the average; and

07002 Teachers cope with different ability levels just by dividing up the class.

These show negative relationships with high-ability students' attitudes. The findings for low-ability students, however, are mixed. In some cases, the suggestion is that teaching to the middle of the class and dividing up the class is positively related to attitudes among low-ability students but in other cases, the indications are that they are not. For variables 07008, 07002, and 07010 the findings for lows are mixed.

In summary, a number of findings related to instructional organization show effects for achievement. These tend to suggest that teachers who teach the whole class and do not divide the class into smaller groups have a positive effect on achievement. On the other hand, teachers' reports of grouping and individualizing in some way were negatively related to student achievement overall. With respect to students' attitudes, teachers' reports of grouping of any sort tends to have negative relationships with student attitudes. The teachers' reports of relative lack of success with using class discussions also was associated with low attitudes, particularly for low-ability students. A final suggestion is that high expectations tend to be facilitative for high-ability students' attitudes, but not for low-ability students' attitudes. One possibility is that high-ability students are able to master curriculum requirements much more quickly; slowing down the lesson pace or going back to reteach low-ability students may result in boring and uninteresting classes. On the other hand, high expectations and quick pacing may tend to lose low-ability students. As reports of their attitudes suggest, these kinds of situations may be highly failure-laden and tension-producing for the lows.

Table 2.3

Variables Related to Math Achievement and Student Attitude

Variable Number	Variable Description	Relationship with Achievement		Relationship with Attitude	
		Main	Interaction	Main	Interaction
Instructional Organization					
06014	Teachers report spending high percentage of time teaching to class as a whole	+			
07255	Teachers report that almost all class discussions involve the whole class	+			
06013	Teachers report spending a high percentage of time teaching subgroups			-	
06008	Teachers think a high percentage of class time should be spent in questions, discussions	+			
07064	When presenting new material teachers explain different ways; use small steps, repeat, give detailed lectures	-		-	
07021	Teachers use ability groups given different assignments	-		-	
07025	Teachers group only (do not individualize)			-	
07007	Teachers cope with different ability levels in class by differential testing, grading, expectations	+			
07024	Teachers individualize only (do not group)			+	
06010	Teachers prefer high level of errorless performance in class discussions				Hi + Lo -

Table 2.3-Continued

Variable Number	Variable Description	Relationship with Achievement: Main	Relationship with Achievement: Interaction	Relationship with Attitude: Main	Relationship with Attitude: Interaction
Instructional Organization					
06011	Teachers prefer high level of errorless performance in seatwork				Hi + Lo -
07256	Teachers report use of frequent class discussion				Hi + Lo 0
06001	Teachers expect high percentage of students to master curriculum				Hi + Lo -
07267	Teachers cite following disadvantage of class discussions: discussion may get misdirected, petty, trivial				Hi 0 Lo -
07001	Teachers think that several ability levels in one room presents a problem			-	
07008	Teachers cope with different ability levels in class by whole class approach, teaching to middle				Hi - Lo +
07002	Teachers cope with different ability levels in class by ability grouping (only)				Hi - Lo +
07010	Teachers cope with different ability levels in class in some active way rather than avoiding the problem				Hi 0 Lo -

Evaluation Practices

Table 2.4 shows results with respect to reported evaluation practices. Math teachers' reports that they assess student mastery levels by using their own self-made diagnostic tests or by using standard diagnostic tests were

positively related to achievement, particularly for high students (07042, 07040). On the other hand, teachers who report assessing student achievement at the beginning of the year by checking personal files or by asking the counselor or other teachers (07037) showed lower student achievement. Finding out causes of learning problems by contacting parents (07049) was also negatively associated with student achievement. This finding makes sense if one can make the assumption that teachers have enough knowledge about their students for them to make these decisions for themselves. All of these findings suggest that experienced math teachers who are likely to get the greatest gains from their students tend to rely on their own knowledge of what the students need to know or on objective measures.

The findings for Variables 06017 and 06107 suggest that teachers who tend to be rated highly by students are those who use and rely on standardized tests. Findings for Variable 06058 are somewhat contradictory, however. (See discussion of this variable in Table 2.7, Teacher Characteristics.) Frequent testing (07027) was associated with positive attitudes for high-ability students, but not for lows. The suggestion here is that highs may have benefited from the practice of test-taking, but lows may have met the test-taking situation with anxiety and inattention. On the other hand, reports of regular use of a curve in grading (07062) had the reverse association. Regular use of a curve was negatively related to attitude among high-ability students, but positively related to lows' attitudes. It seems reasonable that lows may tend to benefit from a curve, whereas highs do not necessarily.

Teachers' reports that they use a step-by-step process to diagnose learning problems (07051) and their reported use of correctly done seatwork to measure their success (06025), both showed positive relationships with student attitudes. This suggests that the more realistic a teacher is about measuring

the products of learning objectively, the more likely that students' attitudes will be positive. On the other hand, teachers' reports of measuring their success by such extraneous factors as students' beginning their work quickly after a lecture or explanation were negatively related to achievement (06023). Consistent with this general pattern is the finding that when well-liked teachers use ability grouping, the groups are based on some rational system and assessment of work (07013). Teachers' measuring their success by slower students' appearance of understanding was related to positive attitudes among low-ability students, but to negative attitudes among high-ability classes (06024). The report that rules and procedures in each of the two observed classes differ according to academic expectations for students (07112) shows positive relationships for high-ability students' achievement, but no relationships for low-ability students' achievement. This suggests that certain techniques may be used effectively in classes where students have high ability levels, but these same techniques may be ineffective for lows. It is also possible that changing rules and procedures according to academic expectations for students is a vehicle for the expression of low expectations for low students.

In general, results with respect to evaluation practices indicate that effective math teachers take their roles as diagnosticians and evaluators seriously. They report relying on self-made or standardized tests for student pretesting and diagnosing, rather than depending on less objective data from counselors, other teachers, or even parents. Their responses also imply that they put some time and effort into test preparation (07034, 07033) and diagnosing learning problems. While all of the findings do not support this generalization, the vast majority nevertheless did fit this pattern.

Table 2.4

Variables Related to Math Achievement and Student Attitude

Variable Number	Variable Description	Relationship with Achievement: Main	Relationship with Achievement: Interaction	Relationship with Attitude: Main	Relationship with Attitude: Interaction
Evaluation Practices					
07042	At beginning of year teachers find students' achievement levels by using self-made diagnostic tests	+			
07040	At beginning of year teachers find students' achievement levels by using standard diagnostic tests		Hi + Lo -		
07037	At beginning of year teachers find students' achievement levels by checking personal files; ask counselor, other teachers	-			
07049	Teachers find cause of learning problems by contacting parents	-			
06017	Teachers believe that achievement test scores give more valuable information about students than past grades or other more subjective evaluations			+	
06107	Teachers agree that IQ tests merely label students and should not be used	-			
06058	Teachers rate ability to equip students to do well on standardized tests as important to good teaching			-	
07027	Teachers give tests frequently (excluding spelling)				Hi + Lo -

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Table 2.4-Continued

Variable Number	Variable Description	Relationship with Achievement Main	Relationship with Achievement Interaction	Relationship with Attitude Main	Relationship with Attitude Interaction
Evaluation Practices					
07062	Teachers report regular use of curve in grading				Hi - Lo +
07051	Teachers report use of step-by-step process to diagnose learning problems			+	
06025	Teachers measure their success by correctly done seatwork			+	
06023	Teachers measure their success by students beginning work immediately	-			
07013	When teachers use ability grouping, groups are based on observation, assessment of work			+	
06024	Teachers measure their success by slower students appearing to understand				Hi - Lo +
07112	Teachers report that rules and procedures differ among their classes in terms of academic expectations for students		Hi + Lo 0		
07034	Teachers report disadvantages of self-made tests: takes much time, effort, work to make a test	+		+	
07033	Teachers report disadvantages of self-made tests: validity, reliability; do not cover all skills	-		-	

Classroom Management

Table 2.5 summarizes relationships with respect to classroom management. Math teachers who reported preferring a fairly structured classroom environment and accepting personal responsibility for management and discipline in their classes had higher achievement and positive student attitudes. Posting or otherwise visually clarifying class rules (07115) was positively related to achievement and attitude. Use of some student input into class rules at the beginning of the year (07117) was also associated with positive student ratings of teacher. Teachers' emphasis on students' coming to class prepared (07085) was associated with high student ratings of teachers and high achievement among low-ability classes (though not significantly for high-ability classes). Teachers' laxity in enforcing due dates for assigned work (07098) was associated with low student ratings, and reported enforcing of due dates (07099) with high student ratings of teachers. However, enforcing a time limit for missed work (07103) had differential relationships to attitudes for the two ability groups. There was a negative relationship for highs, but a positive one for lows. The opposite was true for achievement: When teachers reported giving leeway for "excused" late papers (07096), highs tended to benefit, but lows did not.

Teachers' preference for a structured system for students' contributions to class discussions was supported by Variables 07146 and 07148. In addition, teachers' perception of a role consistent with a structured class (07245) was positively related to student attitudes toward teachers, suggesting that students may be more comfortable when guidelines are set which can ensure their chances to participate.

Results with respect to fixed versus flexible seating arrangements were unclear. Teachers' belief that maximal learning occurs with fixed seating

(07137) was associated with high achievement and attitude. It should be noted, however, that Variable 07128 describing use of flexible (rather than fixed) seating in class was not significantly related to either product measure. Results with respect to Variables 07134 and 07135 were difficult to interpret since they appear contradictory.

Teachers' reported self-reliance with respect to discipline in class was strongly supported. Keeping students after class or after school (07229) and contacting parents (07230) were both positively related to student ratings of the teachers. Using special privileges (07214, 07215) as rewards was related to high achievement among high-ability students, but not among low-ability students. There were no significant results with variables describing other strategies: talking to or warning students; student isolation; referral to counselors, principals, school detention, or school suspension.

Effective teachers view discipline as a complex issue (06006) and use positive, well-planned approaches to solving problems. Reported use of a step-by-step discipline process by teachers (07235) was associated with both high achievement and high student ratings. Additionally, reported use of reality therapy techniques (07226) was positively associated with attitudes. In contrast, teachers' belief that they can do little about discipline problems (07464) was negatively related to student attitudes, and teachers' seeking outside help to deal with students who do not pay attention (07173) was also negatively associated with achievement. Teachers' reporting that fair, consistent discipline was the most important attribute of the effective junior high teacher (07475) showed a positive association with attitude.

The findings for these self-report variables suggest that effective classroom control and discipline are critical factors in student attitudes. The teachers' willingness to face discipline problems and to develop tech-

niques to cope with them may have a direct influence on the climate of their classrooms. Instances where teachers are effectively in charge may be crucial to providing a safe, calm learning environment for all students.

Other results with respect to student participation and behaviors were less meaningful (or harder to interpret because of interactions with ability levels of students), but tended to support the generalization that successful math teachers are active, self-reliant classroom managers: 06059, 07093, 07126, 07159, 07161, 07162, 07165, 07168, 07171, and 07209.

Table 2.5

Variables Related to Math Achievement and Student Attitude

Variable Number	Variable Description	Relationship with Achievement		Relationship with Attitude	
		Main	Interaction	Main	Interaction
Classroom Management					
07115	Teachers organize classroom at beginning of year by using visual aids; pass out or post rules	+		+	
07117	Teachers organize classroom at beginning of year by using student input to establish and enforce rules			+	
07085	Class rules include students must come prepared: bring supplies, homework, materials		Hi 0 Lo +	+	
07098	Teachers set deadlines beyond original due date for homework; loose on due dates			-	
07099	Work is due on due date			+	
07103	Teachers set a time limit for turning in missed work				Hi - Lo +

Table 2.5-Continued

Variable Number	Variable Description	Relationship with Achievement: Main	Relationship with Achievement: Interaction	Relationship with Attitude: Main	Relationship with Attitude: Interaction
Classroom Management					
07096	Teachers distinguish between excused and unexcused absences in accepting late papers		Hi + Lo -		
07146	Teachers report problem with students not raising hands, blurting out answers	-			
07148	Teachers cope with call out problems by telling students to raise hand, wait, take turns			+	
07245	Teachers believe to establish credibility one must maintain teacher role: know subject; be correct in manner			+	
07137	Teachers believe that maximal learning occurs with fixed seating	+		+	
07128	Teachers report use of flexible seating arrangement				
07134	Teachers feel that students are more happy and comfortable with flexible seating than with fixed seating	+			
07135	Teachers feel that cliques form with flexible seats; fixed seating breaks them up			+	
07229	Teachers report use of keeping after school, after class to handle disruptive students			+	
07230	Teachers report use of contacting parents, sending notes home for handling disruptive students		Hi + Lo -	+	

Table 2.5-Continued

Variable Number	Variable Description	Relationship with Achievement Main	Relationship with Achievement Interaction	Relationship with Attitude Main	Relationship with Attitude Interaction
Classroom Management					
07214	Teachers report use of out-of-class privileges as reward for good work and behavior		Hi + Lo -		
07215	Teachers report use of in-class privileges (games films, talk, no test or homework, etc.) as motivating strategy		Hi + Lo -		
06006	Teachers think discipline problems are due to factors other than student lack of interest in subject matter or laxity in enforcing rules	+		+	
07235	Teachers report use of step-by-step process for handling disruptive students	+		+	
07226	Teachers report use of reality therapy, contracts to handle disruptive students			+	
07464	Teachers believe that they can do little about discipline, behavior problems, disruptive, antagonistic students			-	
07173	Teachers deal with students not paying attention by seeking outside help: parents, counselors, office	-			
07475	Teachers cite good, consistent, fair discipline and control as most important attribute of effective junior high teacher			+	

Table 2.5-Continued

Variable Number	Variable Description	Relationship with Achievement Main	Relationship with Achievement Interaction	Relationship with Attitude Main	Relationship with Attitude Interaction
Classroom Management					
06059	Teachers believe knowing and using behavior modification techniques is important to good teaching	-			
07093	Class rules include expect mutual respect, courtesy				Hi - Lo +
07126	Teachers indicate willingness to try greater student involvement in making and enforcing rules	-			
07159	Teachers deal with students who never answer when called on by going on to another student		Hi + Lo -		
07161	Teachers deal with students who never answer when called on by having private conference to discuss problem		Hi + Lo -		
07162	Teachers deal with students who never answer when called on by eventually ignoring them, leaving them alone after other strategies fail	+			
07165	Teachers report that student not answering when called on is not a problem, rarely happens			-	
07168	Teachers deal with students who do not pay attention by calling on them, asking them a question			+	
07171	Teachers deal with students not paying attention by using nonverbal intervention	-		-	

Table 2.5-Continued

Variable Number	Variable Description	Relationship with Achievement: Main	Relationship with Achievement: Interaction	Relationship with Attitude: Main	Relationship with Attitude: Interaction
	Classroom Management				
07209	Teachers report that they consistently reward good behavior and good work				Hi + Lo 0

Teaching Strategies

Table 2.6 summarizes findings for teachers' reports of teaching strategies used. Teachers believe ability to engage students in peer teaching is important to good teaching (06047) was associated with low achievement and low student ratings of teachers. Also, agreement that letting faster students help slower ones is a good practice (06083) was negatively related to achievement, but reports of coping with different ability levels in class by peer tutoring, allowing students to work together (07006) indicated an interaction with entering ability, suggesting that peer tutoring may be more positively related to achievement in high-ability math classes than in low-ability math classes.

In general, indications that teachers favored or thought they favored preferential treatment for some students, groups, or classes were associated with low student ratings or low achievement or both, particularly for low-ability classes. Self-reports that teachers paid more attention to or asked more questions of some students or some groups (07272, 07275, 07016) or indications that teachers preferred some classes or treated some classes or groups differently than others, generally were related negatively to achievement

and/or attitude (07440, 07442, 07445, 07111, 07452, 07454, 07455). Only two items appeared to contradict this general trend (07451 and 07017).

Certain criteria that teachers reported using in choosing and emphasizing some teaching objectives over others were significantly related to achievement or student ratings or both. Judgments that some teaching objectives are less important because students have already had the material or can get it later (07318) were associated with low achievement and attitude. Decisions based on perceived need for remediation (07304) also appeared to be negatively associated with achievement. However, decisions based on criteria related to district curriculum guidelines (07305) or on preference for teaching concepts rather than memory work (07317) were related to high class mean achievement. Reported emphasis on some teaching objectives because they will be useful to students in later life (07302) was associated with high student ratings of teachers for low-ability students only. Variable 07314, Teachers assign less importance to some objectives because they are less useful for later life, was related to positive attitudes for both groups.

The preferred curriculum suggested by our data seems to be a "no-frills" program featuring regular textbooks and homework, particularly for lower-ability classes. Teachers' reluctance to rely strongly on the text (06091) was associated with low achievement at all ability levels, and low student ratings of teachers among low-ability classes. Teachers' reported use of the district-adopted math text (07285) was related negatively to student ratings of the teachers among high-ability classes, but positively among low-ability classes. Teachers' reported use of easier materials in addition to the adopted text (07287) was related positively to student attitude in higher-ability classes, but not in lower-ability classes. Preference for regular textbooks appears to be an important correlate of achievement by low-ability

students. One interpretation is that this ce served to focus low-ability students on the m erial emphasized i. he achievement test. Frequent assignment of homework (06015) related positively to student ratings of teachers overall. "Dressing up the lesson" to increase interest (06019) was associated with low achievement, particularly for high-ability classes; and teachers' assumption of student enjoyment of lesson without any special "dressing" (06020) was related to high achievement overall and especially among high-ability classes.

Teachers' self-reports of strategies used to motivate students had varying relationships with student attitude and achievement according to the ability levels of classes. Reports of frequent use of public recognition (06061) were related to positive attitudes among high-ability classes, but negative attitudes among low-ability students. Reported use of written comments on students' papers (06066) was associated with high ach ement among high-ability students, but low achievement among low-ability classes. Other variables describing strategies for dealing with nonworkers and nonvolunteers (07190, 07154, 07196) also showed interactions with achievement and entering ability. Only one variable describing motivation strategies had similar results with both low- and high-ability classes: Variable 06103, Teachers agree that giving failing grades does little to promote achievement, was associated with low student ratings of teachers.

Six statistically significant variables described strategies for helping students with special academic needs, especially remediation. Two results appeared to support referral to trained personnel:

07058 Teachers report referring students who need remediation or enrichment to resource teacher or other special help (positive relationship with achievement); and

07365 Teachers report use of remedial techniques to teach math to non-readers (negative relationship with achievement).

Interpretation of other "remediation" results was complicated by interactions with entering class ability: 07052, 07079, 07080, and 07081.

Table 2.6

Variables Related to Math Achievement and Student Attitude

Variable Number	Variable Description	Relationship with Achievement		Relationship with Attitude	
		Main	Interaction	Main	Interaction
Teaching Strategies					
06047	Teachers believe ability to engage students in peer teaching is important to good teaching	-		-	
06083	Teachers agree that letting faster students help slower ones is a good strategy	-			
07006	Teachers cope with different ability levels in class by peer tutoring; allow students to work together		Hi + Lo -		
07272	Teachers report targeting questions: more to brighter, more to slower, etc.	-			
07275	Teachers report that they direct more questions to brighter students		Hi 0 Lo -	-	
07016	Teachers report that they target attention to special groups			-	
07440	Teachers account for differences between their two observed sections by differences in ability level: some classes are brighter than others			-	

Table 2.6-Continued

Variable Number	Variable Description	Relationship with Achievement Main	Relationship with Achievement Interaction	Relationship with Attitude Main	Relationship with Attitude Interaction
Teaching Strategies					
07442	Teachers account for differences between their two observed sections by differences in student motivation, maturity, work habits, cooperation		Hi + Lo -		
07445	Teachers account for differences between their two observed sections by differences in teacher-student relationship, teacher affect			-	
07111	Teachers report that rules and procedures differ among their classes in that class structure is determined by student behavior	-			
07452	Teachers report that they vary methods but not curriculum in adjusting strategies for different class makeup				Hi + Lo -
07454	Teachers report that they vary both curriculum and methods in adjusting strategies for different class makeup	-			
07455	Teachers report that they vary structure, discipline, control in adjusting strategies for different class makeup				Hi 0 Lo -
07451	Teachers report making unspecified adjustments in teaching strategies for different class makeup			+	

Table 2.6--Continued

Variable Number	Variable Description	Relationship with Achievement: Main	Relationship with Achievement: Interaction	Relationship with Attitude: Main	Relationship with Attitude: Interaction
Teaching Strategies					
07017	Teachers report that they pay more attention to high-ability groups, as opposed to low	+			
07318	Teachers assign less importance to certain objectives because students don't nee it now; already had it; get it later	-		-	
07304	Teachers concentrate on certain skills because they are needed most, have been neglected; were far behind	-			
07305	Teachers concentrate on certain objectives because of district guidelines, standard objectives	+			
07317	Teachers assign less importance to certain objectives because memorizing is not as important as understanding concepts	+			
07302	Teachers concentrate on certain skills because they are important for later life				Hi 0 Lo +
07314	Teachers assign less importance to certain objectives because they are less useful for later life			+	
06091	Teachers agree that too much reliance on the text makes effective teaching harder	-		-	Hi + Lo -
07285	Teachers use district-adopted math text				Hi - Lo +

Table 2.6-Continued

Variable Number	Variable Description	Relationship with Achievement Main	Relationship with Achievement Interaction	Relationship with Attitude Main	Relationship with Attitude Interaction
Teaching Strategies					
07287	Teachers report use of easier material in addition to the adopted text				Hi + Lo -
06015	Teachers report assigning frequent homework			+	
06019	Teachers try to dress up lesson to make it more interesting	-	Hi - Lo 0		
06020	Teachers assume that students will enjoy lessons without special "dressing"	+	Hi + Lo 0		
06061	Teachers report frequent use of public recognition as a motivation strategy				Hi + Lo -
06066	Teachers report using written comments on students' papers as motivators		Hi + Lo -		
07190	Teachers deal with students who won't do any work by nagging, threatening, keeping at them, praising them		Hi + Lo 0		
07154	Teachers deal with students who never volunteer by calling on them; using patterned turns		Hi - Lo +		
07196	Teachers deal with students who won't do any work by failing them, forgetting them, doing nothing				Hi - Lo 0
06103	Teachers agree that giving failing grades does little to promote achivement			-	
07058	Teachers refer students who need remediation or enrichment to resource teacher or other special help	+			

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Table 2.6-Continued

Variable Number	Variable Description	Relationship with Achievement Main	Relationship with Achievement Interaction	Relationship with Attitude Main	Relationship with Attitude Interaction
Teaching Strategies					
07365	Teachers report use of remedial techniques to teach math to nonreaders	-			
07052	Teachers provide supplementary packets, workbooks, kits for students who need remediation or enrichment				Hi + Lo -
07079	When students try to hide the fact that they are lost, teachers leave it up to students to seek help, take initiative		Hi + Lo 0		
07080	When students try to hide the fact that they are lost, teachers get help, information from counselor, principal, parent; check records				Hi 0 Lo -
07081	Teachers report that students' trying to hide their confusion is not a problem; doesn't happen much				Hi - Lo +

Teacher Characteristics

Results with respect to teacher characteristics are presented in Table 2.7. Math teachers who reported valuing affective relationships with their students were likely to be rated more positively than teachers who do not. The following teachers' opinions were related to positive student attitudes:

07220 Becoming close to students is a plus for building rapport;

07221 Social relationship with students is more important than academic progress; and

07246 To establish credibility one must show trust, caring.

Teachers who reported that they carefully avoid embarrassing confused students (07075) and teachers who expressed charitable, uncritical attitudes toward unmotivated students (07181, 07178, 07188) were also rated positively by their students. However, teachers who overemphasized affective aspects of the teaching role (06096) were rated negatively by their students.

Some of our results imply that teachers are aware of their teaching effectiveness and of whether or not they are liked by their students. They appear to respond to some questions and interview items accordingly (and sometimes defensively). For example, Teachers think that students' ratings of classes and teachers are valid (07249) was related positively to both achievement and attitude. Teachers believe that groups and individuals in class accomplished desired objectives for the year (07288) was associated with positive ratings of teachers and high achievement among low-ability students. (However, there was no significant relationship with achievement among high-ability classes.) Teachers who agreed that it is natural for students to resist teachers (06079) and that teaching should be evaluated in its own right regardless of what is learned (06093) were both associated with low student ratings. This may suggest that teachers' lack of confidence and control could be detrimental to student attitudes.

A number of significant relationships with respect to teachers' attitudes toward student teachers appeared, but the results are difficult to interpret and do not appear to be useful. (See Variables 07349, 07354, 07355, 07357, 07358, 07359, and 07360.)

Results with respect to teachers' attitudes about busing included several interactions with mean entering-ability of classes. Positive attitudes toward busing were related to high achievement among low-ability classes and low achievement among high-ability classes. However, teachers who saw bused students as angry and resentful were associated with low achievement and low attitude in both low- and high-ability classes. Concern for the neighborhood school concept appeared to be related to positive achievement overall. The significiant variables related to busing were Variables 07321, 07326, 07327, 07331, 07332, 07333, and 07334.

When asked to describe factors in classes and individuals about which teachers can do nothing, teachers' responses referring to racial or cultural backgrounds of students (07467) were positively related to both achievement and student ratings of the teacher. Responses concerning students' emotional or psychological problems (07463) were associated with high student ratings of teachers. The meaning of these relationships is unclear. Responses indicating that teachers can always try (or expression of a "can do" attitude, Variable 07469) were positively related to achievement.

There were significant relationships between what teachers expected of parents and students' achievement and attitudes. Teachers' reported expectation that parents should tutor students (06029) was associated with low achievement gains in math. Teachers who believed that parents were best included in the extracurricula activities (06032) were rated low by students, whereas teachers who said parents' best contribution was establishing a warm, positive home environment (06035) were rated high by students.

Variable 07139, Teachers believe that substitute teachers should be given lesson plans and other aids, was related to high class mean achievement and high student ratings of teachers. Teachers' reported reluctance to help sub-

stitutes carry on with regularly scheduled class assignments (07144) was associated with low achievement. Teachers' attitudes toward substitutes in their classroom may be related to teachers' attitudes concerning the importance of constructive use of class time.

Teachers' unwillingness to work with school counselors (07342) was related to low student ratings of teachers. Two other variables negatively related to student liking of teachers were mention of patience and mention of energy and health as most important attributes of junior high teachers (07471 and 07473). It is not surprising that teachers experiencing difficulties relating to junior high school students would mention patience and energy as necessary to the job.

Teachers' level of postgraduate education was negatively related to achievement in math classes (06108). According to our results, the closer teachers came to achieving a graduate degree, the lower their mean class achievement gains were likely to be. These results cannot be explained by years of teaching experience (or presumably, by age). No significant results with respect to achievement were obtained for three of the experience variables. However, years of teaching experience (06110), years teaching in junior high school (06111), and in math (06112) were negatively related to the student ratings of the teachers, at least in lower ability classes.

A number of variables pertained to teachers' assumptions and beliefs about teaching/learning. Results with respect to these variables contained many contradictions, especially when considered together and in contrast to results obtained for variables describing the practices and strategies teachers reported they use. These contradictory results suggest inconsistencies between teachers' avowed ideals and beliefs about teaching and what

they do in the classroom. The following variables were all related to low student ratings of teachers:

06058 Teachers believe ability to equip students to do well on standardized tests as important to good teaching;

06051 Teachers believe ability to give clear instructions as important to good teaching;

06082 Teachers agree that unless explanations are short, students lose interest; and

06090 Teachers believe that "practice makes perfect" sums up teaching.

In addition, the following opinions were related to low student ratings of the teacher in low-ability classes but had opposite or no relationship in high-ability classes.

06041 Teachers believe ability to organize classroom as important to good teaching;

06053 Teachers believe ability to motivate students to enjoy schoolwork as important to good teaching;

06076 Teachers agree that without proper training students' mental abilities remain undeveloped;

06081 Teachers agree that students should expect schoolwork to be interesting; and

06097 Teachers agree that teachers should use some of the students' slang.

Three opinions or assumptions about teaching were related negatively to achievement:

06059 Teachers believe knowing and using behavior modification techniques is important to good teaching;

06092 Teachers agree teachers should make it a point to be wrong occasionally then acknowledge it;

07374 Teachers feel that student progress could be improved by greater teacher-student concact.

Other variables positively related to achievement in high-ability classes but not in low-ability classes were:

06037 Teachers believe ability to explain or show how an important part of teaching;

06071 Teachers agree that teachers should teach subjects, not attitudes; and

06073 Teachers agree that schooling should primarily train students to handle social adjustment.

There were a number of inconsistencies in the above results. Compare, for example, Variables 06071 and 06073. Also compare Variable 06058 with findings reported for "Evaluation Practices," in Table 2.4 of this chapter. Such contradictions make interpretation of results with respect to teachers' assumptions and beliefs about teaching less useful than findings for other teacher characteristics and teachers' self-reports of teaching practices.

Table 2.7

Variables Related to Math Achievement and Student Attitude

Variable Number	Variable Description	Relationship with Achievement		Relationship with Attitude	
		Main	Interaction	Main	Interaction
Teacher Characteristics					
07220	Teachers feel that becoming close to students is a plus for building rapport			+	

Table 2.7-Continued

Variable Number	Variable Description	Relationship with Achievement		Relationship with Attitude	
		Main	Interaction	Main	Interaction
Teacher Characteristics					
07221	Teachers feel that social relationship with students is more important than academic progress			+	
07246	Teachers believe that to establish credibility one must show trust, caring, respect for students	+		+	
07075	When students try to hide the fact that they are lost teachers report they avoid embarrassing; build trust			+	
07181	Teachers' view of unmotivated students: emotional, personal adjustment problems; physical disability, etc.		Hi 0 Lo +	+	
07178	Teachers' view of unmotivated students: poor self-concept, lack of confidence, fear of failure			+	
07188	Teachers' view of unmotivated students: teachers are at fault; failure to motivate, improve students' self-image, or work with them			+	
06096	Teachers agree that teacher's personality is the most important qualification			-	
07249	Teachers think that students' ratings of classes and teachers are valid	+		+	
07288	Teachers believe that groups, and individuals in class accomplish desired objectives		Hi 0 Lo +	+	

Table 2.7-Continued

Variable Number	Variable Description	Relationship with Achievement Main	Relationship with Achievement Interaction	Relationship with Attitude Main	Relationship with Attitude Interaction
Teacher Characteristics					
06079	Teachers agree it is natural for students to resist teachers.			0 -	
06093	Teachers agree that teaching should be evaluated in its own right regardless of what is learned			-	
07349	Teachers report they have had a student teacher			+	
07354	Teachers cite advantage of having a student teacher: good for kids to be exposed to a new person; different techniques	-			Hi - Lo +
07355	Teachers cite advantage of having a student teacher other than those listed (07350-07354)				Hi + Lo -
07357	Teachers cite disadvantage of having a student teacher: discipline problems develop	+			
07358	Teachers cite disadvantage of having a student teacher: student teachers are time consuming, a lot of work		Hi 0 Lo +	+	
07359	Teachers cite disadvantage of having a student teacher: students have problems adjusting to new teacher	-		-	
07360	Teachers cite disadvantage of having student teacher: teacher loses contact with students	+			

Table 2.7-Continued

Variable Number	Variable Description	Relationship with Achievement Main	Relationship with Achievement Interaction	Relationship with Attitude Main	Relationship with Attitude Interaction
	Teacher Characteristics				
07321	Teachers feel that busing achieves desired goals for minorities		Hi - Lo +		
07326	Teachers cite advantage to busing other than those listed (07322-07325)		Hi - Lo +		
07327	Teachers cite as disadvantage to busing: time spent on buses makes kids tired, upset; have to come so far				Hi 0 Lo -
07331	Teachers cite as disadvantage to busing: destroys neighborhood concept; kids don't identify with any school	+			
07332	Teachers see as disadvantage to busing: bused kids feel angry, resentful; hold negative attitudes	-		-	
07333	Teachers see as disadvantage to busing: causes disruption, tension, racial conflict		Hi Lo -		
07334	Teachers feel one-way busing won't work; unfair, only blacks are bused		Hi + Lo -		
07467	Teachers believe that they can do little about racial, ethnic, cultural background, and values of students	+		+	
07463	Teachers feel they can do little about emotional problems, adolescent or peer relationships			+	
07469	Teachers feel that they can always try to something about student problems; "can do" attitude	+			

Table 2.7-Continued

Variable Number	Variable Description	Relationship with Achievement		Relationship with Attitude	
		Main	Interaction	Main	Interaction
Teacher Characteristics					
06029	Teachers believe parents are best used as tutors at home	-			
06032	Teachers believe parents are best used extracurricular activities			-	
06035	Teachers believe parents are best utilized to provide warm positive home environments			+	
07139	Teachers provide lesson plans and regularly scheduled assignment for substitute teachers	+		+	
07144	Teachers mention limitations of substitutes; won't let them do some things	-			
07342	Teachers report they work with school counselor as little as possible or not at all			-	
07471	Teachers cite patience as most important attribute of effective junior high teacher			-	
07473	Teachers cite energy, health as most important attributes of effective junior high teacher			-	
06108	Teachers' level of postgraduate education	-			
06110	Total years experience teaching				Hi 0 Lo -

Table 2.7-Continued

Variable Number	Variable Description	Relationship with Achievement		Relationship with Attitude	
		Main	Interaction	Main	Interaction
Teacher Characteristics					
06111	Total years experience teaching at junior high school level				Hi 0 Lo -
06112	Total years teaching present subject matter				Hi 0 Lo -
06058	Teachers believe ability to equip students to do well on standardized tests is important to good teaching			-	
06051	Teachers believe ability to give clear instructions is important to good teaching			-	
06082	Teachers agree that unless explanations are short, students lose intertest			-	
06090	Teachers believe that "practice makes perfect" sums up teaching			-	
06041	Teachers believe ability to organize classroom is important to good teaching				Hi + Lo -
06053	Teachers believe ability to motivate students to enjoy schoolwork is important to good teaching				Hi + Lo -
06076	Teachers agree that without proper training students' mental abilities remain undeveloped			-	Hi + Lo -
06081	Teachers agree that students should expect schoolwork to be interesting				Hi + Lo -
06097	Teachers agree that teachers should use some of the students' slang				Hi 0 Lo -

Table 2.7-Continued

Variable Number	Variable Description	Relationship with Achievement Main	Relationship with Achievement Interaction	Relationship with Attitude Main	Relationship with Attitude Interaction
Teacher Characteristics					
05059	Teachers believe knowing and using behavior modification techniques is important to good teaching	-			
06092	Teachers agree teachers should make it a point to be wrong occasionally then acknowledge it	-			
07374	Teachers feel that student progress could be improved by greater teacher-student contact	-			
06037	Teachers believe ability to explain or show how an important part of good teaching		Hi + Lo 0		
06071	Teachers agree that teachers should teach subjects, not attitudes		Hi + Lo 0		
06073	Teachers agree that schooling should primarily train students to handle social adjustment		Hi + Lo 0		

Uninterpretable Findings for Math Classes

The following variables, while significantly related to either achievement or attitude, will not be interpreted. The majority of these variables involve relationships with infrequent and uncategorizable responses from teachers. Also some were ambiguous, leaving questions about what the teachers actually meant. Information about these variables may be found in Tables 2.1 and 2.2 and in Volumes II and III of this report: 06113, 06114, 07014, 07022,

07050, 07127, 07136, 07158, 07187, 07206, 07248, 07263, 07274, 07306, 07320, 07338, 07340, 07373, and 07470.

Summary

In general, there was a high correspondence between findings for achievement and student attitude in math classes. Teachers whose classes showed high gains in math achievement were well-liked by their students. Results for both measures indicated that successful math teachers were likely to state preference for whole-class organization, a textbook-centered curriculum, and direct teacher-centered teaching style.

Effective and well-liked math teachers saw themselves as objective, self-reliant, and methodical evaluators and diagnosticians. They said they rely on diagnostic tests, standardized test scores, and correctly done seatwork to assess student progress. With regard to classroom management, they said they prefer clearly structured classroom environments; they reported that they hold students accountable for their work; and they expressed confidence and self-reliance as behavioral managers. Their expressed expectations of parental roles were limited and realistic: They saw parents as providers of warm, positive home environments, not as tutors or diagnosticians.

CHAPTER 3

RELATIONSHIPS OF TEACHER SELF-REPORTS WITH ENGLISH ACHIEVEMENT AND STUDENT ATTITUDE

The 39 English teachers in the Texas Junior High School Study responded to the same questionnaire and interview as the math teachers. Variables resulting from their responses are listed in Tables 3.1 and 3.2 (beginning on page 135) showing mean scores, standard deviations, and range of scores for each variable.

Multiple-regression analyses were used to test the extent to which each of the variables was associated with class mean achievement and class mean student rating of the teacher. These analyses resulted in 73 variables significantly ($p \leq .05$) related to achievement in English classes and 111 variables significantly related to student liking of the teacher. The number of significant results again exceeded that which would be expected from chance.

Interactions with Ability of Classes

Interpretation of the English data was complicated by the presence of a large number of interaction effects, particularly with respect to achievement. Of the 73 variables significantly related to achievement, 41 or 56% were differentially related with respect to mean entering ability of classes (mean CAT scores). That is, the nature of the relationships between achievement and the particular self-report item depended upon the entering ability level of the class. Teacher characteristics or teaching practices which appeared to "work" with high-ability classes did not necessarily work with low-ability classes. A total of 25 or 23% of the variables which were related to the affective measure (Student Ratings of Teachers) were differentially related according to ability levels of classes. A generalization emerging from these data is that

in English classes, low-ability groups of students may require (or inspire, respond to, or be circumstantially associated with) very different teacher characteristics or teaching strategies than do high-ability classes. The nature of these differences will be described in succeeding paragraphs.

Comparison of Cognitive and Affective English Results

Unlike the math results reported in chapter 2, there was little correspondence between variables related to cognitive and affective measures for English. Only 19 variables were significantly ($p \leq .05$) related to both English achievement and student ratings of the teacher. Of these, 13 indicated contrasting relationships, and six indicated similar relationships with the two product measures. Teacher characteristics or self-reported practices associated with high achievement usually were unrelated to and occasionally were negatively related to student liking of the teacher. Some of the variables resulting in clearly contrasting relationships with achievement and student attitude were:

06052 Teachers' attitude toward remedial work;

07152 Teachers' attitude toward call outs;

07399 Peer tutoring;

07433 Role playing; and

07481 Teachers' rating of good teaching skills as important.

(All of the above were negatively related to achievement, but positively related to student ratings of the teacher.) And

07104 Student should assume responsibility for makeup work

(positively related to achievement, but negatively related to student rating of the teacher). In addition, Variable 07340, Teachers' contacts with other faculty limited by community/team structure of faculty, showed contrasting relationships with the two product measures and opposite patterns with respect

Table 3.1

Summary Statistics for Teacher Questionnaire:

English Teachers

PER CENT OF STUDENTS EXPECTED TO MASTER CURRICULUM

	MEAN	SIGMA	RANGE	N
ID = 06001	74%	21%	10 - 99%	38

PER CENT OF GRADES BASED ON OBJECTIVE EVIDENCE

	MEAN	SIGMA	RANGE	N
ID = 06002	84%	19%	10 - 99%	36

PER CENT OF GRADES BASED ON SUBJECTIVE IMPRESSIONS

	MEAN	SIGMA	RANGE	N
ID = 06003	42%	20%	10 - 99%	36

PER CENT DISCIPL. PROB. DUE TO LACK OF INTEREST IN SUBJ. MATTER

	MEAN	SIGMA	RANGE	N
ID = 06004	58%	21%	10 - 99%	38

PER CENT DISCIPL. PROB. DUE TO LAXITY IN ENFORCING RULES.

	MEAN	SIGMA	RANGE	N
ID = 06005	37%	20%	10 - 99%	37

PER CENT DISCIPL. PROB. DUE TO OTHER FACTORS INTRINSIC IN

	MEAN	SIGMA	RANGE	N
ID = 06006	47%	22%	10 - 99%	38

PER CENT TIME THAT SHOULD BE SPENT IN LECTURES, DEMONSTRATIONS

	MEAN	SIGMA	RANGE	N
ID = 06007	39%	15%	10 - 70%	38

Table 3.1-Continued

PER CENT TIME THAT SHOULD BE SPENT IN QUESTIONS, DISCUSSIONS

ID = 06008	MEAN	SIGMA	RANGE	N
	51%	13%	10 - 70%	38

PER CENT TIME THAT SHOULD BE SPENT IN SEATWORK

ID = 06009	MEAN	SIGMA	RANGE	N
	49%	13%	10 - 70%	38

PER CENT DESIRED RIGHT ANSWERS IN CLASS DISCUSSIONS

ID = 06010	MEAN	SIGMA	RANGE	N
	84%	18%	30 - 99%	36

PER CENT DESIRED RIGHT ANSWERS IN SEATWORK AND HOMEWORK

ID = 06011	MEAN	SIGMA	RANGE	N
	86%	16%	30 - 99%	37

PER CENT TEACHING DEVOTED TO INDIVIDUALS

ID = 06012	MEAN	SIGMA	RANGE	N
	50%	14%	10 - 70%	37

PER CENT TEACHING DEVOTED TO SUBGROUPS

ID = 06013	MEAN	SIGMA	RANGE	N
	34%	12%	10 - 50%	36

PER CENT TEACHING DEVOTED TO WHOLE CLASS

ID = 06014	MEAN	SIGMA	RANGE	N
	67%	19%	10 - 99%	37

HOW OFTEN IS HOMEWORK ASSIGNED

ID = 06015	MEAN	SIGMA	RANGE	N
	1.28	.99	0.00 - 3.00	39

Table 3.1-Continued

GRADES AS VALUABLE STUDENT INFORMATION

	MEAN	SIGMA	RANGE	N
ID = 06016	.26	.44	0.00 - 1.00	39

ACHIEVEMENT TEST SCORES AS VALUABLE STUDENT INFORMATION

	MEAN	SIGMA	RANGE	N
ID = 06017	.21	.40	0.00 - 1.00	39

OTHER, MORE SUBJECTIVE, EVALUATIONS AS VALUABLE STUDENT INFORMATION

	MEAN	SIGMA	RANGE	N
ID = 06018	.79	.40	0.00 - 1.00	39

DRESS UP A LESSON TO MAKE IT MORE INTERESTING

	MEAN	SIGMA	RANGE	N
ID = 06019	.95	.22	0.00 - 1.00	39

ASSUME CLASS ENJOYS LESSON W/O BUILDING UP INTEREST, ENTHUSIASM

	MEAN	SIGMA	RANGE	N
ID = 06020	.03	.16	0.00 - 1.00	39

STUDENTS APPEAR TO UNDERSTAND MATERIAL

	MEAN	SIGMA	RANGE	N
ID = 06021	.92	.27	0.00 - 1.00	39

FEWER QUESTIONS FROM CLASS

	MEAN	SIGMA	RANGE	N
ID = 06022	.10	.30	0.00 - 1.00	39

STUDENTS GET RIGHT DOWN TO WORK

	MEAN	SIGMA	RANGE	N
ID = 06023	.64	.48	0.00 - 1.00	39

SLOWER STUDENTS SEEM TO UNDERSTAND

	MEAN	SIGMA	RANGE	N
ID = 06024	.85	.36	0.00 - 1.00	39

SEATWORK ASSIGNMENTS ARE DONE CORRECTLY

	MEAN	SIGMA	RANGE	N
ID = 06025	.72	.45	0.00 - 1.00	39

CLASS IS WELL BEHAVED

	MEAN	SIGMA	RANGE	N
ID = 06026	.46	.50	0.00 - 1.00	39

STUDENTS SEEM TO ENJOY SCHOOL

	MEAN	SIGMA	RANGE	N
ID = 06027	.67	.47	0.00 - 1.00	39

STUDENTS WORK ON THEIR OWN

	MEAN	SIGMA	RANGE	N
ID = 06028	.64	.48	0.00 - 1.00	39

PARENTS TUTOR CHILDREN W/ PROBLEMS AT HOME

	MEAN	SIGMA	RANGE	N
ID = 06029	.41	.49	0.00 - 1.00	39

PARENTS PARTICIPATE IN PTA; ITS PROJECTS

	MEAN	SIGMA	RANGE	N
ID = 06030	.38	.49	0.00 - 1.00	39

PARENTS HELP IN FIELD TRIPS

	MEAN	SIGMA	RANGE	N
ID = 06031	.54	.50	0.00 - 1.00	39

PARENTS HELP W/ PEP SQUAD, DRILL TEAM, SPORTS, OTHER SCHOOL ACTIVITIES

	MEAN	SIGMA	RANGE	N
ID = 06032	.33	.47	0.00 - 1.00	39

PARENTS COOPERATE W/ SCHOOL BY DISCIPLINING CHILD AT HOME

	MEAN	SIGMA	RANGE	N
ID = 06033	.85	.36	0.00 - 1.00	39

PARENTS MAKE SURE HOMEWORK DONE, SUPPLIES BOUGHT, PROJECTS TURNED IN

	MEAN	SIGMA	RANGE	N
ID = 06034	.85	.36	0.00 - 1.00	39

PARENTS PROVIDE WARM, POSITIVE HOME ENVIRONMENT

	MEAN	SIGMA	RANGE	N
ID = 06035	.90	.30	0.00 - 1.00	39

PARENTS PROVIDE ENRICHING MATERIALS, BOOKS, GAMES, RECORDS, PUZZLES

	MEAN	SIGMA	RANGE	N
ID = 06036	.67	.47	0.00 - 1.00	39

EXPLAIN, INFORM, SHOW HOW

	MEAN	SIGMA	RANGE	N
ID = 06037	3.72	.45	3.00 - 4.00	39

INITIATE, DIRECT, ADMINISTER

	MEAN	SIGMA	RANGE	N
ID = 06038	3.23	.73	1.00 - 4.00	39

DIAGNOSE LEARNING PROBLEMS

	MEAN	SIGMA	RANGE	N
ID = 06039	3.10	.78	1.00 - 4.00	39

Table 3.1-Continued

MAKE CURRICULUM MATERIALS

	MEAN	SIGMA	RANGE	N
ID = 06040	2.62	.80	1.00 - 4.00	39

ORGANIZE AND ARRANGE THE CLASSROOM

	MEAN	SIGMA	RANGE	N
ID = 06041	2.87	.82	1.00 - 4.00	39

LET STUDENTS GET INVOLVED W/ UGLY, DISTRESSING ASPECTS OF SUBJECTS

	MEAN	SIGMA	RANGE	N
ID = 06042	1.27	1.18	0.00 - 4.00	37

PROVIDE SAME MATERIALS FOR EACH STUDENT IN THE CLASSROOM

	MEAN	SIGMA	RANGE	N
ID = 06043	1.16	1.16	0.00 - 4.00	38

REQUIRE UNDIVIDED ATTENTION, ADMONISH THOSE NOT RESPONDING

	MEAN	SIGMA	RANGE	N
ID = 06044	2.03	1.07	0.00 - 4.00	39

ENCOURAGE STUDENTS TO TACKLE DIFFICULT PROBLEMS

	MEAN	SIGMA	RANGE	N
ID = 06045	2.34	.93	0.00 - 4.00	38

MAKE STUDENTS AWARE THEY ARE HERE TO STUDY AND LEARN

	MEAN	SIGMA	RANGE	N
ID = 06046	2.42	1.27	0.00 - 4.00	38

ENGAGE STUDENTS IN PEER TUTORING

	MEAN	SIGMA	RANGE	N
ID = 06047	2.26	.82	1.00 - 4.00	38

Table 3.1-Continued

GET TO KNOW STUDENTS WELL, DEVELOP WARM PERSONAL RELATIONSHIPS

	MEAN	SIGMA	RANGE	N
ID = 06048	2.82	.88	1.00 - 4.00	38

SENSE OF HUMOR

	MEAN	SIGMA	RANGE	N
ID = 06049	3.56	.63	2.00 - 4.00	39

ABILITY TO CONTROL THE CLASS

	MEAN	SIGMA	RANGE	N
ID = 06050	3.72	.45	3.00 - 4.00	39

ABILITY TO GIVE CLEAR INSTRUCTIONAL PRESENTATIONS

	MEAN	SIGMA	RANGE	N
ID = 06051	3.62	.49	3.00 - 4.00	39

ABILITY TO DO REMEDIAL WORK WITH SLOW LEARNERS

	MEAN	SIGMA	RANGE	N
ID = 06052	3.28	.64	2.00 - 4.00	39

ABILITY TO MOTIVATE STUDENTS TO ENJOY CLASS WORK

	MEAN	SIGMA	RANGE	N
ID = 06053	3.21	.72	2.00 - 4.00	39

ENTHUSIASM

	MEAN	SIGMA	RANGE	N
ID = 06054	3.54	.55	2.00 - 4.00	39

WARMTH

	MEAN	SIGMA	RANGE	N
ID = 06055	3.38	.62	2.00 - 4.00	39

Table 3.1-Continued

FREQUENT PRAISE

	MEAN	SIGMA	RANGE	N
ID = 06056	3.31	.61	2.00 - 4.00	39

ABILITY TO GET STUDENT RESPECT

	MEAN	SIGMA	RANGE	N
ID = 06057	3.46	.55	2.00 - 4.00	39

SEE THAT STUDENTS DO WELL ON MAT, STANFORD, OTHER ACH. TESTS

	MEAN	SIGMA	RANGE	N
ID = 06058	1.36	1.00	0.00 - 3.00	39

KNOWLEDGE AND USE OF BEHAVIOR MOD TECHNIQUES

	MEAN	SIGMA	RANGE	N
ID = 06059	2.38	.74	1.00 - 4.00	39

PRAISE

	MEAN	SIGMA	RANGE	N
ID = 06060	3.47	.64	2.00 - 4.00	38

PUBLIC RECOGNITION

	MEAN	SIGMA	RANGE	N
ID = 06061	2.85	.83	1.00 - 4.00	39

EXEMPTION FROM TESTS

	MEAN	SIGMA	RANGE	N
ID = 06062	1.28	.88	0.00 - 3.00	39

SPECIAL PRIVELEGES

	MEAN	SIGMA	RANGE	N
ID = 06063	1.95	.89	0.00 - 4.00	38

Table 3.1-Continued

CONTESTS, COMPETITIVE GAMES

	MEAN	SIGMA	RANGE	N
ID = 06064	2.26	.84	0.00 - 4.00	39

NOTES TO PARENTS

	MEAN	SIGMA	RANGE	N
ID = 06065	2.64	.95	1.00 - 4.00	39

WRITTEN COMMENTS ON PAPER

	MEAN	SIGMA	RANGE	N
ID = 06066	3.38	.66	2.00 - 4.00	39

OTHER METHODS TO MOTIVATE

	MEAN	SIGMA	RANGE	N
ID = 06067	3.00	1.08	1.00 - 4.00	12

AVOID WORK GAMES OR STUDENT COMPETITION IN FRONT OF WHOLE CLASS

	MEAN	SIGMA	RANGE	N
ID = 06068	1.08	.69	0.00 - 3.00	39

KNOWLEDGE OF FACTS MUST COME BEFORE GENERALIZATIONS ARE MADE, UNDERSTOOD

	MEAN	SIGMA	RANGE	N
ID = 06069	2.56	.87	1.00 - 4.00	39

GOOD TEACHER ADMITS IGNORANCE OPENLY, FREQUENTLY

	MEAN	SIGMA	RANGE	N
ID = 06070	2.92	.96	1.00 - 4.00	38

TEACHERS SHOULD TEACH SUBJECTS RATHER THAN ATTITUDES

	MEAN	SIGMA	RANGE	N
ID = 06071	1.31	.94	0.00 - 4.00	39

STUDENTS CAN LEARN MATH AS WELL AS ANY OTHER SUBJECT

	MEAN	SIGMA	RANGE	N
ID = 06072	2.11	.91	0.00 - 4.00	38

TRAINING STUD. TO HANDLE SOCIAL ADJUSTMENTS IS PRIMARY OBJECTIVE OF SCHOOL

	MEAN	SIGMA	RANGE	N
ID = 06073	1.77	1.02	0.00 - 3.00	39

ORIENT TEACHING TO PREPARING STUD. TO DO WELL ON CITY OR STATE-WIDE TESTS.

	MEAN	SIGMA	RANGE	N
ID = 06074	1.21	1.09	0.00 - 4.00	39

LEARNING IS DIFFICULT, TEACHER AND STUDENTS FIND IT TIRING

	MEAN	SIGMA	RANGE	N
ID = 06075	1.41	1.08	0.00 - 4.00	39

STUDENT MENTAL ABILITIES STAY UNDEVELOPED W/O PROPER TRAINING

	MEAN	SIGMA	RANGE	N
ID = 06076	2.76	1.01	1.00 - 4.00	38

SOME STUDENTS ASK TOO MANY QUESTIONS

	MEAN	SIGMA	RANGE	N
ID = 06077	1.62	1.12	0.00 - 4.00	39

STUD. LEARN FROM PEER INTERACTION--SO T. SHOULD HAVE SMALL GROUP DISCUSSIONS

	MEAN	SIGMA	RANGE	N
ID = 06078	2.62	.67	1.00 - 4.00	39

IT IS NATURAL, HEALTHY FOR STUDENT TO RESIST HIS TEACHER

	MEAN	SIGMA	RANGE	N
ID = 06079	1.57	.86	0.00 - 3.00	37

Table 3.1-Continued

TEACHERS SHOULD TALK TO STUDENTS AS TO ADULTS

	MEAN	SIGMA	RANGE	N
ID = 06080	1.82	1.11	0.00 - 4.00	39

STUDENTS SHOULD EXPECT SCHOOLWORK TO BE INTERESTING

	MEAN	SIGMA	RANGE	N
ID = 06081	2.21	.92	1.00 - 3.00	38

UNLESS EXPLANATIONS ARE SHORT, STUD. LOSE INTEREST AND ABILITY TO FOLLOW

	MEAN	SIGMA	RANGE	N
ID = 06082	2.54	.87	1.00 - 4.00	39

LETTING FAST STUDENTS HELP SLOW IS GOOD WAY TO KEEP BOTH KINDS OCCUPIED

	MEAN	SIGMA	RANGE	N
ID = 06083	2.34	1.08	0.00 - 4.00	38

TEACHER SHOULD GIVE GREAT DEAL BLACKBOARD PRACTICE IN MATH

	MEAN	SIGMA	RANGE	N
ID = 06084	2.18	.57	1.00 - 4.00	34

T. NEED SPEND LITTLE TIME W/ BRIGHTS, AS THEY CAN LEARN BY THEMSELVES

	MEAN	SIGMA	RANGE	N
ID = 06085	1.08	.76	0.00 - 3.00	39

THE HARDER THE TASK, THE BETTER FOR THE STUDENT

	MEAN	SIGMA	RANGE	N
ID = 06086	1.05	.76	0.00 - 3.00	38

DIFFERING WORK BY ABILITY IS NOT A WORKABLE IDEA

	MEAN	SIGMA	RANGE	N
ID = 06087	1.00	.86	0.00 - 3.00	38

Table 3.1-Continued

TEACHER SHOULD DISCOURAGE MOVING FREELY AROUND ROOM

	MEAN	SIGMA	RANGE	N
ID = 06088	1.67	1.03	0.00 - 4.00	38

EXPECT STUDENTS TO FORGET MUCH THAT IS TOLD TO THEM

	MEAN	SIGMA	RANGE	N
ID = 06089	1.95	.97	0.00 - 3.00	38

THE SAYING PRACTICE MAKES PERFECT IS A GOOD SUMMARY OF LEARNING

	MEAN	SIGMA	RANGE	N
ID = 06090	2.08	1.09	0.00 - 4.00	38

TEACHER WHO RELIES ON TEXTS HAS HARD TIME TEACHING EFFECTIVELY

	MEAN	SIGMA	RANGE	N
ID = 06091	2.05	1.01	0.00 - 4.00	39

TEACHERS SHOULD SOMETIMES ON PURPOSE BE WRONG, THEN ACKNOWLEDGE THIS

	MEAN	SIGMA	RANGE	N
ID = 06092	1.46	1.03	0.00 - 4.00	39

TEACHING SHOULD BE EVALUATED INDEPENDENT OF HOW MUCH LEARNING RESULTS

	MEAN	SIGMA	RANGE	N
ID = 06093	1.45	1.14	0.00 - 4.00	38

A GOOD TEACHER MUST BE A DETERMINED PERSON

	MEAN	SIGMA	RANGE	N
ID = 06094	3.18	.64	1.00 - 4.00	39

IMPACT OF T. IS MORE IMPORT. THAN ALL OTHER ASPECTS OF SCHOOL ENVIRONMENT

	MEAN	SIGMA	RANGE	N
ID = 06095	2.61	1.09	0.00 - 4.00	38

Table 3.1-Continued

TEACHER PERSONALITY IS MUST IMPORTANT PEDAGOGICAL QUALIFICATION

	MEAN	SIGMA	RANGE	N
ID = 06096	2.47	.88	1.00 - 4.00	38

TEACHER SHOULD USE SOME OF STUDENTS SLANG OR LINGO

	MEAN	SIGMA	RANGE	N
ID = 06097	1.95	.99	0.00 - 4.00	39

T. SHOULD REWARD EFFORT, PENALIZE LACK OF IT, REGARDLESS OF ACHIEVEMENT

	MEAN	SIGMA	RANGE	N
ID = 06098	1.89	1.05	0.00 - 4.00	38

HIGH STANDARDS, INSISTENT PRESSURE, IS BEST WAY TO GET CHILD TO LEARN

	MEAN	SIGMA	RANGE	N
ID = 06099	1.68	.90	0.00 - 4.00	37

AT RISK OF BORING SOME, TEACHER SHOULD EXPLAIN THOROUGHLY

	MEAN	SIGMA	RANGE	N
ID = 06100	2.77	.83	1.00 - 4.00	39

GIVING INSIGHT INTO NUMBER SYS WILL NOT REDUCE AMT OF MATH DRILL NECESSARY

	MEAN	SIGMA	RANGE	N
ID = 06101	2.38	.65	1.00 - 4.00	32

CALLING ATTENTION TO ACH OF OTHERS DOES NOT STIMULATE ACHIEVEMENT

	MEAN	SIGMA	RANGE	N
ID = 06102	1.42	.91	0.00 - 4.00	38

FAILING GRADES DO LITTLE TO PROMOTE ACHIEVEMENT

	MEAN	SIGMA	RANGE	N
ID = 06103	1.66	.99	0.00 - 4.00	37

IT IS BETTER TO UNDER EXPLAIN THAN OVER EXPLAIN

	MEAN	SIGMA	RANGE	N
ID = 06104	1.44	.84	0.00 - 3.00	39

HIGH GRADES REINFORCE EFFORT, STUDENTS WORK HARD, CONTINUE TO

	MEAN	SIGMA	RANGE	N
ID = 06105	2.59	.74	0.00 - 4.00	39

STRICTER RULES WOULD HELP ELIMINATE DISCIPLINE PROBLEMS

	MEAN	SIGMA	RANGE	N
ID = 06106	2.08	.93	1.00 - 4.00	38

IQ TESTS MERELY LABEL, DO NOT PROVIDE USEFUL INFORMATION

	MEAN	SIGMA	RANGE	N
ID = 06107	1.69	.91	0.00 - 4.00	39

AMOUNT OF POST GRADUATE WORK

	MEAN	SIGMA	RANGE	N
ID = 06108	2.03	1.27	0.00 - 4.00	39

IF GRADUATE DEGREE, WHERE FROM

	MEAN	SIGMA	RANGE	N
ID = 06109	.67	.47	0.00 - 1.00	6

TOTAL YEARS TEACHING EXPERIENCE

	MEAN	SIGMA	RANGE	N
ID = 06110	.95	1.20	0.00 - 4.00	39

YEARS TEACHING JUNIOR HIGH LEVEL

	MEAN	SIGMA	RANGE	N
ID = 06111	.69	1.07	0.00 - 4.00	39

Table 3.1-Continued

YEARS TEACHING PRESENT SUBJECT MATTER AT JUNIOR HIGH LEVEL

	MEAN	SIGMA	RANGE	N
ID = 06112	.59	1.06	0.00 - 4.00	39

BELONG TO ISTA

	MEAN	SIGMA	RANGE	N
ID = 06113	.82	.38	0.00 - 1.00	39

BELONG TO NEA

	MEAN	SIGMA	RANGE	N
ID = 06114	.72	.45	0.00 - 1.00	39

BELONG TO AFT

	MEAN	SIGMA	RANGE	N
ID = 06115	.13	.33	0.00 - 1.00	39

BELONG TO OTHER PROFESSIONAL ORGANIZATION

	MEAN	SIGMA	RANGE	N
ID = 06116	.49	.50	0.00 - 1.00	39

Table 3.2

Summary Statistics for Teacher Interview:

English Teachers

SEVERAL ABILITY LEVELS IN ONE CLASSROOM PRESENTS A PROBLEM

	MEAN	SIGMA	RANGE	N
ID = 07001	1.82	.38	1.00 - 2.00	39

COPE WITH ABILITY LEVELS BY ABILITY GROUPING

	MEAN	SIGMA	RANGE	N
ID = 07002	1.41	.49	1.00 - 2.00	37

BY INDIVIDUALIZED WORK, SELF-PACED;LEARNING CENTERS;IGE; CONTRACT WORK

	MEAN	SIGMA	RANGE	N
ID = 07003	1.38	.48	1.00 - 2.00	37

BY DIFFERENT LEVEL MATERIALS, ASSIGN.; SUPPLEMENT. MATER.; INSTRUCT. GAMES

	MEAN	SIGMA	RANGE	N
ID = 07004	1.57	.50	1.00 - 2.00	37

BY MORE SPECIAL ATTENTION; CONFERENCES; WORK AFTER SHCOOL

	MEAN	SIGMA	RANGE	N
ID = 07005	1.22	.41	1.00 - 2.00	37

BY PEER TUTORING; ALLOW STUDENTS TO WORK TOGETHER

	MEAN	SIGMA	RANGE	N
ID = 07006	1.05	.23	1.00 - 2.00	37

BY DIFFERENTIAL TESTING, GRADING; EXPECT LESS FROM SLOWS; EXTRA CREDIT WORK

	MEAN	SIGMA	RANGE	N
ID = 07007	1.27	.44	1.00 - 2.00	37

BY WHOLE CLASS APPROACH; TEACH TO HIGH, MIDDLE; NEGLECT SOME; IGNORE PROB.

	MEAN	SIGMA	RANGE	N
ID = 07008	1.27	.44	1.00 - 2.00	37

OTHER: RESOURCE TEACHER, STUDENT TEACHER, TEACHER AIDE

	MEAN	SIGMA	RANGE	N
ID = 07009	1.11	.31	1.00 - 2.00	37

TEACH. COPES W/ABILITY LEVELS HERSELF IN CLASS RATHER THAN AVOIDING PROB.

	MEAN	SIGMA	RANGE	N
ID = 07010	2.73	.50	1.00 - 3.00	37

METHODS FOR COPING WITH ABILITY LEVELS IN CLASS WERE SUCCESSFUL

	MEAN	SIGMA	RANGE	N
ID = 07011	3.22	.87	1.00 - 4.00	37

GROUP STUD. IN CLASS ON BASIS OF ABILITY, BASED ON DIAGNOSTIC TESTS, CAT

	MEAN	SIGMA	RANGE	N
ID = 07012	1.46	.50	1.00 - 2.00	28

OF ABILITY, BASED ON OBSERVATION, ASSESSMENT OF WORK; TALK WITH STUDENT

	MEAN	SIGMA	RANGE	N
ID = 07013	1.43	.49	1.00 - 2.00	28

OF ABILITY (NO OTHER RESPONSE GIVEN)

	MEAN	SIGMA	RANGE	N
ID = 07014	1.29	.45	1.00 - 2.00	28

OF RANDOM OR BALANCED GROUPS FOR SOME ACTIVITIES OR WORKING TOGETHER

	MEAN	SIGMA	RANGE	N
ID = 07015	1.25	.43	1.00 - 2.00	28

SOME GROUPS GET MORE ATTENTION THAN OTHERS

	MEAN	SIGMA	RANGE	N
ID = 07016	1.71	.45	1.00 - 2.00	38

MORE ATTENTION GIVEN TO HIGH ABILITY GROUPS, AS OPPOSED TO LOW

	MEAN	SIGMA	RANGE	N
ID = 07017	1.45	.67	1.00 - 3.00	20

TEACHER INDIVIDUALIZES ON REGULAR BASIS

	MEAN	SIGMA	RANGE	N
ID = 07018	2.23	.89	1.00 - 3.00	39

TEACHER INDIVIDUALIZES BY: SELF-PACED WORK, CONTRACTS, LEARNING STATIONS

	MEAN	SIGMA	RANGE	N
ID = 07019	1.61	.49	1.00 - 2.00	28

BY DIFFERING EXPECTANCIES, TESTS, GRADING; LESS WORK TO SLOWS; SPEC. ASSIG

	MEAN	SIGMA	RANGE	N
ID = 07020	1.46	.50	1.00 - 2.00	28

BY ABILITY GROUPS HAVING DIFFERENT ASSIGNMENTS

	MEAN	SIGMA	RANGE	N
ID = 07021	1.14	.35	1.00 - 2.00	28

OTHER: EXTRA HELP; CONFERENCES; USE RESOURCE TEACHER, AIDE

	MEAN	SIGMA	RANGE	N
ID = 07022	1.25	.43	1.00 - 2.00	28

TEACHER USES GROUPS AND ALSO INDIVIDUALIZES

	MEAN	SIGMA	RANGE	N
ID = 07023	1.51	.50	1.00 - 2.00	39

Table 3.2-Continued

TEACHER INDIVIDUALIZES ONLY (DOES NOT GROUP)

	MEAN	SIGMA	RANGE	N
ID = 07024	1.18	.38	1.00 - 2.00	39

TEACHER GROUPS ONLY (DOES NOT INDIVIDUALIZE)

	MEAN	SIGMA	RANGE	N
ID = 07025	1.21	.40	1.00 - 2.00	39

TEACHER NEITHER GROUPS NOR INDIVIDUALIZES

	MEAN	SIGMA	RANGE	N
ID = 07026	1.10	.30	1.00 - 2.00	39

FREQUENCY OF TESTS (EXCLUDING SPELLING TESTS)

	MEAN	SIGMA	RANGE	N
ID = 07027	2.28	.99	1.00 - 4.00	39

USES BOTH TEACHER-MADE AND PREPARED TESTS, AS OPPOSED TO TEACHER-MADE ONLY

	MEAN	SIGMA	RANGE	N
ID = 07028	1.31	.46	1.00 - 2.00	39

ADVANT. OF SELF-MADE TEST: TESTS WHAT IS TAUGHT; KIDS FAMILIAR W/MATERIAL

	MEAN	SIGMA	RANGE	N
ID = 07029	1.90	.30	1.00 - 2.00	39

CAN GIVE DIFFERENT TESTS TO ABILITY GROUPS; MORE INDIVIDUALIZATION

	MEAN	SIGMA	RANGE	N
ID = 07030	1.15	.36	1.00 - 2.00	39

BETTER FORM, INSTRUCTIONS; USE TERMS KIDS KNOW; SIMILIAR TO HOMEWORK

	MEAN	SIGMA	RANGE	N
ID = 07031	1.10	.30	1.00 - 2.00	39

Table 3.2-Continued

OTHER ADVANTAGES TO SELF-MADE TESTS

	MEAN	SIGMA	RANGE	N
ID = 07032	1.31	.46	1.00 - 2.00	39

DISADVANT. OF SELF-MADE TEST: VALIDITY, RELIABILITY; NOT COVER ALL SKILLS

	MEAN	SIGMA	RANGE	N
ID = 07033	1.36	.48	1.00 - 2.00	39

TAKES MUCH TIME, EFFORT, WORK TO MAKE A TEST

	MEAN	SIGMA	RANGE	N
ID = 07034	1.69	.46	1.00 - 2.00	39

OTHER DISADVANTAGES TO SELF-MADE TESTS

	MEAN	SIGMA	RANGE	N
ID = 07035	1.13	.33	1.00 - 2.00	39

FIND KIDSS LEVEL BY OBSERVATION OF WORK AND BEHAVIOR

	MEAN	SIGMA	RANGE	N
ID = 07036	1.26	.44	1.00 - 2.00	39

BY CHECKING PERSONAL FILE: ASK COUNSELOR, OTHER TEACHERS

	MEAN	SIGMA	RANGE	N
ID = 07037	1.28	.45	1.00 - 2.00	39

BY DOING ORAL WORK, READING ALOUD

	MEAN	SIGMA	RANGE	N
ID = 07038	1.28	.45	1.00 - 2.00	39

BY GETTING WRITING SAMPLE, PARAGRAPH

	MEAN	SIGMA	RANGE	N
ID = 07039	1.38	.49	1.00 - 2.00	39

Table 3.2-Continued

BY USING STANDARD DIAGNUSTIC TEST

	MEAN	SIGMA	RANGE	N
ID = 07040	1.13	.33	1.00 - 2.00	39

BY USING DIAGNUSTIC TEST--UNSPECIFIED IF STANDARD OR SELF-MADE

	MEAN	SIGMA	RANGE	N
ID = 07041	1.59	.49	1.00 - 2.00	39

BY USING SELF MADE DIAGNUSTIC TEST

	MEAN	SIGMA	RANGE	N
ID = 07042	1.13	.33	1.00 - 2.00	39

OTHER WAYS TO FIND KIDS LEVEL

	MEAN	SIGMA	RANGE	N
ID = 07043	1.13	.33	1.00 - 2.00	39

FIND CAUSE OF LEARNING PROBLEM BY ANALYSIS OF WORK, BEHAVIOR

	MEAN	SIGMA	RANGE	N
ID = 07044	1.33	.47	1.00 - 2.00	39

BY REFERRING KID TO COUNSELOR, RESOURCE TEACHER, SPECIAL ED.

	MEAN	SIGMA	RANGE	N
ID = 07045	1.23	.42	1.00 - 2.00	39

BY CONSULTING PERMANENT FILE, COUNSELOR, OTHER TEACHERS

	MEAN	SIGMA	RANGE	N
ID = 07046	1.46	.50	1.00 - 2.00	39

BY WORKING WITH STUDENT; CONFERENCE WITH STUDENT

	MEAN	SIGMA	RANGE	N
ID = 07047	1.46	.50	1.00 - 2.00	39

Table 3.2-Continued

BY USING DIAGNOSTIC TEST

	MEAN	SIGMA	RANGE	N
ID = 04048	1.15	.36	1.00 - 2.00	39

BY CONTACTING PARENTS

	MEAN	SIGMA	RANGE	N
ID = 04049	1.10	.30	1.00 - 2.00	39

OTHER METHODS TO DIAGNOSE LEARNING PROBLEMS

	MEAN	SIGMA	RANGE	N
ID = 07050	1.15	.36	1.00 - 2.00	39

HAS STEP-BY-STEP PROCESS TO DIAGNOSE LEARNING PROBLEM

	MEAN	SIGMA	RANGE	N
ID = 07051	1.13	.33	1.00 - 2.00	39

FOR REMEDIATION, ENRICH., GIVE SUPPLEMENTARY PACKETS, WORKBOOKS, KITS

	MEAN	SIGMA	RANGE	N
ID = 07052	1.56	.50	1.00 - 2.00	39

GIVE DIFFERENT LEVEL TEXTS, READERS

	MEAN	SIGMA	RANGE	N
ID = 07053	1.38	.49	1.00 - 2.00	39

GIVE TEACHER MADE MATERIALS: DITTOS, HANDOUTS

	MEAN	SIGMA	RANGE	N
ID = 07054	1.31	.46	1.00 - 2.00	39

GIVE PUZZLES, GAMES

	MEAN	SIGMA	RANGE	N
ID = 07055	1.10	.30	1.00 - 2.00	39

Table 3.2-Continued

USE AUDIO-VISUAL AIDS, LISTENING STATION, ANALOG COMPUTER

	MEAN	SIGMA	RANGE	N
ID = 07056	1.05	.22	1.00 - 2.00	39

GIVE EXTRA-CREDIT ASSIGNMENTS, PROJECTS

	MEAN	SIGMA	RANGE	N
ID = 07057	1.13	.33	1.00 - 2.00	39

REFER TO RESOURCE TEACHER, SPECIAL HELP

	MEAN	SIGMA	RANGE	N
ID = 07058	1.21	.40	1.00 - 2.00	39

OTHER READING CLASS, EASIER ASSIGNMENTS FOR REMED., ENRICHMENT

	MEAN	SIGMA	RANGE	N
ID = 07059	1.23	.42	1.00 - 2.00	39

TEACHER USES ENRICHMENT ACTIVITIES

	MEAN	SIGMA	RANGE	N
ID = 07060	1.28	.45	1.00 - 2.00	39

TEACHER STRESSES EFFORT IN DECIDING GRADES, RAHTER THAN ACHIEVEMENT

	MEAN	SIGMA	RANGE	N
ID = 07061	2.03	.77	1.00 - 3.00	39

REGULARLY USES CURVE IN GRADING

	MEAN	SIGMA	RANGE	N
ID = 07062	1.59	.81	1.00 - 3.00	39

TO PREVENT CONFUSION W/NEW MATERIAL USE EXAMPLES--CONCRETE, GRAPHIC

	MEAN	SIGMA	RANGE	N
ID = 07063	1.18	.38	1.00 - 2.00	39

Table 3.2-Continued

EXPLAIN DIFFERENT WAYS; USE SAMLL STEPS; REPEAT; DETAILED LECTURE

	MEAN	SIGMA	RANGE	N
ID = 07064	1.46	.50	1.00 - 2.00	39

USE VISUAL AND AUDITORY AIDS

	MEAN	SIGMA	RANGE	N
ID = 07065	1.37	.48	1.00 - 2.00	38

RELATE TO PREVIOUS MATERIAL AND BUILD FROM THERE

	MEAN	SIGMA	RANGE	N
ID = 07066	1.08	.27	1.00 - 2.00	39

GENERATE INTEREST, MOTIVATION; RELATE TO REAL WORLD; BE ENTERTAINING

	MEAN	SIGMA	RANGE	N
ID = 07067	1.15	.36	1.00 - 2.00	39

ASK FOR QUESTIONS; DISCUSS W/STUDENTS; WATCH FOR PUZZLED FACES

	MEAN	SIGMA	RANGE	N
ID = 07068	1.18	.38	1.00 - 2.00	39

GIVE ORAL EXPLANATION, LECTURE

	MEAN	SIGMA	RANGE	N
ID = 07069	1.28	.45	1.00 - 2.00	39

CHECK COMPREHENSION W/TEST, DRILL EXERCISES, BOARD WORK

	MEAN	SIGMA	RANGE	N
ID = 07070	1.13	.33	1.00 - 2.00	39

GIVE HANDOUT; WRITTEN INSTRUCTIONS OR EXPLANATION, OUTLINE

	MEAN	SIGMA	RANGE	N
ID = 07071	1.13	.33	1.00 - 2.00	39

Table 3.2-Continued

USE PRIVATE CONTACTS; WORK WITH STUDENTS INDIVIDUALLY

	MEAN	SIGMA	RANGE	N
ID = 07072	1.10	.30	1.00 - 2.00	39

ACTIVE SUTDENT PARTICIPATION; TAKE NOTES; WORK PROBL. W/TEACHER

	MEAN	SIGMA	RANGE	N
ID = 07073	1.05	.22	1.00 - 2.00	39

OTHER:TEACH VOCABULARY; KEEP THEM QUIET; LET PEERS EXPLAIN

	MEAN	SIGMA	RANGE	N
ID = 07074	1.26	.44	1.00 - 2.00	39

WHEN SUTD. HIDES CONFUSION; AVOID EMBARASSING; BUILD TRUST; DRAW THEM OUT

	MEAN	SIGMA	RANGE	N
ID = 07075	1.31	.46	1.00 - 2.00	39

GIVE HELP IN CLASS; WORK WITH STUDENT; RETEACH

	MEAN	SIGMA	RANGE	N
ID = 07076	1.54	.50	1.00 - 2.00	39

GIVE HELP, TALK WITH THEM OUTSIDE OF CLASS

	MEAN	SIGMA	RANGE	N
ID = 07077	1.13	.33	1.00 - 2.00	39

CALL ON THEM IN CLASS; GET THEM INVOLVED AT BOARD, ANSWERING QUESTIONS

	MEAN	SIGMA	RANGE	N
ID = 07078	1.08	.27	1.00 - 2.00	39

UP TO SUTDENT TO SEEK HELP, TAKE INITIATIVE; FORGET THOSE NOT TRYING

	MEAN	SIGMA	RANGE	N
ID = 07079	1.08	.27	1.00 - 2.00	39

GET HELP, INFORMATION FROM COUNSELOR, PRINCIPAL PARENTS; CHECK RECORDS

	MEAN	SIGMA	RANGE	N
ID = 07080	1.08	.27	1.00 - 2.00	39

NOT A PROBLEM; DOESNST HAPPEN MUCH

	MEAN	SIGMA	RANGE	N
ID = 07081	1.18	.38	1.00 - 2.00	39

OTHER:USE CONTRACTS, PEER TUTORS; CATCH IT ON TESTS; CALL ME AT HOME

	MEAN	SIGMA	RANGE	N
ID = 07082	1.15	.36	1.00 - 2.00	39

TEACHER HAS STEP-BY-STEP PROCESS FOR STUDENTS WHO TRY TO HIDE CONFUSION

	MEAN	SIGMA	RANGE	N
ID = 07083	1.08	.27	1.00 - 2.00	39

TEACHER HAS ESTABLISHED RULES AND PROCEDURES FOR APPROPRIATE BEHAVIOR

	MEAN	SIGMA	RANGE	N
ID = 07084	1.90	.30	1.00 - 2.00	39

MUST COME PREPARED; BRING SUPPLIES, HOMEWORK, MATERIALS

	MEAN	SIGMA	RANGE	N
ID = 07085	1.32	.46	1.00 - 2.00	38

MUST BE ON TIME; IN SEAT AT BELL; NO TARDINESS

	MEAN	SIGMA	RANGE	N
ID = 07086	1.47	.50	1.00 - 2.00	38

MUST SIT IN ASSIGNED SEAT

	MEAN	SIGMA	RANGE	N
ID = 07087	1.13	.34	1.00 - 2.00	38

Table 3.2-Continued

MUST NOT LEAVE SEAT WITHOUT PERMISSION

	MEAN	SIGMA	RANGE	N
ID = 07088	1.21	.41	1.00 - 2.00	38

MUST NOT INTERRUPT TEACHER OR OTHER STUD.; RAISE HAND; TALK ONE AT A TIME

	MEAN	SIGMA	RANGE	N
ID = 07089	1.50	.50	1.00 - 2.00	38

NO DISRUPTION, LOUD TALKING, BOTHERING OTHERS

	MEAN	SIGMA	RANGE	N
ID = 07090	1.24	.43	1.00 - 2.00	38

NO FIGHTING, HORSEPLAY, THROWING THINGS

	MEAN	SIGMA	RANGE	N
ID = 07091	1.18	.39	1.00 - 2.00	38

NO GUM OR FOOD ALLOWED

	MEAN	SIGMA	RANGE	N
ID = 07092	1.21	.41	1.00 - 2.00	38

EXPECT MUTUAL RESPECT, COURTESY; RESPECT RIGHTS OF OTHERS

	MEAN	SIGMA	RANGE	N
ID = 07093	1.50	.50	1.00 - 2.00	38

OTHER: NO PROFANITY; OBEY SHCOOL RULES; CLEAN UP ROOM, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07094	1.37	.48	1.00 - 2.00	38

TEACHER HAS RULES FOR TURNING IN HOMEWORK AND SEATWORK

	MEAN	SIGMA	RANGE	N
ID = 07095	1.77	.42	1.00 - 2.00	34

Table 3.2-Continued

DISTINGUISHES BETWEEN EXCUSED AND UNEXCUSED IN ACCEPTING LATE PAPERS

	MEAN	SIGMA	RANGE	N
ID = 07096	1.12	.33	1.00 - 2.00	33

PENALIZES GRADE WHEN WORK IS LATE

	MEAN	SIGMA	RANGE	N
ID = 07097	1.45	.50	1.00 - 2.00	33

SETS DEADLINE BEYOND ORIGINAL DUE DATE; LOOSE ON DUE DATES

	MEAN	SIGMA	RANGE	N
ID = 07098	1.15	.36	1.00 - 2.00	33

WORK IS DUE ON DUE DATE

	MEAN	SIGMA	RANGE	N
ID = 07099	1.76	.43	1.00 - 2.00	33

HAS PROCEDURAL RULES: DO IN INK, PENCIL; PUT IN TRAY; GRADE OWN PAPER

	MEAN	SIGMA	RANGE	N
ID = 07100	1.12	.33	1.00 - 2.00	33

OTHER: CHECKS ONLY OCCASIONALLY FOR COMPREHENSION, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07101	1.09	.29	1.00 - 2.00	33

TEACHER HAS RULES FOR MAKING UP MISSED WORK

	MEAN	SIGMA	RANGE	N
ID = 07102	1.85	.36	1.00 - 2.00	39

SETS A TIME LIMIT FOR TURNING IN MISSED WORK

	MEAN	SIGMA	RANGE	N
ID = 07103	1.57	.50	1.00 - 2.00	37

Table 3.2-Continued

STUDENT MUST TAKE RESPONSIBILITY FOR SEEING THAT WORK IS MADE UP

	MEAN	SIGMA	RANGE	N
ID = 07104	1.38	.48	1.00 - 2.00	37

PENALIZES GRADE FOR UNEXCUSED ABSENCE OR EXCEEDING MAKE-UP DEADLINE

	MEAN	SIGMA	RANGE	N
ID = 07105	1.22	.41	1.00 - 2.00	37

TEACHER TAKE SOME RESPONSIBILITY FOR SEEING STUDENT MAKES UP WORK

	MEAN	SIGMA	RANGE	N
ID = 07106	1.11	.31	1.00 - 2.00	37

OTHER: LAISSEZ-FAIRE ATTITUDE; MISSED WORK MUST BE MADE UP, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07107	1.24	.43	1.00 - 2.00	37

RULES AND PROCEDURES DIFFER BETWEEN CLASSES

	MEAN	SIGMA	RANGE	N
ID = 07108	1.54	.50	1.00 - 2.00	39

THERE ARE MINOR VARIATIONS IN STRICTNESS WITH VARIOUS CLASSES

	MEAN	SIGMA	RANGE	N
ID = 07109	1.29	.45	1.00 - 2.00	24

CLASS STRUCTURE IS DETERMINED BY ABILITY LEVEL

	MEAN	SIGMA	RANGE	N
ID = 07110	1.25	.43	1.00 - 2.00	24

CLASS STRUCTURE IS DETERMINED BY STUDENT BEHAVIOR, RESPONSIBILITY

	MEAN	SIGMA	RANGE	N
ID = 07111	1.50	.50	1.00 - 2.00	24

Table 3.2-Continued

RULES, PROCEDURES DIFFER IN TERMS OF ADADEMIC EXPECTATIONS FOR STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07112	1.13	.33	1.00 - 2.00	24

ORGANIZE CLASSROOM CONTROL AT FIRST OF YEAR BY ASSINGING SEATS

	MEAN	SIGMA	RANGE	N
ID = 07113	1.08	.27	1.00 - 2.00	39

BY BEING STRICT, STERN AT FIRST; STAY DISTANT, LOOSEN UP LATER

	MEAN	SIGMA	RANGE	N
ID = 07114	1.51	.50	1.00 - 2.00	39

BY USING VISUAL AID: PASS OUT OR POST RULES; HAVE KIDS COPY THEM

	MEAN	SIGMA	RANGE	N
ID = 07115	1.36	.48	1.00 - 2.00	39

BY ENFORCING RULES; DONST HESITATE TO PUNISH, MAKE EXAMPLE OF KID

	MEAN	SIGMA	RANGE	N
ID = 07116	1.15	.36	1.00 - 2.00	39

BY USING STUDENT INPUT TO ESTABLISH AND ENFORCE RULES

	MEAN	SIGMA	RANGE	N
ID = 07117	1.13	.33	1.00 - 2.00	39

BY ANNOUNCING RULES, AND THE CONSEQUENCES OF BREAKING THEM

	MEAN	SIGMA	RANGE	N
ID = 07118	1.31	.46	1.00 - 2.00	39

BY TELLING EXPECTATIONS; RAP SESSION; LOW-KEY DISCUSSION WITH STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07119	1.28	.45	1.00 - 2.00	39

Table 3.2-Continued

BY BUILDING STRUCTURE GRADUALLY, INFORMALLY; NO FORMAL PRESENTATION

	MEAN	SIGMA	RANGE	N
ID = 07120	1.15	.36	1.00 - 2.00	39

OTHER METHODS TO ORGANIZE CLASSROOM CONTROL AT FIRST OF YEAR

	MEAN	SIGMA	RANGE	N
ID = 07121	1.21	.40	1.00 - 2.00	39

CLASSROOM CONTROL METHODS HAVE BEEN SUCCESSFUL

	MEAN	SIGMA	RANGE	N
ID = 07122	2.76	.48	1.00 - 3.00	38

OTHER CONTROL METHODS SHE MIGHT TRY; NONE, SATISFIED WITH PRESENT SYSTEM

	MEAN	SIGMA	RANGE	N
ID = 07123	1.28	.45	1.00 - 2.00	36

MIGHT TRY FIRMER, STRICTER ENFORCEMENT; BE MORE CONSISTENT, FOLLOW THROUGH

	MEAN	SIGMA	RANGE	N
ID = 07124	1.14	.35	1.00 - 2.00	36

MIGHT TRY REALITY THERAPY, BEHAVIOR CONTRACTS, BEHAVIOR MOD

	MEAN	SIGMA	RANGE	N
ID = 07125	1.25	.43	1.00 - 2.00	36

TRY LETTING STUDENTS HELP MAKE, ENFORCE RULES, PUNISHMENTS

	MEAN	SIGMA	RANGE	N
ID = 07126	1.17	.37	1.00 - 2.00	36

OTHER: USE F FACTOR; ISM OPEN TO NEW IDEAS; MORE PARENT CONTACT; GROUPING

	MEAN	SIGMA	RANGE	N
ID = 07127	1.31	.46	1.00 - 2.00	36

Table 3.2-Continued

STUDENTS CAN MOVE TO ANOTHER SEAT IF THEY WANT

	MEAN	SIGMA	RANGE	N
ID = 07128	2.11	.69	1.00 - 3.00	37

TALKING IS A PROBLEM W/FLEXIBLE SEATS; FIXED SEATS STOPS THIS

	MEAN	SIGMA	RANGE	N
ID = 07129	1.55	.50	1.00 - 2.00	38

CONFUSION, DISRUPTION RESULTS FROM FLEXIBLE SEATS; FIXED CONTROLS THIS

	MEAN	SIGMA	RANGE	N
ID = 07130	1.21	.41	1.00 - 2.00	38

CONTROL, DISCIPLINE HARDER W/FLEXIBLE SEATS; EASIER W/FIXED SEATS

	MEAN	SIGMA	RANGE	N
ID = 07131	1.29	.45	1.00 - 2.00	38

LEARNING NAMES, CALLING ROLL HARDER W/FLEX.; BETTER ORGANIZATION W/FIXED

	MEAN	SIGMA	RANGE	N
ID = 07132	1.16	.36	1.00 - 2.00	38

SUBST. TEACHER HAS MORE TROUBLE W/FLEXIBLE SEATS; FIXED EASIER FOR HER

	MEAN	SIGMA	RANGE	N
ID = 07133	1.13	.34	1.00 - 2.00	38

STUDENTS HAPPY, COMFORTABLE W/FLEXIBLE; FEEL STIFLED, BORED W/FIXED SEATS

	MEAN	SIGMA	RANGE	N
ID = 07134	1.47	.50	1.00 - 2.00	38

CLIQUES FORM W/FLEXIBLE SEATS; FIXED BREAKS THEM UP

	MEAN	SIGMA	RANGE	N
ID = 07135	1.18	.39	1.00 - 2.00	38

OTHER PROSS AND CONSS OF FLEXIBLE AND FIXED SEATS

	MEAN	SIGMA	RANGE	N
ID = 07136	1.21	.41	1.00 - 2.00	38

MAXIMAL LEARNING OCCURS WITH FIXED SEATS

	MEAN	SIGMA	RANGE	N
ID = 07137	1.23	.42	1.00 - 2.00	13

PERSONAL DEVELOPMENT, PEER RELATION FAVOR FIXED SEATS

	MEAN	SIGMA	RANGE	N
ID = 07138	1.55	.50	1.00 - 2.00	11

SUBSTITUTE GETS LESSON PLANS, REGULARY SCHEDULED MATERIAL, ASSIGNMENT

	MEAN	SIGMA	RANGE	N
ID = 07139	1.72	.45	1.00 - 2.00	39

GETS SPECIAL LESSON PLANS DRILL, BUSY WORK, REVIEW, TEST, READING ASSIGN.

	MEAN	SIGMA	RANGE	N
ID = 07140	1.44	.50	1.00 - 2.00	39

GETS GENERAL INFORMATION: RULES, BELL SCHEDULE, MATERIALS, FORMS

	MEAN	SIGMA	RANGE	N
ID = 07141	1.23	.42	1.00 - 2.00	39

GETS SEATING CHART, CLASS ROLL

	MEAN	SIGMA	RANGE	N
ID = 07142	1.26	.44	1.00 - 2.00	39

GETS NOTES ON RELIABLE AND PROBLEM STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07143	1.23	.42	1.00 - 2.00	39

MENTIONS LIMITATIONS OF SUBS; WONST LET THEM DO SOME THINGS

	MEAN	SIGMA	RANGE	N
ID = 07144	1.08	.27	1.00 - 2.00	39

OTHER THINGS PREPARED FOR SUBSTITUTE TEACHER: PUZZLES, GAMES, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07145	1.13	.33	1.00 - 2.00	39

TEACHER HAS PROBLEM W/STUDENTS WAVING HANDS, BLURTING OUT ANSWERS

	MEAN	SIGMA	RANGE	N
ID = 07146	2.33	.89	1.00 - 3.00	39

HANDLES THIS BY REPRIMAND, RESPOND NEGATIVELY, NON-VERBAL INTERVENTION

	MEAN	SIGMA	RANGE	N
ID = 07147	1.10	.30	1.00 - 2.00	39

BY TELLING THEM TO RAISE HAND, TO STOP, WAIT, TAKE TURNS

	MEAN	SIGMA	RANGE	N
ID = 07148	1.46	.50	1.00 - 2.00	39

BY EMPHASIZING GOOD MANNERS, RESPECT OTHERS; GIVE OTHERS A CHANCE

	MEAN	SIGMA	RANGE	N
ID = 07149	1.31	.46	1.00 - 2.00	39

BY IGNORING CALLED-OUT ANSWERS

	MEAN	SIGMA	RANGE	N
ID = 07150	1.13	.33	1.00 - 2.00	39

SOMETIMES NOT CONSIDERED PROBLEM, INDICATES ENTHUSIASM, WHICH IS NICE

	MEAN	SIGMA	RANGE	N
ID = 07151	1.21	.40	1.00 - 2.00	39

NOT CONSIDERED A PROBLEM, OR DOESNST DEAL WITH IT; ACCEPTS ANSWER

	MEAN	SIGMA	RANGE	N
ID = 07152	1.18	.38	1.00 - 2.00	39

OTHER WAYS TO HANDLE CALLED-OUT ANSWERS

	MEAN	SIGMA	RANGE	N
ID = 07153	1.10	.30	1.00 - 2.00	39

IF SUTDENTS DONST VOLUNTEER, CALL ON THEM; USE PATTERNED TURNS

	MEAN	SIGMA	RANGE	N
ID = 07154	1.51	.50	1.00 - 2.00	39

CALL ON THEM IF SURE THEY KNOW; ASK EASY QUEST. TO AVOID EMBARRASSMENT

	MEAN	SIGMA	RANGE	N
ID = 07155	1.26	.44	1.00 - 2.00	39

LEAVE ALONE, ESPECIALLY IF TIRED, UPSET, SHY; JUST GRADE WRITTEN WORK

	MEAN	SIGMA	RANGE	N
ID = 07156	1.21	.40	1.00 - 2.00	39

DRAW THEM OUT; GIVE EXTRA ATTENTION; TALK PRIVATELY; ASK THEIR OPINION

	MEAN	SIGMA	RANGE	N
ID = 07157	1.23	.42	1.00 - 2.00	39

OTHER; PUT WITH A SMART KID; PRAISE CORRECT PARTS OF ANSWERS

	MEAN	SIGMA	RANGE	N
ID = 07158	1.10	.30	1.00 - 2.00	39

IF A STUDENT DONST RESPOND, GO ON TO ANOTHER STUDENT

	MEAN	SIGMA	RANGE	N
ID = 07159	1.18	.39	1.00 - 2.00	38

Table 3.2-Continued

GO ON TO ANOTHER, BUT CONTACT LATER FOR PRIVATE CONFERENCE

	MEAN	SIGMA	RANGE	N
ID = 07160	1.08	.27	1.00 - 2.00	38

HAVE A PRIVATE CONFERENCE TO DISCUSS THE PROBLEM

	MEAN	SIGMA	RANGE	N
ID = 07161	1.34	.47	1.00 - 2.00	38

EVENTUALLY INSURE, LEAVE ALONE, AFTER OTHER STRATEGIES FAIL

	MEAN	SIGMA	RANGE	N
ID = 07162	1.24	.43	1.00 - 2.00	38

REPEAT, REPHRASE; GIVE TIME TO THINK; ASK LEADING QUESTION; STICK W/HIM

	MEAN	SIGMA	RANGE	N
ID = 07163	1.16	.39	1.00 - 2.00	38

AVOID EMBARASSING STUDENT; PUT HIM AT EASE

	MEAN	SIGMA	RANGE	N
ID = 07164	1.16	.39	1.00 - 2.00	38

NOT A PROBLEM, RARELY HAPPENS

	MEAN	SIGMA	RANGE	N
ID = 07165	1.11	.31	1.00 - 2.00	38

OTHER: REFER TO COUNSELOR, OFFICE; PUT ON INDIVIDUAL WORK, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07166	1.37	.48	1.00 - 2.00	38

IF NOT PAYING ATTENTION, CALL HIS NAME

	MEAN	SIGMA	RANGE	N
ID = 07167	1.26	.44	1.00 - 2.00	34

Table 3.2-Continued

CALL ON THEM, ASK THEM A QUESTION

	MEAN	SIGMA	RANGE	N
ID = 07168	1.31	.46	1.00 - 2.00	39

REPRIMAND, CALL DOWN, THREATEN,, SCOLD, CRITICIZE, EMBARRASS, PUNISH

	MEAN	SIGMA	RANGE	N
ID = 07169	1.26	.44	1.00 - 2.00	39

USE MANAGEMENT; TELL TO PAY ATTENTION, TO KNOCK IT OFF, TO GET TO WORK

	MEAN	SIGMA	RANGE	N
ID = 07170	1.23	.42	1.00 - 2.00	39

USE NON-VERBAL INTERVENTION

	MEAN	SIGMA	RANGE	N
ID = 07071	1.26	.44	1.00 - 2.00	39

TALK PRIVATELY, FIND OUT WHY; DISCUSS PROBLEM WITH THE STUDENT

	MEAN	SIGMA	RANGE	N
ID = 07172	1.21	.40	1.00 - 2.00	39

SEEK OUTSIDE HELP: PARENT, COUNSELOR, OFFICE

	MEAN	SIGMA	RANGE	N
ID = 07173	1.05	.22	1.00 - 2.00	39

DO NOTHING, LEAVE ALONE, ESPECIALLY IF NON-DISRUPTIVE, TIRED, UPSET

	MEAN	SIGMA	RANGE	N
ID = 07174	1.21	.40	1.00 - 2.00	39

OTHER: VARY ACTIVITIES TO KEEP INTEREST; CALL CLASS TO ATTENTION, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07175	1.33	.47	1.00 - 2.00	39

Table 3.2-Continued

CAUSE OF ALIENATION AS LANGUAGE, SES, CULTURE, RACE, MINORITIES

	MEAN	SIGMA	RANGE	N
ID = 07176	1.26	.44	1.00 - 2.00	39

AS CONSISTENT FAILURE, REPEATERS (OLDER STUDENTS)

	MEAN	SIGMA	RANGE	N
ID = 07177	1.23	.42	1.00 - 2.00	39

AS POOR SELF-CONCEPT, LACK OF CONFIDENCE, FEAR OF FAILURE

	MEAN	SIGMA	RANGE	N
ID = 07178	1.26	.44	1.00 - 2.00	39

AS LACK OF ABILITY OR BASIC SKILL; TOO FAR BEHIND; LOW ACHIEVERS

	MEAN	SIGMA	RANGE	N
ID = 07179	1.56	.50	1.00 - 2.00	39

AS INAPPROPRIATE, IRRELEVANT MATERIALS

	MEAN	SIGMA	RANGE	N
ID = 07180	1.10	.30	1.00 - 2.00	39

AS EMOTIONAL-PERSONAL ADJUSTMENT PROBLEMS; PHYSICAL DISABILITY, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07181	1.15	.36	1.00 - 2.00	39

AS HOME PROBLEMS, FAMILY LIFE, HOME ENVIRONMENT

	MEAN	SIGMA	RANGE	N
ID = 07182	1.31	.46	1.00 - 2.00	39

AS LACK OF PARENTAL INTEREST, ENCOURAGEMENT, OR GOOD EXAMPLE

	MEAN	SIGMA	RANGE	N
ID = 07183	1.25	.42	1.00 - 2.00	39

AS PEER PROBLEMS, NO FRIENDS

	MEAN	SIGMA	RANGE	N
ID = 07184	1.13	.33	1.00 - 2.00	39

AS SOCIAL INVOLVEMENT WITH PEERS, OPPOSITE SEX

	MEAN	SIGMA	RANGE	N
ID = 07185	1.15	.36	1.00 - 2.00	39

AS LACK OF INTEREST; DONST VALUE EDUCATION; BORED, DONST CARE

	MEAN	SIGMA	RANGE	N
ID = 07186	1.38	.49	1.00 - 2.00	39

AS BEING ANTI-AUTHORITY, DISRUPTIVE; HATE TEACHER; BELLIGERENT

	MEAN	SIGMA	RANGE	N
ID = 07187	1.13	.33	1.00 - 2.00	39

AS TEACHERSS FAULT; FAIL TO MOTIVATE; GIVE BAD SELF-IMAGE; NOT WORK W/THEM

	MEAN	SIGMA	RANGE	N
ID = 07188	1.15	.36	1.00 - 2.00	39

OTHER; DRUGS; ABSENCE; BUSING, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07189	1.33	.47	1.00 - 2.00	39

IF STUDENT WONST DO ASSIGN.; NAG, THREATEN, FUSS, KEEP AT THEM, PRAISE

	MEAN	SIGMA	RANGE	N
ID = 07190	1.17	.38	1.00 - 2.00	35

ADJUST MATERIALS, ACTIVITIES TO HIS ABILITY, INTEREST, BUILD FROM THERE

	MEAN	SIGMA	RANGE	N
ID = 07191	1.14	.35	1.00 - 2.00	35

Table 3.2-Continued

HAVE CONFERENCE WITH STUDENT TO DISCUSS PROBLEM

	MEAN	SIGMA	RANGE	N
ID = 07192	1.60	.49	1.00 - 2.00	35

GIVE EXTRA ATTENTION, HELP AFTER OR IN CLASS; MOVE NEXT TO TEACHER

	MEAN	SIGMA	RANGE	N
ID = 07193	1.09	.28	1.00 - 2.00	35

CONTACT PARENTS

	MEAN	SIGMA	RANGE	N
ID = 07194	1.49	.50	1.00 - 2.00	35

REFER TO COUNSELOR, OFFICE; CONFERENCE W/COUNSELOR AND/OR PARENTS

	MEAN	SIGMA	RANGE	N
ID = 07195	1.26	.44	1.00 - 2.00	35

FAIL THEM, FORGET THEM, DO NOTHING--NO OTHER RESPONSE GIVEN

	MEAN	SIGMA	RANGE	N
ID = 07196	1.11	.32	1.00 - 2.00	35

FAIL THEM, FORGET THEM AFTER OTHER STRATEGIES FAIL

	MEAN	SIGMA	RANGE	N
ID = 07197	1.26	.44	1.00 - 2.00	35

DISCUSS THE PROBLEM WITH COUNSELOR OR OTHER TEACHERS

	MEAN	SIGMA	RANGE	N
ID = 07198	1.10	.30	1.00 - 2.00	39

OTHER: ASSIGN DETENTION, GUARD RELATIONSHIP WITH STUDENT, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07199	1.20	.40	1.00 - 2.00	35

HAS STEP-BY-STEP PROCESS FOR COPING WITH STUDENTS WHO DONST DO ASSIGN.

	MEAN	SIGMA	RANGE	N
ID = 07200	1.49	.50	1.00 - 2.00	35

IF NOT UNDERSTAND DIRECTIONS; EXPLAIN, DISCUSS, REPEAT, READ TO STUDENT

	MEAN	SIGMA	RANGE	N
ID = 07201	1.67	.47	1.00 - 2.00	39

PRIVATELY EXPLAIN, DISCUSS, REPEAT, READ DIRECTIONS

	MEAN	SIGMA	RANGE	N
ID = 07202	1.23	.42	1.00 - 2.00	39

HAVE STUDENT READ, RE-READ, OR REPEAT DIRECTIONS TO TEACHER

	MEAN	SIGMA	RANGE	N
ID = 07203	1.20	.44	1.00 - 2.00	39

TEACHER USE DEVELOPMENTAL OR PREVENTIVE APPROACH

	MEAN	SIGMA	RANGE	N
ID = 07204	1.18	.38	1.00 - 2.00	39

TEACHER REACTS NEGATIVELY; WONST GIVE HELP; PENALISES GRADE

	MEAN	SIGMA	RANGE	N
ID = 07205	1.33	.47	1.00 - 2.00	39

OTHER: SEND TO COUNSELOR; ASK WHAT HE DOESNST UNDERSTAND; ETC.

	MEAN	SIGMA	RANGE	N
ID = 07206	1.13	.33	1.00 - 2.00	39

BOTH TEACHER AND STUDENTS ARE RESPONSIBLE FOR MOTIVATION TO LEARN

	MEAN	SIGMA	RANGE	N
ID = 07207	1.27	.44	1.00 - 2.00	37

TEACHER GIVES REASONS WHY STUDENTS NEED EXTERNAL MOTIVATION

	MEAN	SIGMA	RANGE	N
ID = 07208	1.30	.46	1.00 - 2.00	37

TEACHER CONSISTENTLY REWARDS GOOD BEHAVIOR AND GOOD WORK

	MEAN	SIGMA	RANGE	N
ID = 07209	2.55	.71	1.00 - 3.00	38

REWARDS WORK, BEHAVIOR WITH GRADES, BONUS POINTS

	MEAN	SIGMA	RANGE	N
ID = 07210	1.39	.49	1.00 - 2.00	36

WITH VERVAL PRAISE

	MEAN	SIGMA	RANGE	N
ID = 07211	1.56	.50	1.00 - 2.00	36

WITH WRITTEN COMMENTS ON PAPER

	MEAN	SIGMA	RANGE	N
ID = 07212	1.28	.45	1.00 - 2.00	36

WITH PUBLIC RECOGNITION: DISPLAY WORK, USE AS EXAMPLE, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07213	1.22	.42	1.00 - 2.00	36

WITH OUT-OF-CLASS PRIVELEGES: LIBRARY, FIELD TRIPS, EAT OUT, RUN ERRANDS

	MEAN	SIGMA	RANGE	N
ID = 07214	1.25	.43	1.00 - 2.00	36

WITH IN-CLASS PRIVELEGES: GAMES, FILMS, TALK, NO TESTS OR HOMEWORK, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07215	1.31	.46	1.00 - 2.00	36

Table 3.2-Continued

WITH TIME OFF, FREE TIME, FREE DAYS, GET TO LEAVE EARLY

	MEAN	SIGMA	RANGE	N
ID = 07216	1.05	.16	1.00 - 2.00	36

WITH CONCRETE REWARDS: CANDY, AWARDS, CERTIFICATES, GUM, GIFTS

	MEAN	SIGMA	RANGE	N
ID = 07217	1.19	.40	1.00 - 2.00	36

WITH APPROVAL, LOVE, PERSONAL ATTENTION, PHYSICAL AFFECTION, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07218	1.19	.40	1.00 - 2.00	36

WITH COMPLIMENTARY NOTES TO PARENTS; CALL PARENTS TO BRAG

	MEAN	SIGMA	RANGE	N
ID = 07219	1.06	.23	1.00 - 2.00	36

BECOMING CLOSE TO STUDENTS IS A PLUS FOR BUILDING RAPPORT

	MEAN	SIGMA	RANGE	N
ID = 07220	2.74	.91	1.00 - 4.00	38

SOCIAL RELATIONSHIP W/STUDENT MORE IMPORTANT THAN ACADEMIC PROGRESS

	MEAN	SIGMA	RANGE	N
ID = 07221	1.77	.62	1.00 - 3.00	39

RELATIONSHIP W/STUDENT IMPORT, BECAUSE MORE YOU KNOW, BETTER YOU CAN TEACH

	MEAN	SIGMA	RANGE	N
ID = 07222	1.13	.33	1.00 - 2.00	39

BECAUSE RELATIONSHIP IS STRONG MOTIVATOR; WILL WORK TO PLEASE T.

	MEAN	SIGMA	RANGE	N
ID = 07223	1.15	.36	1.00 - 2.00	39

Table 3.2-Continued

BECAUSE TEACHER, STUDENTS MORE COMFORTABLE, RECEPTIVE

	MEAN	SIGMA	RANGE	N
ID = 07224	1.13	.33	1.00 - 2.00	39

HANDLE DISRUPTIVE STUDENT BY CONFERENCE, TALK

	MEAN	SIGMA	RANGE	N
ID = 07225	1.71	.45	1.00 - 2.00	38

BY REALITY THERAPY, CONTRACTS

	MEAN	SIGMA	RANGE	N
ID = 07226	1.26	.44	1.00 - 2.00	38

BY MANAGEMENT, THREAT, CIRTICIZE, WARN, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07227	1.39	.49	1.00 - 2.00	38

BY ISOLATING STUDENT; MOVE UP FRONT, INTO HALL

	MEAN	SIGMA	RANGE	N
ID = 07228	1.45	.50	1.00 - 2.00	38

BY KEEPING AFTER SCHOOL, AFTER CLASS

	MEAN	SIGMA	RANGE	N
ID = 07229	1.29	.45	1.00 - 2.00	38

BY CONTACTING PARENTS, SENDING NOTE HOME

	MEAN	SIGMA	RANGE	N
ID = 07230	1.37	.48	1.00 - 2.00	38

BY REFERRING TO COUNSELOR; CONFERENCE W/PARENT, COUNSELOR, STUDENT

	MEAN	SIGMA	RANGE	N
ID = 07231	1.11	.31	1.00 - 2.00	38

Table 3.2-Continued

BY SENDING TO PRINCIPAL, OFFICE

	MEAN	SIGMA	RANGE	N
ID = 07232	1.50	.50	1.00 - 2.00	38

BY SENDING TO DETENTION, ISS, DCS

	MEAN	SIGMA	RANGE	N
ID = 07233	1.24	.43	1.00 - 2.00	38

OTHER: IGNORE HIM; HAVE THEM DO SPECIAL ERRANDS, WRITE SENTENCES

	MEAN	SIGMA	RANGE	N
ID = 07234	1.29	.45	1.00 - 2.00	38

TEACHER HAS STEP-BY-STEP PROCESS FOR HANDLING DISRUPTIVE STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07235	1.53	.50	1.00 - 2.00	38

STUDENTS DISCIPLINED FOR DISRUPTION, DISOBEDIENCE, BOTHERING OTHERS

	MEAN	SIGMA	RANGE	N
ID = 07236	1.51	.50	1.00 - 2.00	39

FOR PROFANITY, SWEARING, VULGAR LANGUAGE

	MEAN	SIGMA	RANGE	N
ID = 07237	1.10	.30	1.00 - 2.00	39

FOR LACK OF RESPECT, CONSIDERATION FOR TEACHER, OTHER STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07238	1.67	.47	1.00 - 2.00	39

FOR CONSTANT TALKING, INTERRUPTING, CALLING OUT, WONST SHUT UP

	MEAN	SIGMA	RANGE	N
ID = 07239	1.26	.44	1.00 - 2.00	39

Table 3.2-Continued

FOR ROUGHHOUSING, FIGHTING, THROWING, DESTRUCTION OF PROPERTY . .

	MEAN	SIGMA	RANGE	N
ID = 07240	1.41	.49	1.00 - 2.00	39

FOR DISREGARDING SCHOOLWORK: TARDY, NOT BRING MATERIALS, NOT DO WORK

	MEAN	SIGMA	RANGE	N
ID = 07241	1.18	.38	1.00 - 2.00	39

TO ESTABLISH CREDIBILITY, MUST BE CONSISTENT; FOLLOW THROUGH

	MEAN	SIGMA	RANGE	N
ID = 07242	1.39	.49	1.00 - 2.00	38

MUST BE FAIR: TREAT ALL THE SAME, DONST PLAY FAVORITES

	MEAN	SIGMA	RANGE	N
ID = 07243	1.21	.41	1.00 - 2.00	38

MUST BE HONEST, SINCERE

	MEAN	SIGMA	RANGE	N
ID = 07244	1.18	.39	1.00 - 2.00	38

MUST MAINTAIN TEACHER ROLE: KNOW SUBJECT; CORRECT IN MANNER, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07245	1.26	.44	1.00 - 2.00	38

MUST SHOW TRUST, CARING, RESPECT FOR STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07246	1.21	.41	1.00 - 2.00	38

MUST ADMIT MISTAKES, BE A REAL PERSON

	MEAN	SIGMA	RANGE	N
ID = 07247	1.21	.41	1.00 - 2.00	38

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Table 3.2-Continued

OTHER: GO BY EXPERIENCE; SET GOOD EXAMPLE; THEY KNOW MY REPUTATUIN

	MEAN	SIGMA	RANGE	N
ID = 07248	1.26	.44	1.00 - 2.00	38

THINKS THAT STUDENT RATINGS OF TEACHERS AND CLASSES ARE VALID

	MEAN	SIGMA	RANGE	N
ID = 07249	2.18	.71	1.00 - 3.00	39

RATINGS INVALID BECAUSE STUDENTS INMATURE, EMOTIONAL, DONST THINK

	MEAN	SIGMA	RANGE	N
ID = 07250	1.41	.49	1.00 - 2.00	22

BECAUSE KIDS RESPOND TO IRRELEVANT FACTORS; REVENGE, PEER PRESSURE, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07251	1.36	.48	1.00 - 2.00	22

BECAUSE OF FAULTY PROCEDURE: POORLY WORDED, TIMED; NOT EXPLAINED, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07252	1.27	.45	1.00 - 2.00	22

KIDS CAN DISTINGUISH ABILITY TO TEACH VERSUS ESTABLISH RAPPORT

	MEAN	SIGMA	RANGE	N
ID = 07253	2.28	.81	1.00 - 3.00	39

TEACHER CONTRADICTS HERSELF IN QUESTIONS 55-57

	MEAN	SIGMA	RANGE	N
ID = 07254	1.95	.22	1.00 - 2.00	39

THE WHOLE CLASS IS INVOLVED IN CLASS DISCUSSIONS

	MEAN	SIGMA	RANGE	N
ID = 07255	1.83	.37	1.00 - 2.00	24

Table 3.2-Continued

FREQUENCY OF CLASS DISCUSSIONS

	MEAN	SIGMA	RANGE	N
ID = 07256	1.27	.57	1.00 - 3.00	15

STUDENTS LEARN BY HEARING OTHERS; SLOWER ONES LEARN FROM BRIGHTER

	MEAN	SIGMA	RANGE	N
ID = 07257	1.36	.48	1.00 - 2.00	39

TEACHER CAN FIND PROBLEM AREAS; SEE IF UNDERSTAND; CATCH QUESTIONS

	MEAN	SIGMA	RANGE	N
ID = 07258	1.26	.44	1.00 - 2.00	39

EFFECTIVE USE OF TEACHER TIME; WHOLE CLASS HEARS WHAT IS SAID

	MEAN	SIGMA	RANGE	N
ID = 07259	1.18	.38	1.00 - 2.00	39

STIMULATES MOTIVATION, INTEREST; BETTER ATTENTION, BEHAVIOR

	MEAN	SIGMA	RANGE	N
ID = 07260	1.33	.47	1.00 - 2.00	39

LEARN COMMUNICATION SKILLS; CHANCE FOR INTERACTION, SELF-EXPRESSION

	MEAN	SIGMA	RANGE	N
ID = 07261	1.33	.47	1.00 - 2.00	39

ESTABLISH IDENTITY, GAIN CONFIDENCE; ALL PARTICIPATE, SHY KIDS TALK

	MEAN	SIGMA	RANGE	N
ID = 07262	1.44	.50	1.00 - 2.00	39

OTHER; BRIGHTS LEARN TOLERANCE; SAVES PAPERWORK; DISCUSSIONS ARE FUN, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07263	1.15	.33	1.00 - 2.00	39

Table 3.2-Continued

MANY DONST OR WONST PARTICIPATE IN CLASS DISCUSSIONS

	MEAN	SIGMA	RANGE	N
ID = 07264	1.28	.45	1.00 - 2.00	39

TIRING FOR TEACHERS HARD TO GIVE ALL A CHANCE; MUST ATTEND CLOSELY

	MEAN	SIGMA	RANGE	N
ID = 07265	1.28	.45	1.00 - 2.00	39

CONTROL, BEHAVIOR PROBLEMS MAY DEVELOPE

	MEAN	SIGMA	RANGE	N
ID = 07266	1.23	.42	1.00 - 2.00	39

DISC. MAY GET MISDIRECTED, PETTY, TRIVIAL; MAY START ARGUMENT

	MEAN	SIGMA	RANGE	N
ID = 07267	1.18	.38	1.00 - 2.00	39

HARD TO DO WITH DIFFERENT ABILITY LEVEL STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07268	1.21	.40	1.00 - 2.00	39

LOSS OF ATIENTION; KIDS TUNE OUT; DONST LISTEN TO EACH OTHER

	MEAN	SIGMA	RANGE	N
ID = 07269	1.10	.30	1.00 - 2.00	39

NO DISADVANTAGES TO CLASS DISCUSSIONS

	MEAN	SIGMA	RANGE	N
ID = 07270	1.08	.27	1.00 - 2.00	39

OTHER; REWARDS COMPETITIVENESS; CANST TEACH TO INDIVIDUALS, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07271	1.23	.42	1.00 - 2.00	39

Table 3.4--Continued

TEACHER TARGETS QUESTIONS TO BRIGHTER, OR SLOWER, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07272	1.38	.49	1.00 - 2.00	39

EQUALIZES QUESTIONS, OR TARGETS FOR SPECIFIC REASONS

	MEAN	SIGMA	RANGE	N
ID = 07273	1.40	.50	1.00 - 2.00	39

TEACHER DOES NOT SAY WHETHER OR NOT SHE TARGETS QUESTIONS

	MEAN	SIGMA	RANGE	N
ID = 07274	1.13	.33	1.00 - 2.00	39

TEACHER DIRECTS MORE QUESTIONS TO BRIGHTER STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07275	1.89	.31	1.00 - 2.00	18

TEACHER GOES TO STUDENT DURING SEATWORK PERIODS

	MEAN	SIGMA	RANGE	N
ID = 07276	3.13	1.24	1.00 - 5.00	39

IN LITERATURE, USE PROJECTION, COUNTERPOINT

	MEAN	SIGMA	RANGE	N
ID = 07277	1.71	.45	1.00 - 2.00	35

IN LITERARURE, USE EASIER SUPPLEMENTARY MATERIALS

	MEAN	SIGMA	RANGE	N
ID = 07278	1.31	.46	1.00 - 2.00	35

IN SPELLING, USE BASIC GUALS IN SPELLING

	MEAN	SIGMA	RANGE	N
ID = 07279	1.83	.38	1.00 - 2.00	35

Table 3.2-Continued

IN GRAMMAR, USE NEW APPROACHES (ADOPTED TEXT)

	MEAN	SIGMA	RANGE	N
ID = 07280	1.26	.44	1.00 - 2.00	35

IN GRAMMAR, USE SUPPLEMENTARY MATERIALS, WORKBOOKS, SELF-MADE, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07281	1.54	.50	1.00 - 2.00	35

PROGRESS IN SPELLING

	MEAN	SIGMA	RANGE	N
ID = 07282	1.71	.45	1.00 - 2.00	28

PROGRESS IN GRAMMAR

	MEAN	SIGMA	RANGE	N
ID = 07283	1.65	.48	1.00 - 2.00	17

PROGRESS IN LITERATURE

	MEAN	SIGMA	RANGE	N
ID = 07284	1.66	.48	1.00 - 2.00	29

USES MODERN SCHOOL MATHEMATICS ONLY

	MEAN	SIGMA	RANGE	N
ID = 07285	-0.00	-0.00	-0.00 - -0.00	-0

USES HIGHER LEVEL MATERIAL IN ADDITION TO ADOPTED TEXT

	MEAN	SIGMA	RANGE	N
ID = 07286	-0.00	-0.00	-0.00 - -0.00	-0

USES EASIER MATERIALS IN ADDITION TO ADOPTED TEXT

	MEAN	SIGMA	RANGE	N
ID = 07287	-0.00	-0.00	-0.00 - -0.00	-0

GROUPS, INDIVIDUALS IN CLASS ACCOMPLISH DESIRED OBJECTIVES

	MEAN	SIGMA	RANGE	N
ID = 07288	1.57	.50	1.00 - 2.00	30

TEACHER EVALUATES SUBGROUPS WITHIN THE CLASS

	MEAN	SIGMA	RANGE	N
ID = 07289	1.43	.50	1.00 - 2.00	30

CONCENTRATED ON WRITING SKILLS, COMPOSITION, PARAGRAPHS

	MEAN	SIGMA	RANGE	N
ID = 07290	1.72	.45	1.00 - 2.00	39

ON SPELLING, VOCABULARY

	MEAN	SIGMA	RANGE	N
ID = 07291	1.56	.50	1.00 - 2.00	39

ON GRAMMAR, SENTENCE STRUCTURE

	MEAN	SIGMA	RANGE	N
ID = 07292	1.54	.50	1.00 - 2.00	39

ON READING COMPREHENSION, READING SKILLS

	MEAN	SIGMA	RANGE	N
ID = 07293	1.26	.44	1.00 - 2.00	39

ON LITERATURE, MYTHOLOGY; EXPOSURE TO, APPRECIATION OF LITERATURE

	MEAN	SIGMA	RANGE	N
ID = 07294	1.41	.49	1.00 - 2.00	39

ON VERBAL COMMUNICATION, DISCUSSION ABILITY

	MEAN	SIGMA	RANGE	N
ID = 07295	1.23	.42	1.00 - 2.00	39

Table 3.2-Continued

ON SELF-RELIANCE, RESPONSIBILITY, INDEPENDENCE, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07296	1.23	.42	1.00 - 2.00	39

OTHER: LIBRARY RESEARCH, DICTIONARY, SEE RELEVANCE OF CLASSWORK

	MEAN	SIGMA	RANGE	N
ID = 07297	1.15	.36	1.00 - 2.00	39

CONCENTRATE ON 4 OPERATIONS ON DECIMALS, PERCENT, FRACTIONS

	MEAN	SIGMA	RANGE	N
ID = 07298	-0.00	-0.00	-0.00 - -0.00	-0

ON GEOMETRY, ALGEBRA, HIGH SCHOOL PREPARARION

	MEAN	SIGMA	RANGE	N
ID = 07299	-0.00	-0.00	-0.00 - -0.00	-0

ON UNDERSTANDING MATH, RELATING TO REAL WORLD

	MEAN	SIGMA	RANGE	N
ID = 07300	-0.00	-0.00	-0.00 - -0.00	-0

ON PERSONAL AND INTELLECTUAL GROWTH

	MEAN	SIGMA	RANGE	N
ID = 07301	-0.00	-0.00	-0.00 - -0.00	-0

BECAUSE IMPORTANT FOR LATER LIFE; IS A BASIC; NEED THIS TO FUNCTION

	MEAN	SIGMA	RANGE	N
ID = 07302	1.63	.48	1.00 - 2.00	38

BECAUSE IMPORTANT FOR OTHER CLASSES, HIGH SCHOOL, COLLEGE

	MEAN	SIGMA	RANGE	N
ID = 07303	1.21	.41	1.00 - 2.00	38

Table 3.2-Continued

BECAUSE NEEDED THIS MOST; HAD BEEN NEGLECTED; WERE FAR BEHIND

	MEAN	SIGMA	RANGE	N
ID = 07304	1.16	.36	1.00 - 2.00	38

BECAUSE OF DISTRICT GUIDLINES, STANDARD OBJECTIVE, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07305	1.16	.36	1.00 - 2.00	38

OTHER: EXPAND INTELLECT; LAST CHANCE TO GET IT, PERSONAL REASONS, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07306	1.26	.44	1.00 - 2.00	38

ASSIGN LESS IMPORTANCE TO GRAMMAR, LINGUISTICS

	MEAN	SIGMA	RANGE	N
ID = 07307	1.41	.49	1.00 - 2.00	29

TO LEARNING OR MEMORIZATION OF SPECIFIC FACTS

	MEAN	SIGMA	RANGE	N
ID = 07308	1.28	.45	1.00 - 2.00	29

TO SPELLING, VOCABULARY, LITERATURE

	MEAN	SIGMA	RANGE	N
ID = 07309	1.38	.49	1.00 - 2.00	29

TO GEOMETRY, ALGEBRA, TRIG.

	MEAN	SIGMA	RANGE	N
ID = 07310	-0.00	-0.00	-0.00 - -0.00	-0

TO BASES

	MEAN	SIGMA	RANGE	N
ID = 07311	-0.00	-0.00	-0.00 - -0.00	-0

Table 3.2-Continued

TO NUMBER THEORY, PROBABILITY, STATISTICS, SETS PROPERTIES

	MEAN	SIGMA	RANGE	N
ID = 07312	-0.00	-0.00	-0.00 - -0.00	-0

OTHER: PERCENT, FRACTION, DECIMALS, WORK PROB., FLOW CHARTS, ETC

	MEAN	SIGMA	RANGE	N
ID = 07313	-0.00	-0.00	-0.00 - -0.00	-0

BECAUSE LESS IMPORTANT, USEFUL FOR LATER LIFE

	MEAN	SIGMA	RANGE	N
ID = 07314	1.31	.46	1.00 - 2.00	36

BECAUSE OF LACK OF TIME

	MEAN	SIGMA	RANGE	N
ID = 07315	1.08	.28	1.00 - 2.00	36

BECAUSE TOO DIFFICULT, ABSTRACT; STUDENTS NOT PREPARED

	MEAN	SIGMA	RANGE	N
ID = 07316	1.06	.23	1.00 - 2.00	36

BECAUSE MEMORIZING NOT AS IMPORTANT AS UNDERSTANDING CONCEPTS

	MEAN	SIGMA	RANGE	N
ID = 07317	1.17	.37	1.00 - 2.00	36

BECAUSE THEY DONST NEED IT NOW; ALREADY HAD IT; GET IT LATER

	MEAN	SIGMA	RANGE	N
ID = 07318	1.08	.28	1.00 - 2.00	36

ALL AREAS ARE IMPORTANT; NONE GIVEN LESS IMPORTANCE

	MEAN	SIGMA	RANGE	N
ID = 07319	1.22	.42	1.00 - 2.00	36

Table 3.2-Continued

OTHER: MATERIAL FORGOTTEN QUICKLY; TRY NOT TO PUSH TOO HARD, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07320	1.22	.42	1.00 - 2.00	36

BUSING ACHIEVES DESIRED GOALS FOR MINORITIES

	MEAN	SIGMA	RANGE	N
ID = 07321	1.67	.91	1.00 - 3.00	39

EXPOSES STUDENTS OT DIFFERENT IDEAS, CULTURE, LIFESTYLE

	MEAN	SIGMA	RANGE	N
ID = 07322	1.51	.50	1.00 - 2.00	39

BREAKS DOWN PREJUDICE; KIDS LEARN TOLERANCE, UNDERSTANDING

	MEAN	SIGMA	RANGE	N
ID = 07323	1.26	.44	1.00 - 2.00	39

MINORITIES GET BETTER EDUCATION, FACILITIES; MORE OPPORTUNITIES

	MEAN	SIGMA	RANGE	N
ID = 07324	1.26	.44	1.00 - 2.00	39

NO ADVANTAGES TO BUSING

	MEAN	SIGMA	RANGE	N
ID = 07325	1.10	.30	1.00 - 2.00	39

OTHER: SATISFIES COURTS; POLITICAL ADVANTAGES; INTEGRATES NEIGHBORHOOD

	MEAN	SIGMA	RANGE	N
ID = 07326	1.08	.27	1.00 - 2.00	39

TIME SPENT ON BUSSES MAKES KIDS TIRED, UPSET; HAVE TO COME SO FAR

	MEAN	SIGMA	RANGE	N
ID = 07327	1.23	.42	1.00 - 2.00	39

Table 3.2-Continued

DOWNGRADES EDUCATION; HURTS CAPABLE KIDS

	MEAN	SIGMA	RANGE	N
ID = 07328	1.21	.40	1.00 - 2.00	39

MINORITIES FEEL INFERIOR, FRUSTRATED COMPETING W/ADVANTAGED WHITES

	MEAN	SIGMA	RANGE	N
ID = 07329	1.31	.46	1.00 - 2.00	39

KIDS, PARENTS CANST BE IN EXTRA-CIRRICULAR ACTIVITIES, PTA, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07330	1.10	.30	1.00 - 2.00	39

DESTROYS NEIGHBORHOOD CONCEPT; KIDS DONST IDENTIFY W/ NEW SCHOOL

	MEAN	SIGMA	RANGE	N
ID = 07331	1.41	.49	1.00 - 2.00	39

BUSED KIDS FEEL ANGRY, RESENTFUL; HOLD NEGATIVE ATTITUDES

	MEAN	SIGMA	RANGE	N
ID = 07332	1.31	.46	1.00 - 2.00	39

CAUSES DISRUPTION, TENSION, RACIAL CONFLICT

	MEAN	SIGMA	RANGE	N
ID = 07333	1.18	.38	1.00 - 2.00	39

ONE-WAY BUSING WONST WORK; UNFAIR; ONLY BLACKS ARE BUSED

	MEAN	SIGMA	RANGE	N
ID = 07334	1.05	.22	1.00 - 2.00	39

OTHER; BLACKS MISS OUT ON OWN CULTURE TEACHER CANST COPE; ISNST HELPING

	MEAN	SIGMA	RANGE	N
ID = 07335	1.25	.42	1.00 - 2.00	39

Table 3.2-Continued

WORKS WITH FELLOW TEACHERS IN HER SUBJECT MATTER

	MEAN	SIGMA	RANGE	N
ID = 07336	1.92	.87	1.00 - 3.00	38

INTERACT BY SHARING IDEAS, MATERIALS; PLANNING UNITS

	MEAN	SIGMA	RANGE	N
ID = 07337	1.38	.49	1.00 - 2.00	26

BY FORMAL STRUCTURED MEETINGS, CURRICULUM DAY; DEPARTMENT MEETINGS

	MEAN	SIGMA	RANGE	N
ID = 07338	1.31	.46	1.00 - 2.00	26

BY MEETING INFORMALLY IN LOUNGE, RAPPING IN HALLS, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07339	1.35	.48	1.00 - 2.00	26

CONTACT LIMITED BY COMMUNITY/TEAM STRUCTURE OF FACULTY

	MEAN	SIGMA	RANGE	N
ID = 07340	1.12	.32	1.00 - 2.00	26

HAS SUPERVISORY ROLE; DEPARTMENT CHAIRMAN, COORDINATOR, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07341	1.27	.44	1.00 - 2.00	26

WORKS W/ COUNSELOR AS LITTLE AS POSSIBLE, NOT AT ALL

	MEAN	SIGMA	RANGE	N
ID = 07342	1.13	.33	1.00 - 2.00	39

ACADEMIC SCHEDULING; CHOOSING HIGH SCHOOL COURSES

	MEAN	SIGMA	RANGE	N
ID = 07343	1.13	.33	1.00 - 2.00	39

Table 3.2-Continued

REFER BEHAVIOR OR EMOTIONAL PROBLEMS FOR COUNSELING

	MEAN	SIGMA	RANGE	N
ID = 07344	1.56	.50	1.00 - 2.00	39

GET ADVICE, BACKGROUND INFORMATION, TEST DATA ON STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07345	1.64	.48	1.00 - 2.00	39

COUNSELOR LEADS GROUP DISCUSSION, HUMAN RELATIONS PROGRAM, CAREERS

	MEAN	SIGMA	RANGE	N
ID = 07346	1.13	.33	1.00 - 2.00	39

COUNSELOR HAS CONFERENCES WITH TEACHER, STUDENT, PARENT

	MEAN	SIGMA	RANGE	N
ID = 07347	1.15	.36	1.00 - 2.00	39

OTHER: WORK W/ COUNSELOR DURING RETREATS, OVER LUNCH, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07348	1.18	.38	1.00 - 2.00	39

TEACHER HAS HAD A STUDENT TEACHER

	MEAN	SIGMA	RANGE	N
ID = 07349	1.52	.50	1.00 - 2.00	33

GET NEW IDEAS, LEARN FROM THEM

	MEAN	SIGMA	RANGE	N
ID = 07350	1.62	.49	1.00 - 2.00	26

MORE TEACHING CAPACITY; DOUBLES TEACHER-STUDENT RATIO

	MEAN	SIGMA	RANGE	N
ID = 07351	1.23	.42	1.00 - 2.00	26

Table 3.2-Continued

TEACHER HAS MORE TIME FOR PLANNING, CLERICAL WORK

	MEAN	SIGMA	RANGE	N
ID = 07352	1.19	.39	1.00 - 2.00	26

PROFESSIONAL DUTY TO HELP NEW TEACHER; GOOD, REWARDING FEELINGS

	MEAN	SIGMA	RANGE	N
ID = 07353	1.15	.36	1.00 - 2.00	26

GOOD FOR KIDS TO BE EXPOSED TO NEW PERSON, DIFFERENT TECHNIQUES

	MEAN	SIGMA	RANGE	N
ID = 07354	1.19	.39	1.00 - 2.00	26

OTHER: SEE HOW KIDS REACT WITH SOMEONE ELSE, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07355	1.31	.46	1.00 - 2.00	26

HAS NEGATIVE EXPECTATIONS FOR EFFECTIVENESS OF STUDENT TEACHER

	MEAN	SIGMA	RANGE	N
ID = 07356	1.64	.48	1.00 - 2.00	25

DISCIPLINE PROBLEMS DEVELOPE WITH A STUDENT TEACHER

	MEAN	SIGMA	RANGE	N
ID = 07357	1.44	.50	1.00 - 2.00	25

STUDENT TEACHERS ARE TIME CONSUMING, A LOT OF WORK

	MEAN	SIGMA	RANGE	N
ID = 07358	1.32	.47	1.00 - 2.00	25

STUDENTS HAVE PROBLEMS ADJUSTING TO NEW TEACHER

	MEAN	SIGMA	RANGE	N
ID = 07359	1.20	.40	1.00 - 2.00	25

TEACHER LOSES CONTACT WITH STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07360	1.20	.40	1.00 - 2.00	25

OTHER DISADVANTAGES OF HAVING A STUDENT TEACHER

	MEAN	SIGMA	RANGE	N
ID = 07361	1.16	.37	1.00 - 2.00	25

TEACHER IS FAMILIAR WITH MATERIAL IN CAT MATH TEST

	MEAN	SIGMA	RANGE	N
ID = 07362	-0.00	-0.00	-0.00 - -0.00	-0

CAT IS ADEQUATE MEASURE OF MATH ABILITY FOR MY STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07363	-0.00	-0.00	-0.00 - -0.00	-0

USES REMEDIAL TECHNIQUES TO TEACH MATH TO THOSE WHO CANST READ

	MEAN	SIGMA	RANGE	N
ID = 07365	-0.00	-0.00	-0.00 - -0.00	-0

AVOIDS PROBLEMS TEACHER, STUDENTS READ TO NON-READER

	MEAN	SIGMA	RANGE	N
ID = 07366	-0.00	-0.00	-0.00 - -0.00	-0

AVOIDS PROBLEMS GIVE ORAL DIRECTIONS, EXPLAIN VERBALLY, DISCUSS

	MEAN	SIGMA	RANGE	N
ID = 07367	-0.00	-0.00	-0.00 - -0.00	-0

AVOIDS PROBLEMS NO WORD PROBLEMS, TAKE READING OUT OF ASSIGNMENTS

	MEAN	SIGMA	RANGE	N
ID = 07368	-0.00	-0.00	-0.00 - -0.00	-0

OTHER: GAMES, PACKETS, PUZZLES, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07369	-0.00	-0.00	-0.00 - -0.00	-0

USES BOTH REMEDIATION AND AVOIDANCE TECHNIQUES W/NON-READERS

	MEAN	SIGMA	RANGE	N
ID = 07370	-0.00	-0.00	-0.00 - -0.00	-0

AMOUNT OF PROGRESS MADE BY SLOWER STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07371	-0.00	-0.00	-0.00 - -0.00	-0

TEACHER DIFFERENTIATES PROGRESS AMONG SLOW STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07373	-0.00	-0.00	-0.00 - -0.00	-0

PROGRESS IS AFFECTED BY AMOUNT OF TEACHER-STUDENT CONTACT

	MEAN	SIGMA	RANGE	N
ID = 07374	-0.00	-0.00	-0.00 - -0.00	-0

BY AFFECTIVE VARIABLES: MOTIVATION, CONFIDENCE, PRAISE, TRUST, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07375	-0.00	-0.00	-0.00 - -0.00	-0

BY ACADEMIC FACTORS: METHODS, MATERIALS, STUDENT ABILITY

	MEAN	SIGMA	RANGE	N
ID = 07376	-0.00	-0.00	-0.00 - -0.00	-0

OTHER REASONS FOR PROGRESS OR LACK OF PROGRESS

	MEAN	SIGMA	RANGE	N
ID = 07377	-0.00	-0.00	-0.00 - -0.00	-0

Table 3.2-Continued

TEACHER GAVE REASONS FOR HER STUDENTSS PROGRESS

	MEAN	SIGMA	RANGE	N
ID = 07378	-0.00	-0.00	-0.00 - -0.00	-0

TEACH SPELLING BY GOING OVER PRONUNCIATION, MEANING

	MEAN	SIGMA	RANGE	N
ID = 07379	1.21	.40	1.00 - 2.00	39

BY DIVIDING WORDS INTO SYLLABLES

	MEAN	SIGMA	RANGE	N
ID = 07380	1.23	.42	1.00 - 2.00	39

BY USING IN SENTENCES, IN CONTEXT

	MEAN	SIGMA	RANGE	N
ID = 07381	1.33	.47	1.00 - 2.00	39

BY DOING DRILL, WRITTEN EXERCISES, HOMEWORK

	MEAN	SIGMA	RANGE	N
ID = 07382	1.51	.50	1.00 - 2.00	39

BY DOING PUZZLES, WORD GAMES, USING FLASH CARDS

	MEAN	SIGMA	RANGE	N
ID = 07383	1.21	.40	1.00 - 2.00	39

ORAL WORK, REPETITION, BOARD WORK, SPELLING BEES

	MEAN	SIGMA	RANGE	N
ID = 07384	1.31	.46	1.00 - 2.00	39

TEACH RULES, PHONETIC CONCEPTS

	MEAN	SIGMA	RANGE	N
ID = 07385	1.33	.47	1.00 - 2.00	39

Table 3.2-Continued

STRESS RECOGNITION OF WORD ROOT, PREFIX, SUFFIX

	MEAN	SIGMA	RANGE	N
ID = 07386	1.21	.40	1.00 - 2.00	39

GIVE TESTS; EITHER PRETEST OR END OF UNIT TEST

	MEAN	SIGMA	RANGE	N
ID = 07387	1.26	.44	1.00 - 2.00	39

OTHER: INDIVIDUALIZE MEMORIZE, DO DICTIONARY WORK

	MEAN	SIGMA	RANGE	N
ID = 07388	1.36	.48	1.00 - 2.00	39

USES INDIVIDUAL SEATWORK ONLY, TO TEACH SPELLING

	MEAN	SIGMA	RANGE	N
ID = 07389	1.23	.42	1.00 - 2.00	39

USES WHOLE CALSS ACTIVITIES ONLY TO TEACH SPELLING

	MEAN	SIGMA	RANGE	N
ID = 07390	1.15	.36	1.00 - 2.00	39

USES BOTH SEATWORK AND CLASS ACTIVITIES TO TEACH SPELLING

	MEAN	SIGMA	RANGE	N
ID = 07391	1.62	.49	1.00 - 2.00	39

FOR NON-READERS, USE SPECIAL MATERIALS; HIGH INTEREST, LOWER LEVEL

	MEAN	SIGMA	RANGE	N
ID = 07392	1.71	.45	1.00 - 2.00	38

USE INDIVIDUAL HELP; EXTRA ORAL READING; SPECIAL ATTENTION

	MEAN	SIGMA	RANGE	N
ID = 07393	1.34	.47	1.00 - 2.00	38

Table 3.2-Continued

USE PEER TUTORS, COLLEGE SUTDENTS; BUDDY SYSTEM

	MEAN	SIGMA	RANGE	N
ID = 07394	1.16	.36	1.00 - 2.00	38

USE RESOURCE TEACHER, READING SPECIALIST, READING SKILLS LAB

	MEAN	SIGMA	RANGE	N
ID = 07395	1.34	.47	1.00 - 2.00	38

USE AUDIOVISUAL AIDS

	MEAN	SIGMA	RANGE	N
ID = 07396	1.16	.36	1.00 - 2.00	38

OTHER: GIVE ORAL DIRECTIONS; READ TO STUDENT, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07397	1.37	.48	1.00 - 2.00	38

USES TECHNIQUES TO REMEDIATE READING PROBLEM

	MEAN	SIGMA	RANGE	N
ID = 07398	1.44	.50	1.00 - 2.00	36

USES PEER TUTORING

	MEAN	SIGMA	RANGE	N
ID = 07399	2.38	.77	1.00 - 3.00	39

PEER TUTORING MAXIMIZES TEACHER TIME AND EFFORT

	MEAN	SIGMA	RANGE	N
ID = 07400	1.31	.46	1.00 - 2.00	36

PEER TUTORING HAS ACADEMIC ADVANTAGES FOR TUTEE.

	MEAN	SIGMA	RANGE	N
ID = 07401	1.64	.48	1.00 - 2.00	36

HAS AFFECTIVE ADVANTAGES FOR TUTEE

	MEAN	SIGMA	RANGE	N
ID = 07402	1.53	.50	1.00 - 2.00	36

HAS ADVANTAGES FOR TUTOR, BOTH ACADEMIC AND AFFECTIVE

	MEAN	SIGMA	RANGE	N
ID = 07403	1.36	.48	1.00 - 2.00	36

PEER TUTOR EFFECGIVENESS LIMITED BY HIS SKILLS AND KNOWLEDGE

	MEAN	SIGMA	RANGE	N
ID = 07404	1.37	.48	1.00 - 2.00	35

TUTORING SESSION MAY TURN INTO SOCIALIZING

	MEAN	SIGMA	RANGE	N
ID = 07405	1.23	.42	1.00 - 2.00	35

TUTOR-TUTEE INTERPERSONAL PROBLEMS MAY ARISE

	MEAN	SIGMA	RANGE	N
ID = 07406	1.40	.49	1.00 - 2.00	35

PEER TUTOR IS PENALIZED ACADEMICALLY; TAKES TIME FROM OWN WORK

	MEAN	SIGMA	RANGE	N
ID = 07407	1.26	.44	1.00 - 2.00	35

TEACHER HAS STUDENTS READ ALOUD

	MEAN	SIGMA	RANGE	N
ID = 07408	1.85	.36	1.00 - 2.00	39

STUDENTS READ ALOUD TO ASSESS ABILITY, CATCH PROBLEMS

	MEAN	SIGMA	RANGE	N
ID = 07409	1.29	.45	1.00 - 2.00	38

TO INSURE ALL UNDERSTAND; AID TO POOR READERS

	MEAN	SIGMA	RANGE	N
ID = 07410	1.47	.50	1.00 - 2.00	38

BECAUSE KIDS ENJOY IT

	MEAN	SIGMA	RANGE	N
ID = 07411	1.39	.49	1.00 - 2.00	38

TO FACILITATE PARTICIPATION, GAIN INTEREST

	MEAN	SIGMA	RANGE	N
ID = 07412	1.26	.44	1.00 - 2.00	38

TO FACILITATE DISCUSSION; QUESTIONS ARISE; CAN STRESS POINTS

	MEAN	SIGMA	RANGE	N
ID = 07413	1.18	.39	1.00 - 2.00	38

AS TEACHING TOOL; GIVES PRACTICE; LEARN PRONUNCIATION

	MEAN	SIGMA	RANGE	N
ID = 07414	1.18	.39	1.00 - 2.00	38

OTHER REASONS TO HAVE STUDENTS READ ALOUD

	MEAN	SIGMA	RANGE	N
ID = 07415	1.15	.36	1.00 - 2.00	39

APPROPRIATE COMPOSITION CRITERIA INCLUDE PUNCTUATION, CAPITALS

	MEAN	SIGMA	RANGE	N
ID = 07416	1.41	.49	1.00 - 2.00	39

INCLUDE SPELLING

	MEAN	SIGMA	RANGE	N
ID = 07417	1.31	.46	1.00 - 2.00	39

Table 3.2-Continued

INCLUDE GRAMMAR

	MEAN	SIGMA	RANGE	N
ID = 07418	1.28	.45	1.00 - 2.00	39

INCLUDE COMPLETE SENTENCES, GOOD SENTENCE STRUCTURE

	MEAN	SIGMA	RANGE	N
ID = 07419	1.46	.50	1.00 - 2.00	39

INCLUDE PARAGRAPHS, TOPIC SENTENCES

	MEAN	SIGMA	RANGE	N
ID = 07420	1.36	.48	1.00 - 2.00	39

INCLUDE SPECIFIED LENGTH

	MEAN	SIGMA	RANGE	N
ID = 07421	1.26	.44	1.00 - 2.00	39

OTHER COMPOSITION CRITERIA

	MEAN	SIGMA	RANGE	N
ID = 07422	1.21	.40	1.00 - 2.00	39

INCLUDE ORGANIZATION, COHERENCE, STRUCTURE, UNITY

	MEAN	SIGMA	RANGE	N
ID = 07423	1.51	.50	1.00 - 2.00	39

INCLUDE CONTENT; SUBJECT THAT CHALLENGES, INTERESTS STUDENT

	MEAN	SIGMA	RANGE	N
ID = 07424	1.36	.48	1.00 - 2.00	39

INCLUDE CREATIVITY, ORGINALITY, SELF-EXPRESSION

	MEAN	SIGMA	RANGE	N
ID = 07425	1.21	.40	1.00 - 2.00	39

CRITERIA INCLUDE MECHANICS ONLY

	MEAN	SIGMA	RANGE	N
ID = 07426	1.21	.40	1.00 - 2.00	39

CRITERIA INCLUDE CONTENT-STRUCTURE

	MEAN	SIGMA	RANGE	N
ID = 07427	1.77	.42	1.00 - 2.00	39

GAMES, FUN DEVICES USED FOR INSTRUCTION, SOCIAL INTERACTION

	MEAN	SIGMA	RANGE	N
ID = 07428	1.79	.40	1.00 - 2.00	39

USED AS INSTRUCTIONAL SUPPLEMENTS

	MEAN	SIGMA	RANGE	N
ID = 07429	1.80	.40	1.00 - 2.00	30

USED FOR PROMOTING SOCIAL INTERACTION, GETTING TO KNOW STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07430	1.50	.50	1.00 - 2.00	30

USED RARELY, OCCASIONALLY DURING THE YEAR

	MEAN	SIGMA	RANGE	N
ID = 07431	1.23	.42	1.00 - 2.00	30

USE IN ORAL REPORTS, SPEECHES, RECITATION, DEBATE

	MEAN	SIGMA	RANGE	N
ID = 07432	1.81	.40	1.00 - 2.00	36

IN ACTING, ROLE-PLAYING, PANTOMIME

	MEAN	SIGMA	RANGE	N
ID = 07433	1.53	.50	1.00 - 2.00	36

Table 3.2-Continued

IN READING ALOUD STORIES, PLAYS, POETRY

	MEAN	SIGMA	RANGE	N
ID = 07434	1.25	.43	1.00 - 2.00	36

IN ART, BULLETIN BOARDS, POSTERS

	MEAN	SIGMA	RANGE	N
ID = 07435	1.19	.40	1.00 - 2.00	36

OTHER: GAMES, LISTENING STATION

	MEAN	SIGMA	RANGE	N
ID = 07436	1.33	.47	1.00 - 2.00	36

DIFFERENCES BETWEEN CLASSES ACCOUNTED FOR BY SIZE OF CLASS

	MEAN	SIGMA	RANGE	N
ID = 07437	1.33	.47	1.00 - 2.00	39

BY TIME OF DAY

	MEAN	SIGMA	RANGE	N
ID = 07438	1.41	.49	1.00 - 2.00	39

BY DIFFENENT ABILITY LEVELS DUE TO TRACKING OR ABILITY GROUPING

	MEAN	SIGMA	RANGE	N
ID = 07439	1.13	.33	1.00 - 2.00	39

BY DIFFERENCE IN ABILITY LEVEL: SOME CLASSES BRIGHTER THAN OTHER

	MEAN	SIGMA	RANGE	N
ID = 07440	1.51	.50	1.00 - 2.00	39

BY EXTREMES OF ABILITY WITHIN CLASS VERSUS HOMOGENOUS ABILITY

	MEAN	SIGMA	RANGE	N
ID = 07441	1.15	.36	1.00 - 2.00	39

BY DIFFERENCES IN STUDENT MOTIVATION, MATURITY, WORK HABITS, COOPERATION

	MEAN	SIGMA	RANGE	N
ID = 07442	1.59	.49	1.00 - 2.00	39

BY DIFFERENCES IN BEHAVIOR PROBLEMS, NUMBER OF TROUBLESOME KIDS, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07443	1.51	.50	1.00 - 2.00	39

BY DIFFERENCES IN CLASS PERSONALITY, INTERPERSONAL RELATIONS

	MEAN	SIGMA	RANGE	N
ID = 07444	1.46	.50	1.00 - 2.00	39

BY DIFFERENCES IN TEACHER-STUDENT RELATIONSHIP, TEACHER AFFECT

	MEAN	SIGMA	RANGE	N
ID = 07445	1.08	.27	1.00 - 2.00	39

BY DIFFERENCES IN BACKGROUND, SES, HOME ENVIRONMENT

	MEAN	SIGMA	RANGE	N
ID = 07446	1.10	.30	1.00 - 2.00	39

NO DIFFERENCES, OR CHANCE ACCOUNTS FOR DIFFERENCES

	MEAN	SIGMA	RANGE	N
ID = 07447	1.08	.27	1.00 - 2.00	39

BY SEX AND RACE MAKE-UP

	MEAN	SIGMA	RANGE	N
ID = 07448	1.08	.27	1.00 - 2.00	39

OTHER: ROOM IS HOT,; ATTENDANCE PATTERNS, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07449	1.18	.38	1.00 - 2.00	39

Table 3.2-Continued

SUTDENTS ARE RANDOMLY ASSIGNED TO CLASSES AT THIS SCHOOL

	MEAN	SIGMA	RANGE	N
ID = 07450	1.72	.45	1.00 - 2.00	39

UNSPECIFIED ADJUSTMENTS; DOES NOT TELL HOW SHE ADJUSTS

	MEAN	SIGMA	RANGE	N
ID = 07451	1.28	.45	1.00 - 2.00	39

VARIES METHODS, BUT NOT CURRICULUM

	MEAN	SIGMA	RANGE	N
ID = 07452	1.28	.45	1.00 - 2.00	39

VARIES CURRICULUM, MATERIALS, EMPHASIS, BUT NOT METHODS

	MEAN	SIGMA	RANGE	N
ID = 07453	1.18	.38	1.00 - 2.00	39

VARIES BOTH CURRICULUM AND METHODS

	MEAN	SIGMA	RANGE	N
ID = 07454	1.15	.36	1.00 - 2.00	39

VARIES STRUCTURE, DISCIPLINE, CONTROL

	MEAN	SIGMA	RANGE	N
ID = 07455	1.10	.30	1.00 - 2.00	39

OTHER: DOES NOT ADJUST; GET TO ALL WITH BASICS; YOU HAVE TO TRY

	MEAN	SIGMA	RANGE	N
ID = 07456	1.15	.36	1.00 - 2.00	39

ADJUSTS IN RESPONSE TO ABILITY LEVEL, OR INDIV. DIFF. IN ABILITY ONLY

	MEAN	SIGMA	RANGE	N
ID = 07457	1.23	.42	1.00 - 2.00	35

TO CLASS PERSONALITY, INTERESTS, ATTITUDES, EMOTIONAL NEEDS ONLY

	MEAN	SIGMA	RANGE	N
ID = 07458	1.11	.32	1.00 - 2.00	35

TO BOTH ABILITY AND PERSONALITY OF THE CLASS

	MEAN	SIGMA	RANGE	N
ID = 07459	1.26	.44	1.00 - 2.00	35

LACK OF PARENTAL ENCOURAGEMENT AND CONCERN

	MEAN	SIGMA	RANGE	N
ID = 07460	1.21	.40	1.00 - 2.00	39

HOME PROBLEMS; HOME ENVIRONMENT

	MEAN	SIGMA	RANGE	N
ID = 07461	1.38	.49	1.00 - 2.00	39

LEARNING DISABILITY, LOW IQ, HYPERACTIVE, NON-READERS, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07462	1.26	.44	1.00 - 2.00	39

EMOTIONAL PROBLEMS, ADOLESCENCE, POOR PEER RELATIONSHIPS

	MEAN	SIGMA	RANGE	N
ID = 07463	1.18	.38	1.00 - 2.00	39

DISCIPLINE, BEHAVIOR PROBLEMS; DISRUPTIVE, ANTAGONISTIC STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07464	1.18	.38	1.00 - 2.00	39

LACK OF INTEREST, MOTIVATION; SOME HAVE GIVEN UP; ALIENATED STUDENTS

	MEAN	SIGMA	RANGE	N
ID = 07465	1.36	.48	1.00 - 2.00	39

Table 3.2-Continued

STUDENT PERSONALITY, OR TEACHER-STUDENT PERSONALITY CONFLICT

	MEAN	SIGMA	RANGE	N
ID = 07466	1.10	.30	1.00 - 2.00	39

RACIAL, ETHNIC, CULTRUAL BACKGROUND AND VALUES

	MEAN	SIGMA	RANGE	N
ID = 07467	1.26	.44	1.00 - 2.00	39

CLASSROOM GIVENS: SIZE, TIME OF DAY, AVAILABLE MATERIALS, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07468	1.05	.22	1.00 - 2.00	39

CAN ALWAYS TRY TO DO SOMETHING; ↓CAN DO↓ ATTITUDE

	MEAN	SIGMA	RANGE	N
ID = 07469	1.08	.27	1.00 - 2.00	39

OTHER: ABSENCE, SCHOOL POLICIES, GET STUCK WITH PROBLEM KIDS, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07470	1.18	.38	1.00 - 2.00	39

NEED PATIENCE, FORTITUDE

	MEAN	SIGMA	RANGE	N
ID = 07471	1.41	.49	1.00 - 2.00	39

NEED SENSE OF HUMOR

	MEAN	SIGMA	RANGE	N
ID = 07472	1.31	.46	1.00 - 2.00	39

NEED ENERGY, HEALTH

	MEAN	SIGMA	RANGE	N
ID = 07473	1.23	.42	1.00 - 2.00	39

Table 3.2-Continued

NEED HONESTY, SINCERITY; BE A REAL PERSON

	MEAN	SIGMA	RANGE	N
ID = 07474	1.10	.30	1.00 - 2.00	39

NEED GOOD, CONSISTENT, FAIR DISCIPLINE AND CONTROL

	MEAN	SIGMA	RANGE	N
ID = 07475	1.28	.45	1.00 - 2.00	39

UNDERSTANDING, CONCERN, CARING, INVOLVEMENT W/KIDS, THEIR PROBLEMS

	MEAN	SIGMA	RANGE	N
ID = 07476	1.44	.50	1.00 - 2.00	39

LIKE KIDS AND TEACHING; DEVOTION, ENTHUSIAM; DESIRE TO BE THERE

	MEAN	SIGMA	RANGE	N
ID = 07477	1.41	.49	1.00 - 2.00	39

NEED COMMUNICATION SKILLS

	MEAN	SIGMA	RANGE	N
ID = 07478	1.10	.30	1.00 - 2.00	39

NEED FLEXIBILITY; BE OPEN TO NEW IDEAS, METHODS; BE OPEN-MINDED

	MEAN	SIGMA	RANGE	N
ID = 07479	1.28	.45	1.00 - 2.00	39

NEED GOOD KNOWLEDGE OF SUBJECT MATTER

	MEAN	SIGMA	RANGE	N
ID = 07480	1.54	.50	1.00 - 2.00	39

NEED GOOD TEACHING SKILLS; ABILITY TO EXPLAIN, PREPARE, MOTIVATE

	MEAN	SIGMA	RANGE	N
ID = 07481	1.33	.47	1.00 - 2.00	39

Table 3.2-Continued

NEED CONCEPT OF APPROPRIATE TEACHER-STUDENT REALTIONSHIP

	MEAN	SIGMA	RANGE	N
ID = 07482	1.18	.38	1.00 - 2.00	39

OTHER: SELF-CONTROL; GOOD JUDGE OF PEOPLE; ADEQUATE MATERIALS, ETC.

	MEAN	SIGMA	RANGE	N
ID = 07463	1.33	.47	1.00 - 2.00	39

to ability of classes. For high-ability classes, team structure of faculty was associated with low achievement, but high student ratings of the teacher. For low-ability classes, in contrast, it was associated with high achievement, but low student attitude toward the teacher.

The lack of correspondence between results for the two product measures in English classes was not surprising in view of the lack of general correlation obtained for the achievement measure and student ratings in English. Unlike math, success in English does not appear to go hand-in-hand with liking of the teacher.

Because results with respect to English achievement and student ratings of the teacher bear so little relationship to each other, variables related to the two product measures will be discussed separately in this chapter. Summary tables showing the results will be divided accordingly. Tables 3.3 through 3.6 summarize results with respect to English achievement. Tables 3.7 through 3.11 summarize results with respect to student ratings of the teachers. An example and explanation of how to read the tables is given in chapter 2 on page 17.

Relationships with English Achievement

A total of 73 presage variables were significantly related to achievement in English classes. Several were difficult to interpret and tended to contradict other findings which showed meaningful patterns. The results, however, indicated some potentially useful relationships with respect to teaching strategies, testing and evaluation, management, and teacher characteristics and assumptions about teaching.

Instructional Organization

In English classes, no significant relationships were found between mean class achievement and instructional organization variables describing

teachers' reports of using ability grouping, individualized instruction, or other methods of coping with varying ability levels of students in class. These aspects of instructional management, at least as reported by teachers in our sample, appeared to be less related to student achievement than to student attitude.

Evaluation Practices

Results for evaluation practices are shown in Table 3.3. With respect to testing and evaluation, results supported teachers' preference for use of objective evidence (Variable 06002). The reported use of both teacher-made and prepared tests, as opposed to teacher-made only (07028) was positively associated with achievement. Two other variables relating to testing showed contradictory results and are difficult to interpret (Variables 07040, 07041).

Table 3.3

Variables Related to English Achievement

Variable Number	Variable Description	Relationship with Achievement: Main	Relationship with Achievement: Interaction
Evaluation Practices			
06002	Teachers report high percentage of grades based on objective evidence	+	
07028	Teachers use both teacher-made and prepared tests, as opposed to teacher-made only	+	
07040	Teachers report using a standard diagnostic test to assess students' achievement level at beginning of year		Hi - Lo +
07041	Teachers report using diagnostic test to assess student achievement level at the beginning of year--unspecified as to self-made or standard		Hi + Lo -

Classroom Management

A generalization supported by the results with respect to management and discipline variables shown in Table 3.4 is that high achievement in our study was associated with teachers' stated preference for formal, more traditional classroom environments. Reports of use of assigned seating (07087) and rules against chewing gum or bringing food to class (07092) were positively related to achievement. The following variables were negatively related to achievement:

06080 Teachers agree that teachers should talk to students as they would to adults;

07152 Teachers do not consider students calling out during class discussion a problem;

07091 Teachers mention no fighting, horseplay, or throwing as established class rules; and

07126 Teachers mention willingness to try greater student involvement in making and in enforcing class rules.

Variables describing allowance for quiet talk (07090) and posting rules (07115) were differentially related to achievement, according to entering ability of the classes.

Consonant with the picture of the traditional, but effective classroom are variables presenting a picture of a rather demanding teacher. The following variables were associated with high achievement:

07104 Teachers' demands that students accept responsibility for makeup work;

07205 Teachers' demands that students pay strict attention to instructions; and

07096 Teachers' distinguishing between excused and unexcused absences in accepting late papers.

In addition, results for several variables (07167, 07106, 07195, and 07174) suggest that demandingness is most effective with low-ability classes when it is combined with persistent personal attention.

Table 3.4

Variables Related to English Student Achievement

Variable Number	Variable Description	Relationship with Achievement: Main	Relationship with Achievement: Interaction
Classroom Management			
07087	Class rules include students must sit in assigned seats	+	
07092	Class rules include no gum chewing or bringing food to class	+	
06080	Teachers agree that teachers should talk to students just as they would to adults	-	
07152	Teachers do not consider students calling out during class discussion a problem	-	
07091	Teachers mention no fighting, horseplay, or throwing as established class rules	-	
07126	Teachers mention willingness to try greater student involvement in making and in enforcing class rules	-	
07090	Class rules allow quiet talk during seatwork, but not disruption		Hi - Lo +
07115	At beginning of year, teachers pass out or post rules or use other visual aids		Hi + Lo -
07104	Students must take responsibility for seeing that work is made up	+	

Table 3.4-Continued

Variable Number	Variable Description	Relationship with Achievement: Main	Interaction
Classroom Management			
07205	Teachers demand strict attention to directions; react negatively to students who do not or cannot follow them	+	
07096	Teachers distinguish between excused and unexcused absences in accepting papers	+	
07167	Teachers deal with student not paying attention by calling his/her name		Hi - Lo +
07106	Teachers take some responsibility that students make up work		Hi 0 Lo +
07195	Teachers cope with students who refuse to work by setting up conferences with counselor and/or parents		Hi - Lo +
07174	Teachers deal with students not paying attention by leaving alone, especially if nondisruptive, tired, upset		Hi + Lo -

Teaching Strategies

Table 3.5 summarizes findings for teaching strategies. A number of variables describing specific English teaching strategies were negatively related to achievement. Acting and role playing (07433), review of pronunciation and meaning for spelling words (07379), and reported use of peer tutoring (07399) were all negatively related to achievement. In addition, favorable teacher attitudes toward small group discussion (06078) and special privileges as motivators (06063, 07214) also bore negative relationships. Teachers' listing of punctuation and capitalization as appropriate composition criteria (07416) was positively related to achievement. The use of district-adopted spelling and literature books and/or more advanced enrichment materials (Variables

07277, 07279, 07060) was also generally associated with high achievement, particularly for low-ability students; whereas the reported use of easier, "high-interest" materials (07392, 07278) was negatively related to achievement for both groups.

Few reported practices were associated with high achievement in classes of high-ability students, although several did suggest facilitative effects for low-ability students. The following variables showed contrasting relationships for the two ability groups (negative for highs, but positive for lows):

07277 and 07279 Reported use of the district-adopted texts for spelling and literature;

07394 Use of peer tutoring for nonreaders;

07408 Having students read aloud;

07204 Carefully and slowly going over directions; and

07452 Adherence to the same curriculum regardless of ability levels.

Variable 07070 reported checking of comprehension with tests, drill, and board work when presenting new material. This variable showed a positive relationship for highs and a negative one for lows.

If teachers' strategies for their English classes are in actuality what they report them to be, then classroom practices may have focused on the remediation and drill needed by low-ability students, but not on more challenging work needed to keep high-ability students.

The remaining variables in the table, involving adjusting instructional approaches (07457), instructional rationale (07410 and 07268), and leaving alone students who do not respond (07162), are less easy to interpret and could represent chance relationships.

Table 3.5

Variables Related to English Achievement

Variable Number	Variable Description	Relationship with Achievement: Main	Interaction
Teaching Strategies			
07433	Teacher uses acting, role playing, or pantomime to communicate subject matter	-	
07379	Teachers use following technique for teaching spelling: going over pronunciations and meanings	-	
07399	Teachers report the use of peer tutoring in their classes	-	
06078	Teachers agree that small group discussions should be used because students learn from peer interaction	-	
06063	Teachers report use of special privileges as a motivational strategy	-	
07214	Teachers use out-of-class privileges as motivating strategy	-	
07416	Teachers list punctuation, capitalization as appropriate composition criteria	+	
07277	Teachers use district-adopted literature text		Hi - Lo +
07279	Teachers use district spelling text		Hi - Lo +
07060	Teachers report provision for enrichment materials in class	+	
07392	For nonreaders, teachers use special materials--high interest, low level	-	
07278	Teachers use supplementary literature materials easier than adopted text	-	
07394	For nonreaders, teachers use peer tutoring, college tutoring, or buddy system		Hi - Lo +
07408	Teachers have students read aloud in class		Hi - Lo +

Table 3.5-Continued

Variable Number	Variable Description	Relationship with Achievement: Main	Interaction
Teaching Strategies			
07204	Teachers use preventive or developmental approach to ensure that students can understand and follow directions		Hi - Lo +
07452	In meeting needs of varying classes, teachers vary methods but not curriculum		Hi - Lo +
07070	When presenting new material, teachers report they check comprehension with test, drill exercises, boardwork		Hi + Lo -
07457	Teachers adjust instructional approaches in response to differing ability levels of classes, but not in response to affective differences, personality	-	
07410	Teachers give following reason for using reading aloud: to ensure that all understand, aid to poor readers	-	
07268	Teachers mention problems with differing abilities of students as disadvantage of class discussion		Hi 0 Lo -
07162	Teachers eventually ignore, leave alone students who never answer when called on		Hi 0 Lo +

Teacher Characteristics

Table 3.6 shows results with respect to teacher characteristics. Experience in teaching was positively related to achievement, especially among low-ability students (06110, 06111). Teachers' willingness to work with a counselor appeared to be a facilitative characteristic and was associated with high achievement, particularly among low-ability students (07342, 07345, 07347). Teachers' beliefs that ability to organize is an important part of good teaching and that energy and health are important attributes of junior

high school teachers (06041, 07473) were positively related to achievement. Teacher's mention of the ability to do remedial work (06052); good teaching skills (07481); disciplining students for profanity (07237); and good, consistent, fair discipline (07475) as important to good teaching were all associated with low achievement. These results are difficult to explain. Variable 07182, Teachers' attribution of lack of student motivation to home problems, was positively related to achievement.

The negative relationship found between achievement and Variable 07360, Teacher mentions as disadvantage of having a student teacher: teacher loses contact with students, also leaves much room for speculation. It seems plausible, however, that in classes which were turned completely over to the student teachers, the experienced teachers did indeed lose contact with their students, and the student teachers left in charge were less able to effect learning gains in the students.

Results for nine variables indicated opposite relationships for high- versus low-ability classes. Variables positively related to achievement in high-ability classes but negatively related in low-ability classes were:

06029 Teachers think that parents are best used as tutors at home;

06056 Teachers believe frequent praise is important to good teaching;

06074 Teachers agree that teaching should be oriented toward helping students do well on normed tests;

06089 Teachers agree that one should expect students to forget much that is told them; and

07425 Teachers list creativity, originality, self-expression as criteria for composition.

Four other variables describing sympathetic views of unmotivated students (07178, 07180), appropriate composition criteria (07424), and teachers' per-

ceptions of differences between classes (07445) were associated with low achievement in high-ability classes but high achievement in low-ability classes. Most of the nine interaction effects suggest that effective teachers have realistic expectations and perceptions of their students.

Table 3.6

Variables Related to English Achievement

Variable Number	Variable Description	Relationship with Achievement	
		Main	Interaction
Teacher Characteristics			
06110	Teachers' total years of experience teaching	+	Hi 0 Lo +
06111	Teachers' total years of experience teaching at junior high level		Hi 0 Lo +
07342	Teachers report that they work with counselor as little as possible or not at all	-	
07345	Teachers work with counselor to get advice, background information, test data on students		Hi - Lo +
07347	Teachers work with counselor in conferences with students and parents		Hi - Lo +
06041	Teachers believe ability to organize classroom is an important part of good teaching	+	
07473	Teachers list energy and health as a most important attribute of effective junior high teachers	+	
07237	Teacher mentions profanity as behavior requiring discipline	-	
06052	Teachers believe that the ability to do remedial work with slow learners is important to good teaching	-	
07481	Teachers list good teaching skills, ability to explain, to prepare, motivate as most important attribute of effective junior high teachers	-	

Table 3.6-Continued

Variable Number	Variable Description	Relationship with Achievement: Main	Relationship with Achievement: Interaction
Teacher Characteristics			
07475	Teachers list good, consistent, fair discipline and control as most important attribute of effective junior high teachers	-	
07182	Teachers attribute lack of student motivation to home problems	+	
07360	Teachers mention as disadvantage of having a student teacher: teachers lose contact with students	-	
06029	Teachers think that parents are best used as tutors at home		Hi + Lo -
06056	Teachers believe frequent praise is important to good teaching		Hi + Lo -
06074	Teachers agree that teaching should be oriented toward helping students do well on normed tests		Hi + Lo -
06089	Teachers agree that one should expect students to forget much that is told them		Hi + Lo -
07425	Teachers list creativity, originality, self-expression as criteria for composition		Hi + Lo -
07178	Teachers' view of unmotivated student: poor self-concept, lack of confidence, fear of failure		Hi - Lo +
07180	Teachers attribute lack of students' motivation to inappropriate, irrelevant materials		Hi - Lo +
07424	Teachers list subject that challenges and interests students as appropriate composition criteria		Hi - Lo +

Table 3.6-Continued

Variable Number	Variable Description	Relationship with Achievement: Main	Interaction
Teacher Characteristics			
07445	Teachers account for differences between observed sections: by differences between teacher/student affective relationships	Hi − Lo +	

Relationships with Student Attitudes

More variables (111) were related to student ratings of English teachers than to achievement in English classes. While not all of these affective outcomes are interpretable, a number of clear-cut relationships emerged with respect to teaching strategies, management, evaluation, and teacher characteristics and assumptions.

Instructional Organization

Findings for instructional organization are summarized in Table 3.7. Fifteen significantly related variables support the generalization that students had positive attitudes toward teachers who reported that they coped with different ability levels in classes by some form of individualization and, to a lesser extent, by ability grouping. Variables describing individualizing by differential testing and grading, differing expectations of students, self-pacing and contracts, and ability grouping based on diagnostic tests or teacher observation and assessment were all associated with positive student ratings of teachers (See Variables 07018, 07024, 07019, 07112, 07007, 07010, 07013, 07012). In contrast, variables describing the use of neither grouping nor individualization and teaching to the middle ability level of the class were related to negative student ratings of teachers (07026, 07008). It should be noted, however, that ability grouping based on unspecified (and

possibly subjective) criteria (07014), reports of teachers' targeting more questions to brighter or slower students (07272), and determination of rules and procedures by ability level of classes (07110) were also associated with negative student affect. Three other variables (07017, 07021, 07053) resulted in interactions which indicated that ability grouping may be less popular among high-mean ability classes than among low-mean ability classes, but such relationships were not strongly supported by other variables.

Table 3.7

Variables Related to English Student Attitudes

Variable Number	Variable Description	Relationship with Attitude: Main	Relationship with Attitude: Interaction
Instructional Organization			
07018	Teachers report they individualize instruction	+	
07024	Teachers individualize only (do not group)	+	
07019	Teachers individualize by self-paced work, contracts, learning stations	+	
07112	Teachers' academic expectations differ for different classes	+	
07007	Teachers cope with differing ability levels by differential testing, grading, expectations	+	
07010	Teachers cope with ability level problem in class rather than avoiding problem	+	
07013	When teachers use ability groups, groups based on observation, assessment of work, talk with students	+	
07012	When teachers use ability groups, groups based on diagnostic tests, CAT scores	+	
07026	Teachers neither group nor individualize	−	

Table 3.7-Continued

Variable Number	Variable Description	Relationship with Attitude: Main	Relationship with Attitude: Interaction
Instructional Organization			
07008	Teachers cope with differing ability levels by teaching to the middle group or ignoring problem	-	
07014	When teachers use ability groups, groups based on ability (no other response given)	-	
07272	Teachers report targeting more questions to brighter or slower students	-	
07110	Rules and procedures determined by ability level of classes	-	
07017	Teachers report more attention given to high-ability groups in their classes		Hi - Lo +
07021	Teachers use ability groups with different assignments		Hi - Lo 0
07053	Teachers provide different level texts, reading groups for students who need remediation or enrichment		Hi - Lo 0

Evaluation Practices

Somewhat more consistent were results with respect to evaluation and grading, shown in Table 3.8. Variable 06002, Teachers report high percentage of grades based on objective evidence, was associated with high student ratings of teachers among high-ability classes. However, there was no significant relationship among lower-ability classes. Variable 06003 describing a high percentage of subjective grades was associated with low student ratings of teachers among high-ability classes. These results were

supported by negative relationships found for three other variables describing subjective evaluation:

06026 Teachers measure their succe s by well-behaved classes;

06021 Teachers measure success by students appearing to understand the material; and

06023 Teachers measure their success by students beginning work immediate.

Results for other variables describing evaluatior strategies were less clear. The following were associated with low student ratings of the teacher:

06105 Teacher's belief that high grades reinforce effort;

06016 Opinions that in evaluating past records, grades are more valuable than achievement scores;

07289 Reports of evaluation of subgroups within classes separately; and

07345 Teachers work with counselor to get advice, background information, test data on students.

Table 3.8

Variables Related to English Student Attitudes

Variable Number	Variable Description	Relationship with Attitude Main	Interaction
Evaluation Practices			
06002	Teachers report high percentage of grades based on objective evidence	+ Hi	+ Lo 0
06003	Teache.. report high percentage of grades based on subjective evidence	- Hi	- Lo 0

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Table 3.8-Continued

Variable Number	Variable Description	Relationship with Attitude: Main	Relationship with Attitude: Interaction
Evaluation Practices			
06026	Teachers measure their success by well-behaved classes	-	
06021	Teachers measure their success by students appearing to understand the material	-	
06023	Teachers measure their success by students beginning work immediately	-	
06105	Teachers agree that high grades reinforce effort, making students work harder	-	
06016	In evaluating student's past record, teachers think grades are more valuable than achievement scores or more subjective data	-	
07289	Teachers evaluate subgroups within class separately	-	
07345	Teachers work with counselor to get advice, background information, test data on students	-	

Classroom Management

Results with respect to classroom management are shown in Table 3.9. They allow us to make no simple two-word description of the kind of English teachers who were well-liked in our sample. Being strict at the beginning of the year and loosening up later (07114) was a practice associated with positive student attitude. Two variables relating to posting of rules and consequences at the beginning of the year, however, resulted in contradictory indications (07118, 07120). Preference for fixed seating (07138) was associated with positive attitudes among high-ability classes, but no relationship was found for low-ability groups.

Students appeared to respond negatively to teachers who were very concerned with maintaining formal teacher roles. Variable 07482, Teacher lists concept of appropriate teacher/student relationships as most important attribute of effective junior high school teachers, and Variable 07245, Teacher believes that to establish credibility one must maintain teacher role, were both associated with low student ratings of the teacher.

Variables describing firm procedural rules for paper work and time limits for turning in work (07095, 07100, and 07103) were generally associated with positive student attitudes, but Variable 07104, Students must take responsibility for seeing that work is made up, was related negatively to student ratings of the teacher. Teachers' reports of providing notes on different students for substitute teachers (07143) was positively related to student ratings of the teacher, and teachers' mention of the limitations of substitutes (07144) was negatively related to student attitude.

Variables with respect to discipline were even less coherent. Positive relationships with student attitudes were found for:

07093 Class rules demanding mutual courtesy;

07152 Teachers' opinions that discipline problems are due to laxity in rules;

06005 Call outs in class are not a problem; and

07240 Mention of fighting, destruction of property as misbehaviors requiring discipline.

Teachers' mention of lack of respect, consideration for teacher or other students as misbehavior requiring discipline (07238) was related to positive attitudes among high-ability classes, but not among low-ability classes.

Negative relationships with student ratings of the teacher were found for the following variables:

07239 Teacher opinion that constant talk is a misbehavior requiring discipline;

07235 Reports of use of a step-by-step process in handling disruptive students;

07090 Allowance of quiet talk during seatwork;

07146 Reports of problems with students calling out answers;

07231 Referring disruptive students to a counselor for conferences; and

07233 Sending disruptive students to detention.

Some of the findings seem almost contradictory (07239 and 07090, for example). Overall results shed little light on the relationship between student atttitude and strategies teachers might use with inattentive, disruptive, or uncooperative students (07190, 07195, 07198, 07148, 07170, 07172, 07173).

Table 3.9

Variables Related to English Student Attitudes

Variable Number	Variable Description	Relationship with Attitude: Main	Relationship with Attitude: Interaction
Classroom Management			
07114	At beginning of year, teachers are strict, loosen up later	+	
07118	At beginning of year, teachers announce rules and the consequences of breaking them	-	
07120	At beginning of year, teachers use informal approach, no formal presentation of rules	-	
07138	Teachers believe personal development, peer relations favor fixed seating		Hi + Lo 0
07482	Teachers list concept of appropriate teacher-student relationships as most important attribute of effective junior high teachers	-	

Table 3.9-Continued

Variable Number	Variable Description	Relationship with Attitude: Main	Relationship with Attitude: Interaction
Classroom Management			
07245	Teachers believe that to establish credibility one must maintain teacher role; know subject; be correct in manner	-	
07095	Teachers have rules for turning in homework and seatwork		Hi + Lo 0
07100	Teachers report procedural rules for paper work	+	
07103	Teachers set a time limit for turning in missed work	+	
07104	Students must take responsibility for seeing that work is made up	-	
07143	Teachers provide notes on reliable and problem students for substitute teachers	+	
07144	Teachers mention limitations of substitutes; won't let them do some things	-	
07093	Class rules include expect mutual respect, courtesy	+	
07152	Teachers do not consider students calling out during class discussion a problem	+	
06005	Teachers believe that discipline problems are due to laxity in enforcing rules	+	
07240	Teachers mention roughhousing, fighting, throwing, destruction of property as misbehavior requiring discipline	+	
07238	Teacher mentions lack of respect, consideration for teacher, other students as misbehavior requiring discipline		Hi + Lo 0
07239	Teachers mention constant talk, interrupting, calling out as misbehavior requiring discipline	-	
07235	Teachers have step-by-step process for handling disruptive students	-	

Table 3.9-Continued

Variable Number	Variable Description	Relationship with Attitude: Main	Relationship with Attitude: Interaction
Classroom Management			
07090	Class rules allow quiet talk during seatwork, but not disruption	-	
07146	Teachers report problems with students waving hands, calling out answers	-	
	Teachers were asked how they handled disruptive students:		
07231	Teachers handle disruptive students by referring to counselor, conference with parent, counselor, student	-	
07233	Teachers handle disruptive students by sending to detention	-	
07190	Teachers cope with students who refuse to work by nag, threaten, fuss, keep at them, praise		Hi - Lo 0
07195	Teachers cope with students who refuse to work by setting up conferences with counselor and/or parents	+	
07198	Teachers cope with students who refuse to work by discussing problem with counselor or other teachers		Hi - Lo +
07148	Teachers respond to call outs by telling them to raise hands, to stop, take turns		Hi - Lo 0
	Teachers were asked how they dealt with inattentive students:		
07170	Telling them to pay attention, get to work	+	
07172	Discussing problem with the student		Hi - Lo 0
07173	Seeking outside help: parent, counselor, office	-	

Teaching Strategies

Table 3.10 summarizes results for variables describing teaching strategies. Some teaching strategies clearly related to positive student attitude toward the teacher were peer tutoring (06083, 07399, 07404), role playing (07433), teachers' written comments on students' papers (06066), and teachers' going to students' desks during seatwork (07276). Reported high frequencies of class discussions (07256) and teachers' assumptions that students learn from others during class discussions or small group discussion (07257 and 06078) were both associated with low student ratings of the teacher. Teachers' citing of socialization as an advantage of class discussion (07262) and their citing of lack of total participation as a disadvantage of class discussion (07264) were both associated with positive student attitudes. Some of these findings suggest that well-liked teachers have realistic attitudes toward peer interactions in their classes.

Spelling appeared to be an unpopular topic with students. Teachers' listing of spelling as an appropriate composition criterion (07417) and teachers' reports that they concentrate on spelling and vocabulary (07291) were both related negatively to the student ratings of the teacher. Reports of reading aloud for drill and pronunciation practices (07414) were also unpopular. Reports of use of audio-visual aids for nonreaders (07396) were related to positive attitudes.

Several statistically significant variables relating to teaching strategies failed to fall into clearly interpretable patterns: 07072, 07073, 07112, 07156, 07164, 07307, 07317, 07398, 07419, and 07458.

Table 3.10

Variables Related to English Student Attitudes

Variable Number	Variable Description	Relationship with Attitude: Main	Relationship with Attitude: Interaction
Teaching Strategies			
06083	Teachers agree that letting faster students help slower ones is a good strategy	+	
07399	Teachers report the use of peer tutoring in their classes	+	
07404	Teachers report disadvantage of peer tutoring: effectiveness is limited by tutor's skills and knowledge	+	
07433	Teachers use acting, role playing, or pantomime to communicate subject matter	+	
06066	Teachers report using written comments on students' papers as motivation	+	
07276	Teachers go to students during seatwork most of the time; seldom stay at teacher's desk	+	
07256	Teachers report high frequency of class discussions	-	
07257	Teachers feel advantages of class discussions include students learn by hearing others; slower ones learn from brighter	-	
06078	Teachers agree that small group discussions should be used because students learn from peer interaction		Hi - Lo 0
07262	Teachers feel advantages of class discussions include students establish identity, gain confidence	+	
07264	Teachers feel disadvantages of class discussion include many don't or won't participate	+	
07417	Teachers list spelling as appropriate composition criteria	-	

Table 3.10-Continued

Variable Number	Variable Description	Relationship with Attitude: Main	Relationship with Attitude: Interaction
Teaching Strategies			
07291	Teachers concentrate especially on spelling, vocabulary objectives	-	
07414	Teachers give following reason for reading aloud: as teaching tool; gives practice; students learn pronunciation	-	
07396	For nonreaders, teachers use audio-visual aids	+	
07072	When presenting new material, teachers report use of private contacts; work with students individually		Hi 0 Lo -
07073	When presenting new material, teachers report active student participation: take notes, work problems with teacher		Hi + Lo -
07112	Teachers' academic expectations differ for different classes	+	
07156	Teachers report dealing with students who never volunteer by leaving them alone especially if tired, shy		Hi 0 Lo -
07164	Teachers deal with students who never answer when called on by avoiding embarrassing student; put him at ease	+	
07303	Teachers concentrate on certain skills because important for other classes, high school, college	-	
07317	Teachers assign less importance to certain objectives because memorizing not as important as understanding concepts		Hi - Lo +
07398	Teachers report some active strategy for remediating reading problems	-	
07419	Teachers list complete sentences, good sentence structure as appropriate composition criteria		Hi - Lo +

Table 3.10-Continued

Variable Number	Variable Description	Relationship with Attitude: Main	Relationship with Attitude: Interaction
Teaching Strategies			
07458	Teachers adjust instructional practices in response to differing class personalities, interest, attitudes, emotional needs but not in response to ability level differences		Hi + Lo -

Teacher Characteristics

Table 3.11 summarizes results for teacher characteristics and student attitudes. A number of the teachers' assumptions about good teaching were significantly related to student attitudes toward teachers in English classes. Well-liked teachers emphasized the importance of the ability to motivate, explain, and do remedial work (06053, 07481, 06052). Teachers' agreement that "practice makes perfect" sums up learning (06090) was also associated with high mean class student rating of the teacher. Teachers' agreement with the following statements was related to low student ratings of the teacher:

06104 It is better to underexplain than overexplain;

06077 Some students ask too many questions;

06089 One should expect students to forget much that is told them; and

07224 Good social relationship between students and teacher is important because students feel more comfortable, receptive.

Significant relationships with student attitude were found for two variables describing teacher attitudes towards busing. The opinion that busing downgrades education and hurts capable kids (07238) was associated with negative student attitude towards the teacher, but teachers' concern for bused students' angry feelings was associated with positive student affect (07332).

The latter concern suggests greater empathy and willingness to see the situation from the students' point of view. Similar implications were suggested by results for two variables describing how teachers accounted for differences between their classes. Teachers who took into account the time of day and its effect on students (07438) were rated high by their students. Teachers who focused on ability levels of students (07441) were rated low. These findings may reflect greater student liking of teachers who are able to see things from the students' point of view.

Teachers' level of graduate education (06108) and teachers' membership in the National Education Association (06114) were associated with low student ratings. No significant relationship was found, however, for teachers' total years of teaching experience (06110) and student attitude.

Teachers were asked to name those things about which they felt teachers can do little. Teachers' mention of learning disabilities (07462) and of student emotional problems or poor peer relationships (07463) in reply to this question were both associated with low student ratings. Teachers who expressed a "can do" attitude, saying that they can always try to do something about student problems (07469), were associated with high student ratings of the teacher.

Some teacher characteristics were related to student attitudes among high-ability classes, but not among low-ability classes. Teachers who attributed lack of students' motivation to inappropriate materials (07180) and teachers who cited loss of student contact as a disadvantage of having a student teacher (07360) were rated low by high-ability students. Teachers' opinions that student teachers were time consuming and a lot of work (07358) was negatively related to student attitude for both ability levels.

Table 3.11

Variables Related to English Student Attitudes

Variable Number	Variable Description	Relationship with Attitude: Main	Relationship with Attitude: Interaction
Teacher Characteristics			
06053	Teachers believe ability to motivate students to enjoy schoolwork is important to good teaching	+	
07481	Teachers list good teaching skills, ability to explain, to prepare, motivate as most important attribute of effective junior high teachers	+	
06052	Teachers believe that the ability to do remedial work with slow learners is important to good teaching	+	
06090	Teachers agree that "practice makes perfect" sums up learning	+	
06104	Teachers agree that it is better to err by underexplaining than by overexplaining	-	
06077	Teachers agree that some students ask too many questions	-	
06089	Teachers agree that one should expect students to forget much that is told them	-	
07224	Teachers feel good social relationship between students and teachers important because students feel more comfortable, receptive	-	
07328	Teachers see as disadvantages of busing: downgrades education; hurts capable kids	-	
07332	Teachers see as disadvantages to busing: bused kids feel angry, resentful; hold negative attitudes	+	

Table 3.11-Continued

Variable Number	Variable Description	Relationship with Attitude: Main	Relationship with Attitude: Interaction
	Teacher Characteristics		
	Teachers were asked to describe the differences between the two classes in which we observed:		
07438	Teachers account for differences between observed sections by time of day	+	
07441	Teachers account for differences between observed sections by extremes of ability within classes	-	
06108	Teachers' level of graduate education	-	
06114	Teachers' membership in N.E.A.	-	
06110	Teachers' total years of teaching experience		
07462	Teachers believe that they can do little about learning disabilities, low IQ, hyperactive, nonreaders, etc.	-	
07463	Teachers believe that they can do little about emotional problems, adolescence, poor peer relationships	-	
07469	Teachers believe that they can always try to do something about student problems; "can do" attitude	+	
07180	Teachers attribute lack of students' motivation to inappropriate, irrelevant materials		Hi - Lo 0
07360	Teachers mention as disadvantage of having a student teacher: teachers lose contact with students		Hi - Lo 0
07358	Teachers mention as disadvantage to having a student teacher: student teachers are time consuming, a lot of work	-	

Uninterpretable Findings

The following variables were statistically significant, but were not interpretable or useful. In most cases, these were "other" answers or "doesn't say" categories. Other variables were too isolated or too ambiguous to be meaningful For the description of these variables, see Volumes II and III and Appendix A of this report: 06006, 07009, 07023, 07032, 07082, 07108, 07145, 07158, 07187, 07189, 07199, 07254, 07271, 07274, 07330, 07348, 07415, 07437, and 07451.

Summary

Results for questionnaire and interview data for English classes were less clear than those for math classes. Of the 184 significantly related variables a relatively small proportion were clearly meaningful and useful. Others appeared to have been chance findings or were ambiguous, isolated, or contradictory. Consideration of possible factors contributing to poor English results is included in chapter 4 of this report.

Some generalizations were possible from the English class findings, however. First, in terms of achievement, different relationships were found for high- and low-ability classes. Some teacher characteristics and self-reported teaching practices which were effective with one ability group were not effective with the other. Second, student attitude toward English teachers was not directly related to achievement gains in the class. Characteristics of academically effective teachers were often very different from characteristics of well-liked ones. In general, academically effective English teachers presented themselves as preferring fairly traditional, structured class environments and curricula. Well-liked teachers were somewhat less formal and traditional, more likely to say they favor use of peer tutoring, individualized instruction, role playing, and active, informal teaching

style. However, many of the student attitude findings were inconsistent or difficult to interpret, allowing few clear conclusions about well-liked English teachers.

CHAPTER 4

SUMMARY AND DISCUSSION

This report presents relationships between variables measured by a teacher questionnaire and interview and two outcome measures of the Texas Junior High School Study. Chapter 1 described the background and methodology of the study. In chapter 2 we presented the teacher questionnaire and interview results with respect to math teachers. Chapter 3 presented the results for English teachers. In this chapter we will summarize and discuss the teacher questionnaire and interview data. In the first section of the chapter, we will briefly review the methodology of the study as a whole. In the second section, we will summarize and evaluate the questionnaire and interview results.

Background and Methodology

The Texas Junior High School Study was conducted by the Correlates of Effective Teaching Program at The University of Texas Research and Development Center for Teacher Education. The primary emphasis of this study was the investigation of process-outcome relationships in 136 junior high school math and English classes. The process-outcome results have been previously reported (Evertson et al., Note 3).

A total of 68 teachers (39 English and 29 math) were observed in nine of the 11 junior high schools in a large urban school district. Two sections were observed for each teacher. Two observers alternated visits to each of these classes, for an average of 20 1-hour observations throughout the school year 1974-75. During their visits the observers collected both high- and low-inference data on classroom processes. At the end of the year, teachers responded to a questionnaire and participated in an interview focus-

ing on presage variables such as teachers' beliefs, expectations, assumptions about teaching, and self-reports of instructional practices.

Two outcome measures were used in this study. The first was an achievement test designed to reflect the subject matter taught in the observed classrooms. Students' scores on the math and English subtests of the California Achievement Test given in the spring of the preceding school year were used to assess entering ability. The second outcome measure was Student Ratings of Teachers, completed by the students at the end of the school year. These two outcome measures enabled us to assess teaching effectiveness in both cognitive and affective terms.

The class was used as the unit of analysis for reporting of all results. When data were collected for individual students, all of the available scores were averaged for each of the 136 classes. Tests of presage- and process-outcome relationships were conducted using linear regression equations for each of the potentially predictive teacher or classroom variables. The equations tested the degree of simple relationship of the variable to achievement gain or student ratings of teachers, and showed the degree of the variable's interaction with initial student ability.

For a more extensive discussion of the background of this study, characteristics of the sample, or other reports using this data base, see chapter 1.

Summary of Results

Considered as a whole, the findings resulting from the teacher questionnaire and interview data were not consistently meaningful and useful. Interpretation of the 386 statistically significant variables was made very difficult by contradictions, isolated findings, interactions with ability levels of classes, some ambiguous questions, and some even more ambiguous responses. While some limitations were inherent in the teacher self-report format, others

could be attributed to weaknesses in the procedures and instruments used in gathering and transforming the data. A number of questionnaire and interview questions were poorly chosen or ambiguously worded. In addition, in order to reduce lengthy teacher interviews to manageable units of information, interview data were subjected to several transformations. Information may have been lost or obscured as interviewers condensed teachers' responses to take notes (no tape recorders were used), or as responses were later analyzed and categorized to produce a response coding system for scoring these responses.

Despite these recognized limitations, the questionnaire and interview study resulted in a number of clear findings. In this section we will summarize what our results have to say about the characteristics and self-reported teaching practices of "good" junior high school teachers, with respect to both students' achievement and students' attitudes toward teachers. First we will summarize the results for math teachers, then we will discuss the results for English teachers. We will also consider differences in the results with respect to ability levels of classes for both subject areas. Finally, we will assess the extent to which these presage findings compare with and/or add to previously reported results obtained with the process measures in this study.

Findings for Mathematics Teachers

Linear regression analysis of the 598 questionnaire and interview variables for math teachers resulted in 87 variables significantly related to math achievement and 115 variables significantly related to student attitudes toward teachers. There was a relatively high correspondence between results with respect to the two product measures (achievement and student attitude) in the math classes. Presage variables associated with high achievement were never also associated with negative student attitudes toward teachers in our

math sample: Teachers having high average gains in math achievement were also rated high in generalized likability by their students. A plausible interpretation of this trend is that students recognize the goals of mathematics study and respond positively to those teachers who help them meet those goals.

In general, results for both achievement and attitude measures indicated that successful math teachers are likely to voice commitments to a structured, whole-class, teacher- and textbook-centered approach. Results clearly did not support the use of ability grouping, small group instruction, or peer tutoring. Results did support the use of a "no frills" program featuring regular textbooks and homework. Effective math teachers reported self-confidence and self-reliance with respect to classroom control and behavioral problems. They reported that they accept personal responsibility for management and discipline in their classes. They indicated that they communicate rules and clear expectations to their students, and that they enforce due dates for student work.

Effective math teachers in our sample also reported they were self-reliant diagnosticians, and saw themselves as objective evaluators and graders. They reported using teacher-made or commercial instruments to diagnose student learning problems and progress. They did not favor reliance on subjective criteria or opinions of other teachers, counselors, or parents.

Math teachers who indicated that they valued affective relationships with students, and teachers who emphasized trust, caring, and affective objectives of teaching, were likely to be well-esteemed by their students. This general trend seemed reasonable but was not related to achievement results. Teachers' expressed willingness to work with counselors was also related to student liking of the teacher, but not particularly related to achievement.

Effective teachers expressed realistic attitudes and expectations about parents' roles. They said they did not rely on parents' tutoring students, and they said they viewed the most important parent role as that of providing a warm, supportive home atmosphere.

Math teachers with more progress toward a graduate degree appeared to be less effective in producing achievement gains among their students. Improperly placed or discontented professionals may see graduate study as a way out of the classroom. At any rate, it appears to be associated with lessened commitment to or effectiveness in producing students' learning in math.

Findings for English Teachers

Multiple-regression analysis of the questionnaire and interview variables for English teachers resulted in 73 variables significantly related to achievement in English classes, and 111 variables significantly related to student liking of the teacher. In general, results for English classes were harder to interpret than those for math classes. One reason for this difference is that in English classes, the pretest (CAT) accounted for an extremely high proportion (85%) of the variance on the posttest. Students' success on the achievement test appeared to depend more on students' background than on learning in the English classroom. Perhaps this fact was not surprising considering the wide range of entering ability of students in the study. Many of the students were not native English speakers. Another interpretation is that our English achievement test may have failed to measure what was actually taught in many classes.

The English data were further complicated by the presence of a large number of interaction effects, particularly with respect to achievement. Over half of the 73 variables significantly related to achievement were differentially related with respect to mean entering ability of classes. This pattern

of results itself has significance: Teacher characteristics or teaching practices which appear to "work" with high-ability classes do not necessarily "work" for low-ability classes. Effective English instruction appears to vary more with ability levels of students, than does effective math instruction.

Another generalization clear from the English data is that in English classes, liking of the teacher does not seem to depend on academic success in the class. There appeared to be little correspondence between variables related to cognitive and affective measures. A number of variables describing teachers' attitudes and practices showed clearly contrasting relationships with achievement and student liking of the teacher. Such lack of correspondence may reflect confusion about the goals and purposes of English instruction. Certainly, English curriculum varies much more than does math curriculum. There is often little consensus, even among teachers within a single school; a wide range of activities may be justified as legitimate parts of an English class. Students enjoy and respond positively to many activities and teachers, without respect to whether they help in passing standardized exams.

Because of the lack of correspondence between cognitive and affective measures, we will describe "good" English teachers in terms of two separate categories: those that appear to effect achievement gains among their students and those that are well-liked by their students. In general, effective English teachers (in terms of achievement) are likely to express a fairly traditional orientation. They reported using a whole-class approach and district-adopted textbooks. They said they stress punctuation and capitalization in student papers. They do not report using very much peer tutoring, small class discussions, acting, or role-playing in their classes. They said they prefer structured classroom environments with assigned seating and rules

against bringing food or gum to class. They reported being fairly demanding with respect to students' paying attention to instructions and making up missed work. Like effective math teachers, they reported that they stress the importance of objective evidence in testing and evaluation of students. They indicated a willingness to work with school counselors when necessary. Experience in teaching was positively related to achievement, especially among low-ability students.

The picture that our results gave us of well-liked English teachers was very different than that for teachers with high-achieving students. Well-liked teachers were somewhat less formal and traditional. They reported using some peer tutoring and role-playing in their classes, and they said they do not stress a lot of spelling activities and objectives. They saw their role as teachers as very active. They said they were not very concerned with maintaining formal or "proper" teacher roles in the class. They reported they used some form of individualizing, with different assignments and expectations to cope with varying student ability in their classes. They stressed the use of objective criteria for evaluation, especially among high-ability classes. Progress towards a graduate degree was negatively related to student attitude toward teachers.

Interactions With Ability Levels of Classes

The number and nature of interactions with ability levels of classes were very different when results for math classes and English classes were compared. As noted previously, teaching objectives and strategies of effective teachers appeared to vary more with ability levels of students in English classes than in math classes. However, there were some interesting commonalities and contrasts.

Interactions with respect to the English data showed that when high-ability and low-ability classes were compared, effective teachers of low-ability classes were more likely to report the use of district-adopted textbooks, peer tutoring, more relaxed classroom atmosphere, working with counselors, and a "team" faculty structure. One important pattern was that in low-ability classes, students appeared to benefit more from teachers' persistence in dealing with students who were nonparticipants or nonworkers. This pattern was in direct contrast to results with math classes. In lower-ability math classes, variables describing persistent teacher pressure on nonworkers and nonparticipants were related to low achievement. In addition, in low-ability math classes reported high teacher expectations and high pressure situations were associated with negative student ratings of teachers. These trends may be related to the high incidence of "math anxiety" among lower-ability students. One commonality between English and math interactions was the importance of reports of using district-adopted textbooks with students in lower-ability classes.

Comparison of Presage-outcome Results with Process-outcome Results

In general, results obtained for the questionnaire and interview data were consistent and supportive of those found with the process measures in the study (Evertson et al., Note 3). This general consistency lends credence to the teacher self-reports of instructional practices in the questionnaire and interview. For example, both the process-product and presage-product results for math classes supported a whole-class approach, a structured, task-oriented environment, and teachers who were active and dominant. In both sets of results, there was a relatively high correspondence between variables related to achievement and to student liking of the teacher in that classroom. Both sets of data indicated that in low-ability math classes, students liked and

benefited from a more relaxed classroom atmosphere than in high-ability classes.

Comparison of process-product and presage-product findings in English classes resulted in less clear patterns, but some overall consistency. Both sets of data suggested that effective English teachers used different patterns of teaching with high-ability versus low-ability classes. Both showed relatively little correspondence between cognitive and affective measures, with students liking teacher characteristics and teaching strategies not always associated with achievement gains.

In comparing results achieved with the process measures and the presage measures, it became clear that the two approaches, well-used, are complementary. The process-product approach yielded many specific findings not reliably investigated with the presage-product approach. On the other hand, the presage-product approach resulted in some significant patterns of findings not obvious from the process-product data. For example, significant results were obtained for a number of questionnaire and interview variables relating to teachers' attitudes toward and contacts with school counselors, other teachers, and parents of students. Process measures probably would provide little evidence concerning these areas. Process measures might also miss some aspects of teachers' strategies for coping with nonworkers. Another area in which significant patterns of results were found with the presage data and teacher self-reports was that of diagnosing learning problems, evaluating student progress, and grading. Some, but not all, of the potentially important information in this area would be accessible by process instruments. Presage variables relating to such teacher characteristics as years of experience and graduate training, and teachers' attitudes toward their affective relation-

ships with students also contributed some information which would have been missed had only process measures been relied upon.

On the other hand, a large number of the questionnaire and interview variables described teaching practices more accurately measured by the process approach: instructional organization, presentation and enforcement of rules, and the nature and number of teacher-student interactions in class. Where discrepancies exist between process-product and presage-product findings for specific classroom practices, the process-product results are presumably more reliable. Some discrepancies might be expected and explained by lack of teacher awareness and/or objectivity in assessing classroom events. Results of this study, however, lend some support for confidence in the general accuracy of teacher self-reports.

Implications for Teacher Research

As discussed in chapter 1 of this report, a long history of educational research has proven that research on presage and teacher self-report variables is an inadequate approach to the study of teaching. However, results obtained with the questionnaire and interview in this study indicate that presage measures may be used fruitfully in conjunction with other measures of classroom process.

Taking into account results reported herein, the following seven aspects of teaching are recommended for further study with presage-product approaches and (where applicable) process-product strategies. Each area was selected for recommendation because it met two criteria: First, it was an aspect of teaching for which significant presage-product relationships were found with the questionnaire and interview in this study, and second, it encompasses teacher characteristics or teaching practices not always easily assessed through direct observation.

1. Teacher contacts with and attitudes toward school counselors, principals, other teachers in the school, and parents. Teachers' reliance on school counselors and on parents was significantly related to one or both of the product measures in both math and English classes. The significance of team faculty structures encouraging teacher-to-teacher cooperation appeared to vary with the ability level of classes. Teachers' contact with principals was not investigated in this study, but probably should have been. Information about all such teacher contacts would be difficult to obtain by direct observation.

2. Teachers' attitudes toward and strategies for dealing with nonworkers and nonparticipants. A number of variables related to this aspect of teaching were significantly related to one or both of the product measures in both math and English. In both subject areas, ability levels of classes appeared to be a significant factor in this respect. While some aspects of these teaching behaviors could be measured by classroom observation, others could not.

3. Evaluating and grading students and diagnosing learning problems. Significant relationships were found for both math and English classes in this area. While some aspects of this teaching activity can be assessed through observation, others cannot.

4. Objectives of teaching and selection criteria. Several related variables were found to be significant in both math and English classes. In English classes, variables related to composition criteria (reflections of teaching objectives) were found to be differentially significant according to entering ability of class.

5. Curriculum materials used. Use of district-adopted textbooks appeared to be a significant factor in both math and English classes. This area of teaching is most easily investigated through teacher self-reports.

6. Teacher characteristics such as teaching experience and graduate education. Some interesting relationships were found for these two simple presage variables. The negative relationship found between teachers' level of graduate education and achievement in math classes, and between graduate education and students' liking of teachers in English classes, bear further study.

7. Preparation and attitude toward substitute teachers. While the import of this aspect of teaching is not readily apparent, clear relationships were found between related variables in both achievement and student attitude in math classes, as well as student attitude in English classes. Teacher preparation for substitutes may be a good indicator of teachers' commitments to students' using time productively. It may also say something about teachers' attitudes toward their job.

Reference Notes

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