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**PRINCIPALS: THEIR USE OF FORMAL  
AND INFORMAL DATA**

CSE Technical Report 315

**Joan L. Herman  
Shari Golan  
Jeanne Dreyfus**

UCLA Center for Research on Evaluation,  
Standards, and Student Testing

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January, 1990

The research reported herein was conducted with partial support from the U.S. Department of Education, Office of Educational Research and Improvement, pursuant to Grant No. G0086-003. However, the opinions expressed do not necessarily reflect the position or policy of this agency and no official endorsement by this agency should be inferred.

This paper was written as part of a research project sponsored by the UCLA Center for Research on Evaluation, Standards, and Student Testing (CRESST). It was prepared for presentation at the Annual Meeting of the California Educational Research Association, 1989.

Please address inquiries to: CSE Dissemination Office, UCLA Graduate School of Education, 405 Hilgard Avenue, Los Angeles, California, 90024-1521

In today's information age school principals are bombarded with enormous amounts of information about those whom they serve. Test scores, attendance rates, discipline records, teacher, parent, and student input, and observations are just a few of the sources of information about students that principals receive. Given so many alternatives, which ones do principals really use and for what purpose? Does one's preferences for different sources change according to how many years experience one has as a principal, whether one is an elementary, middle, or high school principal, or whether one's students are from low, middle, or high socio-economic standings? How can those of us interested in promoting the systematic use of data in schools help principals to use data more effectively? In this paper, we will begin to answer these questions and provide suggestions for improving the reporting of school data.

The Multi-Level Evaluation System (MLES) project, funded by the Office of Educational Research and Improvement (OERI) and administered by the UCLA Center for Research on Evaluation, Standards, and Student Testing (CRESST), has studied the use of school information for almost three years. The MLES project is investigating the feasibility of developing comprehensive information systems that will serve the planning and policy needs of school-based educators, district administrators, and school boards and intends to develop a set of design specifications for such systems. The first stage of the project was to compile a multi-disciplinary literature review that summarized the guiding principles for the design of school-based management information systems and the presentation of school data reports. Stage two featured a review of existing district reporting practices. This paper discusses some of the results of stage three, an interview study of 73 principals, school board members, and other district administrators about how they process and use information on school quality.

We conducted a study that asked principals to define how they use school data and other information. We interviewed the principals using open-ended questions and carried out a content analysis of their responses. The procedures used in the interview and content analysis stages are described in the methodology section of this paper. Principals generated a long list of information sources and some patterns of usage emerged. Some ways in which they misused information also appeared. The findings of the content analysis are discussed in the results section of this paper. The results of this study hold valuable lessons for those who create school data reports. The implication and conclusion section of this paper offers applications which can increase the utility and clarity of school data reports.

## **Methodology**

The MLES project's multidisciplinary literature review and examination of district reporting practices were the basis for hypotheses about how principals use data in the real world and the variables which are likely to influence such use. These were the basis for the sample design and the interview protocol.

### **The Interview Protocol**

The interview protocol was developed to examine questions and variables of interest and then revised based on field test results. The final version had three parts:

**Pre-interview.** The pre-interview consisted of an introduction, a statement of purpose, a description of the general content of the interview, an assurance of anonymity, permission to tape the interview, and solicitation of clarifying questions.

**Interview.** The second part of the protocol contained the interview questions. The questions concerned the sources, criteria and application of information principals use to assess the quality of education in their schools. Other questions were about principals' interest in sub-groups test data, preferences for particular formats for test reports and additionally desired information. The final question asked principals how much they felt test data reflects what is important in schooling. Copies of the questions used are located in Appendix A.

**Post-interview.** The final section of the protocol consisted of questions for the interviewer (which were completed as soon as possible after the interview). This sheet had five comment areas: key themes, areas of concern, areas of confusion, personal reflections and suggestions for future interviews (see Appendix B).

### **The Subject Population**

Twelve districts were selected for participation in the study to represent a range of socio-economic status levels, diversity with regard to ethnic composition, and a range of sizes. Within each district, three principals and three board members were to be randomly selected for interviews.

This paper focuses on the subsample of 38 school principals from all 12 districts which were part of the study. Of the 12 school districts, two districts had less than 10 schools; eight had ten to 30 schools (classified as medium), and two had more than 30 schools (classified as large). The schools served in this obtained sample varied in ethnic composition and socio-economic level. The ethnic composition of most schools was either mixed-minority majority, mixed white majority or majority Latino schools. Other minorities represented were Afro-American and Asian.

Three school levels were represented: eighteen elementary school principals, eight middle school and eleven high school principals. Job experience data on twenty-six of the principals indicated that six were beginners with one to two years experience, eight had three to six years experience, and twelve were veterans with seven or more years.

### **Interview Procedures**

Staff from the UCLA Center for Research on Evaluation, Standards, and Student Testing (CRESST) and directors of district research and evaluation offices were recruited and trained in study procedures. Training included discussion and practice in the use of the interview protocol as well as directions for randomly selecting respondents, and for taping, summarizing and returning completed interviews. Interviewers then used the protocol to obtain data.

Each interviewee was first contacted by phone and asked to be involved in the study. Most interviews took approximately one half hour. All the interviews were tape recorded. The interviews were conducted between May and September, 1989.

Interviewers summarized the results of their interviews as soon as possible after each interview. The interview summaries and tapes were turned over to the MLES staff. The MLES staff then coded and analyzed the results.

### **Analysis of the Data**

Tape interviews were summarized and a code book was assembled and tested by four coders. Formal coding did not begin until there was one hundred percent agreement on eight test interviews. For the study reported in this paper frequencies

were tabulated and analyzed for both overall principal data and on the basis of four specific contextual variables: the school's ethnicity and the school's SES, the principal's years of experience, and the school's performance on CAP reading scores.

### **Limitations of the Data**

Like much of research conducted in natural settings, this study had difficulties in controlling the presence of contextual variables of potential interest. In addition, sample sizes limit the generalizability of findings, particularly for those analyses which attempt to assess the effects of contextual variables (e.g. principal's years of experience, school SES, and school CAP achievement). We also were not able to separate out the effects of school level, principal's experience, school SES, and school CAP achievement from each other. Due to these caveats, the findings presented in our results section should be viewed as preliminary patterns and areas for future research.

## **Results**

### **What Information Do Principals Use?**

**Sources of information used.** School principals who participated in our study use a total of twenty-four sources of information to judge the quality of education in their schools. The sources are both quantitative and qualitative. The median number of sources used by principals is eight.

Our study found that the most frequently used source is school and classroom observation (nearly 87 percent utilize observations). Many principals found classroom observations to be their most valuable source because observations provide immediate feedback as well as give the principals a holistic and personal sense of how the school is functioning. For example, one elementary school principal told us that classroom observations are his most valuable source because they provide "first hand information" that he can gather every day. Another principal said, a classroom observation "...tells me more than anything else, so I visit at least five classrooms daily."

Other widely used sources included CAP scores, mentioned by seventy-four percent of the principals, and other norm-referenced tests mentioned by seventy-one percent. Although many principals use test scores when evaluating their schools, they feel that these test scores receive more attention than they deserve because of the emphasis placed on them by state and district officials. Principals expressed their frustration about this over-emphasis of test scores. According to one principal, "Test scores are rated as important because of the State and District's emphasis on them." Another complained that, "With the over-emphasis of testing by bureaucrats, testing becomes an end, rather than a means to an end." Further, test scores seem to have their biggest impact as a source when they first are reported. A junior high school principal who mentioned test data as his first source of school information also said:

Down the line, test data is not really at the top (important). It's only at the top when it's in the paper. When it's in the minds of people; other than that, it's not a high priority. People forget about it.

CAP scores were also the most controversial source, with sixteen percent of the principals saying that they have no value as a source of information. The principals complained about CAP's instructions, self-report measures, and reporting of results in comparison bands. (These bands are supposed to compare schools similar in socio-economic standing.) A high school principal who preferred CTBS to

CAP told us, "The CAP test contains too many self-report items with bad and ambiguous instructions. Also, the CAP comparison bands are unfair because they do not take into account bussing."

Informal teacher, parent and student input were mentioned as important sources by almost half of the principals and ranked fourth, fifth and sixth respectively among these mentioned. Student grades ranked a close seventh. Other quantitative sources such as teacher turnover rates, drop-out rates and mobility rates were among the least used. Thus, while quantitative measures are viewed as important—ranking second and third in our study—qualitative indicators appear to receive more overall attention than quantitative indicators. (Detailed results of our analysis are summarized in Table 1 and Graph 1 in Appendix C.)

**Effect of school level.** The data yielded interesting contrasts, depending upon grade level. There is a marked difference in what elementary and high school principals consider important sources of information. High school and middle school principals rely more heavily on informal teacher, student and parent input than do elementary school principals. Another difference is that elementary and middle school principals are more interested in CAP and other achievement tests while high school principals are more interested in college preparation exams such as the SAT. In addition, the use of classroom observation declines as the level of the school increases (see Table 2).

**Effect of years of experience.** Analyses by experience level based on a sub-sample indicate that those with six or more years of experience appear to use fewer sources of school information. Veterans of six or more years used a median of six sources while beginning principals with two or less years of experience used a median of nine sources. In addition, veterans appear to rely less on CAP and norm-referenced test data than do beginning principals. Furthermore, veteran principals are less likely to seek or use the advice of superintendents or other district administrators (such as research and evaluation directors). Additional research would be necessary to validate these findings given the small sample size (refer to Table 3). A difference in the emphasis placed on test data and district advice can be seen in these descriptions of the use of test data offered by a beginning and veteran elementary school principal:

(Beginner) I rely on workshops given by the different project heads, such as the CTBS or Director of Federal Projects, to get an understanding of the district data and suggestions on how to present the data to my staff.

(Veteran) I tend to be skeptical about test data...its just one piece of information about a child.

**Effect of SES and CAP achievement.** The two contextual variables of socioeconomic standing of the student population and the school's performance on the reading section of the CAP exam were both related similarly to the use of sources. This was probably a function of a high correlation between SES and success on the CAP exam. Four differences in the use of data emerged between principals from schools of different economic standings and levels of achievement on the CAP exam. Principals of schools with higher SES levels and which perform above the state average on CAP exams tend to be more interested in student success at the next grade or school level, attend more to informal parent and student input, and seek less guidance from district administrators such as research and evaluation directors than do principals of schools of lower SES students and those whose students perform below the state average on CAP. The lack of interest in administrator input among the high SES and achieving school principals may be due to the common tendency to not search out more information when feedback is good and supports prior expectations (see Tables 4 and 5).

The differences in school evaluation approaches between low and high socio-economic elementary school principals are illustrated in the quotes below. The principal of a low-income based school that has been at the lowest percentile per grade level based on national norms for years reported:

To tell if my school is doing a good job, I look first at test scores, since they are widely publicized. I want to see whether my students are on grade level and whether there has been growth over the year. I feel testing is the most important objective source for determining student progress...My school has remained at about the same level test-wise for about five years. I consider this a plus in light of turnover in staff and the influx of new students.

The principal of a high-income based school that consistently scores above the 90th percentile on standardized tests reported to us that to tell if her school is doing a good job:

...I observe classrooms. I want to know that the kids are learning and how they feel. I go into classrooms and look for interaction, active learning, and interest on the part of the students. I also receive parent feedback on the annual survey and from parents involved on the school site advisory committee. I also use test scores and find out how well students are doing in intermediate school.

#### **What Criteria Do Principals Use When Making Their Assessments?**

**Observing schools or classrooms.** The most popular source of information named by principals was personal observations on the school and classroom levels. Most principals, about two-thirds of the respondents, had specific areas of interest in mind when they made their observations. School or classroom climate was the most popular area of interest and was defined in terms of student-student and student-teacher interactions. When asked what he would find in a classroom with a positive climate, one principal named, "the teacher interacting positively with the children; a child who does something wrong is not put down—rather he is encouraged; and positive exchanges among the kids."

Besides interactions among students and teachers, positive classroom climate was also defined in terms of the students' attitudes toward learning and the teachers' attitudes toward teaching. Students were seen as experiencing a positive classroom atmosphere "if students are happy, meaningfully involved, and like and understand what they are doing." Teachers were seen as creating a positive classroom atmosphere when they displayed "an attitude that education is important, that they love kids, that they want to impart this information."

Other frequently mentioned areas of interest when observing a classroom were instructional content, teaching methods, student involvement in instruction, student work products, and teacher morale. (See Graph 2 for actual percentages of factors examined.)

**Analyzing test data.** Standardized tests such as CAP, CTBS, and others were the second and third most used sources of school information. One third of the principals interviewed reported needing help to interpret test results. Many more principals expressed that the time necessary to analyze test data thoroughly is limited and inconvenient. A junior high school principal explained:

We're (principals) flooded with data. We are right now so caught up in the day-to-day management of our schools, we don't get to the point of analyzing data...The direction we're going means that this kind of data (test data) is

going to mean less and less to us unless somebody comes along and pulls it out for us, condenses it, and summarizes it.

For those principals who read and interpreted their own test results, their primary strategy was to look for trends of performance over several years (74 percent said they employed this strategy). Half of the principals said they compared their school's performance to other similar schools. As one principal told us, "I look at average scores to see how my school compares with other schools, particularly schools that serve similar types of students. I also think that comparing student progress over the years—cohort tracking—is important."

Also common when interpreting test results was comparing their school's performance to the national average or some other grade equivalency score. The desire to not fall below grade level on the national norm was strongly expressed. One principal told us, "We always strive and work toward being on grade level—always!" Besides the goal of being at or above grade level, 42 percent of the principals said they approached the data reports with predetermined goals for their schools, such as to be above the 75th percentile (see Graph 3).

### **How Do Principals Apply Test Data?**

**Using data.** In addition to how principals make sense of test data, we were interested in how principals use and apply it. We found that the most common use of test data is to communicate it to teachers and parents (three-quarters of the principals reported doing so). Also popular was using test data to identify areas of instructional strength and weakness. Slightly less frequent was follow-up to actual use of this data for instructional reforms. One principal told us that when she receives test results from the District:

I return to my school and meet with the faculty all together and by grade level. In the grade level meetings we compare for each subject area teachers' scores with others, their strengths are recognized and areas in need of greater emphasis are identified. Ways to ameliorate a particular problem are discussed in detail.

Over a third of the principals use the test data to answer specific programmatic questions. For instance, a principal may specifically check the movement of the third grade's CAP reading score because he or she is concerned about the introduction of a new basal reader in the second grade. Finally, almost a quarter of the principals mentioned that they look for aberrations and unusual results that may highlight potential problem areas (see Graph 4).

**Discrepancy handling.** In order to determine to what extent principals rely upon test data and whether they use it uncritically, principals were asked how they respond when faced with discrepancies between test data and other sources of data such as observations or input from teachers. Their answers suggest that principals are fairly sophisticated in their use of test data. Over one quarter of the principals said that they would consider multiple sources before determining the meaning of the discrepancy. When making sense of inconsistent information, one principal told us how he involves his staff in considering these multiple sources of information. He said:

The only solution to that (a discrepancy) is to analyze what the test is measuring and what is the population. We do this through a teacher committee and decide what information to pay attention to.



We believe that this first approach to handling discrepancies, considering multiple sources, is the most appropriate and should therefore be further encouraged through in-service and pre-service trainings of school administrators.

Another quarter of the principals said in the face of a discrepancy, they would question the test. Other strategies mentioned by the principals were to question the match between the test's coverage and the classroom instructional coverage or to look to alternative explanations such as unusual weather or high rates of student mobility. This is what a principal who questioned the test as well as considered alternative explanations had to say:

If there is a discrepancy between test scores and classroom observations, I would look at changes in our student population, especially in the number of LEP students. I would trust my observations over the test scores.

Only one quarter of the principals said they would believe the test in the face of their own or others' observations (see Graph 5). For these principals, the test results always had value, and in this case reflected some defect in the instructional program. One such principal told us:

We (the staff) have to go back and look and say, What's going on here? Why do we have this? I don't think you can ignore this (the test results). No matter what you think of the test; no matter how invalid you may think the test is; how prejudiced it is, you are still competing against yourself on whether you go up or down.

It is interesting to note that the principals' reliance on and interpretation of test findings does not appear to vary with the school's economic standing, the years of experience at their job, the grade levels present at their school, or how well their school does on standardized tests. Therefore their handling of data discrepancies involving tests does not appear to be a defensive reaction.

#### **Are Principals Interested in Sub-Group Differences?**

**Interest in sub-group differences.** Asked if they had any interest in sub-group differences, almost half the principals expressed an interest in performance differences among ethnic groups (primarily Latino, Afro-American, and White). Another sub-group of interest was those students who are limited in English proficiency. Other bases for sub-groups of interest were socio-economic standing, gender, and levels of achievement. One tenth of the principals expressed the concern that sub-group information may lead to misuse and inappropriate stereotyping. One principal who expressed concern about reporting sub-group differences told us, "I don't believe we should pigeon-hole kids or pit this group against the other. Instead, we must look at lots of variables like home input and quality of teachers in that school."

#### **What More Do Principals Want from School Reports?**

**Additionally desired information.** Most of the principals seemed reluctant to ask for any more information than they already have or receive. Of those who were interested in additional information, the greatest interest was in analyses showing relationships between test results and specific instructional programs. These principals want to be able to tie test data back to their choice of textbooks, teaching methods, or other instructional reforms. Other desired information included: more data about individual students that could help with instructional diagnosis; more descriptive information about what the test is measuring; prescriptive information that tells the principal what instructional practices can be taken to rectify low scores in a particular area; information about other quantitative

indicators such as dropout rates, mobility rates, and attendance rates; and analyses between test scores and student demographics (somewhat the same as sub-group differences). Very few principals were interested in additional information about school climate, although this was a great area of concern when discussing classroom observations (see Graph 7).

**Preferred report formats.** Principals reported their favorite format of presentation to be the graph, a finding which closely relates to their overwhelming interest in trends. This makes sense, because graphs are the clearest way to display trends. Far fewer principals like narratives and tables. Other format preferences expressed were to include less technical information, to provide an executive summary with reports, and to improve the quality of keys for tables and graphs (see Graph 8).

## Implications and Conclusions

This study set out to answer two basic questions: how do principals use school data and how can we help them to use that data more easily and accurately. This section of the paper addresses the latter question; it offers some recommendations for those people involved in the creation of school information reports. The recommendations are broken down into two major categories: helping principals better analyze school data and helping principals better communicate with the public about the quality of their schools.

### Helping Principals To Analyze School Data

**Variety of sources.** The first way in which one might help principals analyze school data is to make them aware of the full range of quantitative and qualitative information available to them. In our study principals identified 24 sources of information which at least one principal, and usually more, found useful. Making principals aware of the full array may lead them to incorporate new sources of information into their own judgements about school quality as well as make them aware of sources that may be used to more concretely show what they already inherently believe about their schools.

**Evaluating the quality of test data.** Most principals realize that test data represents only an estimation of how well their students are doing and that sometimes these estimations may be erroneous. However, a sizable minority of the principals interviewed in this study do not appear to be critical users of test data. Fully one-quarter accept without question the results of tests, even in the face of other evidence to the contrary. It would be beneficial for all principals to approach test results with skepticism and be fully familiar with their potential shortcomings (such as a poor test, poor testing environment, mismatch of test and instructional goals). Similarly, a number of principals appear to need assistance in more effectively using test results to improve their instructional programs (e.g., in identifying areas of instructional strengths and weakness and in designing and following up on program changes to address those weaknesses).

**Relating test data to instruction.** Principals want help relating test data to instructional practices. When asked what additional information they wanted, nearly one-third of the principals wanted analyses that could relate data to instructional reforms and/or other changes in curriculum and instruction. A similar number wanted explicit recommendations about what instructional changes should take place based on the test results.

While both groups want help in better integrating testing with instruction, a distinction can be made between these two groups. Those principals who want to

examine relationships between test results and instructional practices recognize that data can be used as a tool for decision-making. These principals appeared to have specific, albeit idiosyncratic, questions that they wanted the test data to help answer, e.g., has the new science textbook improved achievement? Have changes in grouping practices affected the performance of higher achieving students. This group of principals seems comfortable with using data and might benefit from automated, analytic tools to help them answer their questions.

The second group of principals, however, appear to be looking for simple answers to complex professional problems. They want prescriptions—"just tell me what to do" appears to be their sentiment. This second group of principals might benefit from learning how to approach test data with specific questions that could help them in analyzing specific areas of instruction. For both groups, however, it would be wise to reinforce the ideas that large instructional decisions should not be based on test data alone.

**Formats.** The choice of formats used in a school report can influence the degree to which principals can easily analyze and understand data. In this study, principals clearly state a preference for test data presented in terms of trends, and further report a strong preference for seeing those trends in graphical formats.

Keys presented with graphs apparently are a source of trouble. Keys that accompany graphs should be able to stand alone and be easily understood. In some cases a brief statement summarizing the trend's interpretation also would be helpful. Finally, executive summaries that present key trends, identify aberrations, areas of strengths and weaknesses, and compare school results to other similar schools would prove helpful in many cases.

### **Helping Principals to Communicate School Data to the Public**

**Reporting to the public.** Principals overwhelmingly use and value school and classroom observations more than test data in assessing the quality of their schools. They balance the use of qualitative and quantitative data. Then why should they use test data as the number one, and often only, indicator of school quality when reporting to the public? The problem is that many principals do not know how to report qualitative data to the public in a way that is credible, defensible, and clearly understood. There are also issues about the objectivity of such observations. Developing observational protocols that can be more easily summarized as well as quantified might be a solution. Such protocols could operationalize each of the areas of concern discussed in this paper, incorporating the research base on these areas, and perhaps result in a bank of observation items. A principal could then select those areas of most concern to him or herself and develop a protocol on that basis. With the help of a research and evaluation director, the results of such a protocol could be summarized and quantified for the public. The public—and parents—also could be made privy to important elements assessed by the protocol so that they could make their own observations.

Besides making observational information more credible, principals need professional yet easy ways in which to gather, summarize, and report student, parent, and teacher feedback, perhaps through routine questionnaires or random phone interviews. Current attempts at school report cards will test the feasibility and validity of such practices.

### **Concluding Remarks**

In conclusion, this study is an attempt to understand the use of data by school principals. Although it was based on a small sample size, the study suggests patterns of information usage that can be supported, expanded, and/or changed

through specific action. The implications of this study can be applied immediately to the construction of school reports and the training of school administrators. We hope that this paper also will spur future theoretical studies of school information use and prove to be of practical help out in the real world of educational evaluation.

## Appendix A

**CRESST Multilevel Evaluation Systems Project**  
**INTERVIEW PROTOCOL**  
for School Board Members and School Principals  
May 9, 1989

**1. "Briefly, how do you know how good a job your school(s) are doing for students?" (List sources of information mentioned, e.g., parent phone calls, newspaper articles/editorials, personal observation of schools, test scores, etc.)**

*a. For each source mentioned, probe for how influential that source is in their judgment of their school(s) and why it carries that weight. ("You mentioned a number of sources of information, I'd like to know a little more about how much importance you place in that source and why." How about \_\_\_\_\_. Would you say it's of overpowering importance, important, or only somewhat important? Why)*

*b. If test scores are not initially mentioned, probe: "Do you use any test data?" (If no, probe for why not; if yes, probe for which specific ones are used)*

**2. I'd like to know a little more about how you use this information to judge your school(s).**

*a. For each source mentioned as important above, ask:*

*If your schools were doing a good job, what would you expect to see in [the information source]?"*

*What in [the information source] signals to you that there is a problem or that some change is needed in your school/ district?*

*b. Suppose there's some discrepancy between these various sources of information. For example, suppose you thought your math program was pretty good, but your math test scores are relatively low, what would you do/think?*

**3. (Show district/school testing report) "There's a lot of information in reports like this and not everyone who reads these reports goes about it in the same way. When you get a report like this, how do you attack it to make some sense out of it? What's the process you go through to find out what you want to know?**

*(probe if necessary with questions such as: what's the first thing that gets your attention? ..... And then what.....Is there anything else that particularly draws your attention? What questions are you asking yourself as you review such reports?)*

**4. When you look at information such as this, are you interested in knowing how different groups of students within the district perform? (e.g., how LEP students perform, how Hispanic, Black, Asian, Caucasians perform, how girls vs. boys perform?)**

a. If yes, which subgroups are of most interest to you?

b. If yes, how is this information useful to you?

5. Let's think a little more about the information that's presented in school/ district testing and evaluation reports. We're interested in knowing how to do this better.

a. First, about how the information is presented. Reports like this typically include narrative text, data tables, graphs and the like. What's the easiest way for you to get information?

*Is there some part of this report that is particularly effective?  
What makes it effective?*

*(Probe for format comments, e.g., are there any displays that you find particularly informative?)*

b. Second, about what information is presented. Is there additional information about students, schools, or communities that you could like to see included? Or things that are here that you would just as soon see deleted?

6. Would you say that test scores capture most of what's important in schooling? [probe for whether it represents most of what's important in students' academic achievement.]

7. Any other comments or suggestions?

## Appendix B





## Appendix C

Table 1: Sources of Information Used  
by Principals

Sources	% Discounted	% Used	Rank
Sch/Class Observation	3	87	1
CAP	16	74	2
Norm Reference Tests	8	71	3
Informal Teacher Input	3	58	4
Informal Parent Input	8	53	5
Informal Student Input	3	47	6
Grades	-	47	6
Formal Teacher Input	-	34	8
Counselor Input	3	21	9
Discipline	-	24	10
Formal Student Input	-	21	11
Community Input	3	21	11
Superint/Other Adm Input	-	21	11
Attendance Rate	5	19	14
Proficiency Tests	-	19	14
Newspapers	5	18	16
Success - Next Level	-	18	16
College Prep Exams	-	18	16
Entries - Higher Level	-	13	19
Formal Parent Input	-	13	19
Mobility Rate	-	11	21
Teacher Turnover	-	8	22
Dropout Rate	-	8	22
Awards	-	8	22

GRAPH 1

# Frequency of Citation of Sources School Principals

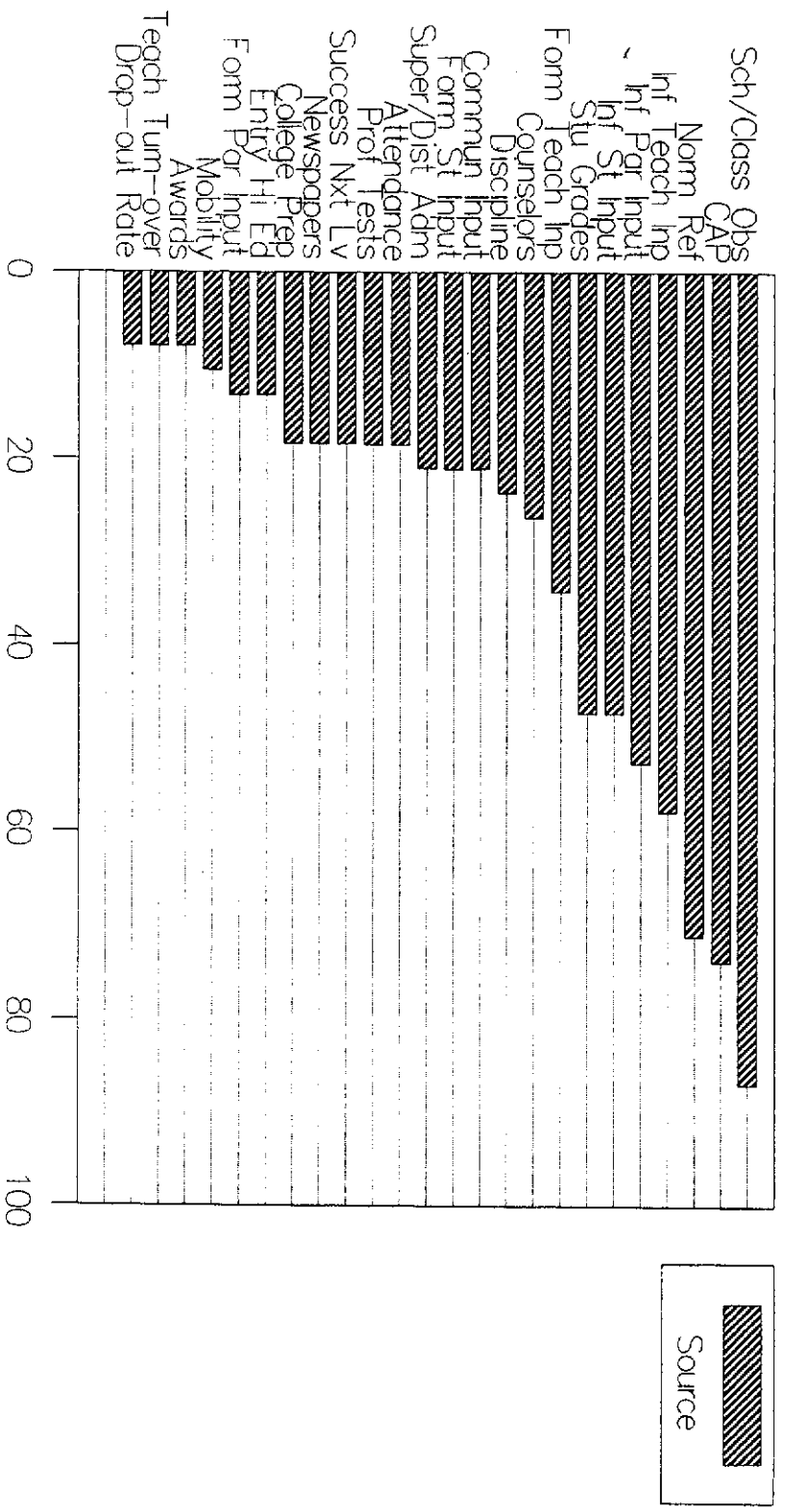


Table 2: Percentages of Principals Who Use Sources  
By School Level

Sources	Elementary n = 18 %	Middle n = 8 %	High n = 11 %
Sch/Class Observation	94	88	63
CAP	50	100	36
Norm Reference Tests	8	63	55
Informal Teacher Input	39	75	73
Informal Parent Input	50	50	64
Informal Student Input	28	75	55
Grades	44	50	55
Formal Teacher Input	39	25	27
Counselor Input	11	50	27
Discipline	22	50	9
Formal Student Input	17	13	36
Community Input	17	25	18
Superint/Other Adm Input	17	25	18
Attendance Rate	17	25	18
Proficiency Tests	17	13	27
Newspapers	11	13	27
Success - Next Level	11	13	36
College Prep Exams	0	0	64
Entries - Higher Level	0	0	46
Formal Parent Input	11	13	18
Mobility Rate	17	13	0
Teacher Turnover	11	0	9
Dropout Rate	6	0	18
Awards	6	13	9

Table 3: Percentages of Principals Who Use Sources  
By Experience at Job

Sources	Beginner n = 6 %	Intermediate n = 8 %	Veteran n = 12 %
Sch/Class Observation	83	75	58
CAP	88	75	58
Norm Reference Tests	83	88	67
Informal Teacher Input	67	50	50
Informal Parent Input	50	63	58
Informal Student Input	67	25	58
Grades	67	38	50
Formal Teacher Input	0	38	25
Counselor Input	50	25	33
Discipline	33	25	42
Formal Student Input	17	13	25
Community Input	50	13	17
Superint/Other Adm Input	50	38	17
Attendance Rate	17	25	25
Proficiency Tests	17	25	8
Newspapers	33	25	8
Success - Next Level	17	25	8
College Prep Exams	33	0	16
Entries - Higher Level	17	13	0
Formal Parent Input	0	25	8
Mobility Rate	0	13	8
Teacher Turnover	17	13	0
Dropout Rate	17	13	8
Awards	17	13	8

Table 4: Percentages of Principals Who Use Sources  
By School SES

Sources	Low n = 6 %	Middle n = 14 %	High n = 4 %
Sch/Class Observation	100	79	50
CAP	50	93	75
Norm Reference Tests	83	43	50
Informal Teacher Input	50	93	75
Informal Parent Input	40	64	100
Informal Student Input	50	71	100
Grades	17	50	25
Formal Teacher Input	0	0	0
Counselor Input	17	50	25
Discipline	33	36	25
Formal Student Input	33	29	25
Community Input	17	29	0
Superint/Other Adm Input	17	43	0
Attendance Rate	17	29	0
Proficiency Tests	17	14	0
Newspapers	0	21	0
Success - Next Level	0	14	50
College Prep Exams	0	14	25
Entries - Higher Level	0	14	25
Formal Parent Input	0	29	25
Mobility Rate	17	7	0
Teacher Turnover	0	0	0
Dropout Rate	0	0	25
Awards	0	7	0

Table 5: Percentages of Principals Who Use Sources  
By CAP Scores

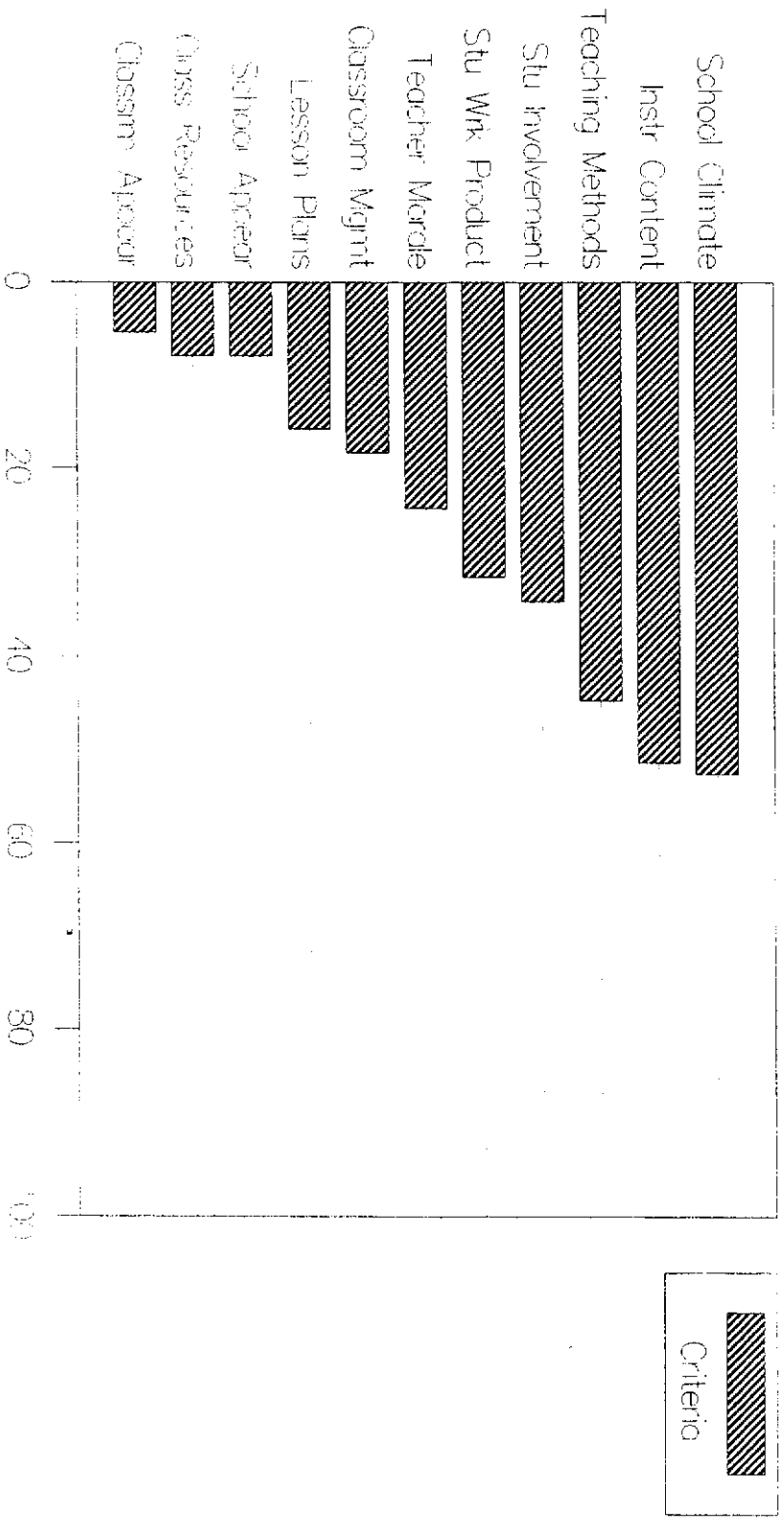
Relative to CAP Reading State Average

Sources	Below n = 9 %	At n = 4 %	Above n = 5 %
Sch/Class Observation	100	79	50
CAP	78	100	80
Norm Reference Tests	78	25	60
Informal Teacher Input	50	93	75
Informal Parent Input	40	64	100
Informal Student Input	50	71	100
Grades	17	50	25
Formal Teacher Input	0	43	0
Counselor Input	17	50	25
Discipline	33	36	25
Formal Student Input	33	29	25
Community Input	17	29	0
Superint/Other Adm Input	17	43	0
Attendance Rate	17	29	0
Proficiency Tests	33	0	0
Newspapers	0	21	0
Success - Next Level	0	14	50
College Prep Exams	17	14	0
Entries - Higher Level	0	14	25
Formal Parent Input	0	29	25
Mobility Rate	17	7	0
Teacher Turnover	0	0	0
Dropout Rate	0	0	25
Awards	0	7	0



GRAPH 2

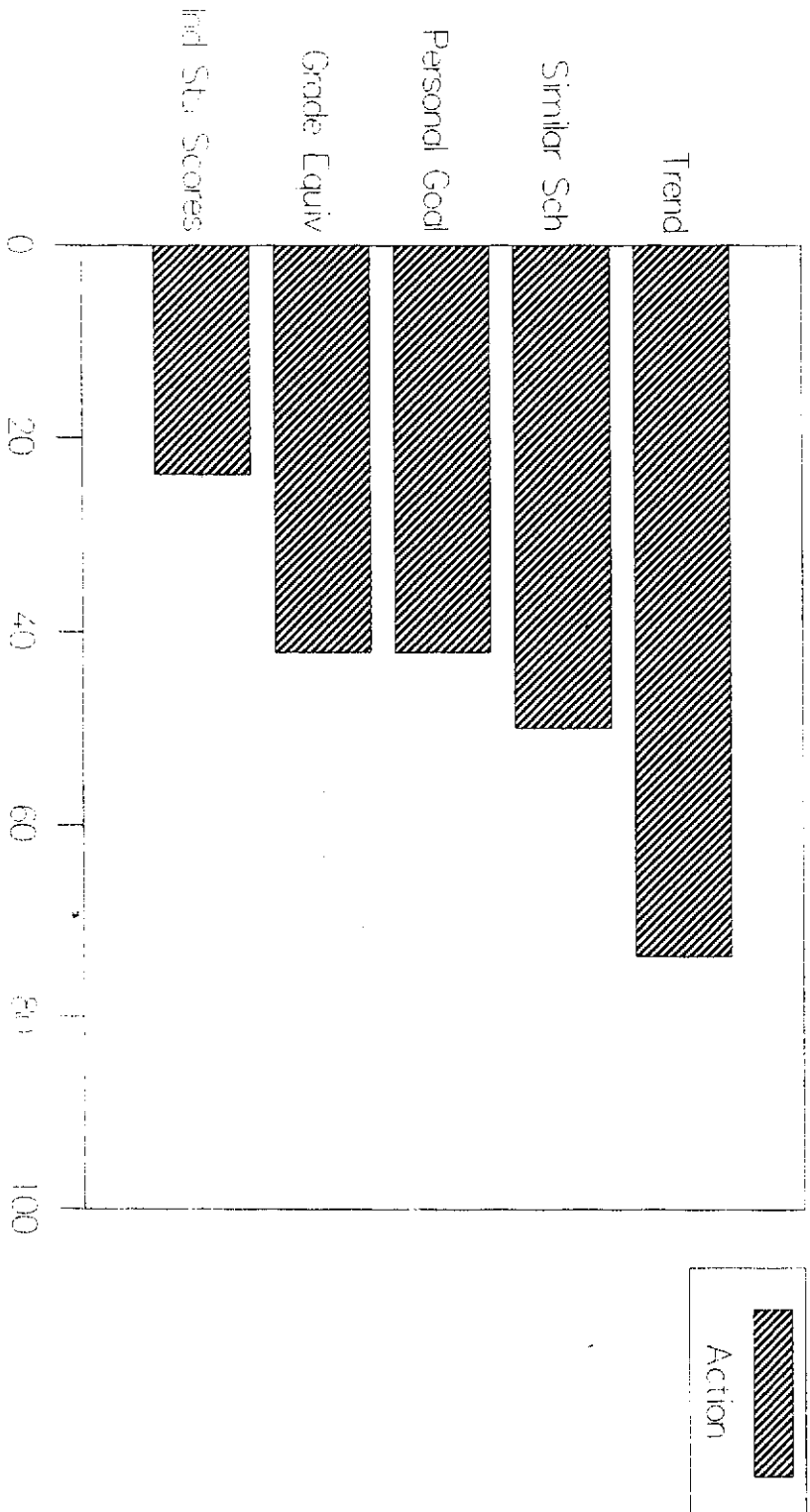
# Criteria Used for Observation School Principals



# Evaluating Test Results

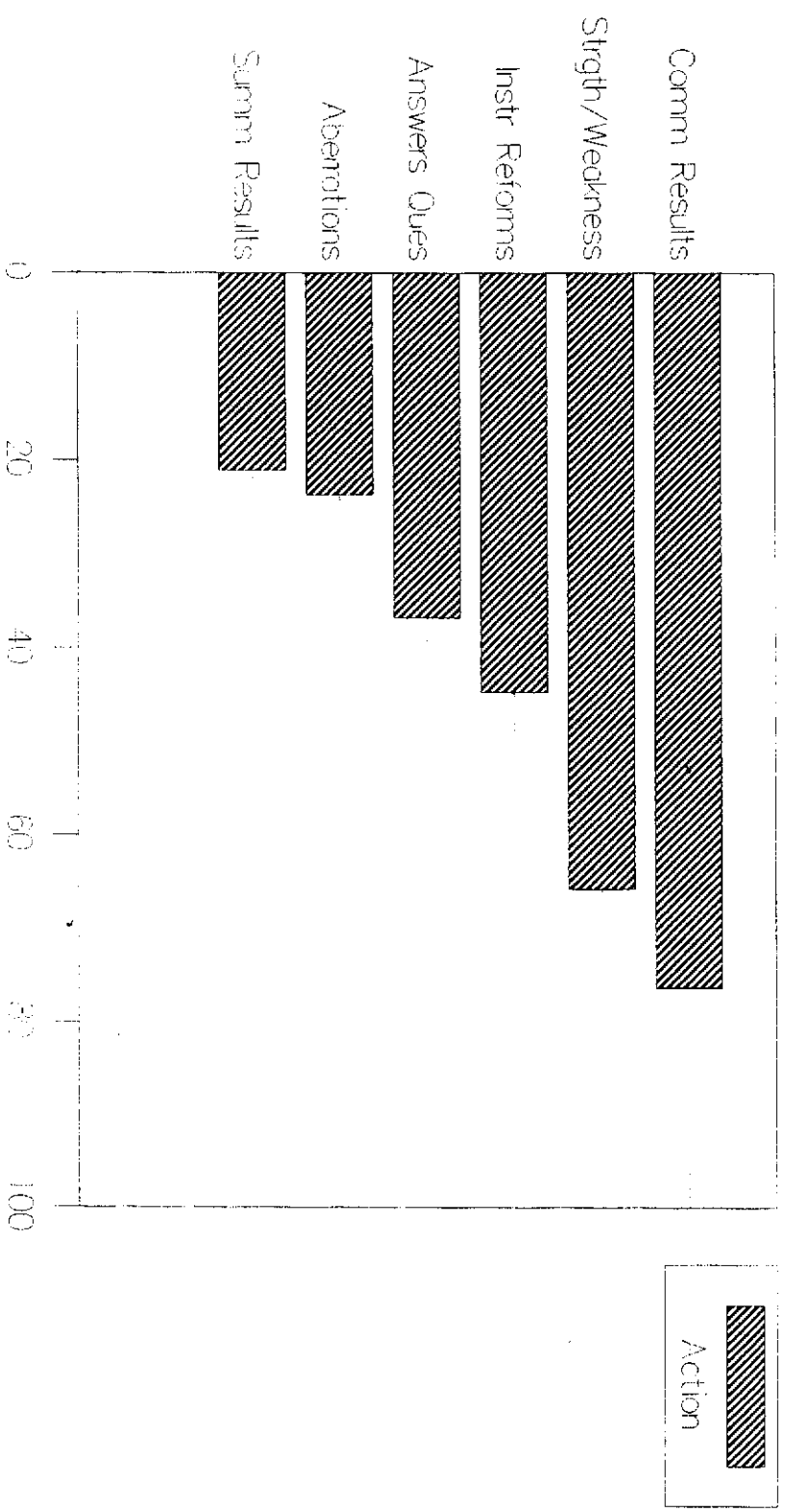
## School Principals

GRAPH 3



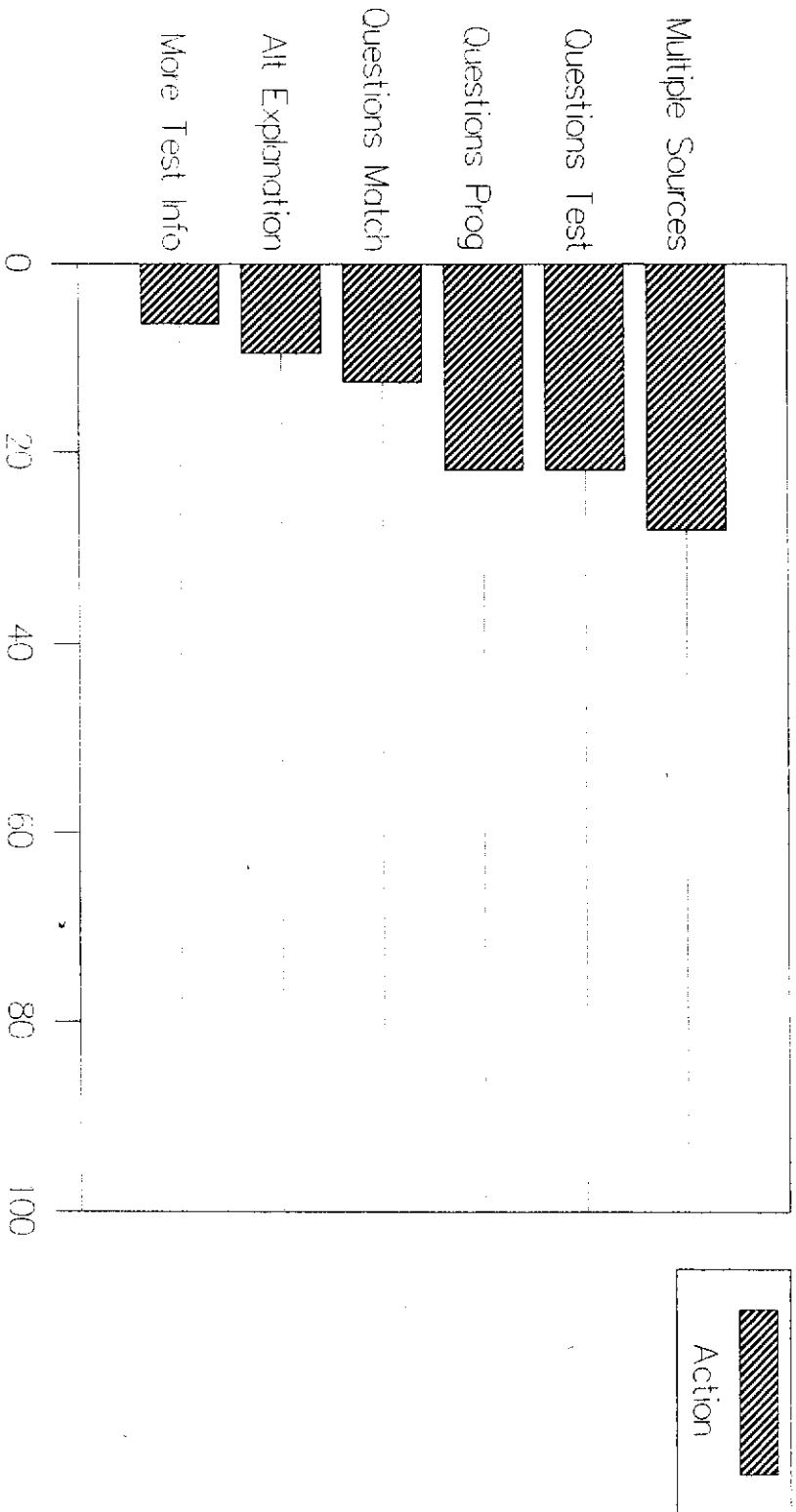
GRAPH 4

# Uses of Test Data School Principals



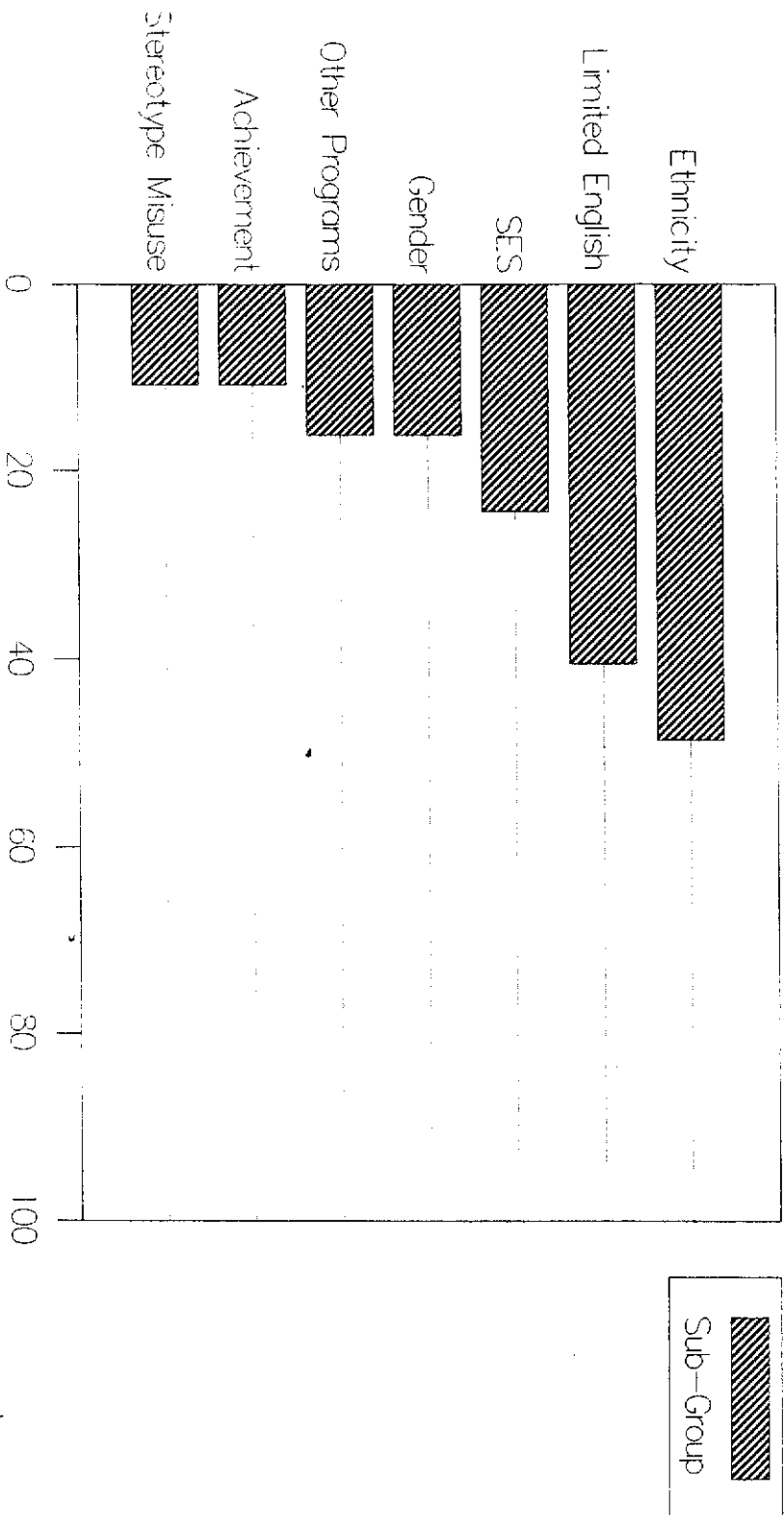
# Discrepancy Handling School Principals

GRAPH 5



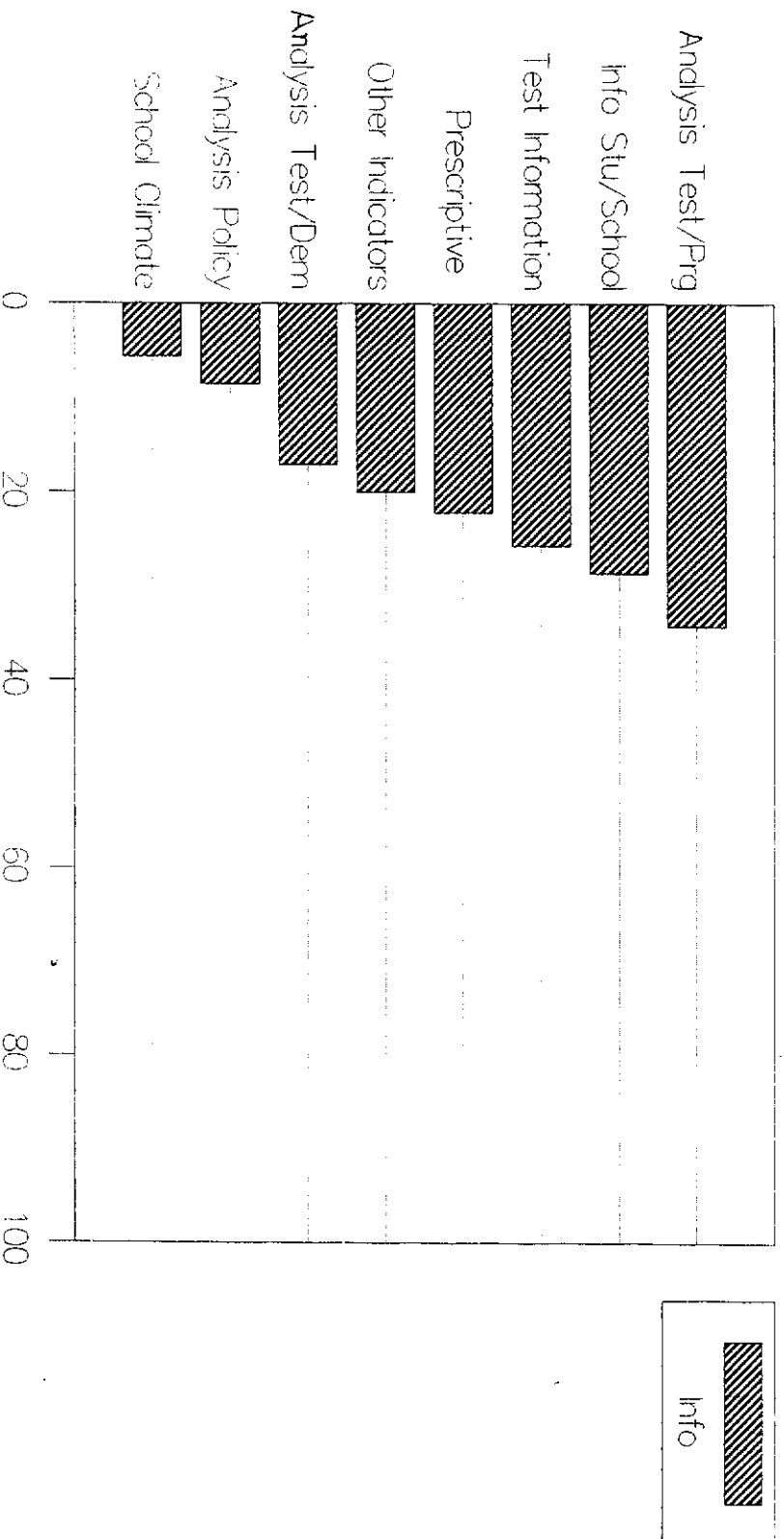
GRAPH 5

# Interest in Sub-Group Differences School Principals



GRAPH 7

# Additional Information School Principals



GRAPH 8

# Data Presentation Preferences School Principals

