Beyond Achievement, Student/Staff/Parent Surveys Used for Edina District School Profiles and Accountability System

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Introduction

Establishing an appropriate accountability system is a major challenge and opportunity for researchers, educators and administrators at school, district, state, and national levels. An effective accountability system should embody an assessment system, a set of indicators, school profiles, and a school improvement process. School profiles should contain educational indicators from assessment and beyond that describe and quantify student progress and school performance. Development of a comprehensive school profile is one of the main components for an accountability system.

More and more states and school districts have developed school profiles or report cards. Thirty-six states now require all schools to publish annual school progress report cards (Raham, 1999). Most, if not all, state and local educational indicator systems emphasize student achievement outcomes, while fewer contain context indicators that help to explain variations in outcomes not directly attributable to educational quality (Hansen, 1999).

Achievement scores are important indicators of students' and schools' performance and accountability. Academic indicators alone, however, have limited power to improve student learning and do not provide sufficient information on school success. In addition to testing scores, a broader range of indicators are needed, including parent, school staff, and student satisfaction levels, school leadership, curriculum and instruction, school learning climates, parent involvement, etc. These indicators

represent the quality of the educational program in a school, district or state, directly or indirectly, which cannot be captured by testing scores.

The purpose of this paper is to introduce the Edina District School Profiles, which are composed of multiple indicators from survey data, assessment data and school demographics. In particular, this paper will focus on student / staff / parent surveys, and show the following aspects:

(1) how these surveys were developed so that they represent student, staff and parent satisfaction levels, needs, perceptions, and opinions on instruction, learning climates, technology integration, parent involvement and so on;
(2) how these survey results were presented and visualized in a clear and useful way in school profiles so that audiences are able to understand and use them; and
(3) how schools use school profiles to monitor student progress, identify and prioritize school needs, set improvement goals, and to devise action plans to meet those goals.

Perspectives of School Profiles

Developing a school profile is similar to developing a process for a school evaluation system. This process needs to clarify the relationship between assessment, indicators, and accountability. Accountability uses school profiles to make judgments about where stakeholders need to adjust behaviors in a constant cycle of assessment, indications, analysis and action to improve future performance. If we wish to encourage schools to use data to improve student success, the school profile must be designed in a way that both identifies problem areas and enables those responsible to respond. Some school profiles that merely contain academic performance data may fail because they

only represent one aspect of the students' experience or a school, which ignore many factors or aspects necessary to impact student learning. Some school profiles that present data in a very sophisticated and complex way may fail because it is hard for school staff to understand and digest.

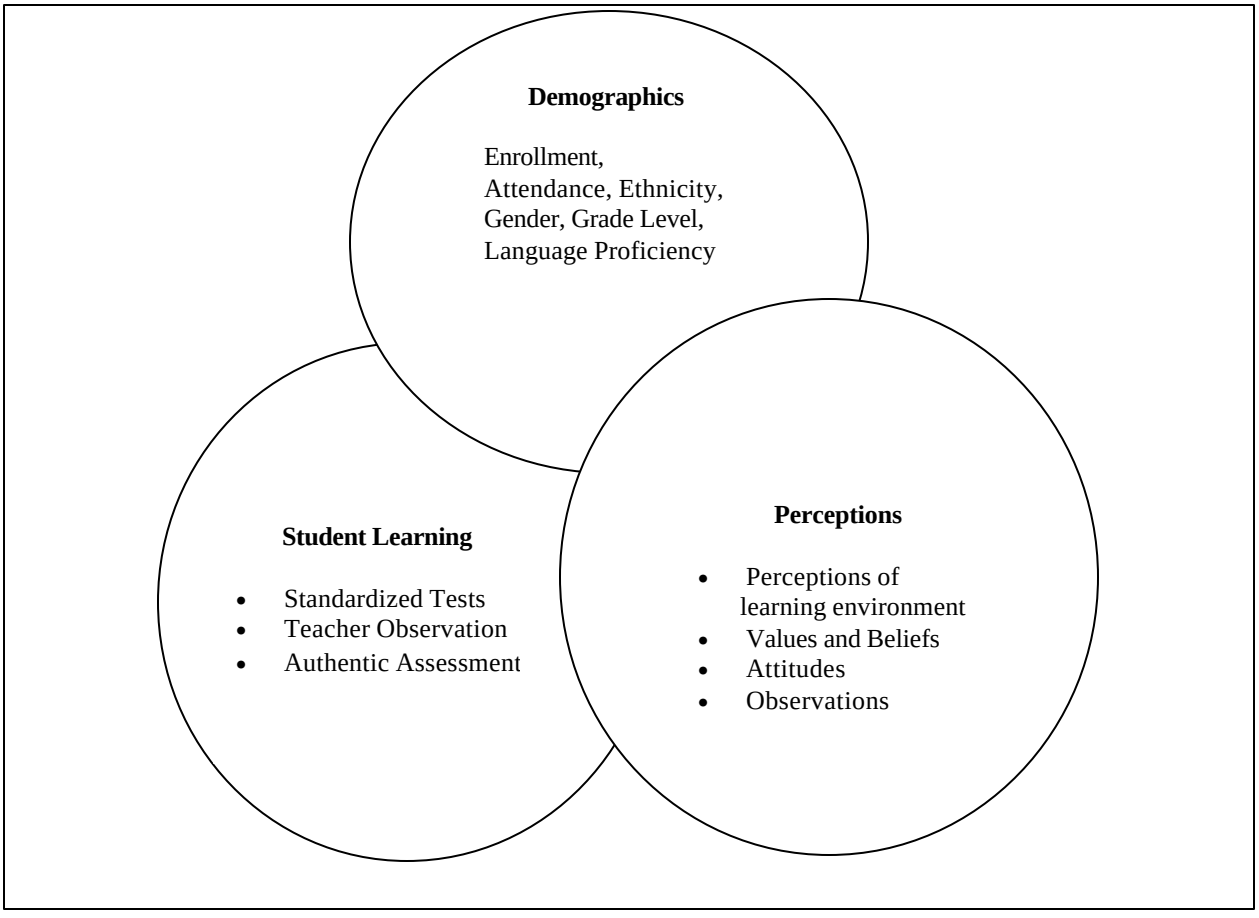
Planning school profiles is a highly complex and collaborative exercise. Engagement of the total individual school community with multiple indicators in designing solutions and responses to their unique learning environment may be possible in any accountability plan. There may be many approaches available to link assessment, indicators, and accountability system to improve student learning and school performance. Truly effective school profiles will be helpful in changing the internal dynamics of schools, nurturing leadership, and encouraging the flexibility required to design and implement pathways to success for every school.

Methods and Procedures of Development of Surveys and School Profiles

The primary purpose of each school is student learning. Learning does not take place in isolation, or only at school. Multiple indicators must be considered and used to understand the multifaceted world of school from the perspective of everyone involved, and to know if the school goals are appropriate and being achieved effectively. Three components are used to develop Edina Public School Profiles. The first one is achievement data from standardized testing and statewide tests. In each school profile, achievement indicators represent students' growth and gain, the gaps between gender and ethnicity, passing rates on the state graduation tests or standards tests, the locations in comparison with district, state, and the nation are identified. The second component is school demographic data such as attendance, dropout and graduation rates;

students'/teachers' gender, ethnicity; as well as teachers' teaching experience and educational levels. Third, survey data that represent satisfaction levels, opinions, perspectives, feeling and attitudes from students, staff and parents are included. The survey information includes multiple aspects of a school such as instruction, learning climates, technology integration, parent involvement and so on. Figure 1 shows the three categories as overlapping circles.

Figure 1 Multiple Indicators for School Profiles



Survey Development

A survey is a common approach to understand perceptions in school because they can be completed anonymously and readministered to assess the change in perceptions over time.

Survey development depends on collaborative efforts from schools, district and community, and includes multiple steps. The following procedures are what the Edina School District used.

First, a planning committee defined and prioritized the school specific needs and formulated research objectives related to those needs. Second, this committee reviewed current available survey instruments such as National Study of School Evaluation (NSSE), ACT Student Needs Assessment Questionnaire, ACT High School Student Opinion Survey, New York State Effective Schools Consortia Surveys, surveys from the Minnesota Elementary School Principals Association, etc. After a careful review of these instruments, this committee decided to develop survey questionnaires internally because locally developed surveys can be better tailored to address specific research needs of the district and meet the district's budget constraints. Third, this committee decided to use the entire populations of students, school staff and parents because this approach will eliminate sampling error and is pragmatic for a district with 7,000 students. Finally, questionnaires for students, staff and parents, respectively, have been developed and finalized.

All of these survey questions are on a four-point Likert-type scale. The four categories are divided as Strongly Agree, Agree, Disagree and Strongly Disagree. Twelve common questions are provided across the different populations so that different perceptions, opinions and attitudes can be examined.

These surveys were administered in April and May in Edina. Standardized administration procedures were provided to school staff for student and staff surveys to enhance the quality of the data. To ensure complete anonymity, no name or identification numbers were used. Parent surveys were distributed through the mail.

Reporting and Visualizing Survey Results in School Profiles

A useful school profile must not only be appropriate to its purpose and technically sound, but it must communicate effectively to the stakeholders and users who receive the reports and read the results about the school or district status relative to the survey and assessment results. Therefore, the impact of survey results on school improvement plans depends both on what is communicated and how it is communicated.

These several ways are used to provide clear information in school profiles. First, identify specific audiences and their needs. Since the audiences of school profiles are school principals, school site council members, teachers, and parents, the results should be very straightforward and easy to understand. Second, relationships in the data that are most pertinent to the research objectives need to be identified. For example, analyses include comparisons among subgroups, within items, with expectations, and with reference groups results. Third, all data presented in the school profiles should be clear, concise and visualized. Graphic presentations, such as bar graphs, pie charts, line graphs are used heavily to enhance the ease with which individuals grasp key relationships and are usually much more effective than extended narratives. Fourth, statistics for analyzing survey data are straightforward and descriptive and only as complex as required to identify and keep concepts appropriate for a particular audience.

Because there is often a tendency to debate the accuracy of individual numbers or their meaning from the survey results in the school profiles, some guidelines for users to interpret are provided. First, the thresholds that make group differences significant and meaningful are provided. When stakeholders use the results, they will understand if the differences shown are only by chance or are actually significant. Second, overwhelming use of numbers may risk that stakeholders will lose their understanding of key messages. Rather, make more use of the figures that give the overall messages such as percent of agreement and disagreement.

Figure 2 shows Edina Grades 4 and 5 student survey results from spring 2000. The results indicate percentages of students who are in strong agreement or agreement with the statements asked about the learning environment of the schools. Only two items are below 90 percent of agreement or strong agreement (schoolwork is challenging and daily homework). The items that are the highest for this group of students were:

- I am learning a lot in school
- I am encouraged to do my best in school
- Teachers are willing to help students with their needs
- Technology (computers, software, etc.) is available for my use at school

Figure 2 Edina Public Schools Grades 4 and 5 Student Responses, spring 2000

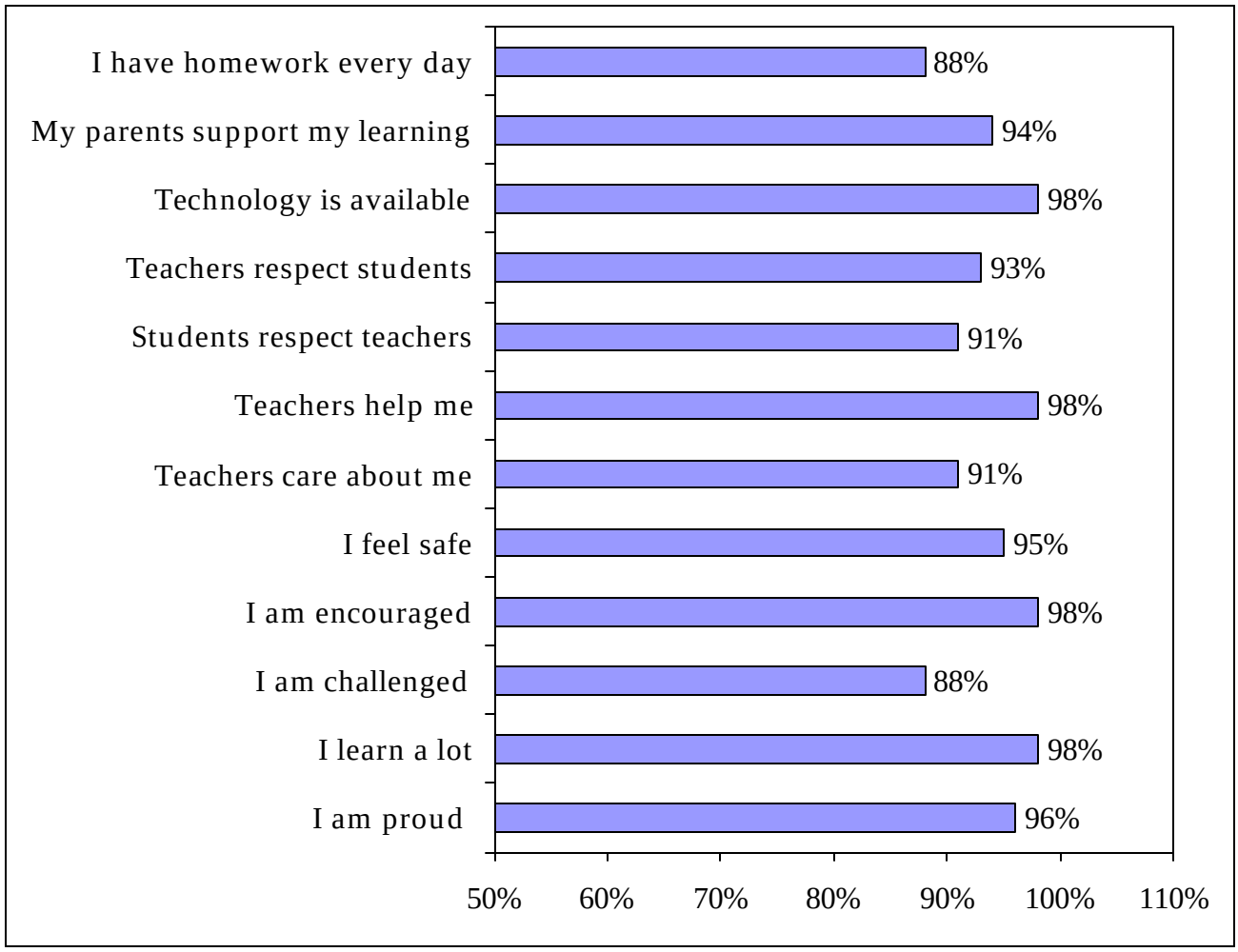


Figure 3 shows Edina Grades 6 through 8 student survey results from Spring 2000. Majority of students are in strong agreement or agreement with the statements asking about the learning environment of their schools. The items that are the highest for this group of students were:

- Technology in my school is available for students' use
- I usually have homework daily
- Student activities (clubs, plays, sports, student council, fine arts, etc.) are available to me.

Figure 3 Grades 6 through 9 Student Responses, Spring 2000

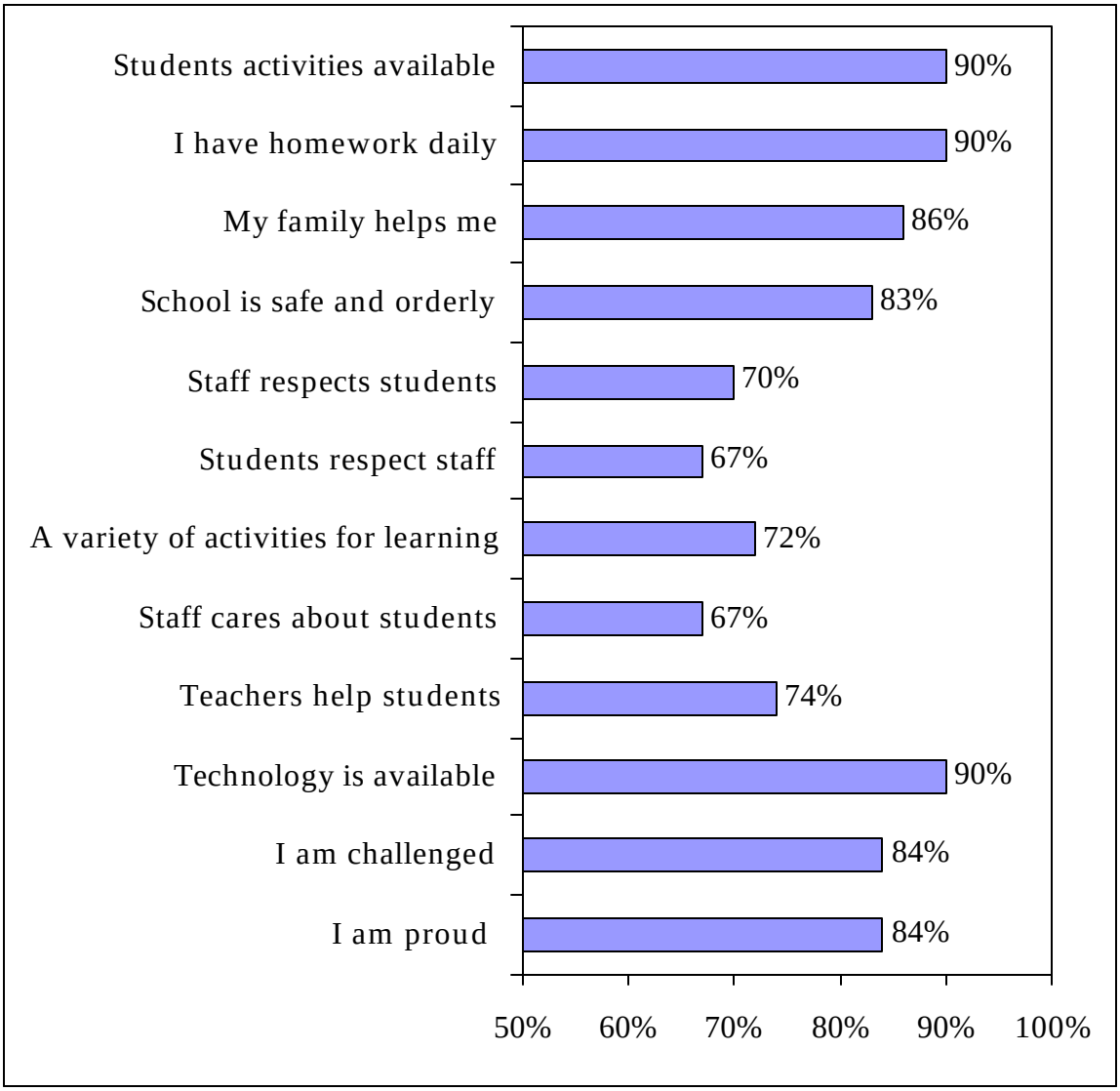
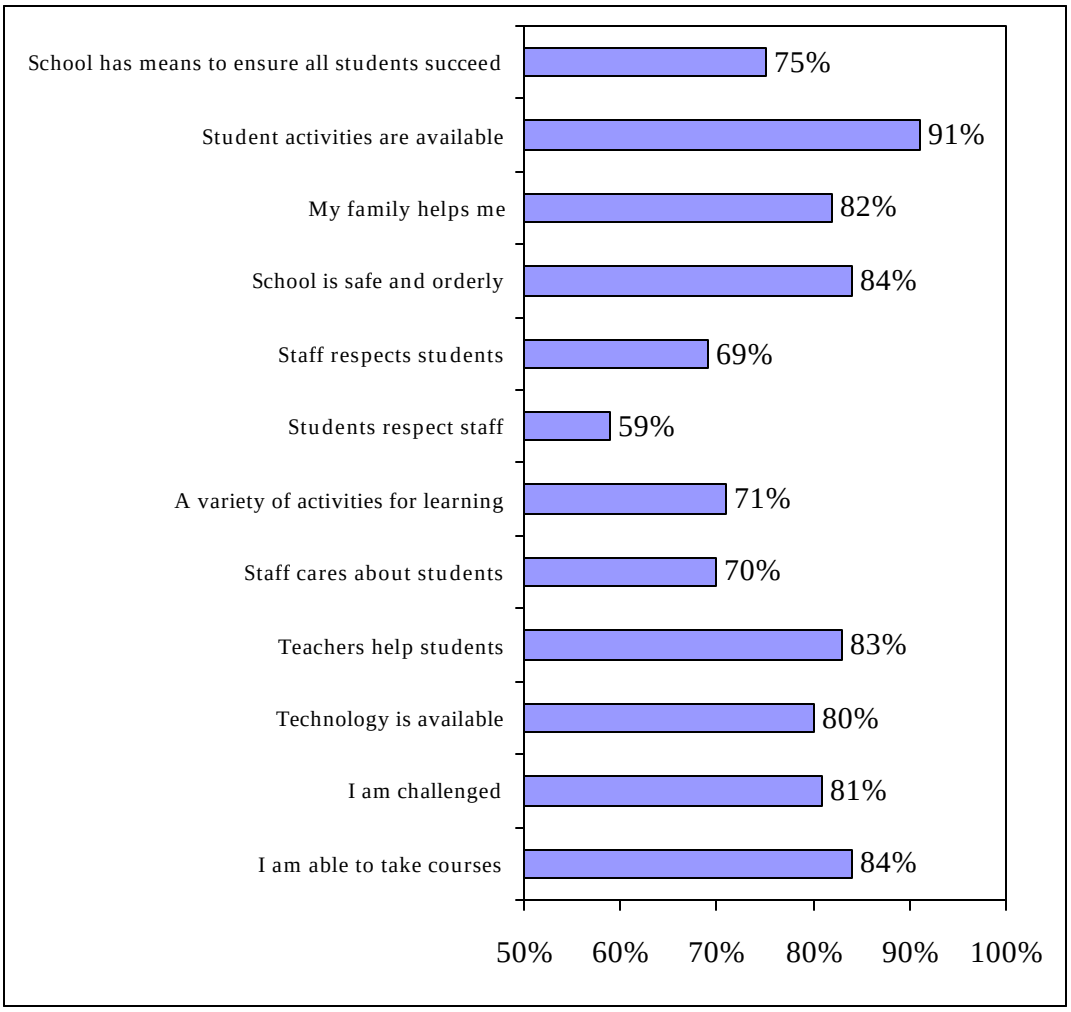


Figure 4 shows Edina Grades 10 through 12 student survey results from Spring 2000. Most students have a positive attitude toward their school learning environment. Compared with the results from younger students, one can find that students become less positive as they become older.

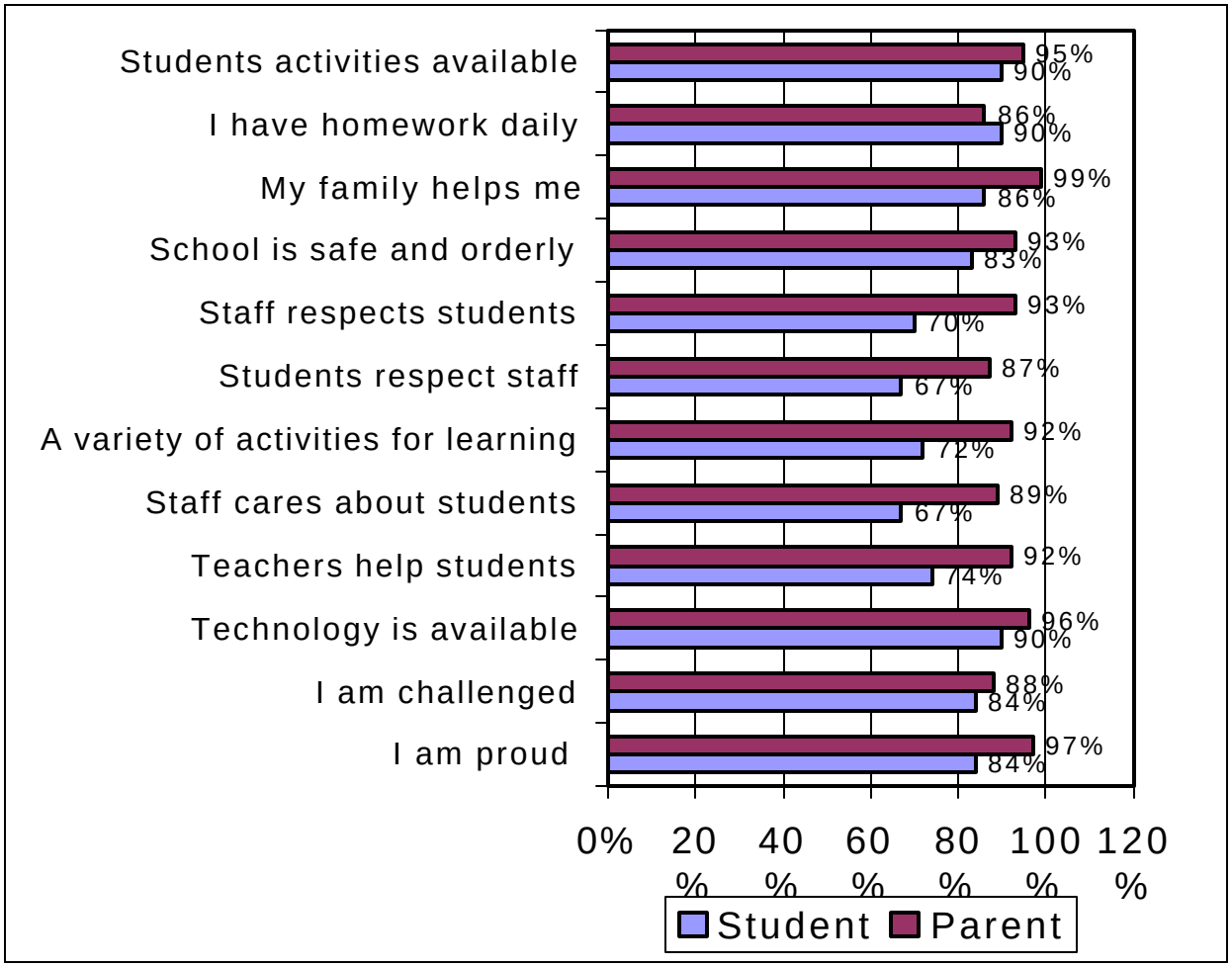
Figure 4 Grades 10 through 12 Student Responses, Spring 2000



Edina parents were surveyed through questionnaires in terms of what they thought about the students' learning environment. The results from middle school parents were compared to the middle school student survey results. Figure 5 shows that parents have a more positive perception of the students' learning environment than students do. There were some significant differences between parent responses and

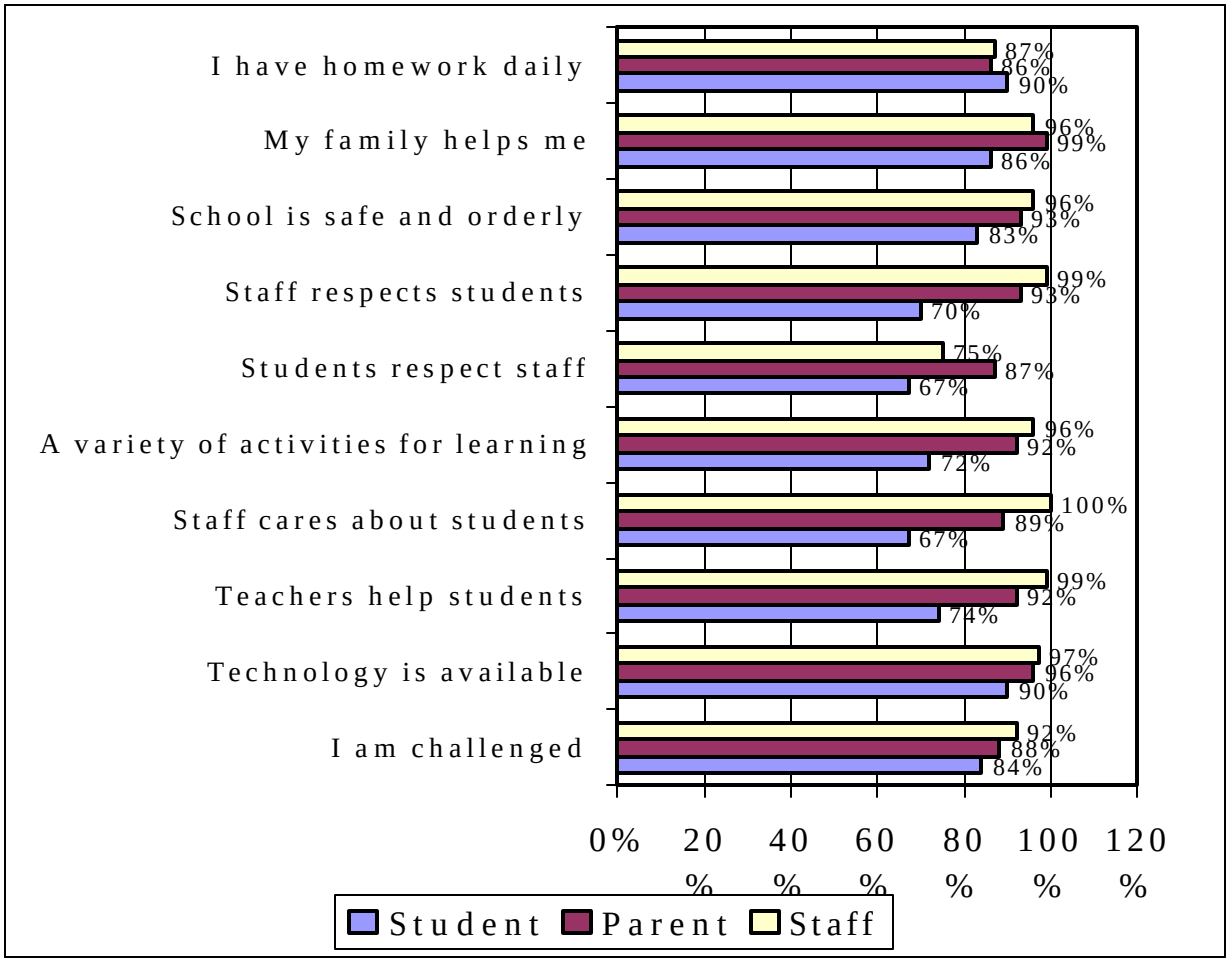
student responses. The greatest differences were in response to respect and a variety of teaching and learning activities.

Figure 5 Responses from Middle School Students and Parents on Common Questions



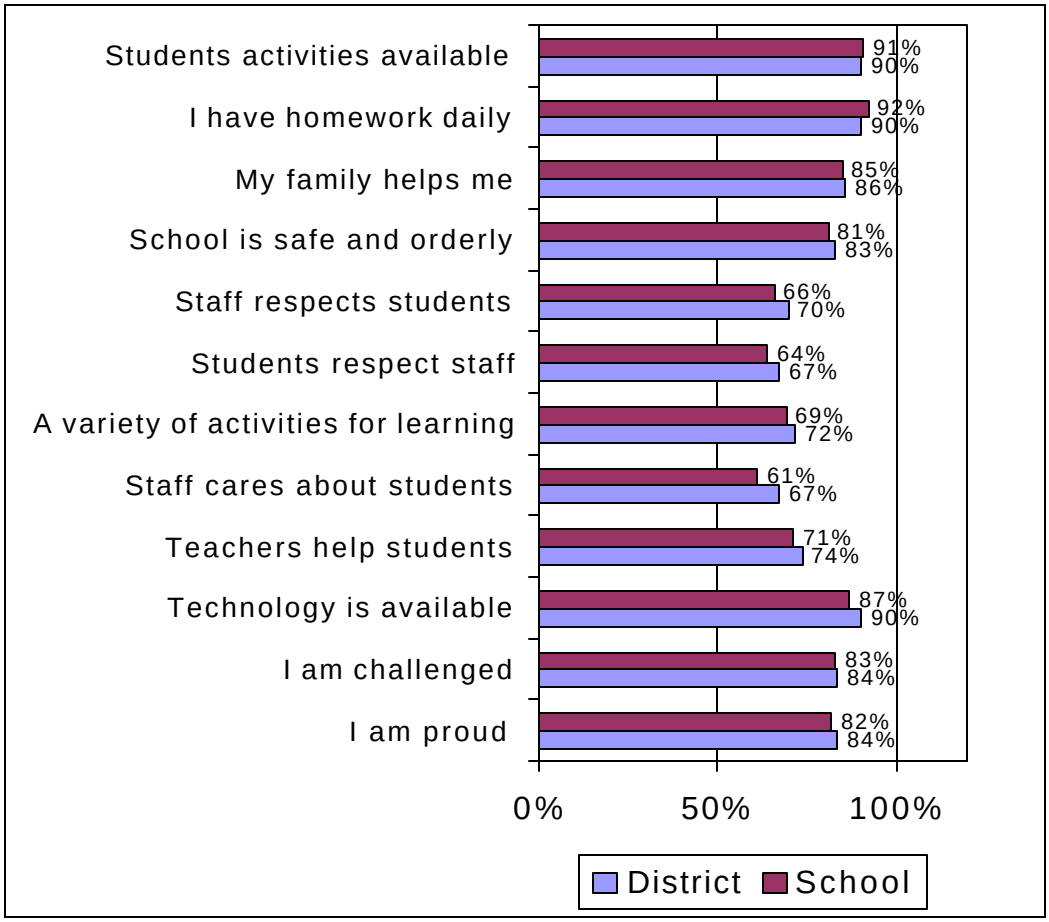
A response comparison among staff, students and parents on common questions is shown in Figure 6. In most cases, parents and staff show more positive perceptions of the school learning environment than students do. There is only one item that shows parents' perception is different from students and staff: "Students respect staff at school." Parents believe students respect staff at school. However, both students and staff rated this item the lowest on all items.

Figure 6 Response Comparison among Students, Parents and Staff



Different from the standardized assessment data, most survey data doesn't have national norms with which to compare. Usually, one approach to identify schools' strengths and weaknesses is to compare school summary data with the district summary data. Figure 7 compares school summary results to the district summary results. The results indicate that this particular school received less positive responses than the district on all questions. The school may need to set school improvement goals to improve their learning environment for students.

Figure 7 School and District Survey Results Comparison, 2000



This year, Edina Public Schools continued surveying the perceptions of students, parents and staff. Currently data collection is in the process. Two years' comparison will be made to see changes.

In summary, several important comparisons among the relationships are used for survey data analysis. First, results from all survey questions within each population are compared. This comparison provides information about what kinds of questions were responded to positively; what kinds of questions were responded to less positively. In this spring 2000 surveys, results show more than 90% of students are satisfied with the

availability of technology and student activities provided by school. However, they feel less satisfied with respect shown between students and staff. This finding indicates that the Edina School District has done a great job at integrating technology in learning and providing many activities for students, but may need to improve respect relationships between students and staff. Secondly, comparison helps examine the discrepancies between different populations to identify problems. On the questions about staff caring about students, 99% of staff believes they really care about students, but only 83% of students feel cared about in school. In particular, as students get older, they feel less cared about by adults. In elementary schools, more than 90% of students feel cared about, but in high school, only 50% of students feel cared about by staff at school. These findings are helpful for staff to target goals to improve their schools. Third, comparison by subgroups is useful to further identify problems and improvement opportunities. For example, 86% of staff responded that students show respect for staff at school. When broken down by grade and staff assignments, results show that the high school staff feels less respected by students than elementary staff. Non-licensed staff feels less respected than licensed staff. Thus, schools are able to use subgroup data to set specific goals.

The results of surveys in school profiles offer educators means for examining aspects of the Edina Public Schools' educational experience. Future years' survey results will represent how these feelings, perceptions and opinions change over time.

Using School Profiles in School Improvement

Once information from the surveys is reported in the school profiles, schools and the district begin the important work of using school profiles for the school improvement process. School profiles are usually completed in July, combining all achievement data, survey data and outcome data. Each August or September, the members of Edina School District community come together to decide how their school can become better at helping students achieve high standards. This process is called School Improvement Planning. School Improvement Planning (SIP) is the primary process used in the Edina Public Schools (EPS) to focus and guide student achievement and staff learning at the school level. While the expectations for student performance are set by the Board of Education ad apply district-wide, the approaches and activities for reaching those expectations vary as school communities work together to respond to the needs of their students.

Each school in the EPS annually prepares a written School Improvement Plan that articulates its educational objectives, strategies for meeting those objectives, annual performance targets, and specific action plans. The SIP process calls for the school's stakeholders to review past performances; set specific, measurable performance targets; take action; measure results; reassess; and set further targets. This provides a powerful, systematic process for continuous improvement and innovative change to ensure that our schools remain among the very best in the state and nation.

To ensure the success of the SIP, it is essential that the process include input and reflection from the school's stakeholders. Representation from the staff, parents, community, and students when appropriate is important. Building a sense of

ownership of the plan enhances commitment from the stakeholder as improvements and innovations are implemented.

The School Improvement Process for the Edina Public Schools has five key steps: data gathering and analysis, improvement plan development, action planning, implementation, and evaluation.

The first step, data gathering and analysis require the gathering and assembling of student performance data. This data includes standardized test results, achievement growth measures, and diagnostic assessment data. A school profile on student attendance, demographics, discipline referrals, community service, etc. is also prepared. A significant part of the data gathering and analysis is the gathering of school community opinions through student, staff, and community surveys. The majority of the data gathering occurs between February and July. Data analysis overlaps into the second step of the SIP, Improvement Plan Development.

In the summer, each school's site council begins the improvement plan preparation. On a three-year cycle, the site council and other school stakeholders meet with the school district facilitator to take a more comprehensive analysis of the school's results and improvement plan. In the "off years," the site council will monitor and adjust the school's plan. In August or September, the school establishes or confirms its guiding beliefs, its mission, and school objectives. It reviews and analyzes the data, identifies annual performance improvement targets, links the targets to the district strategic plan and communicates the SIP to the school community.

The third step is action plan development. Staff, in particular, are asked to suggest what action or initiatives should be undertaken to achieve the annual performance targets. These actions inform staff development and technology infusion plans for the

school. Frequently, the professional goal targets of staff, individually and in teams, are linked to the annual performance targets. Budgets are allocated to support the action plan. The SIP is finalized and the requisite reports for the state and North Central Association accreditation endorsement are prepared. This step is to be completed by October 31.

Implementation of the action plans is Step Four. Staff development and technology training are provided. The plan is communicated via meetings, newsletters, websites, and other means to the entire school community as well as the Board of Education. The school also hosts NCA peer reviewers. Implementation usually involves the balance of the school Year (November – June).

The fifth and final step is to evaluate the plan, its implementation, and preliminary results. This fifth step and the first step, Data Gathering and Analysis, overlap considerably. Data is again gathered. Progress and/or achievement of the annual performance targets is measured and reported. Achievements are celebrated and the targets, strategies, and action plans are adjusted as needed.

The respective School Improvement Plans are the basis for the District Strategic Plan. Site-based improvement efforts are highly informative about the direction the district must take to improve as well as the most useful initiatives to undertake to improve student learning and instructional effectiveness.

In order to identify on which areas the school should focus for performance improvement, it is necessary to identify each school's current level of performance. School profiles contain a wealth of information about individual schools, including data on achievement, attendance, student/staff demographics and student/staff/parent

perceptions of the school. Schools must digest and analyze information provided in the school profiles to review past performance, set specific, measurable targets for improvement aligned with district goals. In this way, the school profile guides each school through a systematic process for continuous school performance improvement and provides the basis for implementation.

Implications

The purpose, process and reporting considerations discussed above suggest that educators and administrators may use surveys as one component in school profiles. Only a small number of studies and a few instruments have been published on the indicators of schools and student learning. Yet, we believe that educators cannot ignore the possibility that learning climates, school leadership, parent involvement, and students' attitudes affect student learning and school improvement.

We expect school indicators beyond achievement in student learning and school performance to become increasingly important. Therefore, three challenges face school profile development and reporting. First, the existing achievement indicators are only partially suited to assess all the variables of student learning and school improvement. The development of survey instruments capable of providing information relevant for learning and school improvement involves many challenges, both conceptual and methodological.

Second, research based on longitudinal and other appropriate designs for surveys and employing relevant measures is needed if we want to better understand how learning environment and school cultures develop, change, and affect student learning.

Finally, in order to make the school profile effectively represent student learning and school performance, further attention by educators and administrators may be focused on the attitudes and beliefs students bring to their learning as well as school climates students experience every day, also how students develop and change their attitudes or beliefs during their educational experiences and what impact they have on students' achievement and eventual application in their future lives.

This study has presented procedures, approaches, and issues of surveys in school profiles. Educators and administrators at all levels may find it helpful to use these approaches to develop their own surveys and school profiles to monitor students and evaluate their schools and increase student learning and school performance.

References

Berdie, D.R., Anderson, J.F., & Niebuhr, M.A. (1986). Questionnaires: Design and use. Metuchen, NJ: Scarecrow Press.

Clements, B. and Blank, R. (1997). What Do We Know About Education in the States? Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL, March 1997.

Du, Y., & Heistad, D. (1999). School Performance Accountability in Minneapolis Public Schools, Paper presented at the Annual American Educational Research Association Conference in Montreal, Canada, April 1999.

Hansen, J.B., (1999). Making Decisions Based on Multiple Indicators: A policy perspective on the development of indicator systems. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada, April 1999.

Raham, H. (1999). Linking Assessment and School Success. Paper presented at the to annual meeting of the American Education Research Association, Montreal, Canada, April 1999.

Schwarz, N. & Sudman, S. (Eds.) (1996). Answering questions. San Francisco: Jossey Bass.

American Educational Research Association, (1999). Standards for Educational and Psychological Testing, Washington, D.C.: American Educational Research Association.

Tufte, E.R. (1983) The visual display of quantitative information. Cheshire, CT.

Bernhardt, V. L., Blanckensee, L. L., Lauck, M.S. and etc. (2000). The Example School Portfolio. Eye on Education, Larchmont, New York.

Schmoker, Michael. Results: The Key to Continuous School Improvement.

North Central Association of Colleges and Schools Commission on Schools (2000). Standards and Criteria for Elementary, Middle Level, Secondary, and Unit Schools. Tempe, Arizona.

Senge, Peter, et al (2000). Schools That Learn, Doubleday Dell Publishing Group, Inc., New York, New York.