Montgomery County Public Schools

Surveys of School Environment: 2001–02 and 2002–03 Districtwide Summary

Office of Shared Accountability

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Purpose

This report provides results of the Surveys of School Environment completed by Montgomery County Public Schools (MCPS) parents, students, and school-based staff members. Survey results are presented for the 2002–03 school year (unless otherwise noted, referred to as 2003, since the surveys were administered in 2003). Comparison data gathered from the 2001–02 Surveys of School Environment also are presented (unless otherwise noted, referred to as 2002, since the surveys were administered in 2002.) The Surveys of School Environment are designed to provide information about how students, parents, and school staff perceive their school environments. Survey respondents are asked to consider their own school's environment in providing their responses. This report provides districtwide results—all schools, alternative programs, special schools, and centers combined. Individual school results and specified comparison school results are reported to principals on a secure internal MCPS Web site for the System of Shared Accountability (SSA). Summary results from the parent and student surveys are reported by school and for the district on the MCPS home page (*http://www.mcps.k12.md.us*). The SSA includes both academic and school quality measures that may be used by students, families, school staff, central office staff, and the community to monitor school performance, improve understanding of the educational environment, and collaborate on ways to improve results.

Background

The school district's strategic plan—*Our Call to Action*, mandates indicators of school processes and outcomes for purposes of accountability and school improvement. Perceptions of school environment obtained from students, their parents, and school staff members serve as measures of school functions, processes, and contextual factors that are likely to influence student learning and academic achievement. Survey topics were identified by reviewing published research related to effective schools, school climate, and other published surveys. School district research staff met with parents, school staff, students, and employee association representatives to review and adapt survey items, and to develop survey items that would assess areas related to the school environment.

The first surveys using the current design and content were pilot-tested in spring 2001. Stakeholders recommended that some modifications be made to the survey content to better reflect school functions and processes. Following the first full year of implementation, during fall 2002, a Survey Workgroup was convened consisting of members who represented parents, students, each of the three school district associations, and central office staff. The Survey Workgroup was charged with facilitating the development of the MCPS Surveys of the School Environment and the distribution and use of survey results in the System of Shared Accountability. As a result of the Survey Workgroup's recommendations, some of the 2003 survey items were revised and organized under different categories, and the administration of the surveys to several respondent groups (school-based staff and parents of elementary students) was modified to increase response rates and/or the representativeness of respondents.

Methodology

Organization of the Surveys

The organization of the surveys is intentionally similar to allow monitoring of stakeholder perceptions within a school and across the school district. However, each survey covered issues specific to the population being surveyed. The surveys consisted of positively worded statements or items about elements of the school environment. Research has shown that positively worded versus negatively worded attitude statements had no predictable effect on respondents' answers (Gendall and Hoek, 1990). The wording of items was designed to make progressing through survey items relatively easy, and to limit interpretive difficulties for survey respondents whose reading skills may be limited. Within each Broad Area, Specific Areas were identified, with survey items organized by specific content. Survey respondents were asked to indicate whether they strongly agreed, agreed, disagreed, or strongly disagreed with each statement. The following Broad Areas were included in all surveys, except as noted:

- Academic Environment
- Social Environment
- Physical Environment
- School Safety and Discipline
- Partnerships
- Guidance (all parent and student surveys)
- School Atmosphere and Communication (all parent surveys)
- Citizenry (middle and high school student and parent surveys)
- Administrative Environment (school-based staff survey)
- Student Satisfaction (all student surveys)
- Parent Satisfaction (middle and high school parent surveys)
- Training (school-based staff survey; includes job satisfaction).

Intended Population of the Surveys

All school-based staff, students in selected grades, and their parents received surveys. For special schools and alternative programs, all parents and all students (insofar as students were able to complete survey forms) received surveys. As a result of recommendations from the Survey Workgroup, the population of surveyed parents was expanded to include parents of students in Grade 1 for the 2002–03 school year. The following seven surveys were included:
1. Elementary Student Survey of School Environment (Grades 3 and 5)
2. Middle School Student Survey of School Environment (Grades 6 and 8)
3. High School Student Survey of School Environment (Grades 9 and 11)
4. Elementary Parent Survey of School Environment (parents of Grade 1 students in 2002–03 only; Grades 3 and 5 in schools that are kindergarten to Grade 5/6; and parents of Grade 2 students in schools that are kindergarten to Grade 2)
5. Middle School Parent Survey of School Environment (parents of Grades 6 and 8)
6. High School Parent Survey of School Environment (parents of Grades 9 and 11)
7. Staff Survey of School Environment (all school-based staff members)

Administration of the Surveys

The surveys were distributed between February and April in each school year (2002 and 2003). All student surveys were completed in the school building. Elementary school students in the selected grades were given the elementary parent survey to take home to their parents, who were asked to return the survey to the Office of Shared Accountability (OSA) in pre-addressed, postage-paid envelopes. Parents of middle school students (Grades 6 and 8) and high school students (Grades 9 and 11) received the surveys at their homes by mail and were asked to return the surveys to OSA in pre-addressed, postage-paid envelopes. Translated parent forms were available in Spanish, Vietnamese, Korean, and Chinese. Parents of elementary school students could request translated surveys from their child's elementary school. Parents of middle and high school students could request translated surveys from OSA, using translated request forms that were included in the survey packets. In the 2001–02 school year, surveys were mailed to the homes of school-based staff members, who were asked to return them to OSA in pre-addressed, postage-paid envelopes. In order to increase the response rate while decreasing costs, the Survey Workgroup recommended that school-based staff receive their 2003 surveys at their respective schools. Staff was given a choice of returning their surveys to OSA either by using the MCPS Pony delivery system at no cost to MCPS or by mailing their surveys through the U. S. postal service (postage paid by MCPS).

Individual survey responses were designed to be anonymous. Individual responses were neither tracked nor reported. Only aggregate data is included in this report and on the internal and external SSA Web sites. Background information was collected to ensure that results were representative of school and district populations. Respondents were asked to indicate their school code number on the survey form so that results from the surveys could be reported to each school to be used for school improvement.

Reporting Results

School-based results are reported in three ways. First, each school principal received an electronic mail message that provided a Web site address, a unique school password, and instructions for accessing his or her school's survey results. As an additional safeguard, users could only access the secure Web site for their school from computers within that school. MCPS central office administrators also were given a unique password that enabled them to access Web site data for all schools. Access to the Web site is made available in July each year to allow principals to share survey results. Principals are expected to share school results from the Surveys of School Environment with school staff and other members of school-improvement planning teams. The intent is for staff and others to share, discuss, analyze, and use the survey data for school improvement planning. Principals are expected to share summary survey results with their school community, and give their community superintendents a report on how data was shared.

The percentage of positive responses (strongly agree and agree) for each survey item was reported on the secure Web site. The average (mean) of these positive responses was compiled and presented for each Specific Area. This Web site is flexible to allow users to track changes,

detect equity patterns, and examine contextual information to guide school-improvement planning.

Second, this report provides districtwide summary results for the surveys. The unit of analysis for the surveys is an individual school. The districtwide results presented here are intended to provide an overview of stakeholder perceptions of the school environment. By presenting the districtwide survey results in this way annually, it is hoped that patterns will begin to emerge regarding stakeholder perceptions of the overall school environment.

Third, summary survey results from the Parent and Student Surveys of School Environment are also reported on the Internet through the MCPS home page, as recommended by the Survey Workgroup. Parent and student survey results are reported by Broad Areas and Specific Areas for all schools. Comparisons are available between two school years, and between a selected school and the districtwide results by level (elementary schools, middle schools, high schools).

Description of Survey Respondents

Tables 1 and 2 provide data on the survey completion rates for the seven Surveys of School Environment.

Students

Student surveys were completed in the student's home school during school hours. As a result, the completion rates for the student surveys were generally high. On any given day, however, and in any given school period, students may not be present, so a 100% response rate is unusual. As might be expected, the response rates are highest for elementary students, followed by middle school students, and then high school students. There is usually about a 9% to 12% percent drop in the response rate for each school level. Given the relatively high percentage of students who complete the surveys, receiving surveys from fewer than 50% of students in the grades that completed the survey is a sign that the responding sample may not be valid. In such cases, student results were not reported in individual school results, but would be included in the districtwide results.

The survey methodology is designed so that, potentially, all students in special schools and alternative programs would be surveyed. Special schools determination as to whether students were capable of completing the survey was made at the individual special school or alternative program level. Only a relatively small percentage of students in these schools completed surveys, and statistically, OSA felt that these results might not represent the opinions of this population. Therefore, results from students in special schools and alternative programs are not reported separately in the response rates in Table 1. Since special schools are not classified by level in the way that most MCPS schools are, the survey results for special school students are not included in this report.

TABLE 1
Student and Parent Completion Rates for 2001–02 and 2002–03 Surveys of School Environment

Elementary School Surveys		2001–02			2002–03		
Sample Population	Grades Sampled	Total Sampled	Total Returned	Completion Rate (%)	Total Sampled	Total Returned	Completion Rate (%)
Students 120 schools	3 and 5	21,040	18,852	MCPS: 90 school range: 49 to 100	21,176	18,266	MCPS: 90 school range: 49 to 100
Parents 120 schools Grade 2 parents in 5 K–2 schools	3 and 5 parents, Grade 2 parents in K–2 schools; Grade 1 parents 2003	21,830	5,566	MCPS: 26 school range: 10 to 44	32,051	8,028	MCPS: 25 school range: 8 to 57
Middle School Surveys		**2001–02**			**2002–03**		
Students 2002: 35 schools 2003: 36 schools	6 and 8 2003: 1 school Grade 6 only	21,342	17,052	MCPS: 80 school range: 21 to 95	21,529	17,227	MCPS: 80 school range: 32 to 94
Parents 2002: 35 schools 2003: 36 schools	6 and 8 2003: 1 school grade 6 only	21,143	3,693	MCPS: 18 school range: 11 to 25	19,945	3,122	MCPS: 16 school range: 9 to 22
High School Surveys		**2001–02**			**2002–03**		
Students 23 schools	9 and 11	21,299	15,084	MCPS: 71 school range: 45 to 88	21,437	14,495	MCPS: 68 school range: 40 to 86
Parents 23 schools	9 and 11	21,036	3,128	MCPS: 15 school range: 9 to 22	19,870	3,074	MCPS: 15 school range: 10 to 22

TABLE 2
School-based Staff Completion Rates for 2001–02 and 2002–03 Surveys of School Environment

School-based Staff		2001–02			2002–03		
Sample Population	Staff Sampled	Total Sampled	Total Returned	Completion Rate (%)	Total Sampled	Total Returned	Completion Rate (%)
Elementary School	All	7,774	2,725	MCPS: 35 school range: 15 to 64	7,754	3,317	MCPS: 43 school range: 15 to 92
Middle School	All	3,572	1,042	MCPS: 29 school range: 14 to 53	3,702	1,371	MCPS: 37 school range: 25 to 56
High School	All	4,186	989	MCPS: 29 school range: 17 to 41	4,388	1,358	MCPS: 31 school range: 21 to 89
Special School and Alternative Programs	All	427	84	MCPS: 23 school range: 13 to 31	523	158	MCPS: 30 school range: 16 to 47

Parents

As with students, a higher percentage of parents of elementary students (25%) than of parents of middle school (16%) or high school students (15%) completed the survey in 2002–03. This trend continues from 2001–02.

Low completion rates among parents raise questions regarding how well survey results represented what all parents would have reported, had all parents completed the survey. For the parent surveys in 2002 and 2003, the percentage of Asian American parents who responded was very similar to that of the school population. Fewer Hispanic and African American parents responded when compared with the school population. More white parents responded when compared with the school population. OSA staff checked the possible effect of these differential response rates by "weighting" the results to take into account the potential under- and over-reporting by race group. Weights were computed based on the ratio of the proportion in each race group in the school population with the proportion of each race group in the responding sample. Table 3.1 in Appendix 3 displays the weighted and non-weighted results by race for the 2003 parent surveys. Results for most Broad Areas are 1% to 2% higher when weighted by race; the exception to this pattern is the Partnerships Broad Area, which yields a lower percentage positive perception when weighted by race group.

As with the student population, while parents of all students in special schools and alternative programs were surveyed in the 2001–02 and 2002–03 school years, the percentage of special school parents that responded to the survey is so statistically small that OSA determined these results may not represent the opinions of this population. Since special schools are not classified by level in the way that most MCPS schools are, the survey results for special school students are not included in this report.

On the MCPS Web site, parent survey respondents are disaggregated to the school level, resulting in some schools having too few respondents to report valid results. Appendix 4 includes suggestions for increasing response rates for the Surveys of School Environment. This is less of an issue when presenting districtwide results versus by school, since reporting results by the three school levels allows OSA to report large enough numbers of parent results that results presented are likely to be valid. Nonetheless, both school-based and districtwide results would benefit from a larger percentage of parents responding to the survey, thus ensuring that the responding parents adequately represent all parents that are surveyed.

School-based Staff

Reporting results by the three school levels allows OSA to report large enough numbers of staff results that the results presented are likely to be valid. As with students and parents, a higher percentage of school staff in elementary schools (43%) than of those in middle schools (37%) or high schools (31%) completed the survey in 2002–03. This trend continues from 2001–02. As indicated above, instructional, non-instructional, and administrative staff in the schools received copies of the Staff Survey of School Environment in their assigned school in 2002–03, rather than at home, as recommended by the Survey Workgroup. As intended, by sending staff surveys to their respective schools, administrative costs were lowered and the response rate increased by

eight percentage points over the previous year in elementary and middle schools, and were two percentage points higher for high school staff. The higher the percentage of respondents, the more likely it is that the respondents are similar to the population being surveyed, so increases such as these are important to note.

For the 2001–02 and 2002–03 school-based staff surveys, the percentage of Hispanic and Asian American staff members who responded was very similar to that in the school staff population. Fewer African American staff responded when compared with the school staff population. More white staff responded when compared with the school staff population. Non-instructional staff members were slightly under-represented in returning surveys, while instructional staff members were slightly over-represented. Survey respondents may have been slightly more experienced than the population of school-based staff, reporting an average of 12 years with MCPS, compared with approximately 10 years for the school-based staff overall. It is unclear whether these differences had an effect on the results reported here. These trends will be monitored in future surveys to ensure that survey respondents are representative of the population whose perceptions MCPS seeks to have represented.

In the case of the Web-based presentation on the secured Web site discussed above, staff survey respondents are disaggregated to the school level, resulting in some schools having too few respondents to report valid results. Appendix 4 includes suggestions for increasing response rates for the Surveys of School Environment.

Validity of the Results

Internal consistency assesses the extent to which respondents gave similar ratings to items having similar content. Internal consistency is needed in order to make good estimates. The Cronbach alpha coefficient is a statistic typically used to assess the internal consistency of scales or subsets of items with similar content. For the 2001–02 and the 2002–03 survey administrations, the consistency of survey responses among students, parents, and school-based staff for items that comprise each specific indicator showed that responses obtained had adequate internal consistency. Cronbach alpha coefficients for the two years ranged from .50 to .96, with median Cronbach alphas for each school level ranging from .71 to .90. The range of Cronbach alpha coefficients and median Cronbach alpha coefficient for each survey are shown in
Table 1-1, Appendix 1.

Results

As noted above, survey respondents were asked to express their level of agreement or disagreement with positively worded statements about the school environment. The percentage of those who recorded "agree" or "strongly agree" for each survey item on each survey was calculated. The average (mean) of these item percentages was then calculated for each Specific Area and Broad Area on each survey. Broad Area results are presented in the tables that follow. Specific Area results are presented in Appendix 2.

At the districtwide level, each Broad Area for each group of survey respondents had an average percentage agreement (combined "agree" and "strongly agree") exceeding 59%. For the vast majority of Broad Area results, agreement with the positively worded statements exceeded two thirds of respondents. Agreement with the positively worded statements on the survey is deemed to be a positive perception of that area of the school environment. In all cases and for all respondent groups, positive perceptions of the school environment exceeded those viewing the school environment negatively. In the vast majority of cases, positive perceptions exceeded negative perceptions by a ratio of 2 to 1. In a large number of cases, positive perceptions of survey respondents outweighed negative perceptions of respondents by a ratio of 3 to 1, with average positive perceptions of the school environment at greater than 75% of survey respondents.

Statistical tests were performed to compare results from the 2001–02 and 2002–03 surveys. In Tables 3 through 5 and Tables 2-1 through 2-7 in Appendix 2, differences that were statistically significant were noted with an asterisk (*). The text that follows will note both positive perceptions by Broad Areas as well as overall patterns of results by respondent group.

Students

Table 3 and Figures 1A through 1C display the percentage of students with positive perceptions of the school environment. Student perceptions of the school environment generally were positive. Most of the Broad Areas covered by the survey were rated positively by more than two thirds of the elementary, middle, and high school students. At all levels in 2002–03, higher percentages of students gave positive ratings to Guidance than to other areas (91% for elementary students, 79% for middle school students, and 77% for high school students). School-Parent Partnerships was also among the Broad Areas rated positively by the greatest percentages of middle and high school students, and Social Environment and Student Satisfaction were among the most positively rated areas by elementary school students. The lowest ratings were observed for Physical Environment and Safety and Discipline (the latter especially for middle and high school students). Table 3 shows the mean percentage of students that had positive perceptions of items in each Broad Area at each level.

Direct comparisons of Broad Area ratings of students at all three levels cannot be made for all Broad Areas, because the individual survey items at the elementary level differ somewhat from items at the middle and high school levels. For those areas in which items are parallel for students at all three levels, however, comparisons among elementary, middle, and high school students reveal that greater percentages of elementary school students have positive perceptions of their school environment than either middle or high school students. The Academic Environment, Safety/Discipline, Physical Environment, and Student Satisfaction Broad Areas are represented by very similar survey items at the three school levels. In each of these areas, the percentage of students reporting positive perceptions was higher in elementary schools than in middle and high schools.

TABLE 3
Student Positive Perception of the School Environment by Broad Area

	Elementary School (% positive perception)		Middle School (% positive perception)		High School (% positive perception)	
Broad Area	**2002**	**2003**	**2002**	**2003**	**2002**	**2003**
Number of respondents	18,832	18,398	17,026	17,066	14,964	14,493
Academic Environment	80.22	80.00	73.21	71.94*	71.00	71.72
Social Environment	85.05	84.56	69.68	68.50*	66.15	67.22
Guidance	91.37	90.65	78.80	78.93	76.23	77.44*
Citizenship	NA	NA	74.49	72.54*	65.23	66.13
Safety/Discipline	75.58	75.07	64.33	61.20*	62.87	61.78
Physical Environment	70.66	71.61	61.51	62.31	59.38	61.12*
Partnerships	80.64	79.45*	75.73	74.29*	73.20	72.94
Student Satisfaction	86.38	85.96	68.11	67.76	64.04	65.39*

* Percentages for 2002 and 2003 were significantly different ($p < .05$).

Comparisons between the perceptions of middle and high school students, however, can be made on nearly all of the Broad Areas, since survey items were identical in all but one area. Although there were smaller differences between the perceptions of middle and high school students than there were between these secondary levels and elementary students, the consistency of differences is worth noting. In all but one area (Safety and Discipline), higher percentages of middle school students report positive perceptions than do high school students. The biggest difference between middle and high school students was seen in their perceptions of Citizenship (72% of middle school students and 66% of high school students rated this area positively).

Because the Surveys of School Environment have been fully implemented in their current format for only 2 years, great care should be taken in drawing conclusions about trends. Nonetheless, some patterns do emerge when survey results for the 2001–02 school year are compared with survey results for the 2002–03 school year, as illustrated in both Table 1 and in Figures 1A through 1C. Results for elementary school students showed the smallest differences between 2002 and 2003, with nearly all Broad Areas within one percentage point of the prior year. Perceptions of middle school students were more negative in 2003 than 2002, with small but statistically significant drops in five of the eight Broad Areas, including a 3 percentage point drop in School Safety and Discipline and a 2 percentage point drop in Citizenship. High school students, on the other hand, reported slightly more positive perceptions in 2003 in nearly all areas; with small but statistically significant increases in three of the eight Broad Areas reported. The largest difference for high school students was a nearly 2 percentage point increase in positive perceptions of the Physical Environment in 2003.

Tables 2-1 to 2-3 containing the Specific Area results for elementary, middle, and high school students are reported in Appendix 2. These tables provide mean percentages of students with positive responses to each of the Specific Areas that comprise the Broad Areas reported in the tables above. The Specific Area results provide a more detailed picture of student perceptions within the Broad Areas of the school environment.

Figure 1A
Elementary School Student Positive Perceptions of School Environment

Elementary School Students
Survey of School Environment

Broad Area: Academic Environment, Social Environment, Guidance, Safety & Discipline, Physical Environment, Partnerships, Student Satisfaction

Legend: 2003, 2002

Mean Percentage Agreement with Broad Area
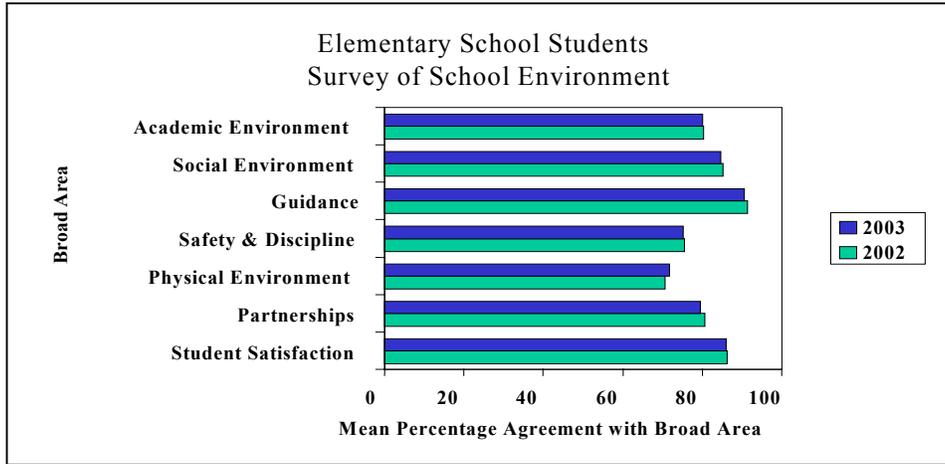
Figure 1B
Middle School Student Positive Perceptions of School Environment

Middle School Students
Survey of School Environment

Broad Area: Academic Environment, Social Environment, Guidance, Safety & Discipline, Physical Environment, Partnerships, Student Satisfaction

Legend: 2003, 2002

Mean Percentage Agreement with Broad Area
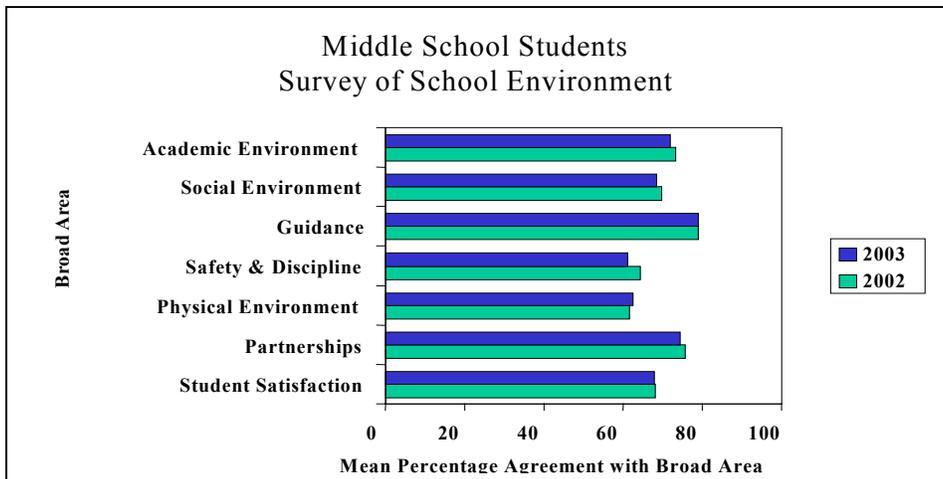
Figure 1C
High School Student Positive Perceptions of School Environment

High School Students
Survey of School Environment

Broad Area: Academic Environment, Social Environment, Guidance, Safety & Discipline, Physical Environment, Partnerships, Student Satisfaction

Legend: 2003, 2002

Mean Percentage Agreement with Broad Area
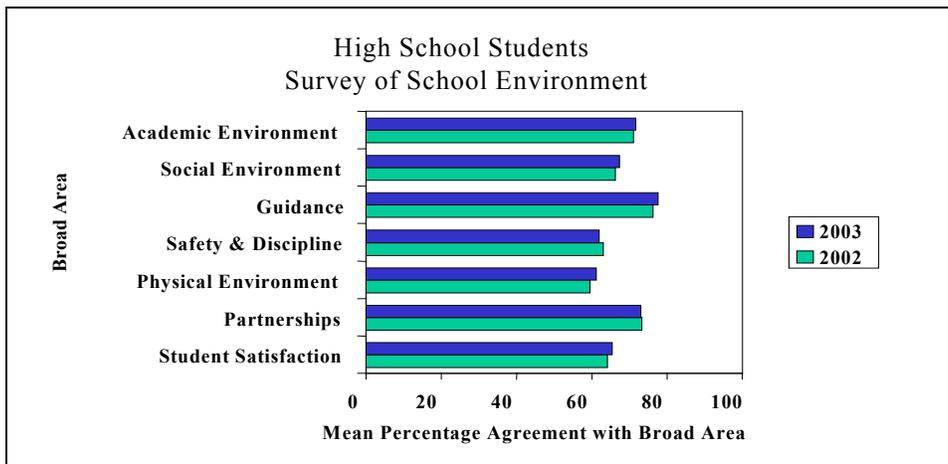
Parents

Table 4 and Figures 2A through 2C display the percentage of parents with positive perceptions of the school environment. High percentages of parents at each level—elementary, middle, and high school—gave positive ratings to the areas of school environment covered in the survey. Very high percentages of parents at all levels reported positive perceptions of the school's Social Environment (93% of elementary parents, 89% of middle school parents, and 85% of high school parents). Among the other areas rated positively by the largest percentages of parents at different school levels were Guidance (96% of elementary parents); Citizenry (88% of middle school parents); and Parent Satisfaction (86% of middle school and 85% of high school parents).

The only Broad Area with less than 80% (rounded) of parents rating it positively was Parent-School Partnerships in the middle and high schools. Items in this Broad Area include self-reports about frequency of attendance at school activities and participation in volunteer activities at school, as well as help by parents with homework. In 2003, 90% of elementary parents, 77% of middle school parents, and 73% of high school parents reported high levels of involvement ("Almost Always" or "Sometimes").

Within the Broad Areas reported here, the individual survey items at the elementary, middle, and high school levels differ somewhat, so direct comparisons among the ratings of parents at the three levels must be made cautiously. In those areas in which items are parallel for the three levels, however, comparisons among elementary, middle, and high school parents reveal that greater percentages of elementary parents have positive perceptions of their child's school environment than either middle or high school parents. Identical or very similar survey items at the three school levels can be found in the Academic Environment, School Safety and Discipline, and Physical Environment Broad Areas. In each Broad Area, the percentage of parents reporting positive perceptions was higher in elementary schools than in middle and high schools.

TABLE 4
Parent Positive Perceptions of the School Environment by Broad Area

Broad Area	Elementary School (% Positive Perception)		Middle School (% Positive Perception)		High School (% Positive Perception)	
	2002	2003	2002	2003	2002	2003
Number of Respondents	5,584	5,029	3,676	3,094	3,074	2,390
Academic Environment	87.53	88.65	84.41	85.16	81.87	82.88
Atmosphere	91.70	91.61	84.58	84.44	82.71	83.23
Social Environment	92.78	92.66	88.99	89.26	85.14	85.27
Guidance	96.04	95.75	83.80	84.59	80.42	79.57
Citizenship**	NA	NA	88.34	88.13	83.13	82.96
Safety/Discipline	90.01	91.01	83.36	84.74	79.55	79.61
Physical Environment	90.00	90.39	82.52	85.97*	75.18	79.26*
Partnerships	90.95	89.90	77.20	76.84	73.94	73.26
Parent Satisfaction**	NA	NA	84.91	85.63	85.25	84.81

* Percentages for 2002 and 2003 were significantly different (p<.05).
** Citizenship and parent satisfaction items for elementary school parents are included in other Broad Areas.

Comparisons between the perceptions of parents of middle school students and parents of high school students can be made on nearly all of the Broad Areas, since survey items were identical in all but one area. Similar to the student results, modest but consistent differences are seen across all the areas surveyed. Higher percentages of middle school parents reported positive perceptions than did high school parents. The biggest differences in average positive perceptions between parents of middle school students and parents of high school students, 5 to 6 percentage points, were seen in their perceptions of Citizenship, Guidance, Safety and Discipline, and Physical Environment.

Figure 2A
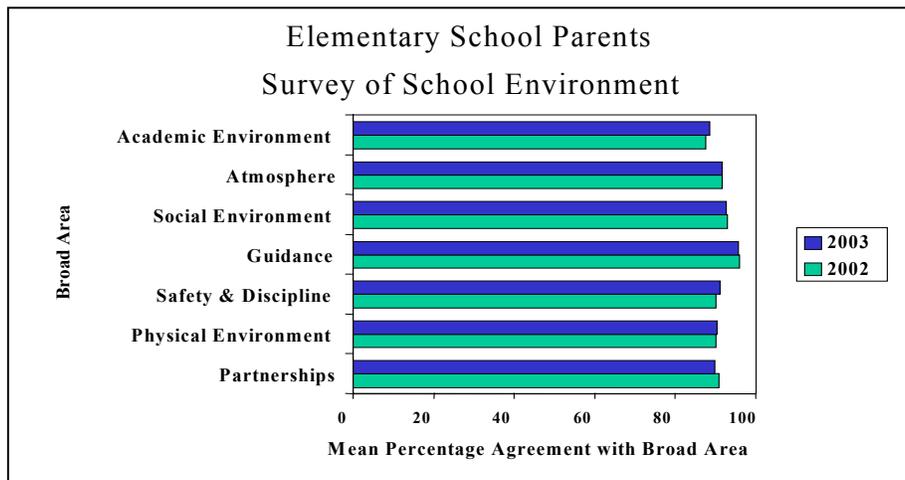**Elementary School Parent Positive Perceptions of the School Environment**

Figure 2B
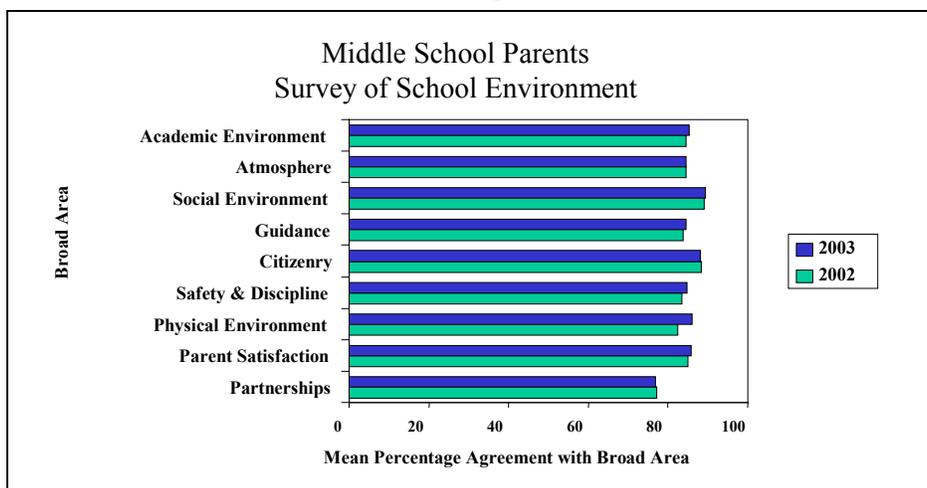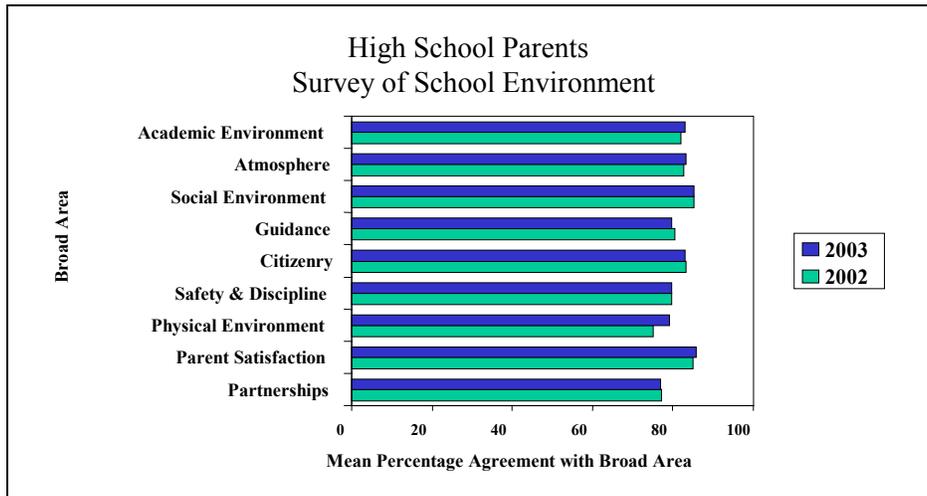**Middle School Parent Positive Perceptions of the School Environment**

Figure 2C
High School Parent Positive Perceptions of the School Environment

Perceptions of parents in 2002 and 2003 were very similar at all school levels. Examination of parent ratings of the Broad Areas across the two time periods reveals that only Physical Environment at the middle and high school levels resulted in a statistically significant increase of parents with positive perceptions of the physical environment (3 to 4 percentage points). However, because the individual survey items representing this Broad Area were changed somewhat in 2003, the difference may be an artifact, and we cannot draw conclusions from a year-to-year comparison of this Broad Area.

Tables 2-4 through 2-6 containing the Specific Area results for elementary, middle, and high school parents are reported in Appendix 2. These tables provide mean percentages of parents with positive responses to each of the Specific Areas that comprise the Broad Areas reported in the charts above. The Specific Area results provide a more detailed picture of parent perceptions within the Broad Areas of the school environment.

School-based Staff

Table 5 and Figures 3A through 3C display the percentage of staff with positive perceptions of the school environment. Staff at all school levels responded to the survey with positive ratings for a range of areas in the school environment. Particularly high percentages of staff at all levels gave a positive rating to their Job Satisfaction (89% of elementary school staff; 83% of middle school staff; and 86% of high school staff). Among the other areas rated positively by the largest percentages of staff at different school levels were Safety and Discipline and Partnerships (85% of elementary school staff positively rated each of these areas), and Social Environment (84% of elementary school staff, 82% of middle school staff, and 80% of high school staff rated this area positively). The only areas with less than 70% of staff rating it positively were Safety and Physical Environment at the high school level.

Comparisons of elementary, middle, and high school staff reveal consistent differences among staff at the different school levels. On each of the Broad Areas, elementary school staff reported

positive perceptions at a greater rate than did middle or high school staff. The largest difference across the school levels was in School Safety and Discipline; 85% of elementary school staff compared with 71% of middle school staff and 69% of high school staff reported positive perceptions in School Safety and Discipline. Large differences also were seen in Partnerships and Administrative Environment, again, particularly between staff at the elementary school level and staff at middle and high school levels.

Few differences emerged between staff perceptions in 2003 and 2002. The slightly higher percentages of staff rating the Physical Environment positively may be a result of a change in 2003 to one of the questions in that Broad Area, so it is important to be careful with any interpretations we make regarding that Broad Area. The area of Safety and Discipline showed statistically significant changes at each school level except special schools and alternative programs, albeit in different directions. In 2003, a greater percentage of elementary school staff rated the Safety and Discipline Broad Area positively, while a smaller percentage of middle and high school staff rated this area positively in 2003 than in 2002.

A sufficient number of surveys were returned from school-based staff in special schools and alternative programs in each of the survey years to report results. Some interesting trends can be identified. Overall, perceptions of the school environment of school-based staff in special schools and alternative programs were similar to the perceptions of staff in general education schools. Overall, perceptions of the school environment for school staff in special schools and alternative programs appear to have increased from 2002 to 2003 on all Broad Areas except Safety and Discipline, but none by a statistically significant amount. This is noteworthy as more staff in special schools and alternative programs responded to the survey in 2003 compared with 2002. This trend should be tracked in future surveys to see whether the increases noted were statistical anomalies or evidence of a statistically significant trend.

Table 5
Staff Positive Perceptions of the School Environment by Broad Area

	Elementary School (% positive perception)		Middle School (% positive perception)		High School (% positive perception)		Special School (% positive perception)	
Broad Area	**2002**	**2003**	**2002**	**2003**	**2002**	**2003**	**2002**	**2003**
Number of Respondents	2,725	3,317	1,042	1,371	989	1,358	84	158
Academic Environment	81.47	83.55	80.11	79.15	75.29	74.90	77.09	80.10
Administrative Environment	83.23	83.68	74.13	73.73	69.45	70.33	77.65	80.61
Social Environment	82.90	83.86	80.18	81.58	77.83	80.45	82.95	85.20
Safety and Discipline	82.09	85.14*	76.61	70.78*	74.00	69.01*	78.81	75.75
Physical Environment	71.45	74.41*	66.55	71.20*	62.37	68.08*	73.06	78.99
Partnerships	84.86	85.30	74.60	73.89	71.24	70.53	67.18	70.36
Training	83.55	83.55	80.17	79.74	72.96	74.59	78.96	82.76
Job Satisfaction	87.24	88.88	82.60	83.24	85.27	85.79	88.27	89.50

* Percentages for 2002 and 2003 were significantly different ($p<.05$).

Figure 3A
Elementary School Staff Positive Perceptions of the School Environment

Elementary School Staff
Survey of School Environment

Figure 3B
Middle School Staff Positive Perceptions of the School Environment
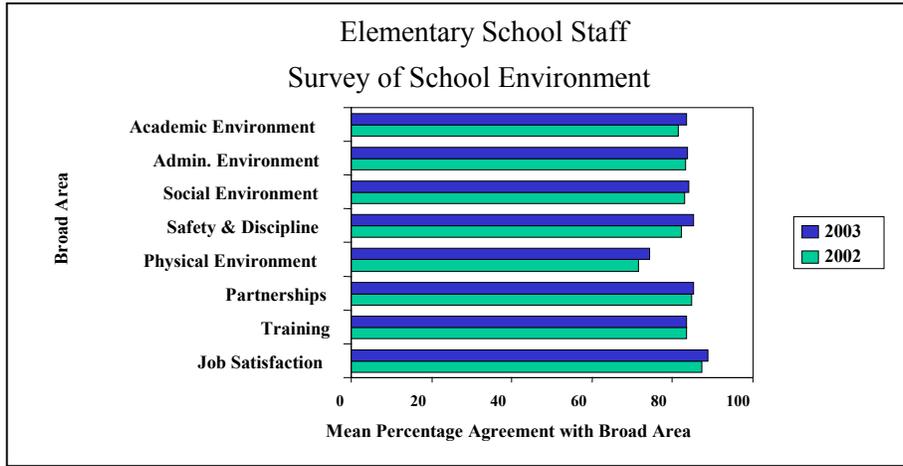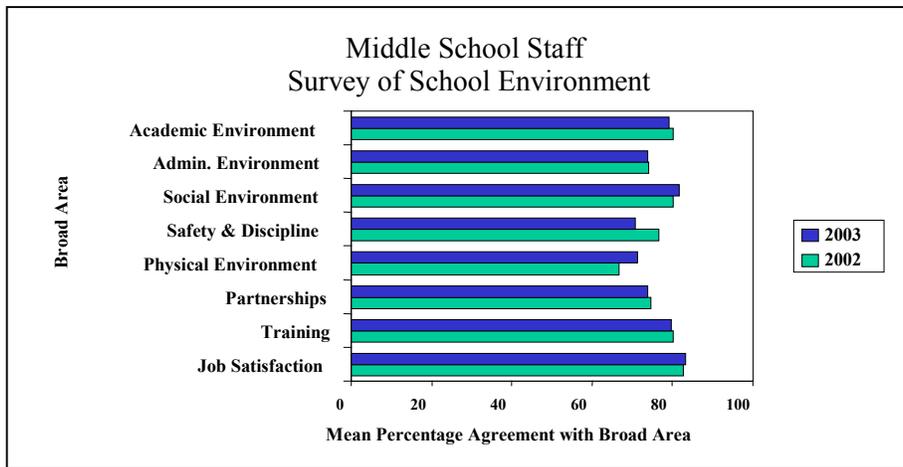

Middle School Staff
Survey of School Environment

Figure 3C
High School Staff Positive Perceptions of the School Environment

High School Staff
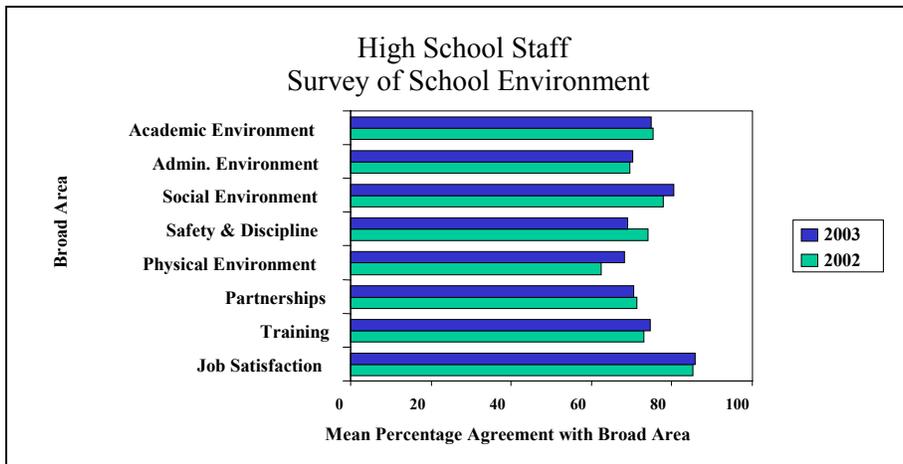Survey of School Environment

Table 2-7 containing the Specific Area results for staff at the elementary, middle, and high school levels are reported in Appendix 2. These tables provide mean percentages of staff members with positive responses to each of the Specific Areas that comprise the Broad Areas reported in the charts above. The Specific Area results provide a more detailed picture of staff perceptions within the Broad Areas of the school environment.

Contribution to the System of Shared Accountability

The SSA uses the Surveys of School Environment to gather information on the perceptions of students, parents, and staff about the quality of the school environment. The perceptions are reported as school quality indicators in the SSA. At the school level, survey results are intended to be used by the school community for reflection and school-improvement planning. Data are to be shared, discussed, analyzed, and used for school improvement planning. Suggested uses of the survey results are included in Appendix 5. Districtwide and school-based survey results will be monitored to track changes that may suggest longer-term trends. As the Surveys of School Environment and the SSA evolve, it is expected that additional uses of survey results will emerge. Considered together with academic results, the surveys will provide contextual data to help interpret a school's academic performance and present a more comprehensive picture of the learning environment within a school. The SSA model includes a descriptive approach to examine issues related to equity and trends, and a connective approach, which is intended to link academic outcomes with measures of school quality. This report begins the process of understanding equity issues and trends districtwide. As the SSA continues to evolve, additional analysis will help identify districtwide trends and issues and factors that may contribute to or impede academic achievement for students.

Summary and Conclusions

Overall, a large percentage of respondents in each of the stakeholder groups—students, parents, and staff members—reported positive perceptions of their school environment. The Academic and Social Environment of the schools, as well as the Guidance and Citizenship Broad Areas, showed positive ratings by more than two thirds of respondents in each group. Relative to other Broad Areas, the Physical Environment was an area of concern for students and staff, but not to parents. Safety and Discipline was another area of concern for students at all levels and for secondary school staff, but again not for parents. Parent perceptions of the Physical Environment and Safety and Discipline Broad Areas were as positive as most of the other Broad Areas. While the majority of responding students and staff still had a positive perception of these Broad Areas, there may be some features of these two Broad Areas of the school environment that are more evident to the students and staff, and their concerns need to be noted.

Among all groups of stakeholders, those at the elementary school level were the most positive about their school environment. On the student and parent surveys, the items differ somewhat by level (particularly between students at the elementary school and secondary levels), so while comparisons need to be cautiously made, the differences are consistent: In all areas, students and parents at the elementary school level rate their school environment more positively than

students and parents at middle and high schools. Percentages of students reporting positive perceptions were between 5 and 17 percentage points higher at the elementary school level than at the middle school and high school levels.

Percentages of parents reporting positive perceptions were between 3 and 15 percent higher at the elementary school level than at the middle and high school levels. Some differences may be attributed to the freshness of the school experience for elementary students and their parents, but others may reflect features of the school environment that students and parents perceive more positively in elementary schools than in middle and high schools.

Staff at elementary schools also reported more positive perceptions than staff in middle and high schools. Perceptions of staff at the elementary and secondary school levels do not differ much in the areas of Social Environment and Physical Environment, and differences in Partnerships likely are more a function of changes in parent involvement as students get older. Differences in Academic Environment, Administrative Environment, and Training, however, may be informative, perhaps reflecting issues related to the structural characteristics of schools at different levels (e.g., school size, administrative structure, greater heterogeneity), as well as contrasts in the day-to-day responsibilities of staff at different levels.

Compared with the 2001–02 student survey results, while positive perceptions of most Broad Areas declined slightly for elementary and middle school students, the positive perceptions of high school students had slight increases. Most of the increases and decreases were not statistically significant, meaning caution must be exercised in interpreting the results. The perceptions of middle school students should be noted, since middle school students had statistically significant declines in the perception of a majority of the Broad Areas reported here (five of eight). This pattern may or may not be reflective of a trend, since only two years of data are available. Parent results were relatively stable across the two years, although the percentage of middle school and high school parents with statistically significant positive perceptions of the physical environment increased by about three and a half to four percentage points.

The Surveys of School Environment demonstrate that, overall, survey respondents have a very positive perception of the school environment in Montgomery County. Generally, students have a less positive perception of the school environment than other groups; responding parents had the most positive perception. This could be due in part to parents being exposed to the school environment on a less frequent basis than students and staff. Additional analysis is needed of whether parent time spent in a school would help determine the extent to which the time spent in the school is a mediating or explanatory factor in the level of positive perceptions held by parents.

Low response rates for the parent and staff surveys continue to be a concern, particularly when disaggregated by school. The influence of low response rates is less apparent when districtwide results are reported, such as in this report. For parent survey results, under-representation of African American and Hispanic parents among respondents is a continued concern. Table 3.1 in Appendix 3 provides results by Broad Area if this under-representation is taken into account. Most results remain unchanged or actually improve, indicating that responding parents in these groups may have more positive perceptions than other survey respondents. The exception is the

Parent Participation Broad Area, which shows lower "positive perceptions" when results are weighted for race. It would appear that African American and Hispanic parent respondents self-reported lower levels of involvement in school activities, particularly at the middle and high school levels. Efforts should continue to increase response rates and encourage completion of surveys by stakeholder groups, in order to address the validity of respondents in representing the larger school population.

Appendices

Appendix 1: Table 1-1, Internal Consistency of Survey Results.

Appendix 2: Tables 2-1 through 2-7, Specific Area Results by Survey Group.

Appendix 3: Table 3-1, Parent Perceptions of the School Environment, 2003 Results Weighted and Not Weighted by Race.

Appendix 4: Suggestions for Increasing Response Rates for the Surveys of School Environment.

Appendix 5: How Schools Can Use the Results of the Surveys for School Improvement.

Appendix 1

Table 1-1. Internal Consistency of Results

Cronbach Alpha Coefficients Surveys of School Environment for the 2003 Surveys of School Environment			
	# of Specific Indicators	Range of Cronbach Alphas	Median Cronbach Alpha
Elementary School Student Survey	15	.51 to .84	.71
Elementary School Parent Survey	15	.63 to .95	.90
Middle School Student Survey	16	.61 to .88	.78
Middle School Parent Survey	17	.64 to .95	.86
High School Student Survey	16	.68 to .89	.80
High School Parent Survey	17	.67 to .95	.88
School-based Staff Survey	14	.68 to .96	.87

Appendix 2

Table 2-1. Elementary Student Specific Area Results

Survey of School Environment Results for Elementary School Students (Grades 3 and 5)	% positive perception	
	2002	**2003**
Broad Area/Specific Area		
Academic Environment		
Academic Materials	79.40	80.13
Support of Student Learning	85.45	85.51
Time Spent on Learning	57.84	56.51*
Homework	82.56	82.27
Expectations for Student Learning	95.84	95.59
Social Environment		
Principal-Student Relationships	83.61	83.50
School Staff-Student Relationships	89.62	88.68
Student-Student Relationships	74.29	73.85
Student Belongingness	86.00	85.70
Student Recognition	91.74	91.06
Guidance		
Guidance	91.37	90.65
School Safety and Discipline		
School Safety, Discipline, School Orderliness	75.58	75.07
Physical Environment		
Physical Environment	70.66	71.61
Student Satisfaction		
Student Satisfaction	86.38	85.96
Partnerships		
School-Parent Relationships	80.64	79.45*
Number of students responding to survey	18,852	18,266

* Percentages for 2002 and 2003 were significantly different (p<.05).

Appendix 2 (*continued*)

Table 2-2. Middle School Student Specific Area Results

Survey of School Environment Results for Middle School Students (Grades 6 and 8)		
	% positive perception	
	2002	**2003**
Broad Area/Specific Area		
Academic Environment		
Academic Materials	75.44	74.14*
Support of Student Learning	78.77	78.15
Time Spent on Learning	57.22	55.00*
Homework	72.55	71.42*
Expectations for Student Learning	82.10	81.00*
Social Environment		
Principal-Student Relationships	68.56	66.93*
School Staff-Student Relationships	70.71	69.47*
Student-Student Relationships	61.55	60.10*
Student Belongingness	72.75	72.22
Student Recognition	74.82	73.79
Guidance		
Guidance	78.80	78.93
Citizenship		
Citizenship	74.49	72.54*
School Safety and Discipline		
School Safety, Discipline, School Orderliness	64.33	61.20*
Physical Environment		
Physical Environment	61.51	62.31
Student Satisfaction		
Student Satisfaction	68.11	67.76
Partnerships		
School-Parent Relationships	75.73	74.29*
Number of students responding to survey	17,052	17,227

* Percentages for 2002 and 2003 were significantly different (p<.05).

Appendix 2 (*continued*)

Table 2-3. High School Student Specific Area Results

Survey of School Environment Results for High School Students (Grades 9 and 11)	% positive perception	
	2002	**2003**
Broad Area/Specific Area		
Academic Environment		
Academic Materials	73.77	73.58
Support of Student Learning	73.31	74.45*
Time Spent on Learning	63.62	64.27
Homework	65.40	66.99*
Expectations for Student Learning	78.87	79.33
Social Environment		
Principal-Student Relationships	61.77	63.06*
School Staff-Student Relationships	64.50	65.74*
Student-Student Relationships	64.03	64.68
Student Belongingness	72.39	72.66
Student Recognition	68.08	69.94*
Guidance		
Guidance	76.23	77.44*
Citizenship		
Citizenship	65.23	66.13
School Safety and Discipline		
School Safety, Discipline, School Orderliness	62.87	61.78
Physical Environment		
Physical Environment	59.38	61.12*
Student Satisfaction		
Student Satisfaction	64.04	65.39*
Partnerships		
School-Parent Relationships	73.20	72.94
Number of students responding to survey	15,084	14,495

* Percentages for 2002 and 2003 were significantly different ($\underline{p}$<.05).

Appendix 2 (*continued*)

Table 2-4. Elementary School Parent Specific Area Results

Survey of School Environment Results for Elementary School Parents (Grades 3 and 5 only)	% positive perception	
	2002	**2003**
Broad Area/Specific Area		
Academic Environment		
Academic Materials	84.61	85.95
Teacher-Parent Communication	92.05	91.85
Academic Instruction	83.28	85.62*
Homework	85.46	86.94
Expectations for Student Learning	92.25	92.91
School Atmosphere and Communication		
School Atmosphere	92.14	91.49
Informed and Empowered	91.27	91.73
Social Environment		
Principal-Parent Relationships	90.74	89.36
School Staff-Student Relationships	94.40	94.35
Student Recognition	93.20	94.26
Guidance		
Guidance	96.04	95.75
School Safety and Discipline		
School Safety	90.78	92.41
Discipline and School Orderliness	89.23	89.61
Physical Environment		
Physical Environment	90.00	90.39
Partnerships		
Parent Involvement Activities	90.95	89.90
Number of parents responding to survey	5,566	8,028

* Percentages for 2002 and 2003 were significantly different ($p<.05$).

Table 2-5. Middle School Parent Specific Area Results

Survey of School Environment Results for Middle School Parents (Grades 6 and 8)		
	% positive perception	
	2002	**2003**
Broad Area/Specific Area		
Academic Environment		
Academic Materials	84.59	85.40
Teacher-Parent Communication	86.02	86.94
Academic Instruction	79.61	79.81
Homework	85.27	86.81
Expectations for Student Learning	86.57	86.85
School Atmosphere and Communication		
School Atmosphere	88.34	88.24
Informed and Empowered	80.82	80.64
Social Environment		
Principal-Parent Relationships	88.46	87.82
School Staff-Student Relationships	87.35	88.12
Student Recognition	91.16	91.83
Guidance		
Guidance	83.80	84.59
Citizenry		
Citizenry	88.34	88.13
School Safety and Discipline		
School Safety	85.00	86.99
Discipline and School Orderliness	81.72	82.48
Parent Satisfaction		
Parent Satisfaction	84.91	85.63
Physical Environment		
Physical Environment	82.52	85.97*
Partnerships		
Parent Involvement Activities	77.20	76.84
Number of parents responding to survey	3,693	3,122

* Percentages for 2002 and 2003 were significantly different (p<.05).

Appendix 2 (*continued*)

Table 2-6. High School Parent Specific Area Results

Survey of School Environment Results for High School Parents (Grades 9 and 11)		
	% positive perception	
	2002	**2003**
Broad Area/Specific Area		
Academic Environment		
Academic Materials	84.78	84.66
Teacher-Parent Communication	80.29	81.31
Academic Instruction	75.79	78.08
Homework	84.32	85.32
Expectations for Student Learning	84.16	85.05
School Atmosphere and Communication		
School Atmosphere	88.50	90.05
Informed and Empowered	76.91	76.41
Social Environment		
Principal-Parent Relationships	84.70	84.58
School Staff-Student Relationships	83.14	83.85
Student Recognition	87.59	87.39
Guidance		
Guidance	80.42	79.57
Citizenry		
Citizenry	83.13	82.96
School Safety and Discipline		
School Safety	78.75	78.99
Discipline and School Orderliness	80.36	80.23
Parent Satisfaction		
Parent Satisfaction	85.25	84.81
Physical Environment		
Physical Environment	75.18	79.26*
Partnerships		
Parent Involvement Activities	73.94	73.26
Number of parents responding to survey	3,128	3,074

* Percentages for 2002 and 2003 were significantly different (p<.05).

Table 2-7. School-based Staff Specific Area Results

Survey of School Environment Results for School-based Staff								
	Elementary School (% positive perception)		Middle School (% positive perception)		High School (% positive perception)		Special School (% positive perception)	
	2002	2003	2002	2003	2002	2003	2002	2003
Broad Area/Specific Area								
Academic Environment								
Academic Materials	79.04	82.96*	79.04	76.34	72.43	71.80	72.93	78.04
Instructional Supports	71.97	73.69	70.54	71.88	67.76	67.43	75.14	71.92
Expectations for Student Learning	93.40	94.00	90.75	89.24	85.67	85.46	83.21	90.35
Administrative Environment								
Administrative Support of Staff	85.89	87.05	79.04	79.64	77.42	78.20	85.43	87.50
Staff Empowerment	83.24	83.89	70.80	70.30	68.71	68.46	77.17	78.80
Goal Clarity	80.56	80.11	72.55	71.25	62.24	64.32	70.36	75.52
Collegiality & Professionalism	87.10	87.17	80.82	84.04	77.84	83.67*	77.94	85.10
Staff Orientation	79.48	83.56*	75.71	85.49*	70.73	85.10*	87.20	86.10
Staff Recognition	82.11	80.86	84.00	75.21*	84.93	72.58*	83.72	84.40
School Safety and Discipline								
Safety, Discipline, School Orderliness	82.09	85.14	76.61	70.78	74.00	69.01	78.81	75.75
Physical Environment								
School Facilities	71.45	74.41	66.55	71.20	62.37	68.08	73.06	78.99
Partnerships								
Parent-School Staff Relations	84.86	85.30	74.60	73.89	71.24	70.53	67.18	70.36
Training								
Training	83.55	83.55	80.17	79.74	72.96	74.59	78.96	82.76
Job Satisfaction								
Job Satisfaction	87.24	88.88	82.60	83.24	85.27	85.79	88.27	89.50
Number Responding to Survey	2,725	3,317	1,042	1,371	989	1,358	84	158

* Percentages for 2002 and 2003 were significantly different (p<.05).

Appendix 3

Table 3-1. **Parent Perceptions of the School Environment 2003 Results Weighted and Not Weighted* by Race**

Broad Area	Elementary School (% positive perception)		Middle School (% positive perception)		High School (% positive perception)	
	Weighted	Non-Weighted	Weighted	Non-Weighted	Weighted	Non Weighted
Academic Environment	90.03	89.75	85.77	85.16	83.87	82.88
Atmosphere	92.42	92.23	85.44	84.44	84.37	83.23
Social Environment	93.65	93.47	89.95	89.26	86.16	85.27
Guidance	96.35	96.24	86.16	84.59	81.02	79.57
Citizenship**	NA	NA	89.20	88.13	84.23	82.96
Safety/Discipline	92.15	91.73	85.87	84.74	80.31	79.61
Physical Environment	91.70	91.34	86.61	85.97	80.37	79.26
Parent-School Partnerships	89.03	90.05	74.90	76.84	70.99	73.26
Parent Satisfaction**	NA	NA	86.69	85.63	85.70	84.81
Number responding		8,028		3,122		3,074

* Non-weighted results reflect percentages of responding parents with positive perceptions of a Broad Area as they were received. Weighted results adjust results to reflect results as they would likely have occurred if African American and Hispanic parent populations had responded to the survey at rates consistent with the student population.

** Citizenship and parent satisfaction items on for elementary school parents are included in other Broad Areas.

Appendix 4

Suggestions for Increasing Response Rates for the Surveys of School Environment

Community Outreach

1. Schools and PTAs can collaborate on effective methods for announcing and promoting participation in the parent survey of school environment.

2. MCPS association contacts in schools can collaborate with school administration on ways to promote participation in the staff survey of school environment.

3. Community groups, particularly those representing minority groups, can help by encouraging ESOL parents to participate in the parent surveys of school environment (parent survey and instructions are translated into Spanish, Chinese, Korean, and Vietnamese). Pay particular attention to ESOL parents of students in middle schools and high schools, as the response rates for these groups are particularly low.

Parent Surveys

4. Schools can send a letter or post an announcement on the school's Web site, in newsletters, and in PTA newsletters to highlight the upcoming administration of the parent survey and the importance of participating in the survey.

5. Schools can provide information about how parents can access summary results of the Parent and Student Surveys through the MCPS Internet Web site. The 2002–03 survey results for the public will be available in late December 2003.

6. Schools can present the results of the 2002–03 surveys of school environment at a regularly scheduled PTA meeting. The school community can discuss the results, outlining areas of strength and areas that may need improvement (e.g., working with the School Improvement Team).

7. Schools can work with ESOL teachers to provide information to ESOL parents on the importance of participating in the parent survey of school environment. Ask ESOL teachers to send home, in translated formats, information that encourages ESOL parents to participate.

Staff Surveys of School Environment

8. School leadership teams can be used to dialogue with their school staff on ways to use the results of the surveys of school environment.

9. Schools can celebrate "best practices" in addressing areas that may need improvement, and that resulted in effective areas of school environment. Describe the "best practices" on a Web site so that other schools can use them as a resource for ideas.

Appendix 5

How Schools Can Use the Results of the Surveys for School Improvement

1. Use survey results to verify known effective and less effective areas of school environment.

2. Examine survey results to determine areas of strength and weakness.

3. Use two–year data to track changes in perceptions that may need to continue to be monitored.

4. Use comparable data to compare perceptions.

5. Use survey results to elicit additional questions, not just to provide answers. Use survey results to identify areas that may need more rigorous examination or evaluation.

6. Use the survey results to develop a game plan to celebrate effective elements, and develop strategies to address less effective elements.

7. Use survey results to establish and continue dialogues with staff, parents, and students on ways to maintain success and improve less effective elements.

8. Begin process of looking for linkages between parent, student, and staff perceptions of success, areas of concern, and academic results.