

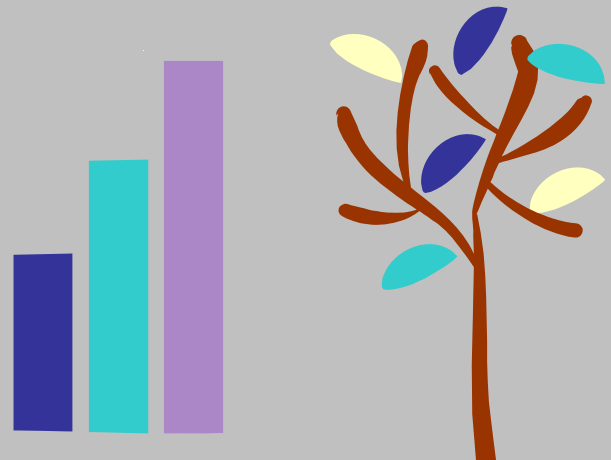
The Milwaukee Academy of Science

Programmatic Profile and Educational Performance

2009–10 School Year

Report Date: September 2010

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
I. INTRODUCTION	1
II. PROGRAMMATIC PROFILE.....	2
A. Description and Philosophy of Educational Methodology	2
1. Mission and Philosophy	2
2. Instructional Design	3
B. School Structure.....	5
1. Areas of Instruction.....	5
2. Teacher Information.....	6
3. Hours of Instruction/School Calendar	10
4. Parental Involvement	11
5. Waiting List	12
6. Discipline Policy.....	12
7. Graduation Information	13
C. Student Population.....	15
D. Activities for Continuous School Improvement	19
III. PARENT, TEACHER, STUDENT, AND BOARD MEMBER SATISFACTION.....	22
A. Parent Surveys	22
B. Teacher Interviews.....	31
C. Student Interviews	38
D. Board of Directors Interviews.....	39
IV. EDUCATIONAL PERFORMANCE	43
A. Primary/Elementary Academy (K4 Through Fifth Grades)	43
1. Attendance	43
2. Parent-teacher Conferences	44
3. Special Education Student Records	44
4. Local Measures of Educational Performance	44
a. Literacy	45
b. Mathematics.....	50
c. Writing.....	53
d. IEP Goals for Special Education Students.....	54
5. External Standardized Measures of Educational Performance.....	55
a. SDRT for First Graders.....	55
b. SDRT for Second Graders	57
c. Standardized Tests for Third Graders	59
i. SDRT for Third Graders	59
ii. WKCE for Third Graders.....	61
d. WKCE for Fourth Graders.....	62
e. WKCE for Fifth Graders.....	64
B. Junior Academy and High School (Sixth Through Twelfth Grades)	65
1. Attendance	65
2. Parent-teacher Conferences	66
3. Special Education Student Records	67

TABLE OF CONTENTS (continued)

4.	High School Graduation Plan	67
5.	High School Graduation Requirements	68
6.	Local Measures of Educational Performance	69
	a. Literacy	70
	b. Mathematics	71
	c. Writing	74
	d. Special Education Students	75
7.	External Standardized Measures of Educational Performance	76
	a. WKCE for Sixth Graders	76
	b. WKCE for Seventh Graders	77
	c. WKCE for Eighth Graders	78
	d. Standardized Tests for Ninth and Tenth Graders	79
	i. EXPLORE for Ninth Graders	81
	ii. PLAN for Tenth Graders	83
	iii. WKCE for Tenth Graders	86
	e. ACT or SAT for Eleventh or Twelfth Graders	87
C.	Multiple-year Student Progress	87
	1. SDRT Results for First Through Third Graders	88
	a. Consecutive Years	88
	b. Students Below GLE	89
	2. Multiple-year Student Progress for Fourth Through Eighth Graders	90
	a. Students Who Met Proficiency Level Expectations	90
	b. Students Who Did Not Meet Proficiency Level Expectations	91
	3. EXPLORE to PLAN for Tenth Graders	93
D.	Annual Review of the School's Adequate Yearly Progress	96
	1. Background Information	96
	2. Adequate Yearly Progress Summary	97
V.	SUMMARY AND RECOMMENDATIONS	98
	A. Contract Compliance	98
	B. Education-related Findings	98
	C. Local Measures Results	98
	D. Standardized Test Results	100
	E. Multiple-year Advancement	100
	F. Survey and Interview Results	101
	G. Recommendations	101

APPENDICES

Appendix A: Contract Compliance Chart

Appendix B: Outcome Measure Agreement Memos

Appendix C: Trend Information

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EXECUTIVE SUMMARY
for
Milwaukee Academy of Science
2009–10

This is the second annual report to describe the operation of the Milwaukee Academy of Science as a City of Milwaukee–chartered school. It is a result of intensive work undertaken by the City of Milwaukee Charter School Review Committee (CSRC), school staff, and the Children’s Research Center (CRC). Based on the information gathered and discussed in the attached report, CRC has reached the following findings.

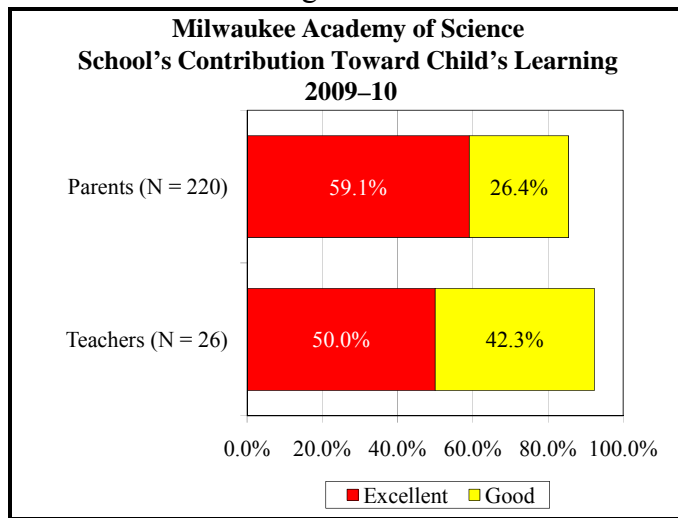
I. CONTRACT COMPLIANCE SUMMARY¹

The Milwaukee Academy of Science (MAS) has met all but the following educational provisions in its contract with the City of Milwaukee and the subsequent requirements of the CSRC. Provisions not met were that all eleventh and twelfth graders take the ACT or SAT; that all second and third graders advance 1.0 grade level equivalent (GLE); and that second and third graders below GLE advance more than 1.0 GLE.

II. PARENT, TEACHER, STUDENT, AND BOARD MEMBER SATISFACTION

- Over 85% of 220 parents indicated that the school’s contribution to their child’s academic progress/learning was excellent (59.1%) or good (26.4%); and
- Twenty-four (92.3%) of 26 teachers rated the school’s contribution to students’ academic progress as excellent (50.0%) or good (42.3%).

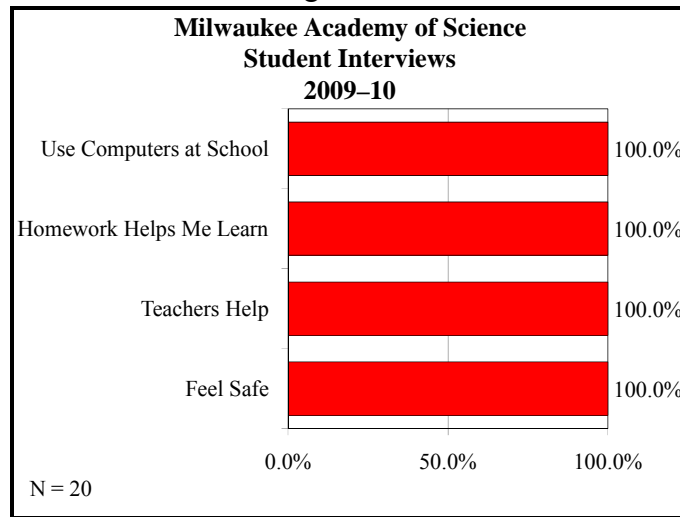
Figure ES1



¹ See Appendix A for a list of each education-related contract provision, page references, and a description of whether or not each provision was met.

- All 20 students interviewed indicated that they use computers at school, homework helps them learn more, teachers help them at school, and they feel safe at school. See Figure ES2.

Figure ES2



- Among other things, teachers suggested that creating a shared sense of community and providing additional materials at the elementary school would improve the school and/or classroom. Junior academy/high school teachers had a variety of suggestions that would help improve the school, including continuing to use data to support decisions and ensuring cohesive communication.
- All eight board members interviewed indicated that they were very satisfied with the commitment of the school’s leadership and seven of eight were very satisfied with the safety of the educational environment.
- Board members offered the following suggestions to improve the school: focus on efforts to attract more appropriate students; focus on learning and accept no excuse for failure; focus on reading and comprehension; and examine data closely and thoughtfully.

III. PERFORMANCE CRITERIA

A. Local Measures

1. Secondary Measures of Educational Outcomes

To meet City of Milwaukee requirements, MAS identified measurable outcomes in the following secondary areas of academic progress:

- Attendance;
- Parent conferences; and
- Special education student records.

The school met all of these goals.

2. Primary Measures of Educational Progress

The CSRC requires each school to track student progress in reading, writing, mathematics, and individualized education program (IEP) goals throughout the year to identify students in need of additional help and to assist teachers in developing strategies to improve the academic performance of all students.

This year, MAS's primary local measures of academic progress resulted in the following outcomes.

For primary/elementary academy grades (K4 through fifth):

- Of 345 K4 through third-grade students, 93.3% showed improvement or reached proficiency in literacy skills. K4 and K5 progress was based on the BRIGANCE Comprehensive Inventory of Basic Skills and first through third graders were tested using the Scholastic Guided Reading Level. The school's goal was 90%.
- Of 149 fourth and fifth graders, 83.2% demonstrated growth or maintained grade equivalency in literacy, based on BRIGANCE. The school's goal was 80%.
- Of 126 K4 and K5 students, 99.2% exhibited progress or maintained proficiency in mathematics, based on BRIGANCE. The school's goal was 90%.
- Of 375 first through fifth graders, 90.4% showed improvement or maintained grade level expectations, based on BRIGANCE. The school's goal was 80%.
- Third- through fifth-grade students scored, on average, 12.5 points on the teacher-assessed writing sample. The school's goal was 12 points.
- Of 46 primary/elementary academy students with IEP goals, 91.3% met one or more of their goals this year. The school's goal was 80%.

For junior academy (sixth through eighth grade) and high school (ninth through twelfth grade):

- Junior academy students scored, on average, 74.9 points higher on the Scholastic Reading Inventory (SRI) administered at the end of the year compared to the beginning of the year. High school students scored, on average, 27.0 points higher. The school's goal was 50 points for junior academy and 25 points for high school.
- Of 195 junior academy students, 86.2% demonstrated progress in math based on the Wide Range Achievement Test (WRAT). On average, students demonstrated a 2.0 increase in grade level based on spring 2009 to spring 2010 scores. The school's goal was that, on average, students would show one month increase for each month of instruction.
- Of 151 high school students, 92.7% demonstrated math competency by scoring 70% or higher at the final course examination. The school's goal was 80%.
- Junior academy students scored, on average, 19.2 points on a teacher-assessed writing sample. The goal for these students was 18 points. High school students, on average, scored 22.1 points. The goal for these students was 21 points.
- Of 33 junior academy and high school students with IEP goals, 93.9% met one or more of their goals this year. The school's goal was 80%.
- Graduation plans were developed for all (100%) 153 ninth- through twelfth-grade students. The school's goal was to develop a plan for all students.
- Ninth graders earned an average of 6.3 credits; tenth graders accumulated an average of 13.1 credits; eleventh graders accumulated an average of 19.7 credits; and twelfth graders accumulated, on average, 25.2 credits. One hundred thirty-eight (90.2%) students were promoted to the next grade or graduated from high school this year.

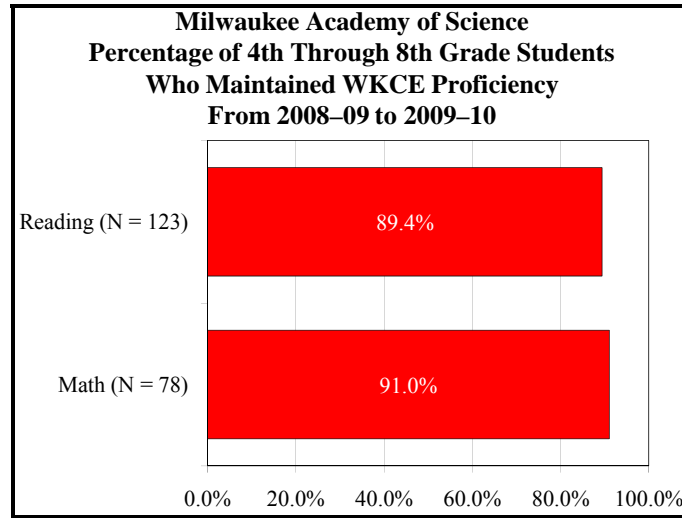
B. Year-to-year Academic Achievement on Standardized Tests

The following summarizes year-to-year achievement based on standardized test scores.

- Fifty-seven second graders advanced, on average, 0.8 GLE and 66 third graders advanced, on average, 1.0 GLE, based on Stanford Diagnostic Reading Test (SDRT) scores from consecutive years. Overall, these students advanced 0.9 GLE. The CSRC goal is 1 GLE or higher.
- Fifty second and third graders below GLE last year advanced, on average, 0.9 GLE. The CSRC goal is that these students would advance more than 1 GLE.

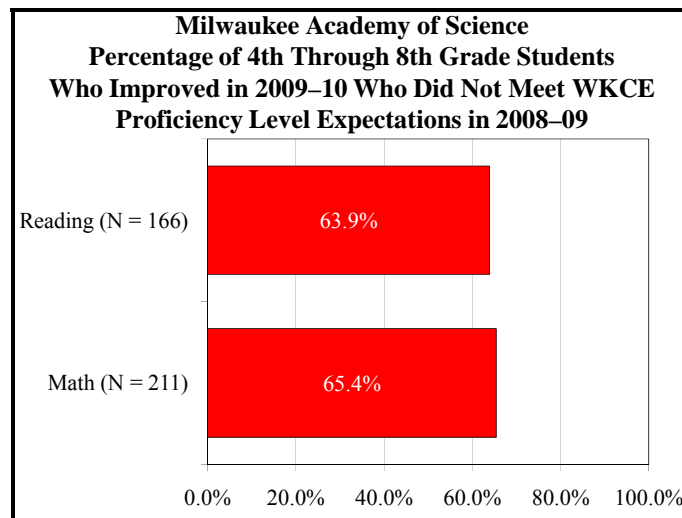
- Of 123 fourth through eighth graders, 89.4% maintained proficiency in reading, and 91.0% of 78 students maintained proficiency in math. The CSRC goal is 75%. See Figure ES3.

Figure ES3



- Of 166 fourth through eighth grade students who were below proficient in reading, 63.9% showed improvement, while 65.4% of 211 students who were below proficient in math showed improvement. See Figure ES4. This compares to 47.3% of 165 students who showed improvement in reading and 52.3% of 218 students who improved in math the previous year.

Figure ES4



- Twenty-four (75.0%) of 32 tenth graders scored within and 5 (15.6%) scored above the expected range based on ninth grade EXPLORE to tenth grade PLAN scores.

C. Adequate Yearly Progress

The school met adequate yearly progress (AYP) in all four objectives. The school's improvement status is "Level 2, Improved."

IV. RECOMMENDATIONS

The following recommendations were jointly identified by the school leadership and CRC. To continue a focused school improvement plan, it is recommended that the following activities be undertaken for the 2010–11 year.

For the primary/elementary academy:

- Improve the planning, instruction, and assessment skills of all reading teachers. The staff will review students' reading assessments on a regular basis and plan next steps for each student. The two reading coaches will assist the classroom teachers with implementation of the reading curriculum, with a focus on pre-literacy skills for the youngest students and comprehension skills for second through fifth graders. The school has a goal to move its reading instruction from good to excellent by increasing the consistency in teachers' instructional practices across grade level teams. An emphasis will be placed on raising the level of reading instruction at all grades levels so that all students (low and high achievers) can maximize their reading skill levels.
- Provide sufficient training for the achievement director and all teaching staff to enable them to effectively utilize a new assessment model: Measure of Academic Progress (MAP) including how to adapt the curriculum to ensure that all students meet the school's high expectations for growth.
- Maintain and improve the math initiative launched during the 2009–10 school year.

For the junior academy:

- Continue implementing the strategies adopted last year to improve all students' (low and high achieving) math competencies. Utilize some of these same interventions to improve students' reading competencies.
- Involve all students and teachers in cross curriculum projects. Special attention will be given to improving students' skills with "project management" in such areas as creating and meeting timelines, following procedures, planning efficiently and effectively, and producing expected outcomes (accountability).
- Assign all teachers to a content specialty area for instructional purposes. Teacher looping will also be utilized to enable "good" teachers to continue effectively building students' skills in the next school year.

For the high school:

- Improve the use of the Committee of Concern for issues related to academic performance. Staff will work to design and implement more effective intervention strategies, incentives, etc.
- Offer students more elective options during all periods of the school day. Examples of some of the elective options will be Honors English in both Composition and Speech and Advanced Composition for seniors to improve their writing skills.
- Utilize the results from the staff's spring data retreat² to create and implement the diverse interventions required to improve students' reading and math performance in the 2010–11 school year. These interventions will also include strategies to assist the students with their “project management” skills.

² The spring data retreat included staff from the junior academy as well as the high school.

I. INTRODUCTION

This is the second regular program monitoring report to describe educational outcomes for the Milwaukee Academy of Science (MAS), a school chartered by the City of Milwaukee.³ This report focuses on the educational component of the monitoring program undertaken by the City of Milwaukee Charter School Review Committee (CSRC) and was prepared as a result of a contract between the CSRC and the Children’s Research Center (CRC).⁴

The process used to gather the information in this report included the following steps:

- Two initial site visits occurred, wherein a structured interview was conducted with the primary/elementary academy and junior academy/high school’s leadership staff, critical documents were reviewed, and copies of these documents were obtained for CRC files.
- CRC staff assisted the school in developing its outcome measures for two distinct learning memos.
- Additional scheduled and unscheduled site visits were made to observe classroom activities, student-teacher interactions, parent-staff exchanges, and overall school operations, including the clarification of needed data collection. CRC staff also reviewed a representative sample of special education files.
- At the end of the school year, CRC conducted face-to-face interviews with a random selection of teachers and students. CRC also interviewed eight members of the school’s board of directors. Parent surveys were distributed by the school at the spring parent conferences in April, and CRC made two attempts by telephone to gather survey information from parents who did not return a survey.
- At the end of the school year, structured interviews were conducted with the primary/elementary academy and the junior academy/high school leadership teams.
- The school provided electronic data to CRC, which were compiled and analyzed by CRC.

³ The City of Milwaukee chartered five schools for the 2008–09 school year. MAS initially opened in August 2000 and was chartered by UW–Milwaukee. In July 2008, the school entered into a five-year charter agreement with the City of Milwaukee.

⁴ CRC is a nonprofit social research organization and division of the National Council on Crime and Delinquency.

II. PROGRAMMATIC PROFILE

The Milwaukee Academy of Science
2000 West Kilbourn Avenue
Milwaukee, WI 53233

Phone Number: 414-933-0302

President and Chief Executive Officer: Judy Merryfield
Associate Principal, six through twelfth grade: Murece Johnson
Associate Principal, Kindergarten through fifth grade: Jacqueline DeJean

A. Description and Philosophy of Educational Methodology

1. Mission and Philosophy

According to the MAS website and its 2009–2010 Parent Handbook, “the mission of the Milwaukee Academy of Science, an exemplary leader in innovative science education that maximizes the potential of each young mind, is to graduate urban students prepared to compete successfully in science at the post-secondary level, by providing a rigorous 21st century curriculum taught by master educators in collaboration with students, families, staff, and the community.”

MAS opened in August 2000, and was chartered by the University of Wisconsin–Milwaukee (UWM). The school began a new five-year charter agreement with the City of Milwaukee in July 2008. It currently serves students from K4 through twelfth grade with a challenging curriculum that emphasizes science. It enhances its curriculum with community partnerships so it can offer its students unique science opportunities.

MAS complements its mission by operating under the following guiding principles:

- All human beings have equal, intrinsic worth;
- Every individual is unique, and has an unlimited capacity for learning;
- In a changing world, a passion for lifelong learning is crucial for reaching one’s full potential;

- Personal success is achieved through high expectations, hard work, and perseverance;
- As individuals mature, they become increasingly more responsible for their choices and behavior;
- Everyone benefits when people willingly contribute to the well-being of their community;
- A quality education requires the collaborative effort of devoted and enthusiastic students, family, staff, and community;
- Integrity is essential for building and sustaining a strong, supportive community;
- Diversity of experience and culture strengthens understanding and enriches life;
- The understanding and application of science prepares individuals for the complexities of the 21st century.

2. Instructional Design

MAS emphasizes the integration of science into the general curriculum. It also provides its students with unique science opportunities at all levels. The school's overall objectives, as stated in the school's 2008–2013 strategic plan and the 2009–10 Parent Handbook, are threefold.

1. All students who are enrolled at MAS for three or more years will meet or exceed grade-level standards in reading, writing, and mathematics.
2. By 2013, all MAS graduates will demonstrate 21st century skills necessary to make a successful transition to post-secondary education in science.
3. Each student will design and complete challenging, meaningful science projects or experiences tailored to their interest, abilities, and aspirations.

As part of the school's efforts to achieve these objectives, the teachers at MAS are trained in differentiated instruction as well as in the curricular areas they teach. Teachers use a variety of instructional groupings including one-on-one instruction, small group instruction, cooperative learning, whole-group instruction, and independent study. Teachers may team teach, which commonly occurs in inclusion classrooms with the regular education teacher and the special

education teacher. The school's professionals use direct and indirect instruction methodologies, project-based learning, computer-based learning, interactive learning techniques, and experiential learning opportunities. The needs of the students and the objectives of the lesson determine the most appropriate instructional techniques.⁵

The school's curriculum is challenging and designed to meet the needs of individual learners. Open Court reading, a research-based program with proven ability to accelerate reading skills with urban students, is used as the core reading program for the primary/elementary academy. The junior academy students use Holt, Rinehart, and Winston's Elements of Literature series as a foundation text. Teachers supplement this curriculum through the use of novels and techniques such as literature circles. The high school program uses a variety of materials, dependent upon the reading skills of the students. Both programs used the Scholastic Reading Inventory (SRI) to assess and monitor students' acquisition of higher level reading skills.

For math, MAS uses the New Math curriculum for the primary/elementary academy students. Transitions Math is used for the junior academy students, while the high school math program allows students to progress through courses in pre-algebra, algebra I, geometry, and algebra II/trigonometry. More advanced courses are provided based on students' needs.

Students start their science learning at the youngest ages by focusing on themes aligned with their reading series. At third grade, students move to the FOSS curriculum, a research-based program developed at University of California–Berkeley to engage students in exploration of the natural world. The junior academy students use Science Plus, which is an active, hands-on curriculum. It is based on the Constructivist Learning Model, which encourages students to build their own understanding of science. Older students engage in Project Lead the Way (PLTW). PLTW consists of four 10-week stand-alone modules that cover topics such as design and modeling, “the magic of electrons,” the science of technology, and automation and robotics.

⁵ This information was taken from the school's application to become a city-chartered school.

Finally, MAS recognizes the importance of “specials” in a student’s academic program, so each student receives instruction in art, music, and physical education on a regular basis.

B. School Structure

1. Areas of Instruction

MAS administration is structured to support the ongoing improvement of the learning environment and academic achievements of all its students. The structure has a president/chief executive officer who is responsible for the overall school and its academic outcomes. Two associate principals, assisted by achievement coordinators, oversee the two academies: the primary/elementary academy and the junior academy/high school. The primary/elementary academy serves students in K4 through fifth grades. The junior academy/high school serves students in sixth through twelfth grades.

A major part of the school’s overall strategic plan is to identify 21st century skills, integrate them throughout the K4 through twelfth-grade curriculum, and develop appropriate means for assessment and improving students’ academic performance. In the earliest grades (K4–third), instruction focuses primarily on the acquisition of literacy and mathematical skills. At these early ages, students are also introduced to science, social studies, technology, and the fine arts. As students progress into the next two grades in the primary/elementary academy, the curriculum expands its focus to encompass additional instructional time on scientific constructs and social studies material, but special attention continues to be given to the acquisition of all age-appropriate literacy and mathematical skills.

Students in the junior academy/high school receive instruction in language arts, writing, reading, literature, mathematics, technology, social studies, science, foreign languages, art, music, and physical education. Grade-level standards and benchmarks have been established for each of these curricular areas; progress is measured against these standards for each grade level.

Most recently, the high school students have been given expanded opportunities to participate in Advanced Placement (AP) classes and other more advanced courses. In order to graduate from MAS, students must acquire 22 credits. The minimum credit requirements for graduation are as follows:

- English 4.0
- Mathematics 4.0
- Social Studies 3.0
- Science 3.0
- Engineering 2.0
- Foreign Language 2.0
- Physical Education/Health 2.0
- Electives 2.0

These requirements may vary for students with special education needs, depending upon their individualized education program (IEP) goals and their transition plan.

The school offers the 21st Century Community Learning Center (CLC), an afterschool program operated in partnership with the Boys and Girls Clubs of America, to provide students with math preparation for the Wisconsin Knowledge and Concepts Examination (WKCE), science fair project assistance, and academic enrichment. Students on the “bubble,” i.e., those who scored minimal or basic on the WKCE, were selected to participate in the first phase of the program. For other phases of CLC, students were selected based on their overall academic needs.

2. Teacher Information

MAS is located on a 2.54-acre parcel of land. The primary/elementary and junior academies occupy a three-story-plus-basement building, while the high school occupies two stories of the 12-story attached “tower” building. The school has a gymnasium on the north side of its building, which is currently used by all students. At the beginning of the 2009–10 academic year, MAS had 28 primary/elementary academy classrooms and 21 junior academy/high school

classrooms. There are also numerous rooms available for art, music, computer labs, libraries, science labs, resource areas, engineering lab, and conference rooms.

Classrooms were staffed with 28 primary/elementary academy teachers, 11 junior academy teachers, and 10 high school teachers. These classroom teachers were supported by a special education coordinator and seven special education teachers,⁶ two art teachers, a music teacher, two physical education instructors, and two Title 1 teachers. Other educational support staff at the school included five tutors, a substitute teacher, eight classroom assistants, and a guidance counselor for the ninth- through twelfth-grade students. Five of the classroom teachers served as lead teachers: 3 were in the primary/elementary academy, 1 was in the junior academy, and 1 was in the high school. The school also employed two parent support staff, two health services nurses, and a four-person technology team that included a librarian. In addition to the president/chief executive officer, the school's administrative staff included an executive vice president/chief operating officer, two associate principals, two achievement coordinators, two science directors, three office staff, three security staff, and a food services worker.

At the beginning of the year, 17 (26.6%) of the 64 teachers were newly hired. The remaining 47 (73.4%) teachers returned from the 2008–09 school year and had been at the school from one to nine years. The return rate for classroom teachers was 73.5% (36 of 49); the return rate for other teachers was 73.3% (11 of 15). During the 2009–10 school year, two⁷ of the 64 teachers left the school prior to the end of the school year resulting in an annual school year teacher retention rate of 96.9%. By the end of the 2009–10 school year, the classroom teachers had been teaching at the school for an average of 3.3 years and other teaching staff for 3.5 years. Overall, classroom teachers/other teachers had 3.4 average years experience at the school.

⁶ The special education teachers included two speech and language specialists.

⁷ One of the departing teachers was a classroom teacher and the other teacher was a physical education teacher.

An end-of-the-year review of teacher plans indicated that 51 (82.3%) teachers were planning to return to the school to teach for another school year and 11 (17.7%) of the 62 teaching staff were not intending to return. Eight of the 11 were classroom teachers and 3 were in other teaching positions. Six teachers were leaving for personal or professional reasons; five were not offered contracts due to inadequate performance during the school year and/or their positions were eliminated

All 64 teachers employed during the year (including the two who left) held a Wisconsin Department of Public Instruction (DPI) license or permit to teach.

MAS believes that staff members are accountable for their own professional growth and development. The school is accountable for providing opportunities for professional development. Staff members are provided with in-house support and multiple opportunities to grow as professionals.⁸ The school maintains a comprehensive induction program for initial (new) educators. Components include the following:

- Orientation program prior to the start of the school year;
- Trained mentors for each teacher;
- Professional development plan reviewers on staff;
- Membership in the Southeastern Wisconsin New Teacher Project, which includes regular mentor/new teacher seminars;
- New teacher group moderated by the principals;
- Strong, cohesive teams; and
- Principal observations.

All K4 through eighth-grade staff members are involved in the professional development program, “Wednesday University.” Every Wednesday during the school year, K4 through

⁸ The material in this section was extracted from MAS’s application to the City to be authorized as a charter school in July 2008, pages 24 and 25.

eighth-grade students are dismissed at 12:30 p.m. and the staff spend the remainder of the day in professional development. Activities have included the following:

- College courses (credit or non-credit options) on topics such as Differentiated Instruction;
- Collaborative work time for grade-level teams;
- Focused professional development with content area experts (for example, science director, reading coordinator);
- Workshops presented by staff in their areas of expertise;
- Specific team meetings (e.g., math team, science team, literacy team, data team); and
- Workshops presented by consultants, accompanied by individualized coaching during the school year.

In addition, teachers are encouraged to attend relevant conferences and workshops. For example, some of the K4 through eighth-grade staff attends the Wisconsin State Reading Association Conference each year.

Formal teacher evaluations occur on an annual basis and are used to guide decisions about contract renewals for the next school year. Assessments/evaluations of MAS teaching staff are based on four criteria: professionalism measures, evidence of professional growth and development, student achievement gains, and contributions to the community. Each criterion accounts for 25% of the total evaluation rating. The evaluation process is explained in detail in the MAS's *Staff Handbook, 2008–2009*.⁹

⁹ The handbook was not updated for the 2009–10 school year. It is currently being updated for the 2010–11 school year.

3. Hours of Instruction/School Calendar

For primary/elementary and junior academy students, the regular school day began at 7:45 a.m. and ended at 3:05 p.m.¹⁰ Students were dismissed at 12:30 p.m. every Wednesday. The high school students could start their day at 8:30 a.m. with breakfast in the cafeteria. The first class period started at 9:00 a.m., but the first period bell rang at 8:50 a.m. so that all students were prepared and present for their first class session. Dismissal was at 3:50 p.m., but any student involved in project work/study or an extracurricular activity could stay at the school until 5:00 p.m. The high school students participated in seven 50-minute class periods each day. These students also had a 25-minute lunch break. The first day of student attendance was August 10, 2009, and the last day was June 18, 2010. The highest possible number of days for student attendance in the academic year was 190 (including Wednesday early release days for primary/elementary and junior academy students); therefore, the contract provision of at least 875 hours of instruction was met.

MAS offers its students regular opportunities for afterschool activities and academic support. Staff provide homework support, reading and math instruction, assistance with PLTW, sports, band, scouts, arts/crafts, recreational activities, and assorted other clubs. These activities typically take place from the time of dismissal until 4:00 p.m. for the younger students and 5:00 p.m. for the older students, while some of the activities available to the older students extend until 7:00 p.m.

¹⁰ Breakfast was served to eligible children in their classrooms at 7:45 a.m. each school day.

4. Parental Involvement

MAS recognizes that parent/family involvement is a critical component of student success. The school encourages and solicits the engagement and involvement of parents in the following ways:

- One of the 13 directors on the school's Consortium Board is a parent representative. This board is responsible for making decisions related to school policies and for approving the school's strategic direction.
- MAS employs a full-time family coordinator. The coordinator is expected to work with parents/families to ensure that children are coming to school regularly. It is also the coordinator's task to provide parents with regular and diverse opportunities to participate in school functions.
- MAS seeks regular communication with its families by sending weekly newsletters from the president. These newsletters highlight upcoming school activities, provide updates on school policy changes, and describe recent student achievements and school awards. The school uses an auto-dialer system to contact parents via telephone about important information related to their child. Finally, teachers are encouraged to communicate with parents on a regular basis via written notes, telephone, and/or email as well as to be prepared to meet with parents on a quarterly basis during parent/teacher conferences.¹¹

The school also has a Parent Action Team, which holds meetings on a monthly basis. All parents are members of this organization and are encouraged to participate so that the team can achieve its mission, which is to make MAS the best school in Milwaukee. The team provides parents with an additional link to teachers; bridges communication between parents, school, students, and teachers; helps to develop students as lifelong learners; provides leadership for the school community; and raises funds for school programs and projects.

¹¹ This information was extracted from MAS's charter school application and the high school 2008–09 and 2009–10 Parent Handbook.

5. Waiting List

The school's administrator reported that as of May 2010, the school had a waiting list for some of the grade levels this upcoming fall.

6. Discipline Policy

MAS places a strong emphasis on a safe and orderly learning environment. The school has adopted a "Code of Conduct," which is recited each morning by all students during the morning news broadcast. The Code of Conduct reads as follows:

At the Milwaukee Academy of Science,
I will respect myself,
respect my school staff,
respect my fellow students,
and respect my school.

In the MAS Parent Handbook, the school emphasizes its commitment to creating and maintaining a positive learning environment that promotes cooperation, fosters creativity, and encourages and nurtures students to take risks involved in learning. MAS believes that parents and community members play a critical role in supporting this learning environment through the use of common, respectful language that inspires students while setting clear limits. These partners are encouraged to discuss the school's Code of Conduct with their children.

The Parent Handbook also contains detailed information about MAS's discipline code. The code contains detailed information about what MAS considers to be Level 1, 2, and 3 violations. It also provides clear and concrete descriptions of the range of disciplinary consequences that will be used by MAS staff. The handbook identifies each type of consequence, describes each consequence in some detail, indicates who can assign the consequence, and associates each consequence with a set of procedures that increase in severity from step 1

through 7. For example, a warning issued to a student is a step 1 procedure, and expulsion is a step 7 procedure.

7. Graduation Information

MAS's guidance department provides some assistance to the school's eighth graders, but the junior academy staff work throughout the year with these students and their parents and strongly encourage them to continue their education at MAS through high school graduation. If eighth graders decide they do not plan to continue at MAS as ninth graders, the school works with these students and their parents to enroll in the school of their choice. The reasons generally stated for non-returning students are their desire to participate in school athletics or to pursue interests other than science and/or engineering. The leadership team at MAS indicated that most of their eighth graders continue at MAS for high school.

MAS employs a full-time guidance counselor, whose primary responsibility is to work with the high school students as they prepare for post-secondary careers and educational experiences. As part of her work over the last school year, the counselor completed the following activities with MAS students:

- All twelfth graders participated in a credit check and graduation progress meeting. A specific form was structured for use in these meetings so that each senior was aware of what was required of him/her in order to graduate at the end of the school year. During this session, each student identified the colleges and careers of greatest interest to him/her.
- All eleventh graders participated in an individual session to develop a career plan. As part of this plan, each student was required to complete an online career exploration tool. This tool assists students in identifying potential careers based on their personal preferences and interests. The plan also requires students to determine what they will need to do to be successful in the career(s) of their choice.
- All tenth graders and their parents participated in a counseling session related to post-secondary education and future careers. Topics discussed included PLAN

results, credit status, graduation plans, career interest inventory outcomes, steps required for college admission, etc.

- All ninth graders participated in group counseling sessions reviewing the graduation requirements at MAS. Additionally, students were given information related to opportunities for participation in pre-college programs and information to help them understand how MAS staff would work with them on scheduling, reviewing credit status, and planning for graduation within a four-year timeframe. These students also signed the Wisconsin Covenant Pledge.

Individualized sessions were complemented by a series of other activities that MAS provided to its high school students to increase their knowledge and ability to be more successful in their careers after graduation from high school. Some of these activities included the following:

- A college/career exploration course was offered as an elective. During the course, students practiced job interviews, developed short- and long-term goals, and researched colleges.
- A Career Club was launched to help students develop critical employability skills. The club met after school once per week.
- Representatives from several pre-college programs (e.g., Upward Bound, Talent Search, and Upward Bound Math-Science) met with students to discuss potential opportunities.
- Students were assisted with completing applications, preparing for interviews, and getting to interviews for Mayor Barrett's Summer Youth Internship Program.
- Students were offered opportunities for trips to Concordia, UWM, UW-Parkside, UW-Waukesha, Carroll University, UW-Platteville, and UW-LaCrosse.
- Recruiters from several UW sites, Marquette, Mount Mary, ITT Tech, McNally Smith Music College, and the Air Force visited the school and talked with students.

Some of the outcomes of these diverse activities, as reported by the guidance counselor at the end of the school year, were as follows:

- Eighteen (78.3%) of the 23 high school graduates were accepted into post-secondary schools or a branch of the military;

- Another two students were planning to attend college after working for a period of time. No information was provided about the plans for the other three graduates.

Finally, MAS launched a website at the end of the 2008–09 school year in an effort to stay in touch with its graduates and to enable alumni to stay connected to each other. At the end of each school year, all graduates receive a flier informing them of the website and encouraging them to log on in the near future.

C. Student Population

MAS started the school year on August 10, 2009. As of September 18, 2009, there were 969 students enrolled in K4 through twelfth grades.¹² During the year, 14 students enrolled in the school and 111 students withdrew.¹³ Students withdrew for a variety of reasons. Of the primary/elementary academy students, 26 students moved away, 12 left before or after a Charter Discipline Review Board (CDRB) session on a possible expulsion, 6 left because of transportation issues, 6 left after a sibling withdrew, 4 left due to excessive behavioral issues, 3 because of family issues, 2 students left for a school that better suited special needs, 1 was accepted to military school, 1 student wanted a smaller environment, 1 student submitted a false application, 1 student was not ready for full-day K4, and 1 student never attended and was dropped from the roster. Two students left for unknown reasons. Of the junior academy and high school students, 20 students withdrew and no reason was provided, 14 withdrew due to fighting, 6 left to attend another school, 2 students stopped coming to school, 1 student withdrew due to assault, 1 left when his/her sibling withdrew, and 1 student was expelled.

¹² There were 580 students in primary/elementary academy, K4 through fifth grade; 216 in junior academy, sixth through eighth grade; and 173 students were in high school, ninth through twelfth grades. Two elementary students withdrew and re-enrolled in the school, and one student was promoted to the next grade during the year.

¹³ Eight students enrolled and 66 withdrew from primary/elementary academy; 5 enrolled and 24 withdrew from junior academy; and 1 enrolled and 21 withdrew from high school. Twelve of the students who withdrew from MAS had special education needs.

At the end of the year, there were 872 students enrolled. Student enrollment was as follows:

- There were 522 students in K4 through fifth grades, 197 in junior academy (sixth through eighth grades), and 153 students in high school (ninth through twelfth grades);
- There were 473 (54.2%) girls and 399 (45.8%) boys.
- Five-hundred and fourteen (98.5%) students in the primary/elementary academy were African American, 5 (1.0%) students were White, 2 (0.4%) students were Hispanic, and 1 (0.2%) was Native American. Three hundred forty-eight (99.4%) students in the junior academy/high school were African American, 1 (0.3%) was Hispanic, and 1 (0.3%) was White.
- There were 107 students who had special education needs. Thirty-four students had speech and language needs (SPL); 20 students had other health impairments (OHI); 18 students had learning disabilities (LD) and SPL; 15 students had LD; 8 students had OHI/SPL; 4 had cognitive disabilities (CD) and SPL; 3 had emotional/behavioral disabilities (EBD); 1 had autism/SPL; 1 had CD; 1 had significant developmental delay (SDD) and SPL; 1 had SPL/LD; and 1 student had a traumatic brain injury (TBI) and SPL.
- There were 717 (82.2%) students eligible for free/reduced lunch.

The number of students in each grade level is illustrated in Figures 1 and 2.

Figure 1

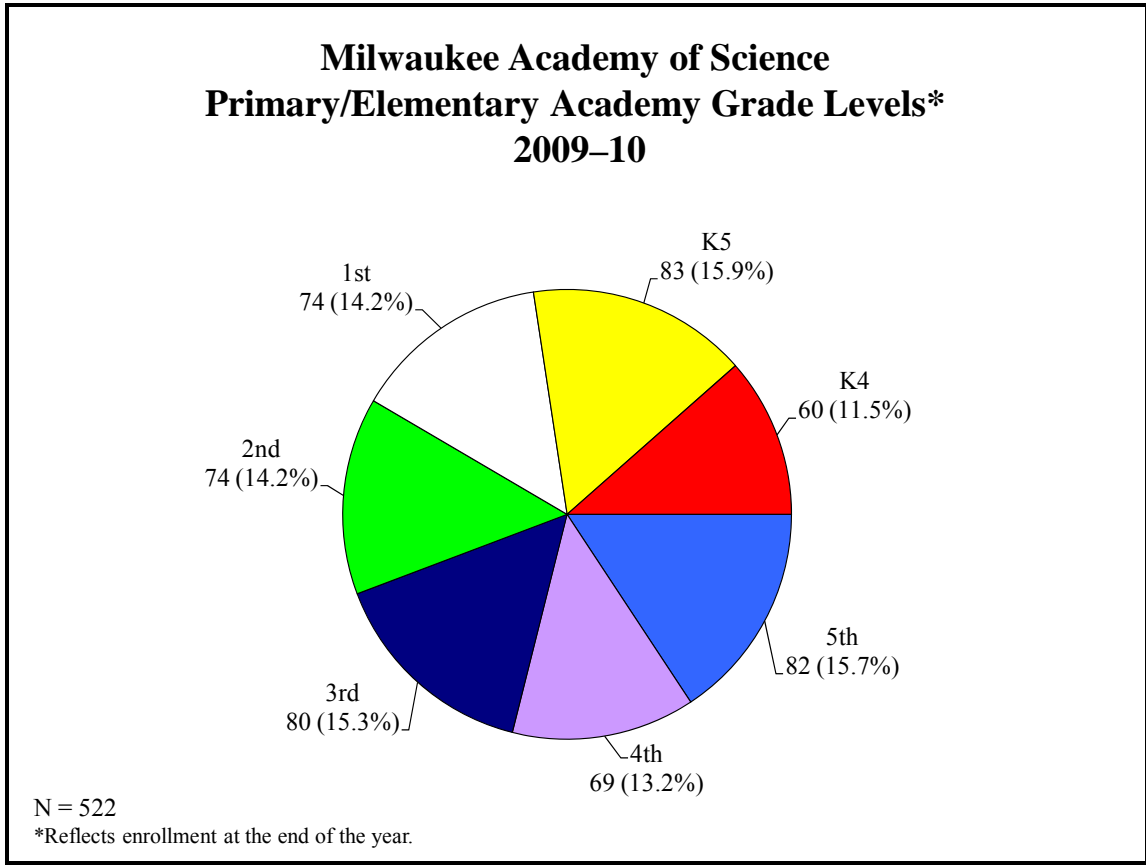
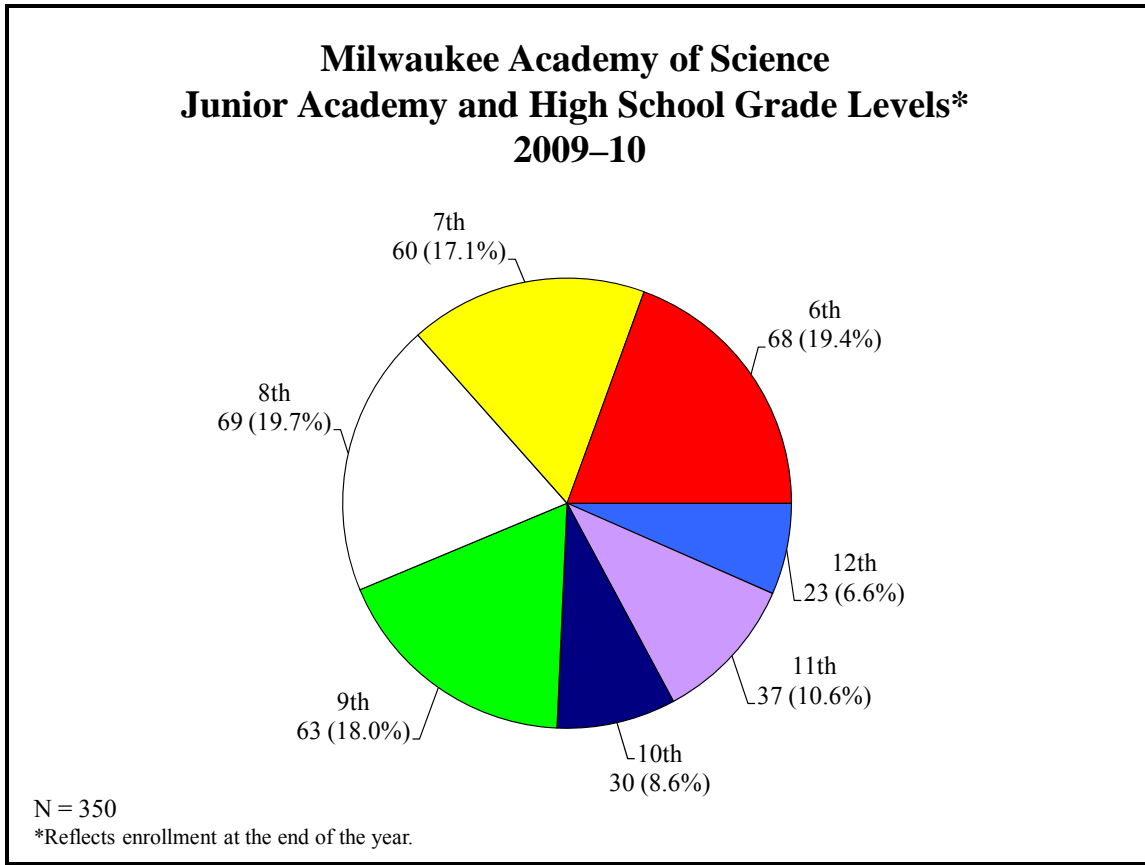


Figure 2



There were 858 students who had been enrolled for the entire school year. This represents a retention rate of 88.5%.¹⁴ There were 344 (88.4%) of 389 students enrolled in the junior academy and high school for the year, and 514 (88.6%) of 580 in the primary/elementary academy.

There were 869 students enrolled at the end of the 2008–09 school year who were eligible to return to the school, i.e., had not graduated from high school. Of these, 715 were enrolled as of the third Friday in September 2009. This represents a student return rate of 82.3%.

¹⁴ Eight hundred and fifty-eight of 969 students.

D. Activities for Continuous School Improvement

The following is a description of MAS's response to the recommended activities in its programmatic profile and educational performance report for the 2008–09 academic year.

For the primary/elementary academy:

- Recommendation: Improve the math competency of students by using math coaches with lower-achieving students. The staff will review students' math assessments on a regular basis and plan next steps for each student. The math coaches will assist the classroom teacher with the implementation of the adopted math curriculum strategies for each low-achieving student.
- Response: The academy utilized time during Wednesday University for a team of math coaches to work with consultants from Wisconsin Education Innovations (WEI).¹⁵ As part of these sessions, the coaches used student test data and designed a variety of instructional applications to improve students' math performance. The coaches then worked with the head math leaders, which was one teacher for each grade level, to prepare for the implementation of data driven instructional practices. These math leaders spent time in a retreat to reflect on current math practices at each grade level and review strategies known to be best practices. This work led to a consensus on the beginning and end of math grade level skills for each grade level. Finally, all teachers participated in a professional development day reviewing the math outcomes for each grade level. Throughout the day, special attention was given to best practices and how to implement them. Time was also spent reviewing obstacles and engaging in potential problem solving activities. The end result of all these efforts was that each grade level had rewritten its math skill requirements, redesigned its quarterly assessment tools, and adopted best practice strategies to improve the math skills of all students whether low or high achievers.
- Recommendation: Move the Guided Reading program into the fourth and fifth grades for the next school year. Intervention staff (tutors) will focus their time and efforts on increasing the reading competencies of the lower-achieving students in these two grade levels.

Response: The Guided Reading program was moved into the fourth and fifth grades by the beginning of the 2009–10 school year. The program was provided to these students on a daily basis. Title 1 staff were used as the intervention staff due to their previous familiarity with the Guided Reading program. The lowest achieving students in these two grade levels were given extra time and resources to improve their reading skill levels.

¹⁵ WEI was founded in 1994 and is operated in conjunction with Cardinal Stritch University. WEI provides the opportunity for teachers to continue their professional growth. Science, mathematics, technology, and reading/writing are emphasized. An expanded number of courses and workshops are offered in all subject areas and instructional methodologies. Application of theory and best classroom practice is provided.

- Recommendation: Develop benchmark examples and protocols for teachers to use in their efforts to improve students' writing skills. Special attention will be given to writing fluency and grammar.

Response: Staff implemented a new language program in K4 and K5 to provide an early focus initially on oral and subsequently on grammar and fluency skills. For all other students, teachers analyzed their students' writing examples with increased frequency. These assessments were used by staff to develop solid benchmark writing examples and clearer protocols for the assessment of all students' writing skills.

For the junior academy, the focus was on improving the math competencies of students through the following strategies:

- Recommendation: Involve all students in a math learning laboratory on Wednesday mornings for two hours. The students with above-grade-level skills will work with the high school math teachers to increase their knowledge base, while the students with below-grade-level skills will work with the junior academy staff in their specific areas of need.

Response: All students were involved in a two-hour math learning laboratory every Wednesday morning. During the first hour, the high-achieving students worked with the high school math teachers and then spent time with the junior academy staff to practice expanding their skill levels. The lower-achieving students spent the entire time with the junior academy staff and utilized specific materials related to their identified needs. Students' progress was assessed weekly and then student groupings were reformatted based on their current needs and weekly math progress.

- Recommendation: Supply the seventh- and eighth-grade students with bus passes to stay after school for additional assistance with math skills.

Response: The students with the greatest math needs were identified at a data retreat held at the beginning of the school year. These students were provided bus passes and were required to stay on Thursday afternoon for specialized tutorial sessions.

- Recommendation: Use master teachers to mentor other teachers about curricular strategies with the greatest potential for success with students who exhibit below-grade-level skills. These teachers will have time to observe the students in their regular math classes. The teacher mentors will meet on a monthly basis to discuss students' progress and formulate recommendations for more appropriate instructional strategies for use by the classroom teachers.

Response: MAS implemented the practice described above. In addition to the master teachers, the staff engaged with math coaches from CESA as well. The

master teachers and coaches also spent time assisting teachers with best practice strategies related to science.

For the high school, the focus was on the following steps:

- Recommendation: Increase the rigor of the curriculum, especially in the areas of math and science. More instructional time will be devoted to engaging students in the more advanced mathematical curricula.

Response: The high school introduced several new and rigorous math and science courses for its students. The courses were advanced math/trade class, advanced placement biology, anatomy, and physiology. Tutors were used in the algebra classes to enable the lower-achieving students to engage in this course. The students with average achievement in the algebra class were given special assignments requiring them to progress to higher skill levels.

- Recommendation: Improve entrance tests for ninth graders and all newly enrolled students to better ascertain their current reading and math skill levels and competencies so that lower-achieving students are provided with supplemental instruction at the start of each school year.

Response: All ninth graders and newly enrolled students were tested on the WRAT within 30 days of their first day of attendance. These test results were used to identify the low-achieving students at the beginning of the school year. Math tutors were assigned to the lower-achieving students and provided them with assistance based on their specific needs.

- Recommendation: Provide targeted, supplemental assistance to all students who do not meet the expected benchmarks on the EXPLORE and PLAN, increase the test-taking skills of tenth graders, and build their overall vocabularies.

Response: Staff met in December to review the student results on the EXPLORE and PLAN. The student results were used by staff to redesign the core curriculum to ensure that all students would be acquiring the skills needed to reach the expected benchmarks in each content area by the time of the next testing. Students were also engaged in reviewing their test results and participated in planning activities designed to improve their performance over the next year. Finally, all tenth-grade students participated in a “test-taking skill class” as well as completed a vocabulary test on every unit of instruction.

- Recommendation: For all students, the school will plan and provide higher-level plans/activities for students who are at or above grade level in the acquisition of basic skills.

Response: In addition to offering AP and higher level skill courses, the highest achievers were engaged in special projects and encouraged to participate in independent reading assignments.

III. PARENT, TEACHER, STUDENT, AND BOARD MEMBER SATISFACTION

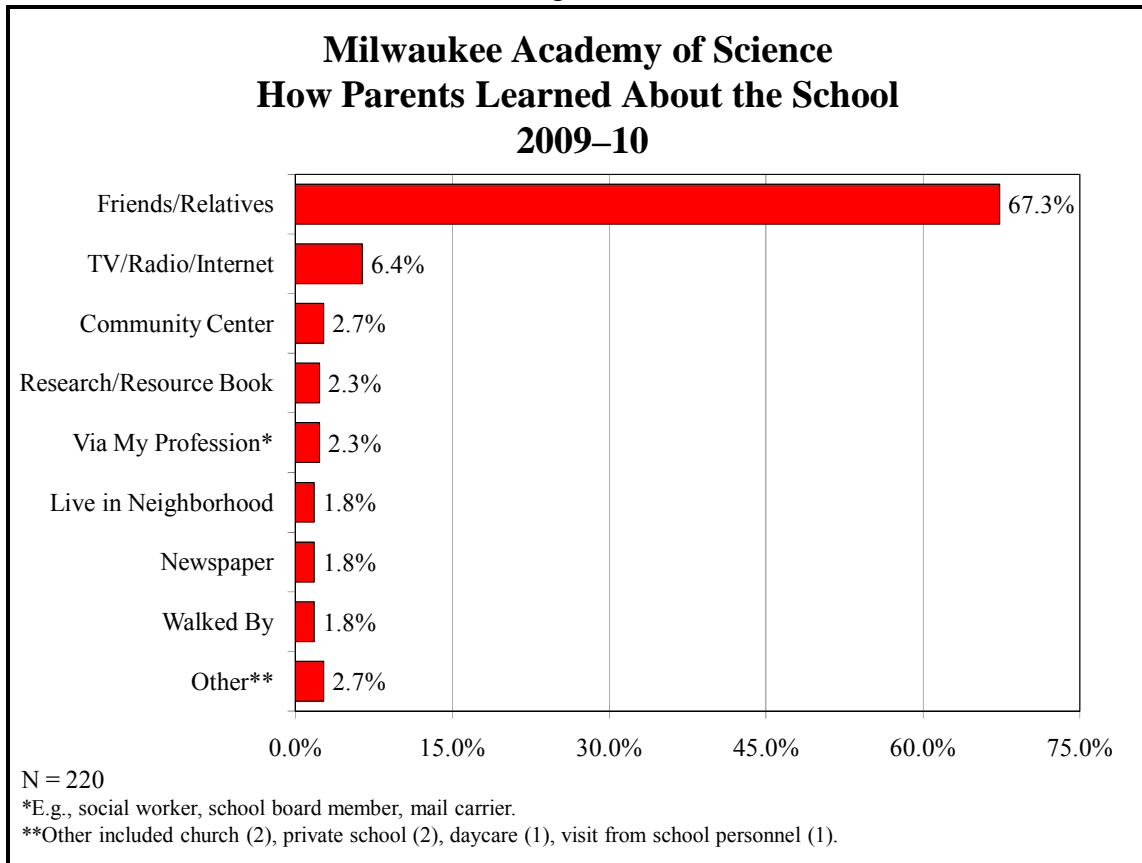
A. Parent Surveys

Parent opinions are qualitative in nature and provide a valuable external measurement of school performance. To determine how parents heard about the school, why they elected to send their students to the school, parental involvement with the school, and an overall evaluation of the school, parents were asked to complete a survey that was provided to them during the student-led parent/teacher conferences held in April 2010. CRC made two attempts by telephone to gather survey information from parents who did not return a survey. At the time of this report, 220 of 526 (41.8%) family surveys (representing parents of 352 students) had been completed and submitted to CRC.¹⁶

¹⁶ Surveys submitted as of July 27, 2010.

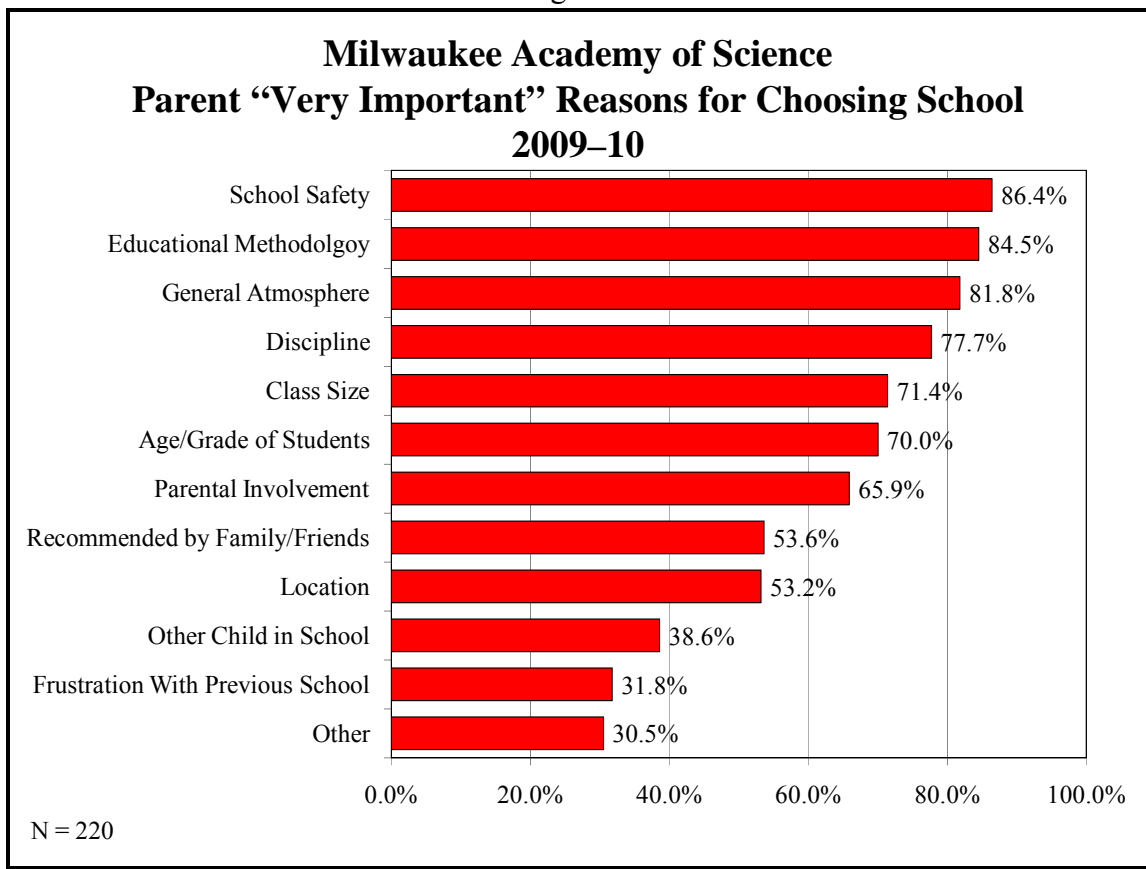
As illustrated below, 67.3% of parents heard about the school from friends or relatives. Others heard about the school from the TV, radio, or internet (6.4%) and 2.7% of parents heard about the school from their community center (see Figure 3).

Figure 3



Parents chose to send their child(ren) to the Academy for a variety of reasons. Figure 4 illustrates the reasons parents considered very important when making the decision to send their child(ren) to this school.¹⁷ For example, 86.4% of parents indicated that school safety was a very important reason for selecting this school, and 84.5% indicated that educational methodology were very important to them when choosing this school.

Figure 4

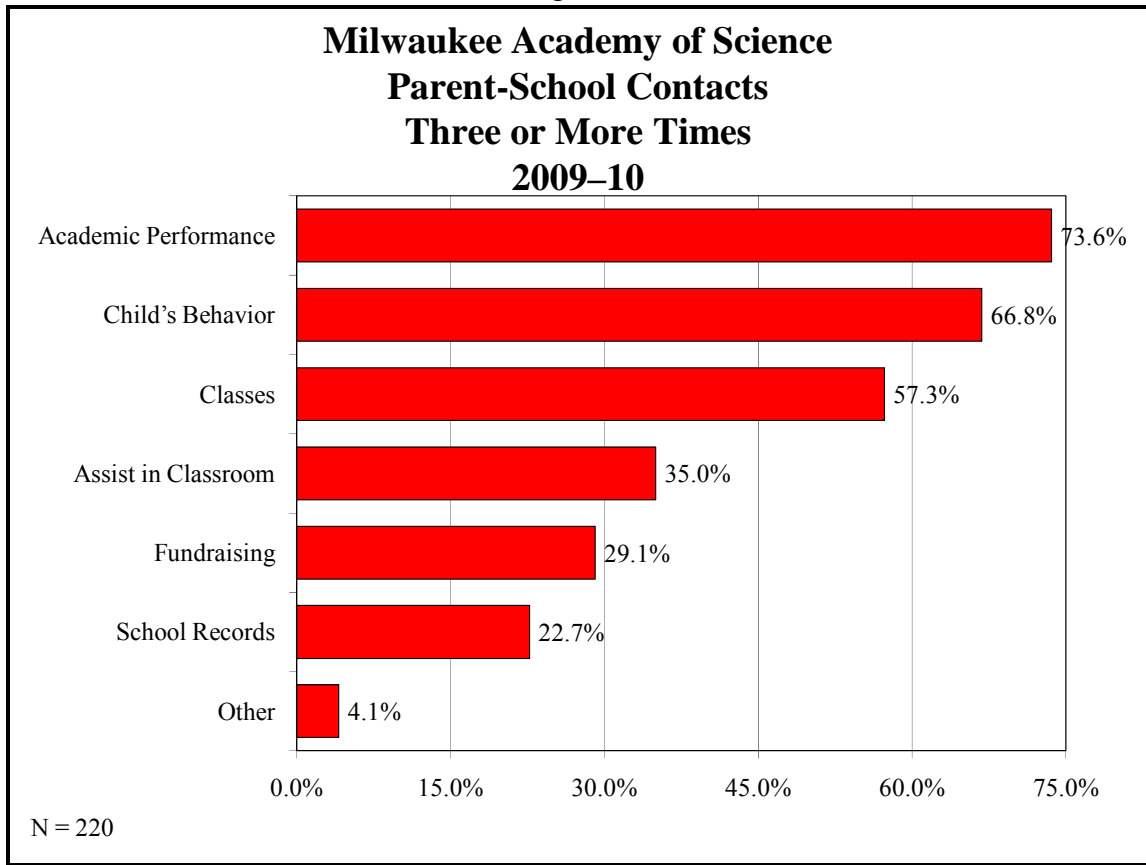


Parental involvement was also used as a measure of satisfaction with the school. Parental involvement was measured by the number of contacts between parents and the school and participation in educational activities at home.

¹⁷ Parents were given the following choices for each reason: very important, somewhat important, somewhat unimportant, and not at all important.

Parents and the school were in contact for a variety of reasons, such as a child’s academic performance and/or behavior, as well as to inquire about the classes in which their child was enrolled. This year, 73.6% of parents were in contact with the school at least three times regarding their child’s academic performance, 66.8% of parents were in contact regarding their child’s behavior, and 57.3% of parents were in contact with the school to discuss classes (see Figure 5).

Figure 5



Parents of high school students were asked how often they had been in contact with the school regarding their child’s graduation plan. Of 69 parents, 44.9% had been in touch with the school three or more times.

Parental participation can be described in terms of educational activities the family engages in while at home. The survey asked some engagement questions of primary/elementary academy parents and others of junior academy/high school parents. Results include parents who responded to questions in either category.

Elementary

There were 167 parents of elementary academy children. Parents indicated that during a typical week, they engaged in the following activities:

- 88.6% of parents read to their children;
- 59.8% participated in activities with their children (e.g., sports, library, museum);
- 90.4% worked with arithmetic or math;
- 73.6% watched educational programs on TV; and
- 92.8% worked on homework with their children.

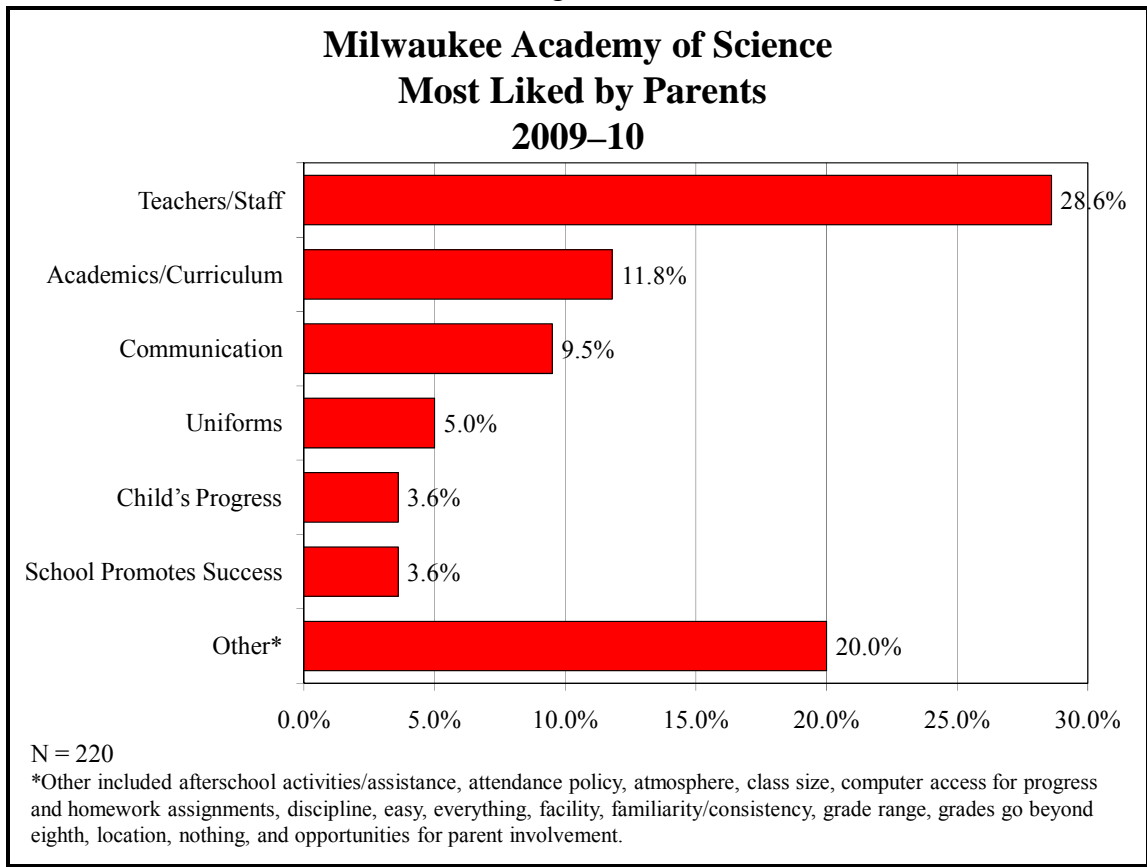
Junior Academy/High School

There were 117 parents who responded to questions about activities for older children (sixth through twelfth grades). These parents indicated that they engaged in the following at least weekly:

- 83% monitored homework;
- 60.7% watched educational programs on TV with their children;
- 55.5% participated in activities outside of school;
- 73.5% discussed progress toward graduation; and
- 67.5% discussed post-secondary plans.

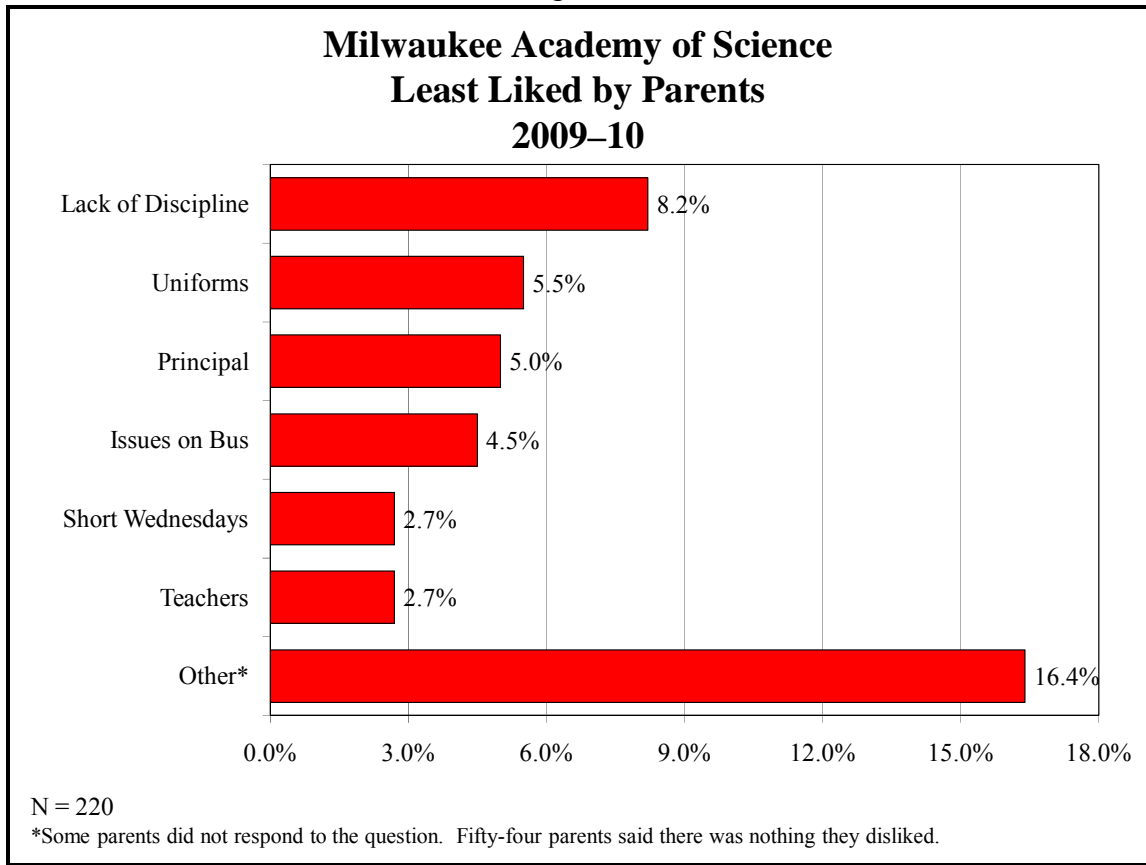
When asked an open-ended question about what they most liked about the school, 28.6% of parents indicated an appreciation for the teachers and/or staff; 11.8% liked the school's academic rigor and/or curriculum; 9.5% of parents mentioned communication between school and home; 5.0% mentioned uniforms; and 3.6% mentioned that their child had made progress at the school and/or the school promotes success, particularly post-secondary success. See Figure 6.

Figure 6



Parents were also asked their opinion about what they liked least about the school. Their responses are shown in Figure 7.¹⁸ For example, 8.2% indicated the lack of discipline, 5.5% mentioned school uniforms, and 5.0% were unhappy with the principal.

Figure 7



On a scale of excellent, good, fair, or poor, parents rated most areas of the academic environment as excellent or good most of the time. For example, 55.0% of parents indicated that the program of instruction was excellent and 30.9% thought it was good; 51.4% thought that the enrollment policy and procedures were excellent and 31.8% thought they were good. The areas that received the lowest ratings were discipline methods and principals' performance: 14.1% of

¹⁸ "Other" included attendance policy, cell phone policy, changes to curriculum, child's progress, lack of communication, fees, inconsistent treatment of students, lack of activities for girls, lack of teachers outside, limited special education resources, location, lunch, not enough diversity, minimal educational activities for middle school, not academically challenging, schedule, student behavior, teacher turnover, and unwelcoming environment.

parents indicated discipline methods used at the school were fair and 9.1% thought the methods were poor, and 13.2% of parents indicated that the principals' performance was fair and 8.2% said it was poor. Where no response was indicated, the parent either had no knowledge or experience with that aspect or had no opinion. See Table 1.

Table 1										
Milwaukee Academy of Science Parent Rating of Academic Areas 2009-10 (N = 220)										
Area	Response									
	Excellent		Good		Fair		Poor		No Response	
	N	%	N	%	N	%	N	%	N	%
Program of instruction	121	55.0%	68	30.9%	24	10.9%	5	2.3%	2	1.0%
Enrollment policy and procedures	113	51.4%	70	31.8%	25	11.4%	4	1.8%	8	3.6%
Child's academic progress	124	56.4%	63	28.6%	24	10.9%	6	2.7%	3	1.4%
Student/teacher ratio	98	44.5%	84	38.2%	31	14.1%	5	2.3%	2	0.9%
Discipline methods	96	43.6%	70	31.8%	31	14.1%	20	9.1%	3	1.4%
Parent-teacher relationships	134	60.9%	65	29.5%	12	5.5%	6	2.7%	3	1.4%
Communication regarding learning expectations	141	64.1%	48	21.8%	18	8.2%	9	4.1%	4	1.8%
Parent involvement in policy and procedures	132	60.0%	65	29.5%	16	7.3%	3	1.4%	4	1.8%
Teachers' performance	134	60.9%	61	27.7%	20	9.1%	3	1.4%	2	0.9%
Principals' performance	111	50.5%	56	25.5%	29	13.2%	18	8.2%	6	2.7%
Teacher/principal accessibility	109	49.5%	73	33.2%	24	10.9%	8	3.6%	6	2.7%
Responsiveness to concerns	123	55.9%	61	27.7%	20	9.1%	11	5.0%	5	2.3%
Progress reports	134	60.9%	55	25.0%	14	6.4%	6	2.7%	11	5.0%

Parents of high school students were asked how well the high school graduation plan addresses credit accumulation and post-secondary planning.

- Of 79 parents, 49.4% said credit accumulation was excellent and 35.4% said good.
- Of 77 parents, 45.5% indicated that post-secondary planning was excellent and 39.0% indicated good.

Parents were then asked their opinions about school staff. Parents rated their feelings about each of the following statements as strongly agree, agree, neutral, disagree, or strongly disagree. See Table 2 for results.

Table 2												
Milwaukee Academy of Science Parent Rating of School Staff 2009–10 (N = 220)												
Area	Response											
	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		No Response	
	N	%	N	%	N	%	N	%	N	%	N	%
I am comfortable talking with the staff.	145	65.9%	53	24.1%	8	3.6%	2	0.9%	1	0.5%	11	5.0%
The staff welcomes suggestions from parents.	120	54.5%	59	26.8%	18	8.2%	9	4.1%	2	0.9%	12	5.5%
The staff keeps me informed about my child’s performance.	141	64.1%	51	23.2%	11	5.0%	3	1.4%	0	0.0%	14	6.4%
I am comfortable with how the staff handles the discipline.	106	48.2%	52	23.6%	24	10.9%	19	8.6%	6	2.7%	13	5.9%
I am satisfied with the number of adult staff available to work with the students.	107	48.6%	77	35.0%	16	7.3%	4	1.8%	3	1.4%	13	5.9%
I am satisfied with the overall performance of the staff.	103	46.8%	80	36.4%	17	7.7%	6	2.7%	2	0.9%	12	5.5%
The staff recognizes my child’s strengths and weaknesses.	114	51.8%	71	32.3%	16	7.3%	4	1.8%	3	1.4%	12	5.5%

Overall parent satisfaction was evident in the following:

- Of 220 parents, 184 (83.6 %) would recommend the Academy to other parents;
- Of 220 parents, 163 (74.1%) will send their child to the Academy next year;¹⁹ 21 (9.5%) are not sure, 25 (11.4%) will not, and 11 (5.0%) parents did not answer the question; and

¹⁹ Of the 25 parents who said no, 2 students are graduating, 2 are moving, 6 indicated that their child is not offered enough academic challenge, 2 raised issues about the school’s response to discipline, 1 due to transportation, 1 because siblings are going elsewhere, and the other 13 parents did not have an explanation.

- When asked how they thought their child would rate the school, 95 (43.2%) of 220 parents indicated excellent, 83 (37.7%) indicated good, 19 (8.6%) said fair, and 12 (5.5%) parents indicated that their child would rate the school as poor. Eleven (5.0%) parents did not respond to the question.
- When asked to rate the school's overall contribution to their child's learning, 130 (59.1%) of 220 parents indicated it was excellent and 58 (26.4%) parents rated the school as good. Seventeen (7.7%) parents thought the school was fair and 7 (3.2%) parents indicated it was poor. Note that 8 (3.6%) parents did not respond to the question.

B. Teacher Interviews

At the end of the school year, 15 teachers from the elementary academy and 11 from the junior academy/high school were interviewed regarding their reasons for teaching and their satisfaction with the school.²⁰ Elementary teachers were responsible for 8 to 25 students at a given time and junior academy/high school teachers for up to 32 students. Six (40.0%) elementary and two (18.2%) junior academy/high school teachers used team-teaching techniques and the others did not team teach. Four elementary and five junior academy/high school teachers were in their first year at the school. Other teachers had been at the school for two to eight years, and one teacher had 10 years of experience at the school. All teachers indicated that they routinely used data to make decisions in the classroom and that school leadership used data to make schoolwide decisions. Eight (53.3%) elementary teachers' performance reviews occurred annually and reviews occurred at least quarterly for the others. Junior academy/high school teacher performance reviews occurred monthly for five teachers, every six weeks for one teacher, quarterly for three teachers, two to three times per year for one teacher, and one teacher's performance was evaluated on an annual basis. Fourteen (93.3%) elementary and all (100.0%) junior academy/high school teachers were satisfied with the performance review process. All elementary and 10 (90.9%) junior academy/high school teachers indicated that

²⁰ The administrator is not included in the teacher interview section.

student performance was part of teacher performance review. All 26 teachers indicated that they planned to continue teaching at the school.

Overall, at least 24 of 26 teachers indicated that the educational methodology, age/grade of students, discipline, general atmosphere of the school, and class size were important reasons for teaching at this school.²¹ See Table 3 for more details.

Table 3					
Milwaukee Academy of Science					
Reasons for Teaching at School Based on Teacher Interviews					
2009–10					
Reason	Elementary (n = 15)		Junior Academy/High School (n = 11)		Total* (N = 26)
	Very Important	Somewhat Important	Very Important	Somewhat Important	
Location	2	5	2	7	16
Financial	4	7	0	10	21
Educational methodology	8	6	8	3	25
Age/grade of students	11	3	4	6	24
Discipline	6	8	7	3	24
General atmosphere	12	3	8	3	26
Class size	6	7	5	6	24
Type of school	4	3	2	5	14
Parental involvement	6	5	3	5	19

*Combines “very important” and “somewhat important” responses.

²¹ Teachers could respond very important, somewhat important, somewhat unimportant, or not at all important.

In terms of overall satisfaction with the school, teachers were asked to rate the school's performance related to class size, materials and equipment, the school's overall student assessment plan, shared leadership, professional support and development activities, and the school's progress toward becoming excellent. Possible responses included excellent, good, fair, and poor. Most teachers rated these areas as good or excellent. Areas in which 25 of 26 teachers agreed were excellent or good included student assessment plan, local measures, and progress toward becoming an excellent school. The area with the lowest rating was shared leadership, decision making, and accountability (see Table 4).

Table 4					
Milwaukee Academy of Science School Performance Rating Based on Teacher Interviews 2009–10					
Area	Elementary Rating (n = 15)		Junior Academy/ High School Rating (n = 11)		Total* (N = 26)
	Excellent	Good	Excellent	Good	
1. Class size	5	8	4	5	22
2. Materials and equipment	5	6	3	7	21
3. Student assessment plan	3	11	3	8	25
a. Local measures	8	6	4	7	25
b. Standardized tests	3	9	6	2	20
c. Progress reports	9	4	8	3	24
4. Shared leadership, decision making, accountability	5	5	2	7	19
5. Professional support	9	4	7	4	24
6. Professional development opportunities	9	5	7	3	24
7. Progress toward becoming an excellent school	9	5	7	4	25

*Combines “good” and “excellent” responses.

On a satisfaction rating scale ranging from very satisfied to very dissatisfied, teachers responded on the satisfied end of the response range in most areas. The area where all teachers expressed satisfaction included teacher collaboration to plan learning experiences and their own performance as a teacher. Teacher dissatisfaction was most often in parent and community/business involvement. Table 5 lists all of the teacher responses.

Table 5					
Milwaukee Academy of Science Teacher Satisfaction 2009–10					
Performance Measure	Elementary (n = 15)		Junior Academy/ High School (n = 11)		Total* (N = 26)
	Very Satisfied	Somewhat Satisfied	Very Satisfied	Somewhat Satisfied	
Program of instruction	6	8	3	8	25
Enrollment policy and procedures	2	9	1	5	17
Students' academic progress	9	5	7	4	25
Student/teacher ratio/class size	7	7	4	5	23
Discipline policy	4	6	6	4	20
Adherence to discipline policy	5	4	3	8	20
Instructional support	8	5	5	6	24
Parent-teacher relationships	4	6	3	4	17
Teacher collaboration to plan learning experiences	8	7	5	6	26
Parent involvement	2	5	1	1	9
Community/business involvement	6	3	2	4	15
Teachers' performance	8	7	5	6	26
Principals' performance	7	5	10	1	23
Professional support staff performance	9	4	4	7	24
Opportunities for teacher involvement	4	5	3	6	18
Board of directors' performance	7	4	1	5	17
Opportunity for continuing education	8	4	7	1	20
Frequency of staff meetings	6	7	9	2	24
Effectiveness of staff meetings	5	5	3	7	20

*Combines "very satisfied" and "somewhat satisfied."

When teachers were asked what they most liked about the school, they most often noted the following:

Elementary

- Staff are cohesive and supportive (n= 14);
- Support staff/resources (n = 6);
- Parent support (n = 5);
- Students (n = 4);
- Environment (n = 3);
- Leadership willingness to listen (n = 3);
- Math and/or science curriculum (n = 3);
- Curriculum offers freedom, flexibility, and autonomy (n = 2);
- Monitoring student progress (n = 2);
- Class size (n = 1);
- Pull-out groups (n = 1); and
- Schedule allows more days to help students (n = 1).

Junior Academy/High School

- Staff collaboration and support (n = 8);
- Science focus (n = 5);
- Administration/support (n = 3);
- Freedom to teach (n = 3);
- Atmosphere (n = 2);
- Class size (n = 2);
- Students (n = 2);
- Character counts curriculum (n = 1);
- Consistent procedures (n = 1);
- Dedication to student improvement (n = 1);
- Facilities (n = 1);
- Leadership (n = 1);
- Parent/teacher relationships (n = 1);
- Professional development opportunities (n = 1); and
- School size (n = 1).

Teachers most often mentioned the following as least liked about the school:

Elementary

- Lack of consistency with discipline policy (n = 4);
- Lack of prep time (n = 4);
- Parent involvement (n = 3);
- Inconsistencies with parent/student accountability (n = 2);
- Lack of breaks (n = 2);
- Lack of feedback from leadership (n = 2);
- Lack of staff input with curriculum changes (n = 2);
- Lack of strong science curriculum (n = 2);
- Benefits (n = 1);
- Class size (n = 1);

Junior Academy/High School

- Lack of parental support (n = 6);
- Communication needs improvement (n = 3);
- Staff changes/turnover (n = 3);
- Budget (n = 2);
- Food (n = 2);
- Lack of professional development (n = 2);
- Student behavior/inconsistent discipline (n = 2);
- Conflict between cultural versus educational values (n = 1);
- Inconsistent teacher accountability (n = 1);
- Lack of materials (n = 1);

Elementary (continued)

- Food (n = 1);
- Lack performance reviews (n = 1);
- Lack of social studies curriculum (n = 1);
- Micromanagement (n = 1);
- No union (n = 1);
- No windows in classrooms (n = 1);
- Pay (n = 1);
- Procedural changes (n = 1); and
- Writing program (n = 1).

Junior Academy/High School (continued)

- Minimal sports and art (n = 1); and
- Pay (n = 1).

On a scale of poor, fair, good, or excellent, 13 (86.7%) of 15 elementary and all 11 (100.0%) junior academy/high school teachers rated the school's contribution toward academic progress as excellent or good. Two elementary teachers indicated it was fair.

When asked for a suggestion to improve the school, two or more teachers responded as follows:

Elementary

- Create shared sense of community—teachers, students, and particularly parents (n = 5);
- Collaborate between grade levels (n = 2);
- Follow-through on discipline (n = 2); and
- One teacher each said the following: bring in healthy food, eliminate Wednesday University; establish a committee to review communication; keep class size small; review special education caseload; and stick with decisions.

Junior Academy/High School

One teacher each had the following recommendations: continue using data to support decisions and cohesive communication; ensure consistency between teachers; ensure strong mentors; get better at recruiting students interested in science; improve parent involvement; install computer lab; more accountability at lower levels to prepare students; more extracurricular activities; more specialized classes; and recognize teacher contributions.

When asked to provide suggestions to improve the classroom, two or more teachers responded as follows:

Elementary

- Provide materials—equipment, supplies, sturdy furniture (n = 6);
- Improve time management to access all students (n = 2);
- Smaller class sizes (n = 2); and
- One teacher each suggested the following: individualize education; hold parents accountable; improve discipline; allow more prep time; provide constructive feedback; and provide science and social studies curriculum.

Junior Academy/High School

- More computers/technology (n = 4);
- More rigor (n = 2); and
- One teacher each suggested adding staff (e.g., teachers, aides); decreasing the size of pillars; installing blinds on windows to keep temperatures low; and providing more books.

C. Student Interviews

At the end of the year, CRC staff interviewed 10 students in fifth grade, and 10 students in eleventh or twelfth grades about their school. All students indicated that they used computers at school, homework helps them learn more, teachers help them at school, and they feel safe in school (see Table 6).

Table 6			
Milwaukee Academy of Science Student Interviews 2009–10			
Question	Elementary (n = 10)	Junior Academy/ High School (n = 10)	Total
	Yes	Yes	
1. Do you like your school?	10	8	18
2. Do you learn new things every day?	9	9	18
3. Have you improved in reading?	8	10	18
4. Have you improved in math?	7	9	16
5. Do you use computers at school?	10	10	20
6. Is your school clean?	9	8	17
7. Do you like the school rules?	8	2	10
8. Do you follow the rules?	9	7	16
9. Does your homework help you learn more?	10	10	20
10. Do your teachers help you at school?	10	10	20
11. Do you like being in school?	10	8	18
12. Do you feel safe in school?	10	10	20
13. Do people work together at your school?	8	9	17
14. Do you feel the marks you get on class work, homework, and report cards are fair?	9	9	18
15. Do your teachers talk to your parents?	9	7	16
16. Does your school have afterschool activities?	10	8	18
17. Do your teachers talk with you about high school plans?*	9	N/A	N/A
18. Do you have a high school graduation plan?***	N/A	10	N/A
19. Do your teachers talk with you about college?***	N/A	9	N/A
20. Are you planning to go to college?*	N/A	9	N/A

*Does not apply to high school students.

**Applies to high school students only.

Students were then asked what they liked best and least about the school. Students indicated that they liked the following the best:

Elementary

- Atmosphere, e.g., bad things don't happen (n = 2);
- Math (n = 2);
- Teachers (n = 2); and
- One student each indicated parties; principal; reading; and school trips.

Junior Academy/High School

- Classes (n = 3);
- Teachers (n = 3);
- Open lunch (n = 2); and
- One student said afterschool activities and another said the school environment, e.g., safe, happy.

Students indicated that they liked the following the least:

Elementary

One student each indicated the following: difficult to do activities I don't understand; "girl drama"; have to tell if someone hits you; math; negative people; reading; science; tuck in shirt; when something goes on in the bathroom that shouldn't.

Junior Academy/High School

- Drama (n = 2);
- Lack of activities (n = 2);
- Rules (n = 2);
- Clothing restrictions (n = 1);
- Homework (n= 1); and
- Lunch (n = 1).

D. Board of Directors Interviews

Board member opinions are qualitative in nature and provide valuable, although subjective, insight regarding school performance and organizational competency. Eight members of the Academy's Board of Directors were interviewed via telephone by CRC staff using a prepared interview guide. Four board members had served for 10 years, three members served between four and seven years, and one member was new to the board this year. CRC interviewed the president, vice president, the treasurer/secretary, and five other board members. These board members represented experience in education/academia, nonprofit administration, business, and law. Seven of eight members indicated they participate in strategic planning, all indicated they

approve the school's annual budget, and all indicated that the board is presented with the school's annual academic monitoring report. All members indicated that the board used data to make decisions about the school.

The interviewees were asked to rate the school's performance in class size, materials and equipment, and the student assessment plan (local measures of achievement, standardized testing, progress reports to parents) if they had knowledge of these school performance elements. The rating scale was excellent, good, fair, or poor. All interviewees rated these elements as either excellent or good.²² In addition, the interviewees rated the school's performance regarding shared leadership, decision making and accountability, professional support, and professional development opportunities as either excellent or good.²³ One interviewee indicated that the school was making excellent progress toward becoming high-performing, six said progress was good, and one indicated the school's progress toward becoming high-performing was fair. Seven interviewees indicated that, overall, the school was good, and the other interviewee rated the school as fair.

On a satisfaction rating scale ranging from very satisfied to very dissatisfied, most interviewees indicated that they were somewhat to very satisfied with a number of areas including the program of instruction, the discipline policy, adherence to the discipline policy, instructional support, community/business involvement, teachers' performance, performance of the principals, board of directors' performance, and safety of the educational environment. All members indicated that they were very satisfied with the commitment of the school's leadership. Members expressed the most dissatisfaction with the financial resources to fulfill the school's mission, citing no funds for transportation, and parent involvement, indicating a need to increase the level at which parents are involved with the school. See Table 7 for details.

²² One member did not have enough information to form an opinion regarding local measures of student achievement, one did not offer an opinion on standardized testing, and three did not provide an opinion on progress reports to parents.

²³ One member did not provide an opinion on professional development opportunities.

Table 7					
Milwaukee Academy of Science Board Member Interviews 2009–10 (N = 8)					
Area	Response				
	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Do Not Know/No Opinion
Program of instruction	5	3	0	0	0
Enrollment policy and procedures	4	4	0	0	0
Students' academic progress	0	6	2	0	0
Student/teacher ratio/class size	3	5	0	0	0
Discipline policy	5	3	0	0	0
Adherence to discipline policy	5	2	0	0	1
Instructional support	5	3	0	0	0
Parent involvement	1	4	3	0	0
Community/business involvement	5	1	2	0	0
Teachers' performance	5	3	0	0	0
Principals' performance	5	3	0	0	0
Opportunities for teacher involvement in policy/procedures decisions	4	3	1	0	0
Current role of board of directors	4	4	0	0	0
Board of directors' performance	5	3	0	0	0
Opportunities for continuing education	2	4	1	0	1
Human resources to fulfill school's mission	2	5	0	0	1
Administrative resources to fulfill school's mission	4	3	0	0	1
Financial resources to fulfill school's mission	0	5	3	0	0
Commitment of school's leadership	8	0	0	0	0
Safety of the educational environment	7	1	0	0	0

When asked what they liked best about the Academy, board members indicated the following:

- Board commitment (n = 5);
- Emphasis on science and/or math (n = 5);
- Leadership team (n = 3); and
- High academic standards (n = 3).

One board member each mentioned staff enthusiasm/dedication, the students, enrollment efforts, reasonable alternative for parents, and data-based decision making.

Regarding dislikes, the interviewees mentioned the unstable funding, particularly related to transportation (n = 6); the slow pace of educational improvement (n = 3); low parent involvement/home support (n = 3); that public relations needs to improve so that the school attracts the students it was designed to attract (n = 3); the need to establish a clear vision for the future (n = 1); that the board was not focused on educational outcomes early on (n = 1); the facility (n = 1); and that there is too little focus on academics (n = 1).

When asked for one suggestion for improving the school, the board members mentioned the following:

- Focus on efforts to attract more appropriate students, including highlighting vision and promoting positive aspects of the school in the community (n = 3);
- Focus on learning and accept no excuses for failure (n = 2);
- Focus on reading and comprehension (n = 2);
- Examine data closely, and thoughtfully consider implications and solutions (n = 1).

IV. EDUCATIONAL PERFORMANCE

To monitor the performance of MAS as it relates to the CSRC contract, the school collected a variety of qualitative and quantitative information at specified intervals during the past two academic years. This year, the school established goals for attendance, parent conferences, and special education student records. In addition, the school identified local and standardized measures of academic performance to monitor student progress.

This year, the local assessment measures included student progress in literacy, mathematics, and writing, as well as IEP goals for special education students. The standardized assessment measures used were the Stanford Diagnostic Reading Test (SDRT), the WKCE,²⁴ the EXPLORE, the PLAN,²⁵ and the ACT or SAT. Results for measures of academic progress are presented for primary/elementary academy students in K4 through fifth grades and then for students attending the junior academy (sixth through eighth grades) and high school (ninth through twelfth grades).

A. Primary/Elementary Academy (K4 Through Fifth Grades)

1. Attendance

At the beginning of the 2009–10 academic year, the primary/elementary academy established a goal to maintain an average attendance rate of 90.0%. A student was considered present if he/she arrived no later than 11:00 a.m. This year, students attended school an average of 90.2% of the time. When excused absences were included, the attendance rate rose to 90.7%. The school has therefore met its goal.²⁶

²⁴ The WKCE is a standardized test aligned with Wisconsin model academic standards.

²⁵ The EXPLORE and PLAN were developed by ACT and measure a student's preparedness to take the ACT.

²⁶ Attendance data were provided for 588 students enrolled at any point during the school year. Attendance was calculated for each student by dividing the number of days attended by the number of days expected, then averaging all of the students' attendance rates.

Note that 18 students were suspended at least once from school during the year. These students spent, on average, 7.1 days out of school due to suspension.

2. Parent-teacher Conferences

At the beginning of the school year, the school set a goal that, on average, parents would attend two of three scheduled parent-teacher conferences. Conferences were scheduled for October 2009, January 2010, and April 2010. There were 514 primary/elementary academy students enrolled all year. Parents of 505 (98.2%) students attended two of three conferences. The school has therefore exceeded its goal for parent participation.

3. Special Education Student Records

The school established a goal to maintain up-to-date records for all special education needs students. There were 70 special education students enrolled in primary/elementary academy at the end of the year. An IEP had been developed and/or reviewed for all 70 students. In addition, CRC conducted a random review of special education files. This review indicated that IEPs were routinely completed and that parents were invited to develop and/or be involved in developing the IEP. The school has therefore met its goal to maintain records on all students with special needs.

4. Local Measures of Educational Performance

Charter schools, by their definition and nature, are autonomous schools with curricula that reflect each school's individual philosophy, mission, and goals. In addition to administering standardized tests, each charter school is responsible for describing the goals and expectations for its students in the context of that school's unique approach to education. These goals and

expectations are established by each City of Milwaukee–chartered school at the beginning of the academic year to measure the educational performance of its students. These local measures are useful for monitoring and reporting progress, guiding and improving instruction, clearly expressing the expected quality of student work, and providing evidence that students are meeting local benchmarks.

At the beginning of the school year, MAS designated three different areas in which students’ competencies would be measured: literacy, mathematics, and writing.

a. Literacy

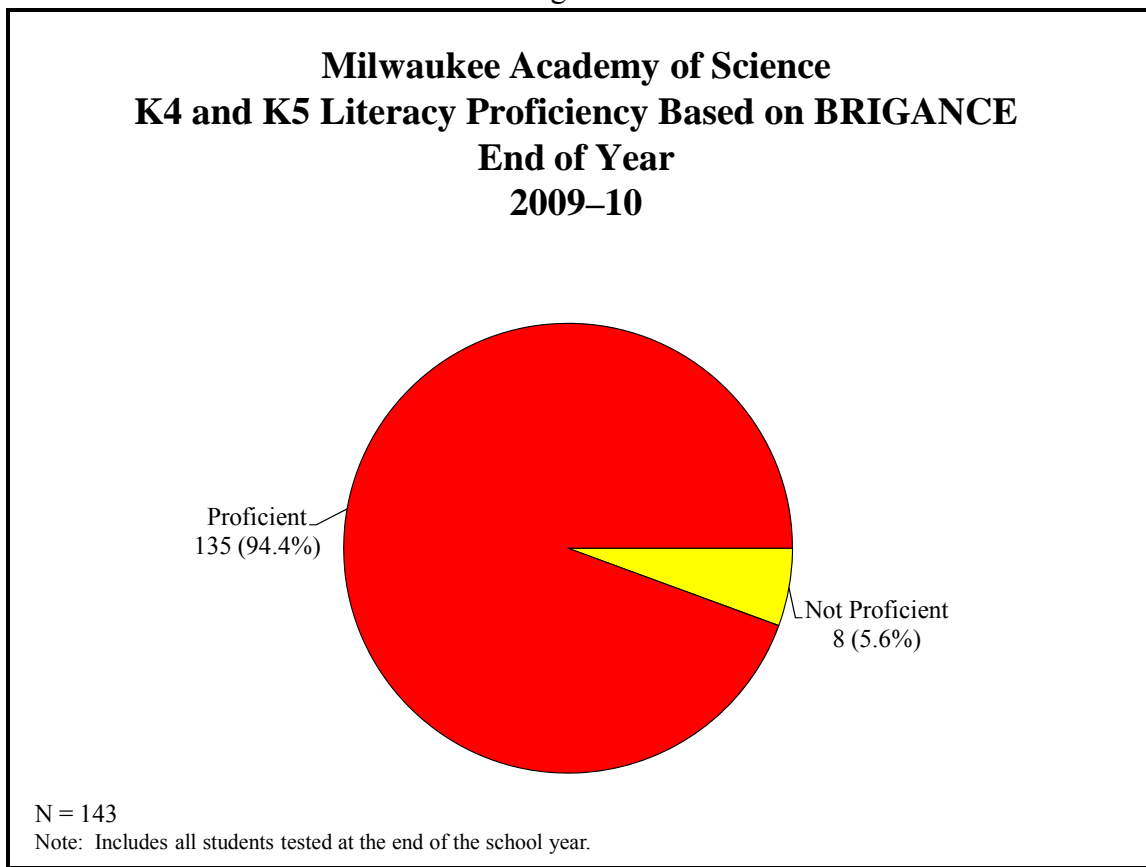
The school set a goal that at least 90% of students in K4 and K5 would show progress or maintain proficiency in literacy skills, that 90% of students in first through third grades would show progress or reach proficiency, and that 80% of students in fourth and fifth grades would demonstrate growth or maintain grade equivalency (GE). Literacy skills for K4 and K5 included reciting the alphabet and recognizing and printing upper and lowercase letters. K4 student progress was based on scores from fall of 2009 and spring of 2010 BRIGANCE assessments. K5 student progress was based on spring 2009 to spring 2010 BRIGANCE scores (for new students, progress was based on fall 2009 and spring 2010 scores). Results were provided as raw and quotient scores. An increase in all quotient scores was considered improvement. First- through third-grade literacy skills were assessed using the Scholastic Guided Reading Level. Students were to exhibit reading skills at grade level or show at least four levels of improvement based on the test gradient scale, which assesses reading fluency and comprehension. The test gradient scale consists of 27 levels, each assigned an alphabetic character(s). Levels correspond to grade-level skills; for example, levels A through C indicate Kindergarten, and B through I indicate second-grade-level reading skills. The minimum level for first grade proficiency was H;

for second grade, L; and for third grade, O. Tests were given in the fall of 2009 and spring of 2010.

The school's goal for fourth and fifth graders was that 80% of students would show one month's growth for each month of instruction or maintain a GE score at or above grade level. Fourth and fifth graders were assessed using the word recognition portion of the BRIGANCE. Scores were provided as GE. Returning students were tested in the spring of 2009 and spring of 2010. New students were tested in the fall of 2009 and spring of 2010.

At the end of the year, most (94.4%) K4 and K5 students were proficient²⁷ or higher on reciting the alphabet and recognizing and printing upper and lowercase letters (i.e., scored 85 or higher on all areas). See Figure 8.

Figure 8



²⁷ A score of 85 is considered proficient.

Of first through third graders, 69.0% were reading at or above grade level expectations (Table 8).²⁸

Table 8				
Milwaukee Academy of Science 1st Through 3rd Grades Reading Proficiency at the End of the Year Based on Scholastic Guided Reading Level 2009–10				
Grade	Minimum SRI Level for Proficiency	N	Proficient or Higher	
			N	%
1st	H	74	51	68.9%
2nd	L	74	46	62.2%
3rd	O	78	59	75.6%
TOTAL	--	226	156	69.0%

Of fourth through fifth graders, 80.3% were at GE²⁹ or above in reading. See Table 9.

Table 9					
Milwaukee Academy of Science 4th Through 5th Grades Reading GE at the End of the Year Based on BRIGANCE 2009–10					
Grade	N	Minimum GE	Maximum GE	Average GE	% At or Above GE
4th	71	2.0	6.8	5.4	74.6%
5th	81	2.5	6.8	6.1	85.2%
TOTAL	152	--	--	--	80.3%

²⁸ Scores were provided as an alpha-character level.

²⁹ Fourth grade GE scores of 4.0 or higher were considered at or above grade level. Fifth grade GE scores of 5.0 or higher were considered at or above grade level.

Results for the K4 through third-grade students indicate that 93.3% of students showed improvement or reached proficiency or reading level requirements in literacy skills (see Table 10 for details). The school has therefore met its internal literacy goal.

Table 10					
Milwaukee Academy of Science Literacy Progress for K4 through 3rd Grades 2009–10					
Grade	Test Administrations	Test	N	Met Goal	
				N	%
K4	Spring 2009 and Spring 2010	BRIGANCE	51	51**	100.0%
K5	Spring 2009 and Spring 2010*	BRIGANCE	71	68**	95.8%
1st	Fall 2009 and Spring 2010	Scholastic Guided Reading Level	73	66***	90.4%
2nd	Fall 2009 and Spring 2010	Scholastic Guided Reading Level	73	64***	87.7%
3rd	Fall 2009 and Spring 2010	Scholastic Guided Reading Level	77	73***	94.8%
Total	--	--	345	322	93.3%

*New students were tested in the fall of 2009 and the spring of 2010.

**Reflects students who reached proficiency or improved in all quotient scores.

***Reflects students who reached reading level requirements or improved four or more levels on the test gradient scale.

Results for fourth and fifth graders indicate that 83.2% of students maintained GE or showed improvement of one month GE per month of instruction in literacy skills. This meets the school's internal goal (see Table 11).

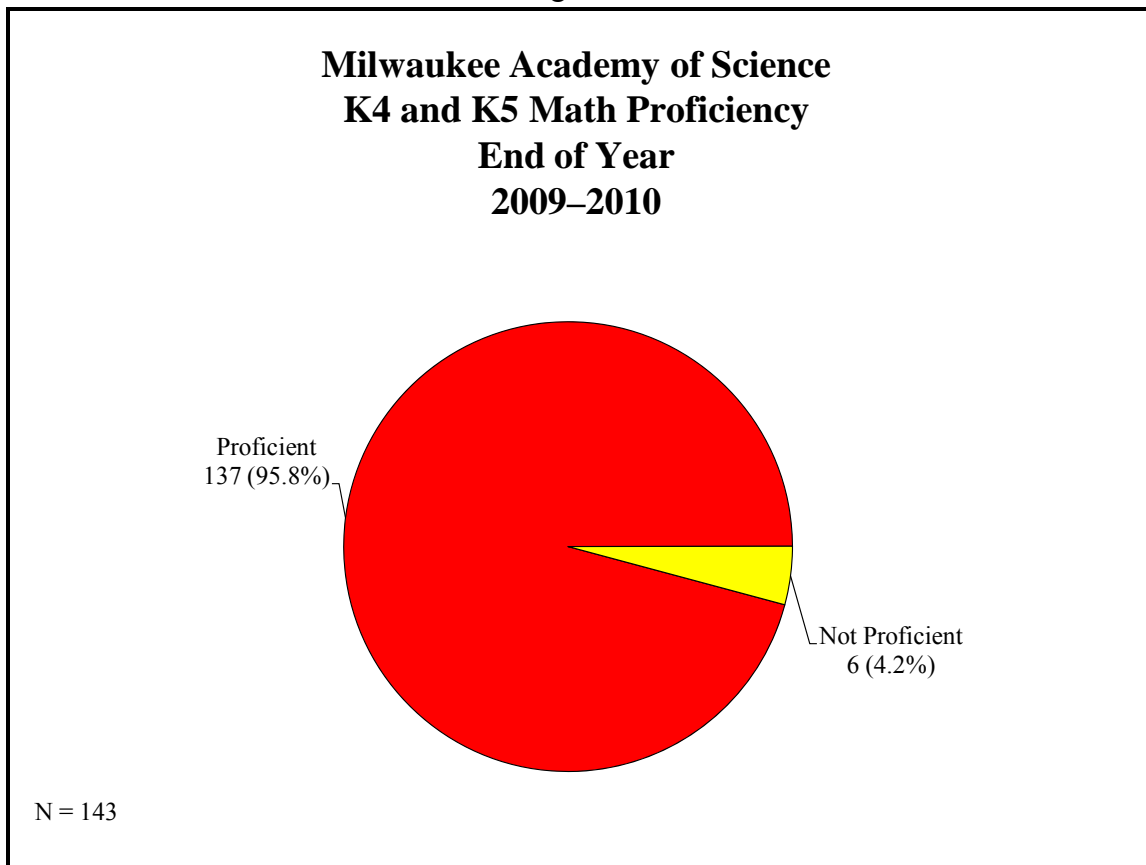
Table 11					
Milwaukee Academy of Science					
Literacy Progress for 4th and 5th Grades Based on BRIGANCE					
2009–10					
Grade	Test Administrations	N	Maintained GE	Number Improved 1 GE/ Month	Percentage Maintained or Improved
4th	Spring 2009 and Spring 2010*	71	39	14	74.7%
5th	Spring 2009 and Spring 2010*	78	55	16	91.0%
Total	--	149	94	30	83.2%

*New students were tested in the fall of 2009 and the spring of 2010.

b. *Mathematics*

To assess primary/elementary academy student progress in mathematics, the school set a goal that at least 90% of students in K4 and K5 would exhibit progress or maintain proficiency from the first to the final assessment of their math skills, based on the BRIGANCE. Math skills included rote counting, counting objects, and reading numbers. K4 skills were tested in the fall of 2009 and the spring of 2010. K5 skills were tested in the spring of 2009 and spring of 2010. New K5 students were tested in the fall of 2009. Results for K4 and K5 students were provided in quotient and raw scores. An increase in all quotient scores was considered improvement. At the end of the year, most (95.8%) K4 and K5 students were proficient in math (Figure 9).

Figure 9



BRIGANCE was also used to test math skills for first through fifth graders. The school set a goal that 80% of these students would show improvement or maintain GE or higher. These students were tested on computation skills. Results for first through fifth grades were provided as GE. Tests were given in the spring of 2009 and spring of 2010 for all returning students. All first graders and newly enrolled students were tested in the fall of 2009 and again in spring of 2010. At the end of the year, on average, all (100.0%) first graders were functioning at grade level, as were 97.2% of second, 86.4% of third, 87.5% of fourth, and 81.5% of fifth graders.³⁰ See Table 12.

Table 12			
Milwaukee Academy of Science			
1st Through 5th Grades			
At or Above GE in Math Based on Spring 2010 BRIGANCE			
2009–10			
Grade	N Tested	At or Above GE	
		N	%
1st	72	72	100.0%
2nd	71	69	97.2%
3rd	81	70	86.4%
4th	72	63	87.5%
5th	81	66	81.5%
Total	377	340	90.2%

³⁰ At or above GE reflects students who scored GE equal to or greater than their grade. For example, first-grade scores of 1.0 or higher were considered at or above grade level, second-grade scores of 2.0 or higher were considered at or above grade level, etc.

Academic progress results indicate that 99.2% of 126 K4 and K5 students reached or maintained proficiency or showed improvement in all three math quotient scores (see Table 13).

Table 13			
Milwaukee Academy of Science Math Progress for K4 and K5 Based on BRIGANCE 2009–10			
Grade	N	Progress*	
		N	%
K4	51	51	100.0%
K5	75	74	98.7%
Total	126	125	99.2%

*Reached or maintained proficiency or increased all quotient scores.

Academic progress for 375 first- through fifth-grade students with comparable test results from the spring of 2009 or fall of 2009 and the spring of 2010, indicated that 90.4% improved at least one month for every month of instruction or maintained GE³¹ (see Table 14). The school has therefore met its goal.

Table 14					
Milwaukee Academy of Science Mathematics Progress for 1st Through 5th Grades Based on BRIGANCE 2009–10					
Grade	N	Number Maintained GE	Number Improved 1 GE per Month	Total	
				N	%
1st	72	16	56	72	100.0%
2nd	70	39	24	63	90.0%
3rd	80	25	46	71	88.8%
4th	72	5	61	66	91.7%
5th	81	33	34	67	82.7%
Total	375	118	221	339	90.4%

³¹ To be considered “maintained,” a student’s scores must be equal to or greater than their grade. For example, first-grade scores were considered “maintained” if the student scored 1.0 or higher on each test; second grade scores were considered maintained if they scored 2.0 or higher on each test, etc.

c. *Writing*

To assess student skills in writing, at the end of the school year teachers judged student writing samples and assigned a score to each student. Student writing skills were assessed in six domains: purpose and focus, organization and coherence, development of content, sentence fluency, word choice, and grammar. Each domain was assigned a score of 1, minimal/basic control; 2 for adequate control; or 3 for proficient/advanced control. Scores in each domain were totaled. A score of 12 or more indicated that the student was writing at grade level. The school's goal was that students in third through fifth grades would reach a score of 12 or more, on average.

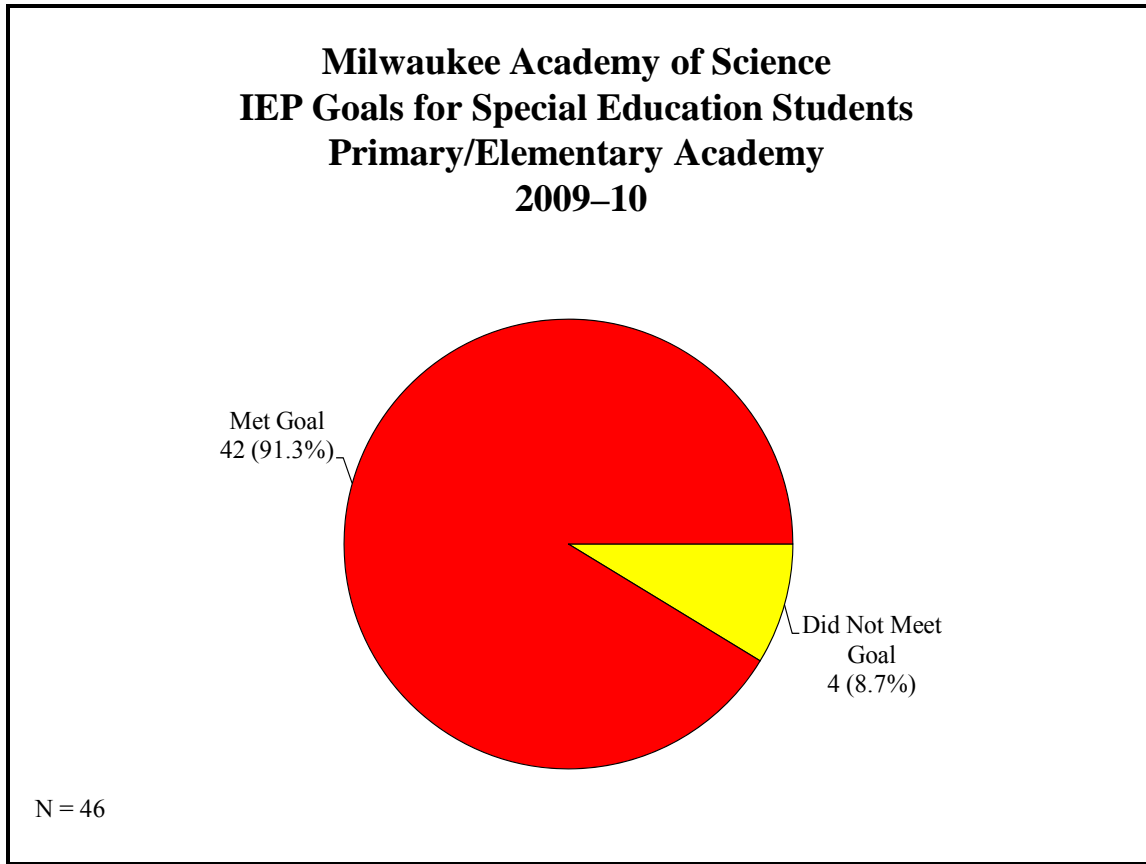
Results for students in third through fifth grades indicate that students, on average, scored 12.5, meeting the school's goal (see Table 15).

Table 15		
Milwaukee Academy of Science		
Writing Skills for 3rd Through 5th Grades Based on Teacher Assessment		
2009–10		
Grade	N	Writing Score Average
3rd	81	11.8
4th	69	13.7
5th	80	12.3
Total	230	12.5

d. *IEP Goals for Special Education Students*

This year, the primary/elementary academy's goal was that at least 80% of special education students would meet one or more goals defined on their IEP as assessed by the participants in their most recent annual IEP review. There were 70 special education students enrolled at the end of the year. IEPs for 24 students had been in effect for less than one year and were not yet due for an assessment of student progress toward meeting goals. Of the 46 students who were assessed for progress, 42 (91.3%) met at least one goal (see Figure 10). Therefore, the elementary academy has exceeded its goal.

Figure 10



5. External Standardized Measures of Educational Performance

The CSRC required the SDRT be administered to all first-, second-, and third-grade students between March 15 and April 15, 2010. Student performance is reported in phonetic analysis, vocabulary, and comprehension. These scores are summarized in an overall SDRT total. CSRC also required that the WKCE be administered to all third- through fifth-grade students in October or November, the timeframe established by the Wisconsin DPI.³² The WKCE directly aligns with Wisconsin model academic standards in reading and math. Results describe how students perform relative to these standards. Skills are assessed as minimal, basic, proficient, or advanced.

The CSRC requires that these tests be administered to students to provide an assessment of student skills and to provide a basis for student progress over consecutive school years. The DPI required all students in third through eighth and tenth grades to participate in WKCE testing to meet federal No Child Left Behind requirements.

Results for primary/elementary academy students administered the examinations are included in this section. This section reflects results for all students enrolled in the school who were administered all portions of the exams, including those enrolled for a full academic year (FAY) or longer and those students who were new to the school.

a. SDRT for First Graders

In March 2010, MAS administered the SDRT to 74 first-grade students. Results indicate that first graders were functioning, on average, at 1.4 to 1.9 grade-level equivalents (GLE) in reading, depending on the area assessed (see Figure 11 and Table 16).

³² The WKCE is also given to students in sixth, seventh, eighth, and tenth grades. Students in fourth, eighth, or tenth grade were also tested in language arts, science, and social studies.

Figure 11

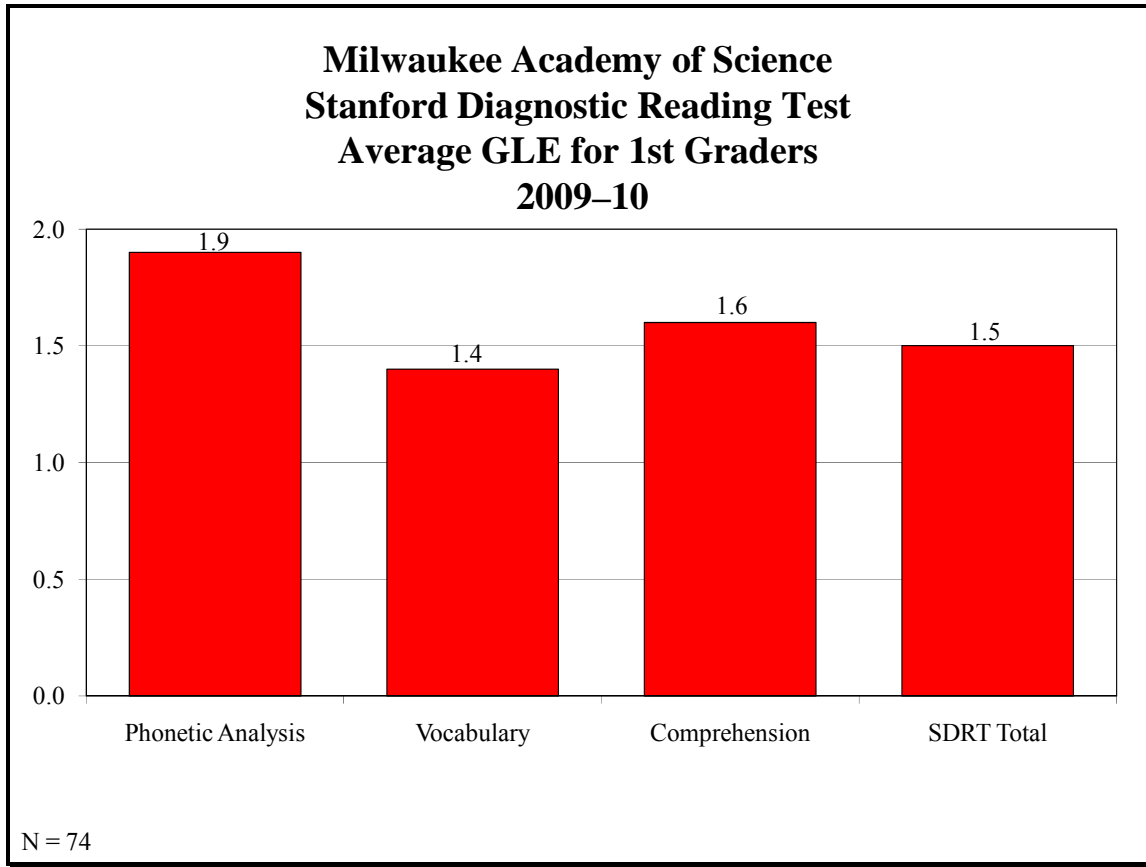


Table 16

**Milwaukee Academy of Science
Stanford Diagnostic Reading Test
GLE for 1st Graders
2009–10
(N = 74)**

Area Tested	Lowest GLE Scored	Highest GLE Scored	Median	% At or Above Grade Level
Phonetic Analysis	K.0	5.2	1.6	85.1%
Vocabulary	K.4	2.6	1.4	75.7%
Comprehension	K.2	5.3	1.6	82.4%
SDRT Total	K.4	2.7	1.5	85.1%

Note: Results are rounded to the nearest one tenth.

b. *SDRT for Second Graders*

In March 2010, the SDRT was administered to 76 second-grade students. Second graders were functioning, on average, at or above GLE depending on the areas tested. Results are presented in Figure 12 and Table 17.

Figure 12

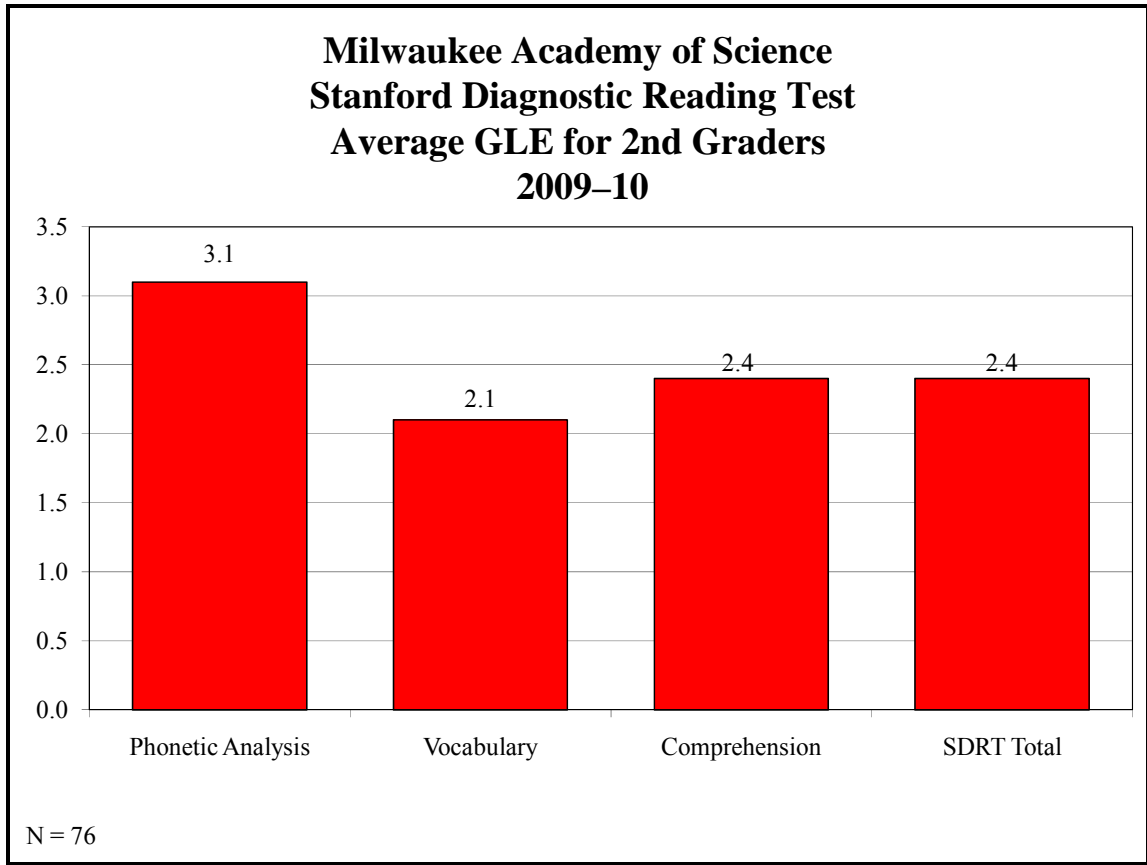


Table 17

**Milwaukee Academy of Science
Stanford Diagnostic Reading Test
GLE for 2nd Graders
2009–10
(N = 76)**

Area Tested	Lowest GLE Scored	Highest GLE Scored	Median	% At or Above Grade Level
Phonetic Analysis	K.9	10.9	2.3	72.4%
Vocabulary	K.5	5.6	2.0	50.0%
Comprehension	K.7	5.7	2.2	60.5%
SDRT Total	K.7	7.3	2.0	55.3%

Note: Results are rounded to the nearest one tenth.

c. *Standardized Tests for Third Graders*

i. *SDRT for Third Graders*

In March 2010, MAS administered the SDRT to 82 third graders. Results indicated that the third graders were, on average, reading at second- or third-grade levels, depending on the area tested (see Figure 13 and Table 18).

Figure 13

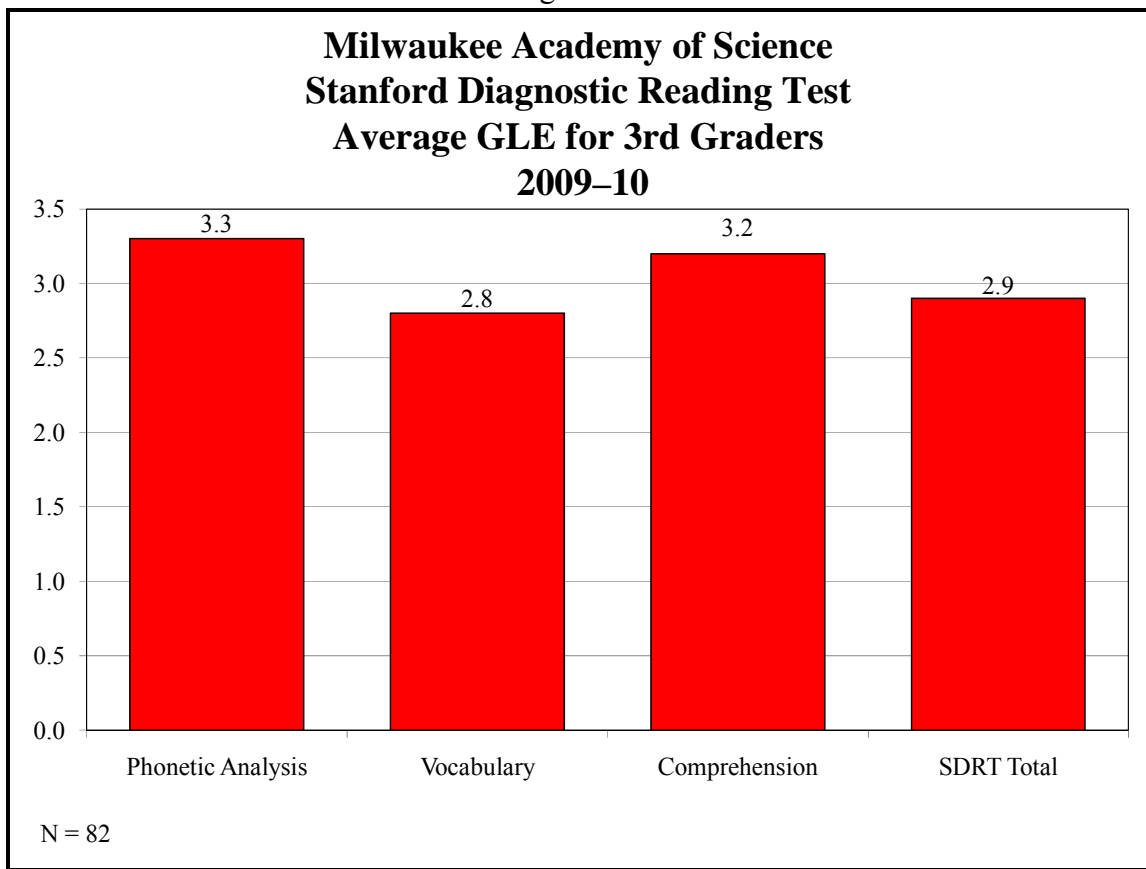


Table 18

**Milwaukee Academy of Science
Stanford Diagnostic Reading Test
GLE for 3rd Graders
2009–10
(N = 82)**

Area Tested	Lowest GLE Scored	Highest GLE Scored	Median	% At or Above Grade Level
Phonetic Analysis	K.9	10.8	2.7	36.6%
Vocabulary	K.8	7.2	2.7	42.7%
Comprehension	1.1	10.1	2.7	41.5%
SDRT Total	1.2	9.6	2.7	37.8%

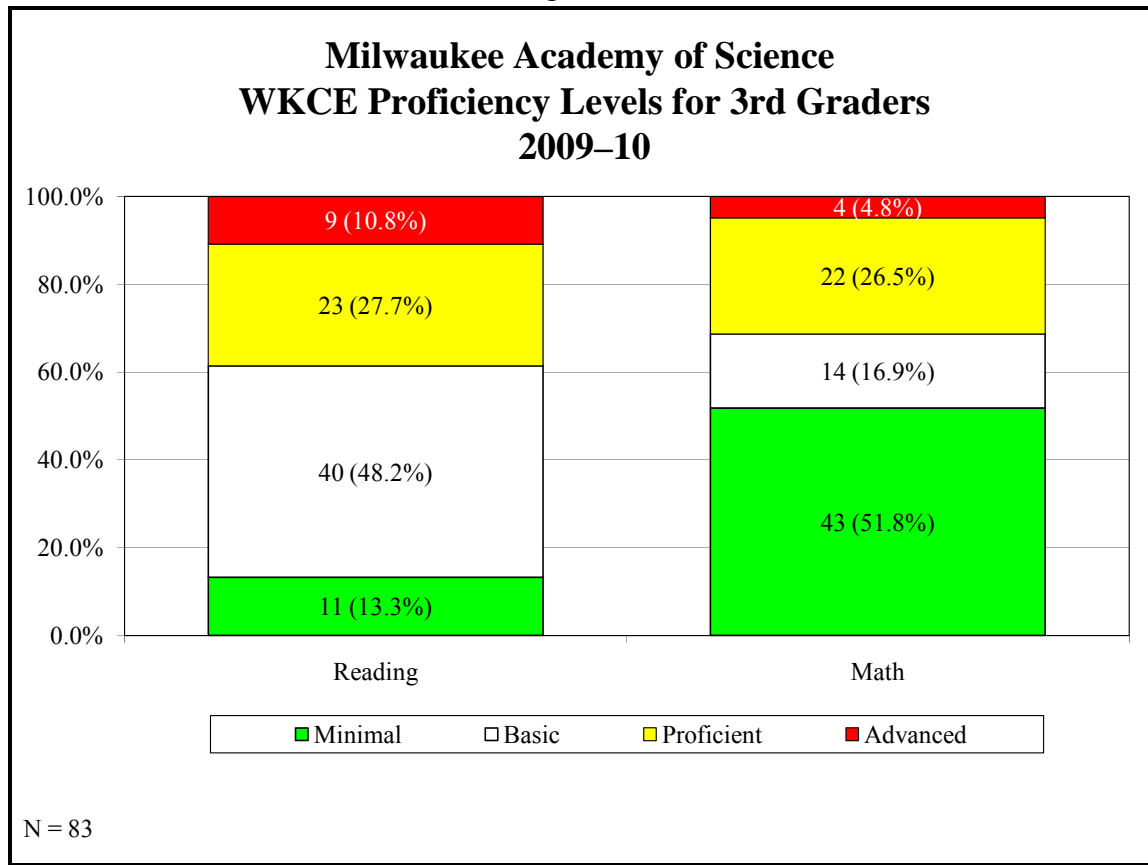
Note: Results are rounded to the nearest one tenth.

ii. *WKCE for Third Graders*

In October 2009, 83 MAS third graders were administered the WKCE. Results show that 9 (10.8%) third graders reached the advanced level, 23 (27.7%) scored at the proficient level, 40 (48.2%) scored at the basic level, and 11 (13.3%) students exhibited minimal reading skills.

In math, 4 (4.8%) students reached the advanced level, 22 (26.5%) scored at the proficient level, 14 (16.9%) scored at the basic level, and 43 (51.8%) students scored at the minimal level (see Figure 14).

Figure 14

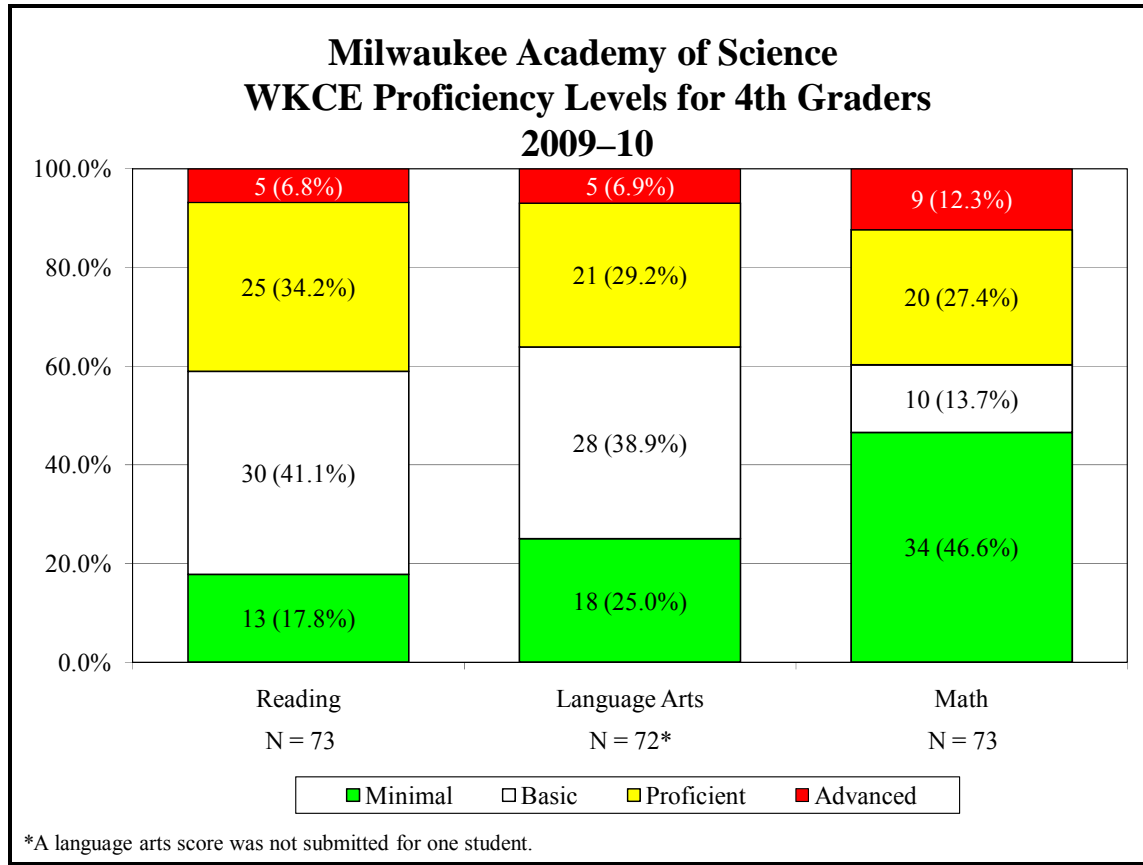


d. WKCE for Fourth Graders

In October 2009, Wisconsin fourth graders were administered the WKCE. In addition to reading and math, fourth graders were tested in language arts, science, and social studies. CSRC requires that results in reading, language arts, and math be reported.

Proficiency indicators from the WKCE reading, language arts, and math subtests are illustrated in Figure 15. Five (6.8%) fourth graders had advanced reading proficiency, 25 (34.2%) were proficient readers, 30 (41.1%) had a basic level of understanding, and 13 students (17.8%) had minimal reading proficiency. In language arts, 5 (6.9%) students scored in the advanced category, 21 (29.2%) were proficient, 28 (38.9%) had basic skills, and 18 (25.0%) students had minimal skills. Nine (12.3%) students exhibited advanced math skills, 20 (27.4%) scored in the proficient category, 10 (13.7%) had basic skills, and 34 (46.6%) students had minimal skills in mathematics.

Figure 15



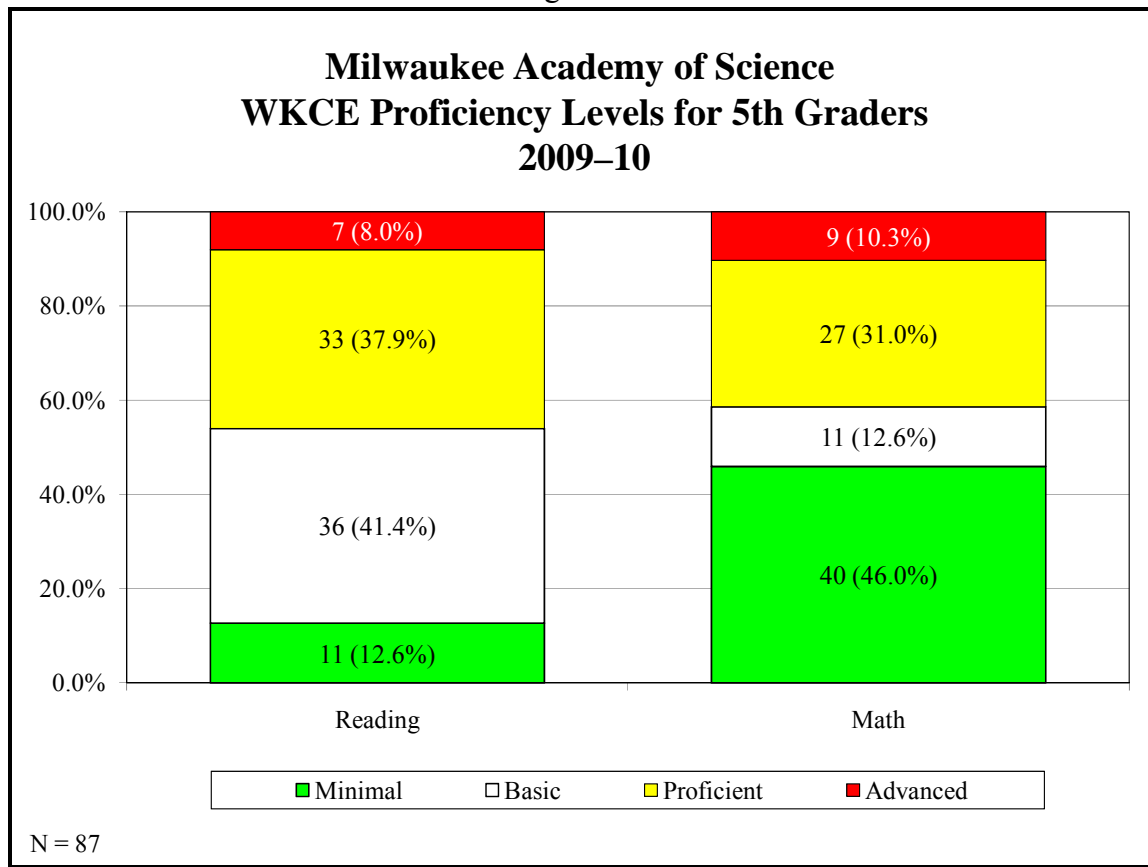
The final score from the WKCE is a writing score. Each student's extended writing sample is scored using two holistic rubrics. A six-point composing rubric evaluates students' ability to control purpose/focus, organization/coherence, development of content, sentence fluency, and word choice. A three-point conventions rubric evaluates students' ability to use punctuation, grammar, capitalization, and spelling. Points received on these two rubrics are combined to produce a single score with a maximum possible score of nine.

The MAS fourth-grade extended writing scores ranged from two to six. The median score was four, meaning half of the students scored at or below four, and half scored four to six on a scale of zero to nine.

e. *WKCE for Fifth Graders*

The WKCE reading and math tests were administered to fifth graders in October 2009. As illustrated in Figure 16, 7 (8.0%) fifth graders scored at an advanced level, 33 (37.9%) scored proficient, 36 (41.4%) exhibited basic skills, and 11 (12.6%) students exhibited minimal skills in reading. In math, 9 (10.3%) students scored in the advanced range, 27 (31.0%) were proficient, 11 (12.6%) showed basic understanding, and 40 (46.0%) exhibited minimal skills.

Figure 16



B. Junior Academy and High School (Sixth Through Twelfth Grades)

1. Attendance

At the beginning of the 2009–10 academic year, the junior academy/high school established a goal to maintain an average attendance rate of 90.0%. A junior academy student was considered present if he/she arrived at school prior to 10:00 a.m. High school students were considered present if they attended 90% or more of the instructional hours for that day. Junior academy and high school students attended school an average of 89.1% of the time.³³ When excused absences were included, the attendance rate rose to 94.6%, meeting the school's goal.

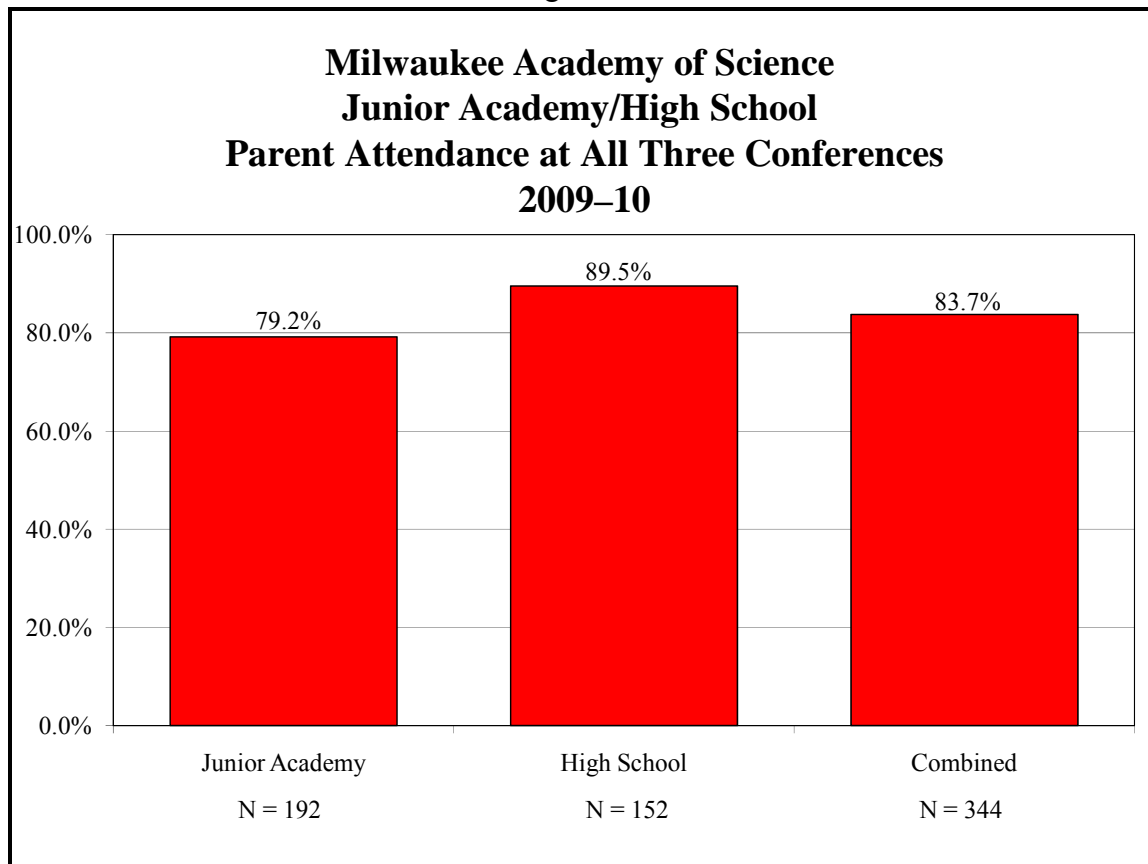
Note that 253 students were suspended at least once during the year. These students spent an average of 9.4 days out of school due to suspension.

³³ Attendance data were provided for 395 students enrolled at any point during the school year. Attendance was calculated for each student by dividing the number of days attended by the number of days expected, then averaging all of the students' attendance rates.

2. Parent-teacher Conferences

At the beginning of the school year, the school set a goal that 80% of parents of junior academy/high school students would attend each of three scheduled parent-teacher conferences. Conferences were scheduled for October 2009, January 2010, and April 2010. There were 344 students enrolled for all three conferences (i.e., the entire year). Parents of 79.2% of junior academy and 89.5% of high school students attended all three conferences (attendance could occur in-person at the school, at the parents' home, or via telephone). Overall, parents of 83.7% of students attended the three conferences, which meets the school's goal (see Figure 17).

Figure 17



3. Special Education Student Records

The school established a goal to maintain up-to-date records for all special education needs students. There were 37 special education students enrolled in junior academy or high school at the end of the school year. An IEP had been completed or reviewed for all of these students. In addition, CRC conducted a random review of special education files that indicated that IEPs were routinely completed and that parents were invited to develop and/or were involved in developing the IEP. The school has therefore met its goal to maintain records on all students with special needs.

4. High School Graduation Plan

A high school graduation plan is to be developed for each high school student by the end of his/her first semester of enrollment at the school. The plans are to include: 1) evidence of parent/guardian/family involvement; 2) information regarding the student's post-secondary plans; and 3) a schedule reflecting plans for completing four credits in English and mathematics; three credits in science and social studies; and two credits each in engineering, foreign language, physical education/health, and other electives.³⁴

This year, plans were completed for all 153 high school students enrolled at the end of the year.³⁵ Of these, 79.7% included the students' post-secondary plans,³⁶ 98.7% were submitted to parents for their review, and 100.0% included a schedule reflecting credits needed to graduate. Counselors were required to review each student's plan at least once during the year. Part of the review was to ensure that students were on track to graduate and to determine if a student should

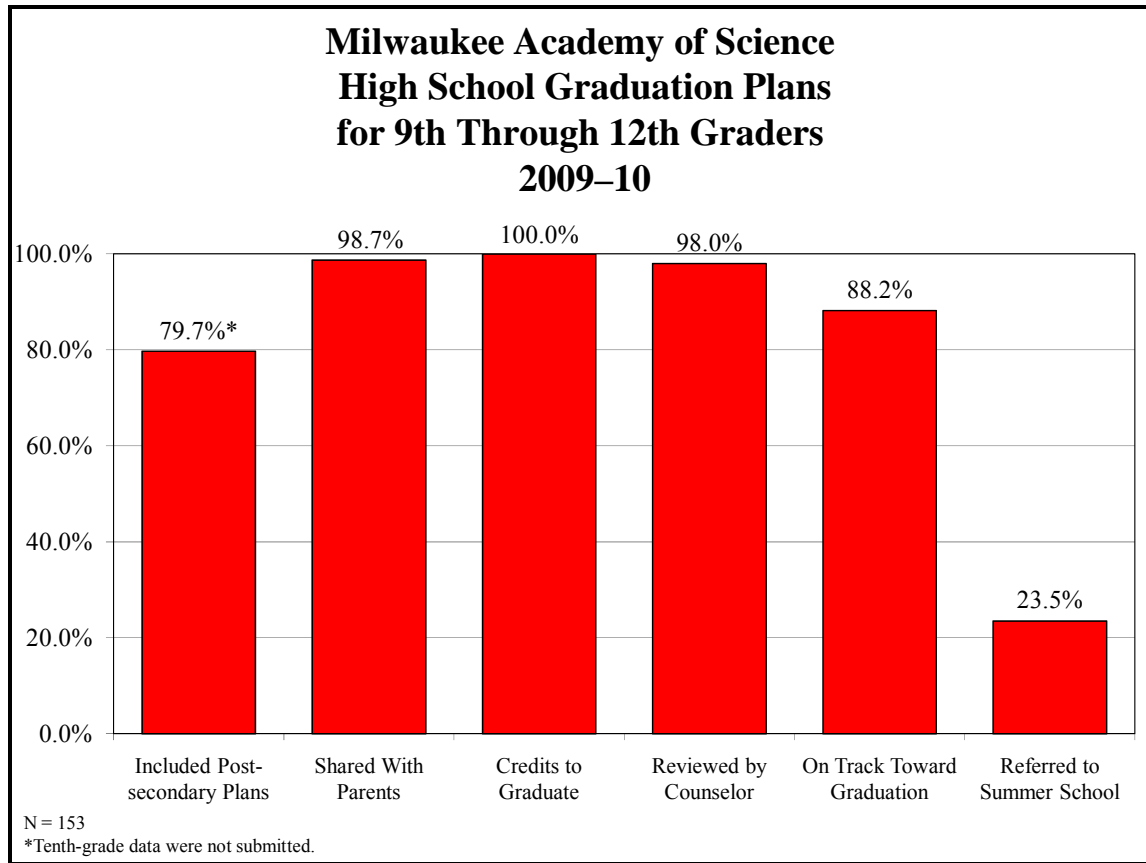
³⁴ Evidence of involvement reflects whether or not the school provided the student's parent with a copy of the plan. Parents are also encouraged to review the plan as part of scheduled parent-teacher conferences.

³⁵ Graduation plan data were not submitted for students who withdrew during the year.

³⁶ These data were not submitted for tenth graders.

be referred for summer school. This year, 88.2% of students were on track to graduate and 23.5% were referred to summer school (Figure 18).

Figure 18



5. High School Graduation Requirements

As part of high school graduation requirements, the school set a goal that all ninth graders who earned at least 5.5 credits would be promoted to tenth grade; all tenth graders who accumulated at least 11 credits would be promoted to eleventh grade; all eleventh graders who accumulated at least 16 credits would be promoted to twelfth grade; and all twelfth graders who had earned 22 or more credits would graduate. This measure applies to high school students only (not to junior academy students).

Credit and promotion information was provided for high school students who finished the school year at MAS. Of 153 students, 138 (90.2%) earned at least the minimum number of credits to be promoted to the next grade or, in the case of twelfth graders, to graduate from high school. Fifty-two (82.5%) of 63 ninth graders were promoted; 27 (90.0%) of 30 tenth graders were promoted; 36 (97.3%) of 37 eleventh graders were promoted; and all 23 twelfth graders graduated. Ninth graders earned, on average, 6.3 credits; tenth graders accumulated, on average, 13.1 credits; eleventh graders earned, on average, 19.7 credits; and twelfth graders earned an average of 25.2 credits. See Table 19.

Table 19					
Milwaukee Academy of Science High School Graduation Requirements 2009–10					
Grade	N	Minimum Number of Credits Required	Average Credits Earned/Accumulated	Promoted/Graduated	
				N	%
9th	63	5.5	6.3	52	82.5%
10th	30	11.0	13.1	27	90.0%
11th	37	16.0	19.7	36	97.3%
12th	23	22.0	25.2	23	100.0%
Total	153	--	--	138	90.2%

6. Local Measures of Educational Performance

At the beginning of the school year, MAS designated four different areas in which junior academy and high school students' competencies would be locally measured: literacy, mathematics, writing, and IEP goals.

a. *Literacy*

The school set a goal that all students be administered the SRI in the fall and again in the spring. The goal for junior academy students was to show improvement in scores, called measures,³⁷ of at least 50 points. High school students were to increase measures by 25 points. These Lexile measure increases would indicate that students had made one year of progress in attaining skills. Lexile measures can range from 0 (beginning reader) to 1700³⁸ and are used to help students find books that align with reading skills. Lexile levels cannot be converted into grade level units. Based on SRI scores from the spring 2010 test administration, students scored, on average, the measures indicated in Table 20. (Note that Lexile measures are typically denoted with an “L.”³⁹)

Table 20					
Milwaukee Academy of Science Junior Academy and High School Scholastic Reading Inventory Lexile Measures at the End of the Year Spring 2010					
Grade	N	Minimum	Maximum	Average	Typical Reader Measures
6th	68	0L	1,317L	673.2L	665L to 1000L
7th	60	111L	1,237L	751.4L	735L to 1065L
8th	69	52L	1,285L	860.8L	805L to 1100L
9th	65	206L	1,356L	906.6L	855L to 1165L
10th	30	665L	1,266L	976.1L	905L to 1195L
11th	37	684L	1,367L	1,021.7L	940L to 1210L
12th	22	642L	1,463L	1,061.6L	940L to 1210L

³⁷ www2.scholastic.com/browse/article.jsp?id=1556

³⁸ www.lexile.com/about-lexile/lexile-overview; www.lexile.com/m/uploads/downloadablepdfs/WhatDoestheLexileMeasureMean.pdf indicates that the largest maximum possible measure is 2000.

³⁹ www.lexile.com/about-lexile/grade-equivalent/grade-equivalent-chart/

As illustrated in Table 21, 56.6% of 196 junior academy and 51.3% of 154 high school students with comparable SRI measures were able to show improvement (as measured by a 50-point increase for junior academy and a 25-point increase for high school students) in reading skills based on SRI fall and spring test measures. Overall, junior academy students improved, on average, 74.9 points and high school students improved 27.0 points, on average. The school has therefore met its internal goal.

Grade	N	Number Improved*	Percentage Improved	Average Increase in Score
6th	68	42	61.8%	114.2
7th	60	33	55.0%	73.3
8th	68	36	52.9%	37.0
Junior Academy Subtotal	196	111	56.6%	74.9
9th	65	31	47.7%	19.4
10th	30	17	56.7%	42.2
11th	37	19	51.4%	32.6
12th	22	12	54.5%	19.1
High School Subtotal	154	79	51.3%	27.0

*Improved by 50 or more points for junior academy; 25 or more points for high school.

b. Mathematics

To assess junior academy student progress in mathematics, the school set a goal that junior academy students would exhibit progress from the spring of 2009 to the spring of 2010 assessment of their math skills, based on the WRAT.⁴⁰ The goal was that, on average, students would show at least one month gain for every month of instruction. To assess progress for high

⁴⁰ Note that new students are given the WRAT within 30 days of enrollment to test math competency level.

school students, the school set a goal that at least 80% of students in each math class would attain a score of 70% or more on the course examination at the end of the school year. Math scores for junior academy students were provided as GL. High school student scores were percentage correct. Results for junior academy students from the test administered at the end of the school year indicate that students exhibited math skills, on average, at the following GL (see Table 22).

Table 22		
Milwaukee Academy of Science Junior Academy WRAT Math Average GL Scores at the End of the Year Spring 2010		
Grade	N	Average GL
6th	67	7.2
7th	60	7.7
8th	69	8.3
Total	196	--

High school results from exams at the end of the year indicate that, on average, students scored 82.7% correct (see Table 23).

Table 23				
Milwaukee Academy of Science High School Final Math Exam Percentage Correct at the End of the Year Spring 2010				
Grade	N	Minimum %	Maximum %	Average %
9th	63	37.0%	100.0%	87.1%
10th	30	53.0%	97.0%	79.6%
11th	36	40.0%	100.0%	78.0%
12th	22	70.0%	100.0%	82.0%
Total	151	--	--	82.7%

As illustrated in Table 24, 86.2% of 195 junior academy students with comparable scores showed progress from the spring of 2009 to the spring of 2010 mathematics test.⁴¹ On average, students showed 2.0 GL increase in scores, exceeding the school's goal.

Table 24				
Milwaukee Academy of Science Junior Academy Math Progress Measured by WRAT GL Scores 2009–10				
Grade	N	Improved		Average GE Improvement
		N	%	
6th	67	65	97.0%	2.7
7th	60	48	80.0%	1.9
8th	68	55	80.9%	1.4
Total	195	168	86.2%	2.0

As illustrated in Table 25, 92.7% of high school students scored 70% or higher on their end-of-the-year mathematics examinations, exceeding the school's goal.

Table 25			
Milwaukee Academy of Science High School End-of-the-Year Math Course Examination (A Measure of Progress) Spring 2010			
Grade	N	N Met Goal	% Met Goal
9th	63	59	93.7%
10th	30	27	90.0%
11th	36	32	88.9%
12th	22	22	100.0%
Total	151	140	92.7%

⁴¹ Fall 2009 test scores were used for new students.

c. *Writing*

To assess junior academy and high school students' skills in writing, at the end of the school year teachers judged student writing samples and assigned a score to each student. Student writing skills were assessed in six domains: purpose and focus, organization and coherence, development of content, sentence fluency, word choice, and grammar. Each domain was assigned a score from zero to six. Scores in each domain were totaled. A score of 18 or more for junior academy students and a score of 21 or more for high school students indicated that the student was writing at grade level. The goal was that students in sixth through eighth grades would reach a score of 18 or more, on average, and students in grades nine through twelve would achieve 21 or more, on average.

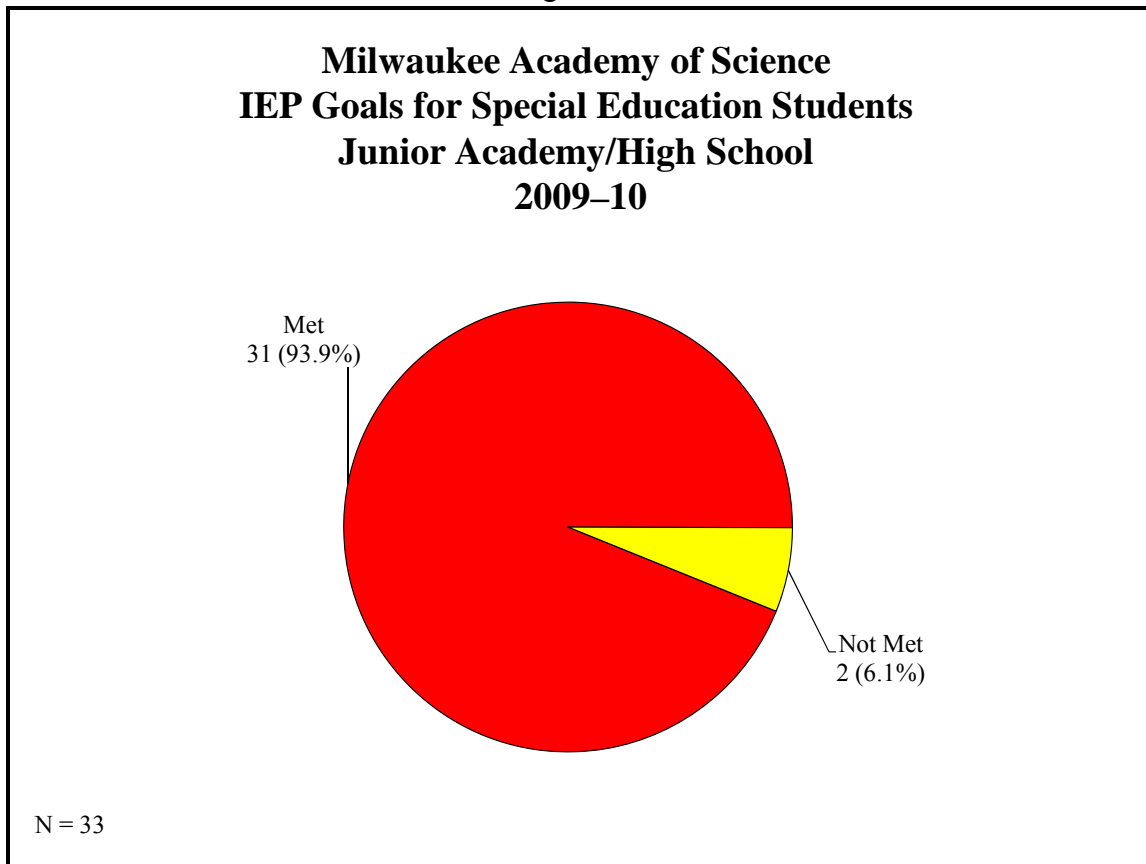
Results for students in junior academy indicated that students scored, on average, 19.2 points. Results for high school students indicate that students' average score was 22.1 points (see Table 26). The school has therefore met its goal.

Table 26 Milwaukee Academy of Science Junior Academy and High School Writing Skills Based on Teacher Assessment 2009–10		
Grade	N	Writing Score Average
6th	68	18.0
7th	60	18.9
8th	69	20.7
Junior Academy Subtotal	197	19.2
9th	64	20.8
10th	30	22.0
11th	38	22.7
12th	23	24.6
High School Subtotal	155	22.1

d. *Special Education Students*

This year, the junior academy and high school's goal was that 80% of special education students would meet one or more goals on their IEP, as assessed by the participants in their most recent annual IEP review. There were 37 special education students in sixth through twelfth grades at the end of the year. IEPs for four students had been in effect for less than one year; therefore, progress toward meeting goals was not required. Of the remaining 33 students, 31 (93.9%) were able to meet one or more of the goals in their IEP (Figure 19). The junior academy/high school has therefore met its goal related to student progress on IEP goals.

Figure 19



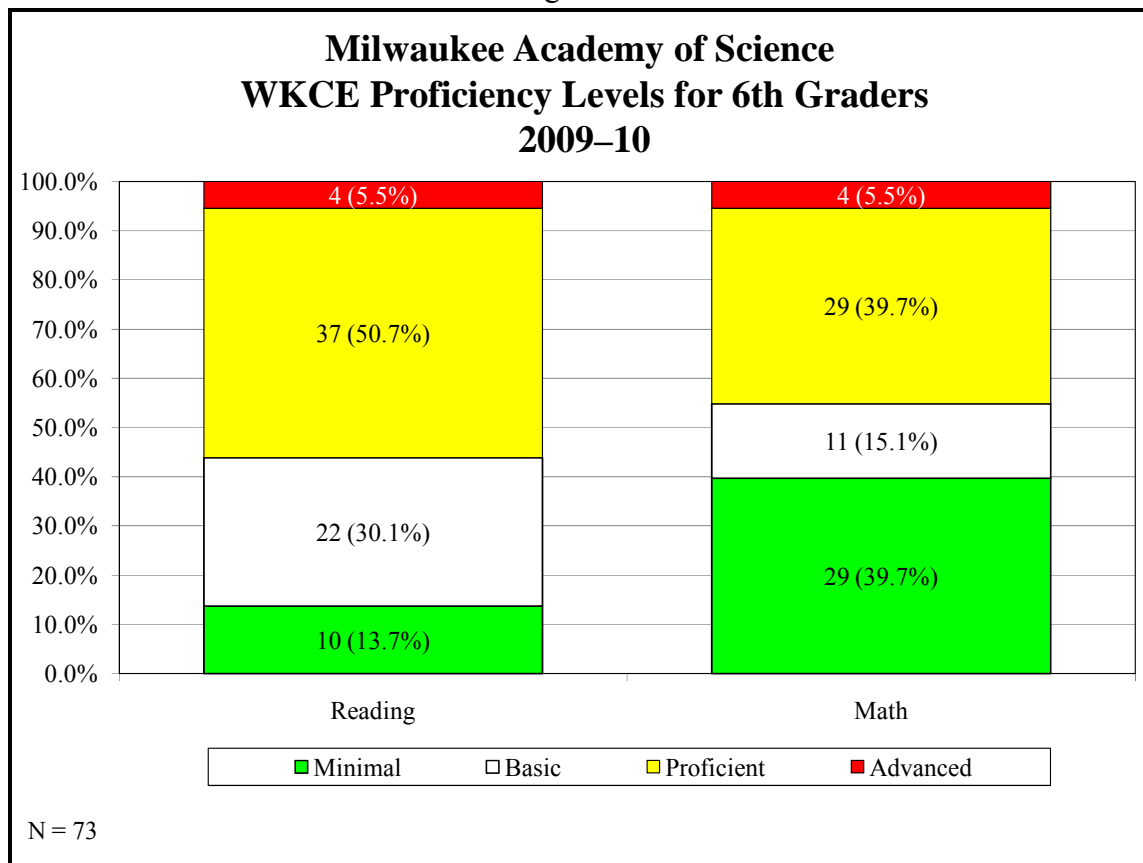
7. External Standardized Measures of Educational Performance

The CSRC required that the WKCE be administered to all sixth- through eighth- and tenth-grade students.⁴² Results for all junior academy and high school students administered all subtests, regardless of FAY status, are reflected in this section.

a. *WKCE for Sixth Graders*

Sixth graders were administered the WKCE in October 2009. As illustrated, 4 (5.5%) sixth graders showed advanced reading skills and 37 (50.7%) scored as proficient in reading. In math, 4 (5.5%) students exhibited advanced skills and 29 (39.7%) scored in the proficient range (see Figure 20).

Figure 20

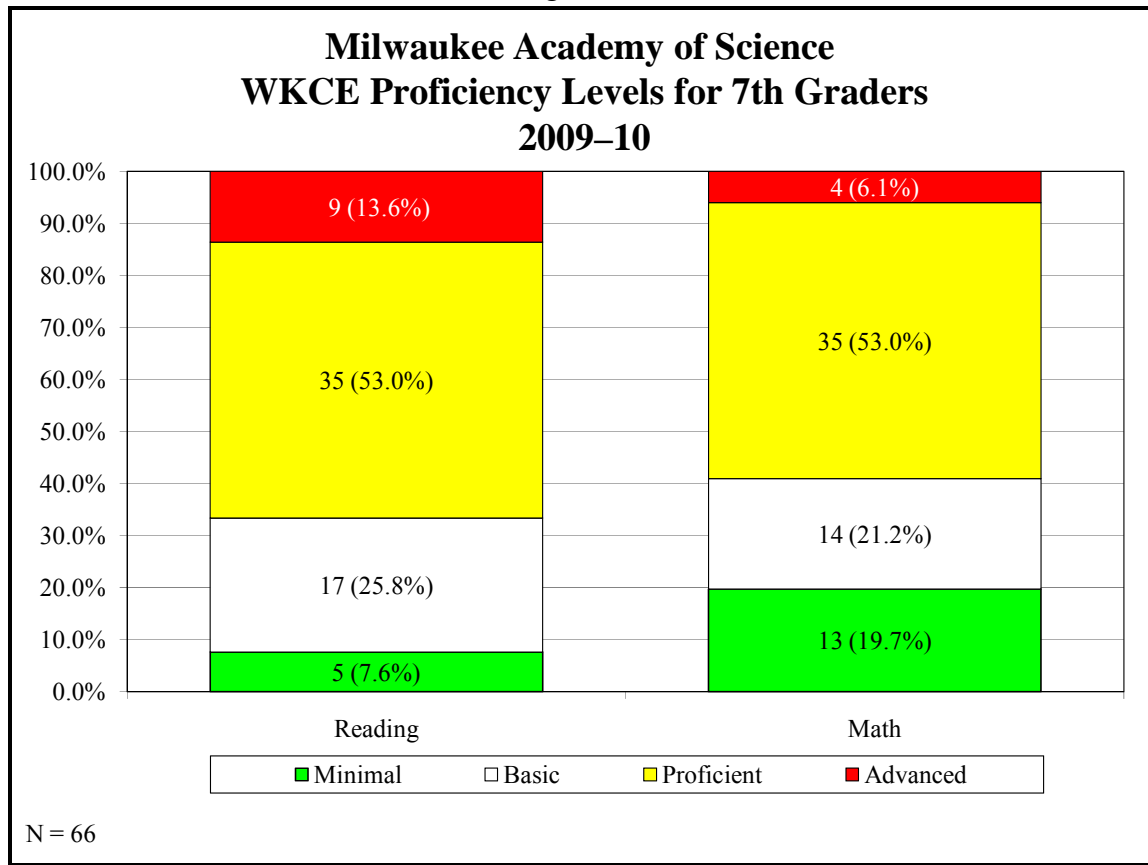


⁴² The WKCE is also given to students in third, fourth, and fifth grades to test reading and math skills. Students in fourth, eighth, or tenth grade were also tested in language arts, science, and social studies.

b. *WKCE for Seventh Graders*

Proficiency levels from the WKCE administered in October 2009 for seventh graders are illustrated in Figure 21. In reading, 9 (13.6%) students scored at the advanced level and 35 (53.0%) scored as proficient, while 17 (25.8%) students scored at a basic level and 5 (7.6%) scored at a minimal level of proficiency. In math, 4 (6.1%) seventh graders were advanced, 35 (53.0%) were proficient, 14 (21.2%) were at a basic skill level, and 13 (19.7%) scored at a minimal skill level.

Figure 21

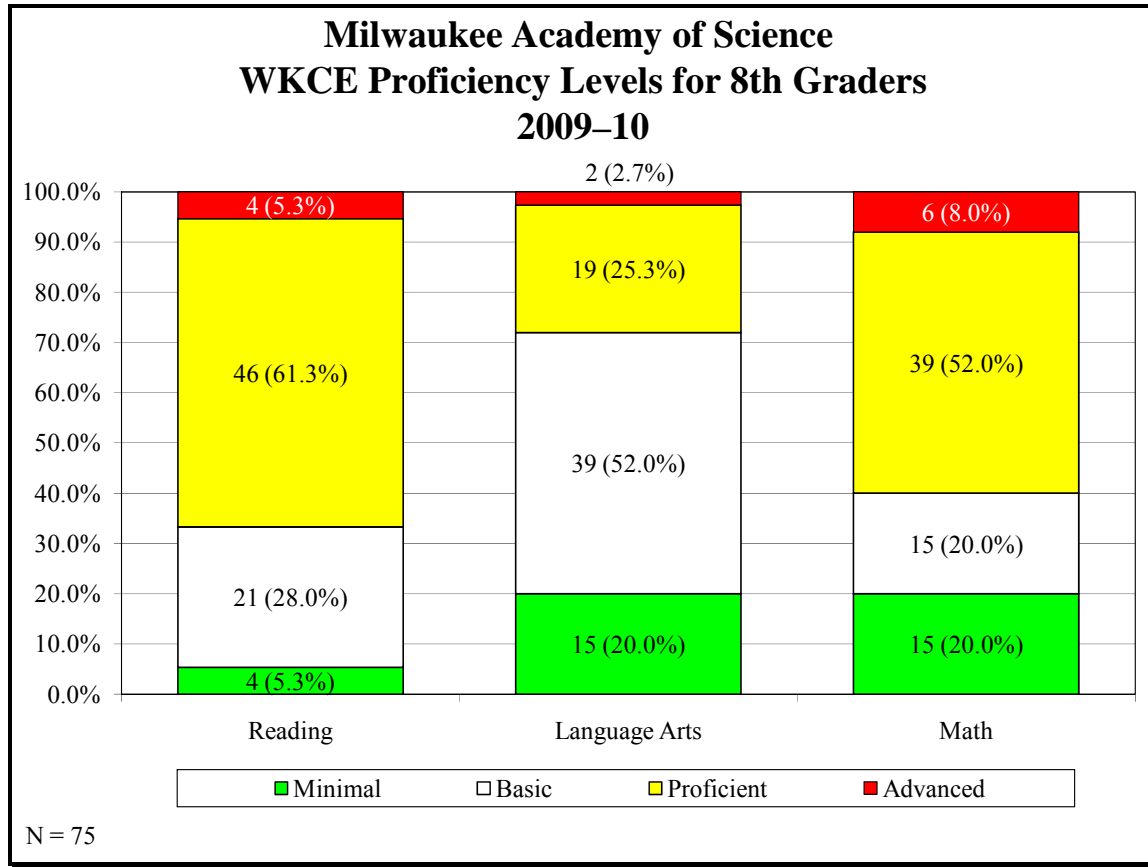


c. *WKCE for Eighth Graders*

In October 2009, the WKCE was administered to eighth-grade students. Like the fourth graders, students were tested in reading, language arts, mathematics, science, and social studies. The CSRC requires that results be reported for reading, language arts, and math.

Proficiency indicators for eighth graders are illustrated in Figure 22. For example, 4 (5.3%) eighth graders scored in the advanced reading proficiency range, 46 (61.3%) scored in the proficient range, 21 (28.0%) had a basic understanding, and 4 (5.3%) scored in the minimal range. In terms of language arts ability, 2 (2.7%) students demonstrated advanced skills, 19 (25.3%) scored in the proficient range, 39 (52.0%) had a basic understanding, and 15 (20.0%) students demonstrated minimal skills. In mathematics, 6 (8.0%) students scored in the advanced range, 39 (52.0%) were proficient, 15 (20.0%) had a basic understanding, and 15 (20.0%) students demonstrated minimal skills.

Figure 22



The final score from the WKCE is a writing score. The extended writing sample is scored using two holistic rubrics that are similar to those used on the fourth-grade test. Points received on the two rubrics are combined to produce a single score on the report, with a maximum possible score of 9.⁴³ The MAS eighth-grade writing scores ranged from two to six. The median score was five, meaning half of students scored two to five and half scored five to six on a scale of zero to nine.

d. Standardized Tests for Ninth and Tenth Graders

The EXPLORE is the first in a series of two pre-ACT tests developed by ACT and is typically administered to students in eighth or ninth grade. The EXPLORE includes sections for

⁴³ See www.dpi.state.wi.us/oea/kc_writg.html for details.

English, math, reading, and science. EXPLORE scores provide information about students' knowledge, skills, interests, and plans. Students can use this information as they plan their high school coursework and begin thinking about college and careers. In addition to providing a score for each section, the EXPLORE provides a composite score for each student that reflects all the areas tested. Students can score between 1 and 25 on each section of the test; the composite score, which also ranges from 1 to 25, is an average of the scores from all four of the subtests.⁴⁴

The PLAN, the second in the series of pre-ACT tests, is generally taken in tenth grade as a follow-up to the EXPLORE. Like the EXPLORE, the PLAN includes sections for English, math, reading, and science. Results of the PLAN can be used as a guidance tool for students planning to attend college or join the workforce following graduation. It has also been shown to be a predictor of student success on the ACT. Students can score between 1 and 32 on each section of the test; the composite score, which also ranges from 1 to 32, is an average of the scores from all four of the subtests.⁴⁵

In addition to providing information about students' skill levels in reading, math, English, and science, scores from the EXPLORE, PLAN, and ACT from consecutive years can be used to gauge student progress toward college readiness. ACT conducted a study to determine the relationship between scores on the EXPLORE, PLAN, and ACT with success in college courses. Based on that research, ACT set minimum scores on the English, math, reading, and science subtests for the EXPLORE, PLAN, and ACT that serve as benchmarks for success in college-level English composition, algebra, social sciences, and biology. Students who reach the benchmark or higher on the EXPLORE as ninth graders, the PLAN as tenth graders, and the ACT as eleventh or twelfth graders have a 50% chance of receiving at least a B in those college

⁴⁴ Information found at <http://actstudent.org/explore/index.html>, July 2008.

⁴⁵ Information found at <http://www.act.org/plan>, July 2008.

courses. Table 27 shows ACT’s benchmark scores for each subtest on the EXPLORE and PLAN.⁴⁶

Table 27			
Milwaukee Academy of Science			
ACT College Readiness Benchmarks for the EXPLORE and PLAN			
2009–10			
Subtest	EXPLORE Benchmark (9th Grade)	PLAN Benchmark (10th Grade)	ACT Benchmark (11th Grade)
English	14	15	18
Math	18	19	22
Reading	16	17	21
Science	20	21	24

The following describes results for ninth and tenth graders relative to these benchmarks. It also describes the school’s progress toward meeting goals related to providing additional intervention to students based on their composite scores.

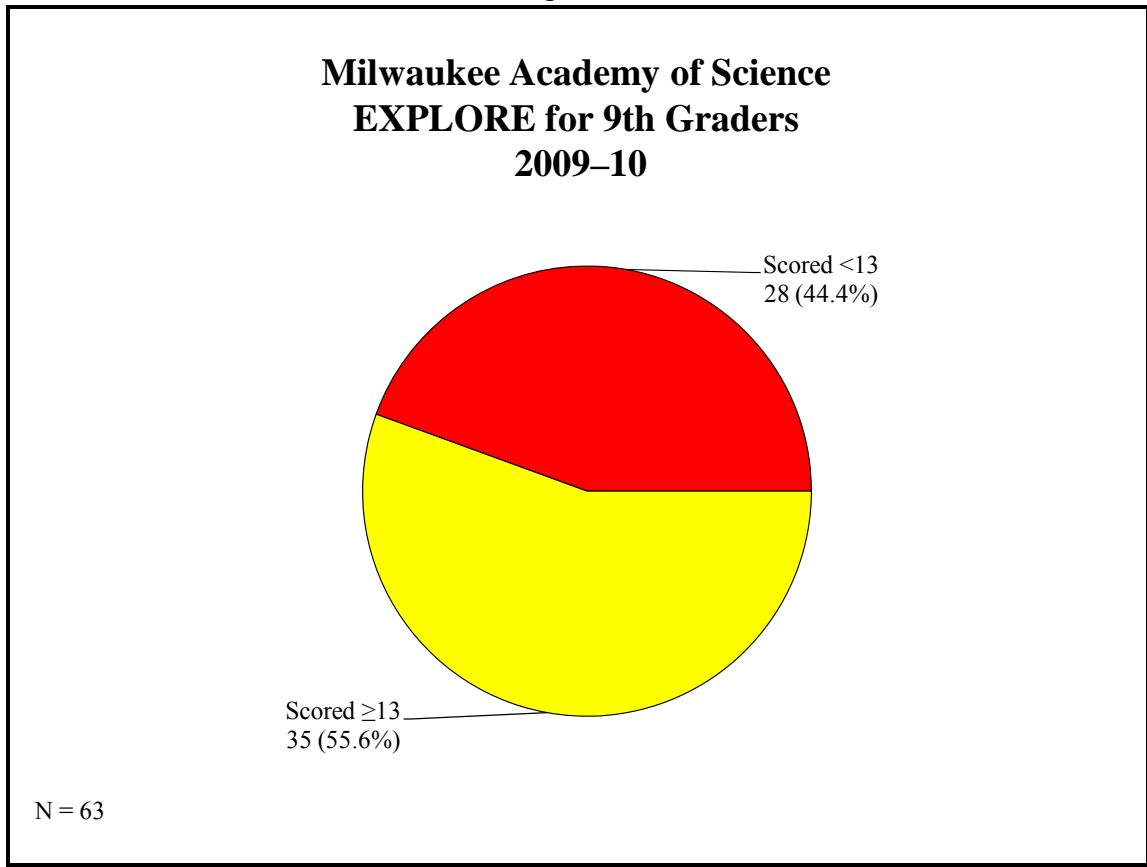
i. EXPLORE for Ninth Graders

All ninth graders were required to take the EXPLORE during October/November 2009, the same timeframe the DPI established for the standardized WKCE. During December, teachers of students who scored below 13 reviewed the results of the EXPLORE with the achievement director and embedded additional instructional activities into the applicable core content areas. Examples of embedded activities included do-nows, exit cards, review sheets, math tutoring, reading comprehension practice, and periodic basic skill reviews. In some cases, students were referred to the school’s Committee of Concern for further support and intervention.

⁴⁶ For more information, see the ACT EXPLORE Technical Manual online at <http://www.act.org/explore/pdf/TechManual.pdf>.

This year, there were 63 students who took the EXPLORE in the fall and remained in school through the end of the second semester. Twenty-eight (44.4%) of these students scored below 13 (see Figure 23).

Figure 23



The following illustrates student performance relative to the ACT readiness benchmarks on each subtest, as well as the composite score for all students who took the test (including those who withdrew during the year). As shown, 14 (20.0%) students who completed the test scored 14 or more on the English test, 4 (5.7%) scored 18 or higher on the math test, 12 (17.1%) scored 16 or better on the reading test, and 2 (2.9%) students were at or above the benchmark for science (see Table 28).

Table 28				
Milwaukee Academy of Science EXPLORE for 9th Graders Minimum, Maximum, and Average Scores Fall 2009 (N = 70)				
Test Section	Minimum Score	Maximum Score	Average Score	Students At or Above Benchmark
English	8.0	21.0	11.8	14 (20.0%)
Math	4.0	18.0	12.4	4 (5.7%)
Reading	8.0	21.0	12.6	12 (17.1%)
Science	11.0	20.0	15.4	2 (2.9%)
Composite	9.0	20.0	13.4	--*

*Note: There is not a college readiness benchmark for the composite score.

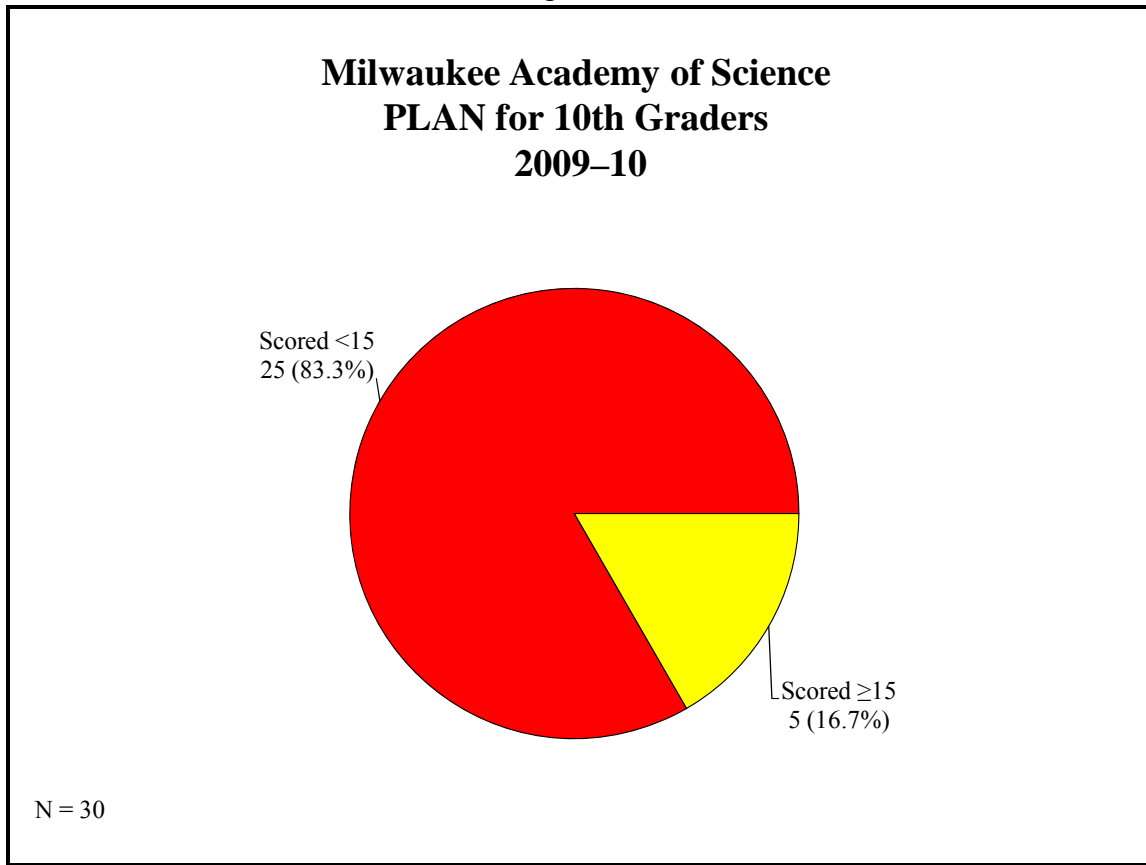
ii. PLAN for Tenth Graders

All tenth-grade students were required to take the PLAN. The PLAN was administered during the fall semester of 2009. In December, teachers of students who scored less than 15 reviewed the results of the PLAN with the achievement director and created additional appropriate instructional activities to be embedded in applicable core content areas for students who scored low. Examples of embedded activities included do-nows, exit cards, review sheets, math tutoring, periodic basic skill reviews, reading comprehension practice, and, in some instances, a referral to the school's Committee of Concern.

In February 2010, the achievement director met with tenth-grade students to review results. In addition, parents of tenth graders were invited to review and interpret PLAN scores and were provided with suggestions for how students can prepare for the ACT.

This year, there were 30 tenth graders who took the test in the fall and remained enrolled in the school through the second semester. Results indicate that 25 (83.3%) of these students scored below 15 (see Figure 24).

Figure 24



Student performance relative to ACT benchmarks in each subtest indicated that eight (23.5%) of the tenth-grade students who completed the test in the fall of 2009 scored 15 or higher on the English test, one (2.9%) student scored 19 or better on the math test, two (5.9%) students scored at least 17 on the reading test, and none of the students received a score of 21 or higher on the science test. Note: This includes all students who completed the test. See Table 29.

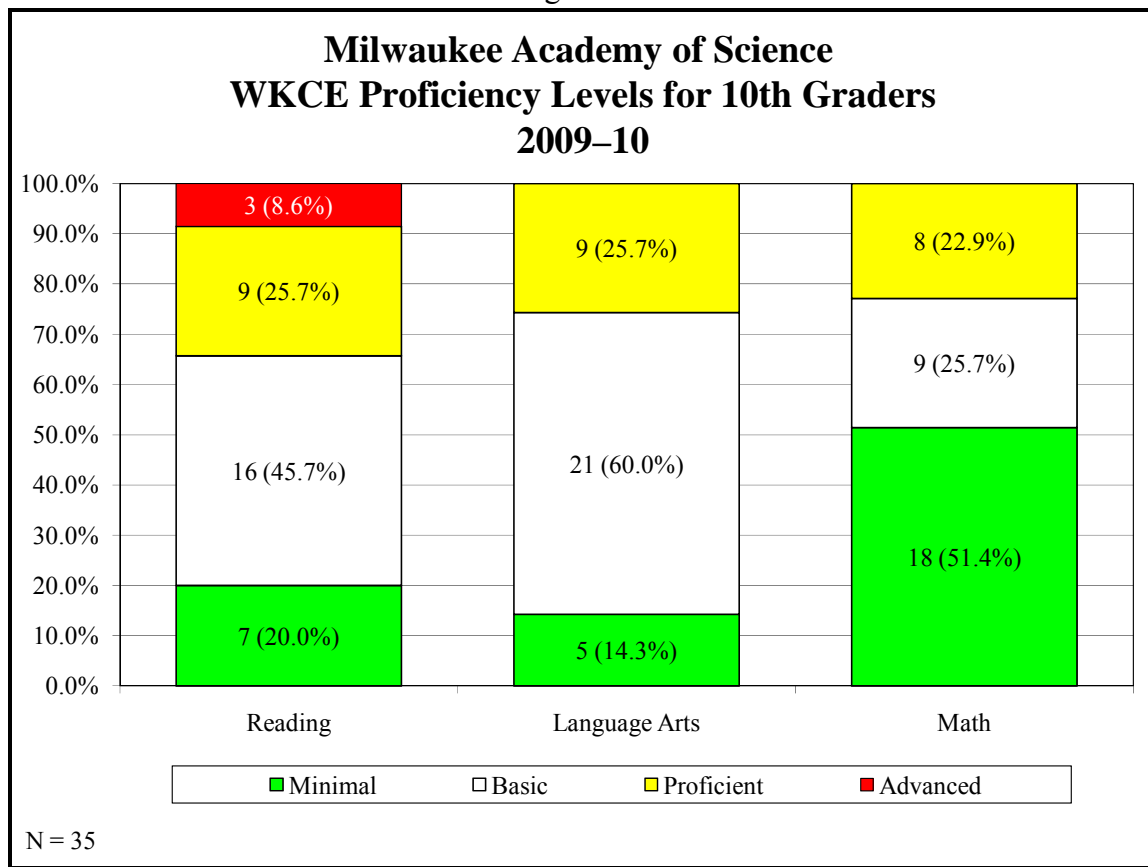
Table 29 Milwaukee Academy of Science PLAN for 10th Graders Minimum, Maximum, and Average Scores Fall 2009 (N = 34)				
Test Section	Minimum	Maximum	Average	Students at or Above Benchmark
English	7.0	19.0	12.6	8 (23.5%)
Math	7.0	20.0	13.5	1 (2.9%)
Reading	8.0	18.0	13.1	2 (5.9%)
Science	9.0	19.0	15.3	0 (0.0%)
Composite	11.0	19.0	13.7	--*

*Note: There is no college readiness benchmark for the composite score.

iii. *WKCE for Tenth Graders*

In October 2009, 35 tenth graders were given the WKCE. Nine (25.7%) students scored proficient and three (8.6%) scored advanced in reading; nine (25.7%) scored proficient and none scored advanced in language arts; and eight (22.9%) students scored proficient and none scored advanced in math. Results are illustrated in Figure 25.

Figure 25



e. *ACT or SAT for Eleventh or Twelfth Graders*

The final CSRC expectation was that all eleventh and twelfth graders will have taken the ACT or SAT. Eleventh graders were to have taken the test by the end of the school year. Twelfth graders who had not taken the test as eleventh graders were to have taken the test in the fall of 2009.

This year, there were 37 eleventh and 23 twelfth graders who were enrolled at the end of the year and therefore should have taken the test. Forty-two (70.0%) of these 60 students took the ACT and one took the SAT. This falls short of CSRC expectations that all eleventh and twelfth graders take the ACT or SAT.

Composite ACT scores for eleventh graders ranged from 10.0 to 23.0, with an average of 15.4. ACT scores for twelfth graders ranged from 11.0 to 28.0, with an average of 15.6. To protect student identity, SAT scores⁴⁷ could not be included in this report. Overall, eleventh and twelfth graders scored, on average, 15.5 points on the ACT composite. See Table 30.

Table 30			
Milwaukee Academy of Science			
Composite ACT Scores for 11th and 12th Graders			
2009–10			
Grade	Minimum	Maximum	Average
11th (N = 23)	10.0	23.0	15.4
12th (N = 19)	11.0	28.0	15.6
Total	--	--	15.5

C. Multiple-year Student Progress

Year-to-year progress is measured by comparing scores on standardized tests from one year to the next. First- through third-grade skills are assessed based on the SDRT. Year-to-year progress expectations apply to all students with scores in consecutive years. Fourth- through

⁴⁷ CSRC requires cohorts of 10 or more students for inclusion in this report.

eighth-grade reading and math skills are tested on the WKCE. Year-to-year progress expectations apply to students who have been enrolled at the school for a full academic year. Progress toward college readiness from ninth to tenth grade is assessed using benchmarks from the EXPLORE and PLAN tests. The CSRC requires that multiple-year progress be reported for students who met proficiency level expectation (i.e., scored at proficient or advanced levels), and for those students who did not meet proficiency level expectations (i.e., tested at minimal or basic levels) in the 2008–09 school year.

The CSRC expectation is that at least 75.0% of the students who were at the proficient or advanced levels on their previous year’s WKCE reading and math subtests, and who met the full academic year definition,⁴⁸ would maintain their status of proficient or above. The CSRC expectation for those students who scored below expectations, i.e., at the minimal or basic levels on their previous year’s WKCE reading or math tests, was that students would either advance to the next proficiency level or advance to the next highest quartile within their previous year’s proficiency level. Minimal expectations on the SDRT are that students advance, on average, at least 1.0 GLE. Students below grade level are expected to advance, on average, more than 1.0 GLE.

1. SDRT Results for First Through Third Graders

a. *Consecutive Years*

The standardized test used by the CSRC to track reading progress from first through third grade is the SDRT. GLE scores from this test do not translate into proficiency levels; therefore, results are described in GLE. Progress for all students who took tests in the last two consecutive years was examined.

⁴⁸ Students had to be enrolled in the school on or before September 19, 2008, to meet the full academic year definition.

There were 57 students enrolled at MAS as first graders in 2008–09 who took the test in 2009–10 as second graders, and 66 students enrolled in 2008–09 as second graders who took the test in 2009–10 as third graders. The CSRC expects that these students will advance, on average, 1.0 GLE. As illustrated in Table 31, 31.6% of second and 42.4% of third graders improved by 1.0 GLE or more. The average advancement from first to second grade was 0.8 GLE, and second to third graders advanced an average of 1.0 GLE. Overall, these students advanced, on average, 0.9 GLE from 2008–09 to 2009–10. These data indicate that the school met the goal for third grade and that second-grade students did not meet the CSRC expectation of 1.0 GLE average advancement.

Table 31				
Milwaukee Academy of Science				
Average GLE Advancement in Reading				
Based on SDRT Total				
Grade (2008–09 to 2009–10)	Average GLE 2008–09	Average GLE 2009–10	Average GLE Advancement	% Met Goal
1st to 2nd (N = 57)	1.5	2.3	0.8	31.6%
2nd to 3rd (N = 66)	2.0	3.0	1.0	42.4%
Total (N = 123)	--	--	0.9	37.4%

In addition to examining reading skills progress from last year to the current year, SDRT scores can be used to estimate advancement from first to third grade. Because this is the school’s second year as a city-chartered school, results were not yet available. Next year, year-to-year SDRT results will include student progress from first to third grade.

b. Students Below GLE

The CSRC requires that progress for students below proficiency be examined separately. The SDRT does not provide proficiency indicators; therefore, GLE scores were used to identify students who were functioning below grade level in reading. The CSRC expects more than 1.0

GLE improvement for these students. As illustrated below, there were 50 second and third graders who tested below GLE as first or second graders. These students advanced, on average, 0.9 GLE this year, short of the CSRC goal. See Table 32.

Table 32				
Milwaukee Academy of Science Average GLE Advancement in Reading for Students Below GLE				
Grade (2007–08 to 2009–10)	Average GLE 2008–09	Average GLE 2009–10	Average GLE Advancement	% Met Goal
1st to 2nd (N = 10)	0.6	1.4	0.8	30.0%
2nd to 3rd (N = 40)	1.4	2.4	1.0	42.5%
Total (N = 50)	--	--	0.9	40.0%

Note: Results are rounded to the nearest one tenth.

2. Multiple-year Student Progress for Fourth Through Eighth Graders

a. *Students Who Met Proficiency Level Expectations*

Based on fall 2008 WKCE data, there were 123 students who reached proficiency in reading and 78 who were proficient or higher in math. As illustrated in Tables 33 and 34, 89.4% of students maintained their reading levels and 91.0% maintained proficient or advanced levels in math, exceeding CSRC expectations.

Table 33			
Milwaukee Academy of Science Reading Proficiency Level Progress for Students Proficient or Advanced in 2008–09 Based on WKCE			
Grade	Students Proficient/Advanced in 2008–09	Students Maintained Proficient/Advanced in 2009–10	
		N	%
3rd to 4th	16	15	93.8%
4th to 5th	32	26	81.3%
5th to 6th	23	21	91.3%
6th to 7th	21	21	100.0%
7th to 8th	31	27	87.1%
Total	123	110	89.4%

Table 34			
Milwaukee Academy of Science Math Proficiency Level Progress for Students Proficient or Advanced in 2008–09 Based on WKCE			
Grade	Students Proficient/Advanced in 2008–09	Students Maintained Proficient/Advanced in 2009–10	
		N	%
3rd to 4th	8	Cannot report due to N size	Cannot report due to N size
4th to 5th	24	21	87.5%
5th to 6th	12	11	91.7%
6th to 7th	11	11	100.0%
7th to 8th	23	20	87.0%
Total	78	71	91.0%

b. Students Who Did Not Meet Proficiency Level Expectations

To determine if students who did not meet proficient or advanced levels were making progress, CRC examined whether or not these students were able to improve scores by moving up one or more categories, e.g., minimal to basic, minimal to proficient, or basic to proficient. If students were not able to improve by a level, CRC examined student progress within the student’s skill level. To examine movement within a proficiency level, CRC equally divided the minimal and basic levels into quartiles. The lower threshold for the minimal level was the lowest scale score possible on the examination. The lower threshold for the basic level and the upper threshold for both levels reflected the scale scores used by DPI to establish proficiency levels.⁴⁹

There were 166 students who scored in the minimal or basic categories in 2008–09. Of these, 63.9% showed improvement by progressing to a higher proficiency level (N = 74) or quartile (N = 32) in reading (see Table 35). This compares to 47.3% of 165 students who showed improvement from 2007–08 to 2008–09. Note that because 2008–09 was the school’s first year as a City charter school, the CSRC expectation to increase the percentage of students who

⁴⁹ This method is used by CRC to examine student progress in the schools chartered by the city.

advance does not apply; however, if the expectation was applied, MAS would have met the expectation. The expectation will apply next year.

Table 35					
Milwaukee Academy of Science Reading Proficiency Level Progress for Students Minimal or Basic in 2008–09 Based on WKCE					
Grade	# Students Minimal/Basic 2008–09	# Students Who Advanced One Proficiency Level 2009–10	If Not Advanced, # Who Improved Quartile(s) Within Proficiency Level 2009–10	Total Proficiency Level Advancement	
				N	%
3rd to 4th	43	17	6	23	53.5%
4th to 5th	40	13	9	22	55.0%
5th to 6th	30	17	9	26	86.7%
6th to 7th	28	17	5	22	78.6%
7th to 8th	25	10	3	13	52.0%
Total	166	74	32	106	63.9%

Proficiency level progress in math is described in Table 36. There were 211 students who scored below proficient on the fall 2008 WKCE. Overall, 65.4% of these students either advanced one proficiency level (N = 103) or, if they did not advance a level, improved at least one quartile within their level (N = 35). This compares to 52.3% of 218 students who showed progress from 2007–08 to 2008–09. Note that because 2008–09 was the first year as a City charter, the CSRC expectations for increasing the percentage of students who show improvement are not applicable this year; however, if the expectation was applied, MAS would meet the expectation. The expectation will be applied next year.

Table 36					
Milwaukee Academy of Science Math Proficiency Level Progress for Students Minimal or Basic in 2008–09 Based on WKCE					
Grade	# Students Minimal/Basic 2008–09	# Students Who Advanced One Proficiency Level 2009–10	If Not Advanced, # Who Improved Quartile(s) Within Proficiency Level 2009–10	Total Proficiency Level Advancement	
				N	%
3rd to 4th	51	21	12	33	64.7%
4th to 5th	48	11	6	17	35.4%
5th to 6th	41	19	11	30	73.2%
6th to 7th	38	29	6	35	92.1%
7th to 8th	33	23	0	23	69.7%
Total	211	103	35	138	65.4%

3. EXPLORE to PLAN for Tenth Graders

Students in ninth grade during the 2008–09 school year took the EXPLORE in the fall of 2008. Those same ninth-grade students who were enrolled as tenth graders during 2009–10 took the PLAN during the fall of 2009. Composite scores from each examination were available for

analysis.⁵⁰ Note that next year, progress toward college readiness by subtest will be included in this report.

The ACT website provides estimated PLAN composite score ranges based on ninth-grade fall EXPLORE scores. The PLAN composite score range is a prediction of how well a student who earns a particular score on the EXPLORE as a ninth grader will perform on the PLAN as a tenth grader if the student is enrolled in the “right courses and works hard in those courses.”⁵¹ If a student does not keep up with his/her academic work or if he/she excels in high school courses, his/her PLAN scores may fall below or above the predicted range. By comparing fall EXPLORE scores from 2008 to fall PLAN scores from 2009, students, teachers, and parents can see whether the student is on track for success on the ACT and in college courses.⁵²

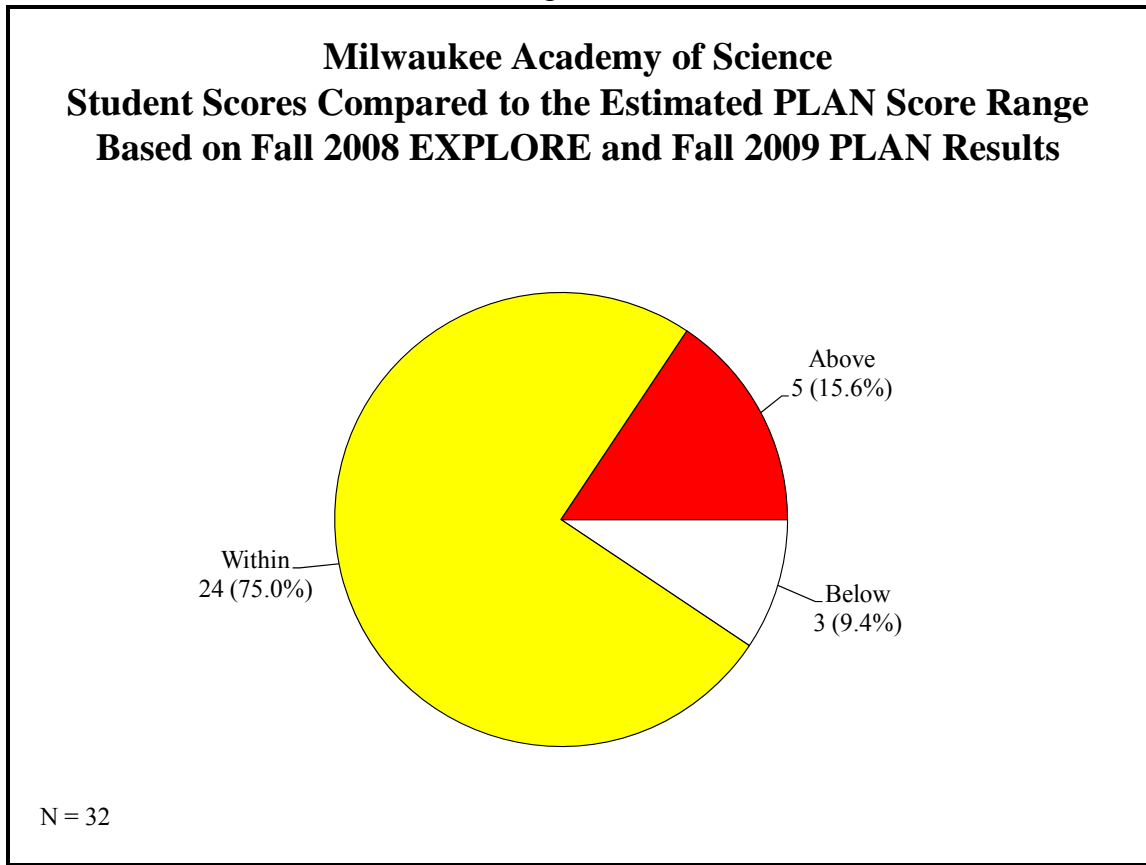
⁵⁰ Subtest scores were not reported (or required to be reported) to CRC for 2008–09.

⁵¹ <http://actstudent.org/explore/score/plancomp.html>.

⁵² Note that the expected PLAN composite score range shows progress based on the score achieved on the EXPLORE. Therefore, if the student received a score below baseline, as described earlier in this report, being in the expected range on the PLAN may not predict success on the ACT or in college; it shows only that the student did not perform as well as expected, performed as expected, or performed better than expected based on his/her EXPLORE results.

There were 32 students who had fall 2008 EXPLORE and fall 2009 PLAN results. Based on each student's score on the EXPLORE, CRC determined whether the student's PLAN score was below, within, or above the estimated PLAN score range. As Figure 26 shows, 5 (15.6%) students' PLAN scores were above the estimated score range, 24 (75.0%) students' scores were in the expected range, and 3 (9.4%) students' scores were below the expected range based on his/her EXPLORE score.

Figure 26



D. Annual Review of the School's Adequate Yearly Progress

1. Background Information⁵³

State and federal laws require the annual review of school performance to determine student academic achievement and progress. In Wisconsin, the annual review of performance required by the federal No Child Left Behind Act is based on each school's performance on four objectives:

- The test participation of all students enrolled;
- A required academic indicator (either graduation or attendance rate);
- The proficiency rate in reading; and
- The proficiency rate in mathematics.

In Wisconsin, the DPI releases an annual review of school performance for all public schools, including charter schools, with information about whether that school has met the criteria for each of the four required adequate yearly progress (AYP) objectives. If a school fails to meet the criteria in the same AYP objective for two consecutive years, the school is designated as "identified for improvement." Once designated as "identified for improvement," the school must meet the annual review criteria for two consecutive years in the same AYP objective to be removed from the status designation.

The possible school status designations are as follows.

- "Satisfactory," which means the school is not in improvement status.
- "School Identified for Improvement" (SIFI), which means the school does not meet AYP for two consecutive years in the same objective.
- SIFI Levels 1–5, which means the school missed at least one of the AYP objectives and is subject to the state requirements and additional Title I sanctions, if applicable, assigned to that level.
- SIFI Levels 1–4 Improved, which means the school met the AYP in the year tested but remains subject to sanctions due to the prior year. AYP must be met for

⁵³ This information is based on the DPI website: <http://dpi.wi.gov/oea/aact/ayp.html>.

two years in a row in that objective to be removed from “improvement” status and returned to “satisfactory” status.

- Title I status identifies whether Title I funds are directed to this school; if so, the school is subject to federal sanctions.

2. Adequate Yearly Progress Summary⁵⁴

According to the Adequate Yearly Progress Review Summary for 2009–10 published by DPI, MAS reached adequate yearly progress in all four AYP objectives. Status in test participation and other academic indicator (graduation) was “satisfactory” and the school’s AYP status in reading and mathematics was “Level 2 Improved.” This is the first time in three years that MAS has met AYP in reading and math. Its school status is Level 2 Improved.

⁵⁴ For a copy of MAS’s Annual Review of School Performance, see http://www2.dpi.state.wi.us/sifi/AYP_Summary.asp?AgKey=071238.

V. SUMMARY AND RECOMMENDATIONS

This report describes the programmatic profile and educational performance of the second year of MAS's operation as a City of Milwaukee–chartered school. Results are described below.

A. Contract Compliance

MAS has met all but three of the educational provisions in its contract with the City of Milwaukee. See Appendix A for a list of contract provisions and whether or not the school met CSRC expectations.

B. Education-related Findings

- Average student attendance including excused absences was 90.7% for elementary and 94.6% for junior academy/high school. This meets the school's goal of 90.0%.
- The school held parent conferences for all students this year. Parents of 98.2% of elementary academy students attended two of three conferences and parents of 83.7% junior academy/high school students attended all three conferences, exceeding the school's goal of 80%.
- The school maintained up-to-date records for special education students, meeting its goal.

C. Local Measures Results

For primary/elementary academy (K4 through fifth grades):

- Of 345 K4 through third-grade students, 93.3% exhibited progress in literacy skills. The school's goal was 90%.
- Of 149 fourth and fifth graders, 83.2% showed progress in literacy skills. The school's goal was 80%.

- Of 126 K4 and K5 students, 99.2% showed progress in math. The school's goal was 90%.
- Of 375 first through fifth graders, 90.4% showed progress in math. The school's goal was 80%.
- Third- through fifth-grade students scored, on average, 12.5 points on the teacher assessed writing sample. The school's goal was 12 points.
- Of 46 students with IEP goals, 91.3% met at least one of their goals this year. The school's goal was 80%.

For junior academy (sixth through eighth grades) and high school (ninth through twelfth grades):

- One hundred ninety-six junior academy students advanced an average of 74.9 and 154 high school students improved on average 27.0 measures on the SRI. The school's goal was 50 points for junior academy and 25 for high school students.
- One hundred ninety-five junior academy students improved, on average, 2.0 GL based on WRAT. Of 151 high school students, 92.7% demonstrated math competencies. The school's goal was that junior academy students would show progress of at least one month for every month of instruction and 80% of high school students would demonstrate competency.
- Junior academy students scored, on average, 19.2 points on a teacher-assessed writing sample. The goal was 18. High school students, on average, scored 22.1 points. The goal for these students was 21.
- Of 33 junior academy and high school students with IEP goals, 93.9% reached at least one of their goals this year. The school's goal was 80%.
- Graduation plans were developed for all (100%) high school students, meeting the school's goal.
- Ninth graders earned an average of 6.3 credits; tenth graders accumulated an average of 13.1 credits; eleventh graders accumulated an average of 19.7 credits; and twelfth graders accumulated 25.2 credits, on average. One hundred thirty-eight (90.2%) students were promoted and/or graduated.

D. Standardized Test Results

Standardized tests results for MAS students were as follows:

- The April 2010 SDRT results indicated the following:
 - » First graders were reading, on average, at 1.5 GLE;
 - » Second graders were at 2.4 GLE; and
 - » Third graders were at 2.9 GLE.
- The WKCE for third through eighth and tenth graders indicated that the following percentage of students were proficient or advanced in reading (see Table 37).

Grade	N	% Proficient or Advanced	
		Reading	Math
3rd	83	38.5%	31.3%
4th	73	41.0%	39.7%
5th	87	45.9%	41.3%
6th	73	56.2%	45.2%
7th	66	66.6%	59.1%
8th	75	66.6%	60.0%
10th	35	34.3%	22.9%
Total	492	50.6%	43.9%

E. Multiple-year Advancement

Based on SDRT from two consecutive years, 57 second graders advanced 0.8 GLE and 66 third graders advanced 1.0 GLE. Overall advancement was 0.9, short of CSRC goal of 1.0.

Based on WKCE for full academic year students:

- Of fourth through eighth graders, 89.4% of 123 maintained proficiency in reading and 91.0% of 78 maintained proficiency in math;

- Of students who were below proficient in reading, 63.9% of 166 showed improvement, while 65.4% of 211 who were below proficient in math showed improvement.

Based on EXPLORE to PLAN, 75% of 32 tenth graders were within and 15.6% were above expected scores on the PLAN.

F. Survey and Interview Results

- Over 85% of 220 parents indicated that the school's contribution to their child's academic progress/learning was excellent (59.1%) or good (26.4%).
- Twenty-four (92.3%) of 26 teachers rated the school's contribution to students' academic progress as excellent (50.0%) or good (42.3%).
- All 20 students interviewed indicated that they use computers at school, that homework helps them learn more, teachers help them at school, and they feel safe at school.
- Among other things, teachers suggested that creating a shared sense of community and providing materials at the elementary school would improve the school and/or classroom. Junior academy/high school teachers had a variety of suggestions that would help improve the school, including continuing to use data to support decisions and ensuring cohesive communication.
- All eight board members interviewed indicated that they were very satisfied with the commitment of the school's leadership and seven of eight were very satisfied with the safety of the educational environment.
- Board members offered the following suggestions to improve the school: focus on efforts to attract more/better students; focus on learning and accept no excuse for failure; focus on reading and comprehension; and examine data closely and thoughtfully.

G. Recommendations

After reviewing the information in this report and considering the information gathered during the administration interview in May 2010, CRC and the school jointly identified a list of focus activities for the 2010–11 school year. This includes the following:

For the primary/elementary academy:

- Improve the planning, instruction, and assessment skills of all reading teachers. The staff will review students' reading assessments on a regular basis and plan next steps for each student. The two reading coaches will assist the classroom teachers with implementation of the reading curriculum, with a focus on pre-literacy skills for the youngest students and comprehension skills for second through fifth graders. The school has a goal to move its reading instruction from good to excellent by increasing the consistency in teachers' instructional practices across grade level teams. An emphasis will be placed on raising the level of reading instruction at all grades levels so that all students (low and high achievers) can maximize their reading skill levels.
- Provide sufficient training for the achievement director and all teaching staff to enable them to effectively utilize a new assessment model: Measure of Academic Progress (MAP) including how to adapt the curriculum to ensure that all students meet the school's high expectations for growth.
- Maintain and improve the math initiative launched during the 2009–10 school year.

For the junior academy:

- Continue implementing the strategies adopted last year to improve all students' (low and high achieving) math competencies. Utilize some of these interventions to improve students' reading competencies.
- Involve all students and teachers in cross curriculum projects. Special attention will be given to improving students' skills with "project management" in such areas as creating and meeting timelines, following procedures, planning efficiently and effectively, and producing expected outcomes (accountability)
- Assign all teachers to a content specialty area for instructional purposes. Teacher looping will also be utilized to enable "good" teachers to continue effectively building students' skills in the next school year.

For the high school:

- Improve the use of the Committee of Concern for issues related to academic performance. Staff will work to design and implement more effective intervention strategies, incentives, etc.
- Offer students more elective options during all periods of the school day. Examples of some of the elective options will be Honors English in both

Composition and Speech and Advanced Composition for seniors to improve their writing skills.

- Utilize the results from the staff’s spring data retreat⁵⁵ to create and implement the diverse interventions required to improve students’ reading and math performance in the 2010–11 school year. These interventions will also include strategies to assist the students with their “project management” skills.

⁵⁵ The spring data retreat included staff from the junior academy as well as the high school.

Appendix A

Contract Compliance Chart

Milwaukee Academy of Science

**Overview of Compliance for Education-related Contract Provisions
2009–10**

Section of Contract	Education-related Contract Provision	Report Reference Page	Contract Provision Met or Not Met?
Section I, B	Description of educational program; student population served.	pp. 2–5 and pp. 15–18	Met
Section I, V	Charter school operation under the days and hours indicated in its calendar.	p. 10	Met
Section I, C	Educational methods.	pp. 2–5	Met
Section I, D	Administration of required standardized tests: a. Grades 1 through 8 b. Grades 9 through 12	pp. 55–64; 76–79; pp. 79–87	a. Met b. Not met ⁵⁶
Section I, D	Expectation that 9th and 10th graders receive supplemental instruction if below the EXPLORE/PLAN benchmarks.	pp. 79–85	Met
Section I, D	All new high school students tested within 30 days of first day of attendance in reading and math.	pp. 70–71	Met
Section I, D	Written annual plan for graduation.	pp. 13–15	Met
Section I, D	Academic criteria #1: Maintain local measures, showing pupil growth in demonstrating curricular goals in reading, math, writing, and special education goals.	pp. 44–54 and pp. 69–75	Met ⁵⁷
Section I, D	Academic criteria #2: Year-to-year achievement measure for grades 1 through 8: a. 2nd- and 3rd-grade students: Advance average of one GLE in reading. b. 4th- through 8th-grade students proficient or advanced in reading: At least 75.0% maintain proficiency level. c. 4th- through 8th-grade students proficient or advanced in math: At least 75.0% maintain proficiency level.	a. pp. 88–89 b. p. 90 c. p. 91	a. Not met ⁵⁸ b. Met. 89.4% of 123 c. Met. 91.0% of 78

⁵⁶ Not all eleventh- and twelfth-grade students took the ACT or SAT as required.

⁵⁷ The school did not meet all of its internal goals, but it met the expectations established by the CSRC.

⁵⁸ Second graders advanced 0.8. GLE third graders advanced 1.0 GLE.

Milwaukee Academy of Science

**Overview of Compliance for Education-related Contract Provisions
2009–10**

Section of Contract	Education-related Contract Provision	Report Reference Page	Contract Provision Met or Not Met?
Section I, D	Academic criteria #3: Year-to-year achievement measure for grades 1 through 8:		
	a. 2nd- and 3rd-grade students below grade level in reading: Advance more than one GLE in reading.	a. pp. 89–90	a. Not met ⁵⁹
	b. 4th- through 8th-grade students below proficient level in reading: Increase the percentage of students who have advanced one level of proficiency or to the next quartile within the proficiency level range.	b. pp. 91–92	b. N/A, but would have met
	c. 4th- through 8th-grade students below proficient level in math: Increase the percentage of students who have advanced one level of proficiency or to the next quartile within the proficiency level range.	c. p. 93	c. N/A, but would have met
Section I, E	Parental involvement.	p. 11	Met
Section I, F	Instructional staff hold a DPI license or permit to teach.	pp. 6–9	Met
Section I, I	Pupil database information, including special education needs students.	pp. 15–18	Met
Section I, K	Discipline procedures.	pp. 12–13	Met

⁵⁹ Second and third graders advanced 0.9 GLE, on average.

Appendix B

Outcome Measure Agreement Memos

To: Children's Research Center/Charter School Review Committee
From: Milwaukee Academy of Science Primary/Elementary Academy
Re: Student Learning Memorandum for the 2009–10 School Year
Date: September 14, 2009

The following procedures and outcomes will be used for the 2009–10 school year to monitor the education-related activities described in the Milwaukee Academy of Sciences (MAS) Primary/Elementary Academy's charter school contract with the City of Milwaukee. Data will be provided to the Children's Research Center (CRC), the monitoring agent contracted by the City of Milwaukee Charter School Review Committee (CSRC). Data will be reported in a spreadsheet or database that includes each student's state ID number(s). CRC requests electronic submission of year-end data on the fifth day following the last day of student attendance for the academic year, or June 25, 2010.

The school will record student data in the PowerSchool (PS) database and Excel spreadsheets. The school will be able to generate a student roster in a usable data file format that lists all students enrolled at any time during the school year. The roster will include student name; student state ID number; enrollment date; withdrawal date and reason; grade; gender; race/ethnicity; free/reduced lunch eligibility; special education status; and if applicable, disability type.

Attendance

The school will maintain an average daily attendance rate of 90.0%. Attendance rates will be reported as present, excused absence, unexcused absence, and in-school and out-of-school suspension. MAS considers a student in attendance if the student arrives at the school no later than 11:00 a.m.

Enrollment

The school will record the enrollment date for every student. Upon admission, individual student information will be added to the school database, including student name; student ID; enrollment date; grade; gender; free/reduced lunch eligibility; race/ethnicity; special education status; and, if applicable, disability type.

Termination/Withdrawal

The withdrawal date and reason for every student leaving the school will be recorded in the school database.

Parent Participation

At least 80% of students enrolled for the entire school year will have their parent(s) participate in two of the three scheduled parent-teacher conferences. If a parent(s) does not attend a scheduled conference at the school, MAS will conduct the conference with the parent either via phone or home visit. The date of the conference, the type of contact (school, phone, or home), and whether a parent/guardian or other interested person participated in the conference will be recorded by the school for each student.

Special Education Needs Students

The school will maintain updated records on all special education students including disability type, date of the individualized education program (IEP) team assessment, assessment outcome, IEP completion date, parent participation in IEP, IEP review dates, review/reassessment results, and parent participation in IEP review/reassessment.

Academic Achievement: Local Measures

Literacy and Math

At least 90% of the students in K4 and K5 will exhibit progress or maintain their proficiency status between the first⁶⁰ and final assessments of their literacy skills (specifically, recites ABCs, recognizes upper/lowercase letters, and prints upper/lowercase letters) and math skills (specifically, rote counting, counting of objects, and reading of numbers), based on student raw scores and/or quotients on the BRIGANCE: Comprehensive Inventory of Basic Skills.⁶¹ (Note: A quotient score of 85 or higher is considered proficient.)

At least 90% of the students in first through third grade will progress at least four levels on their Scholastic Guided Reading Level as measured by the text gradient scale, which assesses reading fluency and comprehension. At least 80% of the students in first through third grade will demonstrate one month's growth for each month of instruction or maintain a grade-equivalency score that is at or above grade level in mathematics (math computation) on the BRIGANCE. At least 80% of the students in fourth and fifth grade will demonstrate one month's growth for each month of instruction or maintain a grade-equivalency score that is at or above grade level in reading (word recognition) and mathematics (math computation) on the BRIGANCE. The tests for students at all grade levels will be administered in the fall and again in the spring.⁶²

Writing

By the end of the final marking period, students in third through fifth grade will have a writing sample assessed, and each grade cohort will be judged to have, on average, at least "adequate control," as indicated by an average total score of 12, of writing skills appropriate for their grade level in the following six domains: purpose and focus, organization and coherence, development of content, sentence fluency, word choice, and grammar. Each domain will be assessed on the following scale: 1 = minimal/basic control; 2 = adequate control; and 3 = proficient/advanced control.

Special Education Students

At least 80% of the special education students will meet one or more of the goals defined in their IEP, as assessed by the participants in their most recent annual review. Data on each special education student's goal achievements will be recorded in an Excel spreadsheet by student ID.

⁶⁰ The spring test results will be used as the pre-tests for all students returning to MAS this school year. All newly enrolled students will be tested early in the fall of 2009.

⁶¹ BRIGANCE is a basic skills assessment model created and distributed by Curriculum Associates, Inc.

⁶² The spring test results will be used as the pre-tests for all fourth- and fifth-grade students returning to MAS this school year. All newly enrolled students will be tested early in the fall of 2009.

Academic Achievement: Standardized Measures

The following standardized test measures will assess academic achievement in reading and/or mathematics.

During the current and subsequent years as a city-chartered school, each grade will demonstrate, on average, a minimum increase of one grade level on the Stanford Diagnostic Reading Test (SDRT), as measured by the academic progress of each student in that grade. Students who tested below grade level on the SDRT in one year will demonstrate more than one grade-level gain the following year. At least 75.0% of the students who were proficient or advanced on the Wisconsin Knowledge and Concepts Examination (WKCE) in 2008–09 will maintain their status of proficient or above in the subsequent year. Students who tested below proficient on the WKCE in 2008–09 will improve a level or at least one quartile within their level in the next school year.

Grades 1, 2, and 3: The SDRT will be administered each spring between March 15 and April 15. Progress will be assessed based on the results of testing in reading in the second and subsequent years.

Grades 3, 4, and 5: The WKCE will be administered on an annual basis in the timeframe identified by the Wisconsin Department of Public Instruction. The WKCE reading subtest will provide each student with a proficiency level via a scale score in reading, and the WKCE math subtest will provide each student with a proficiency level via a scale score in math. Results will also reflect the student's statewide percentile score.

Student Learning Memo Data Addendum Milwaukee Academy of Science

This addendum has been developed to clarify the data collection and submission process related to each of the outcomes stated in the school’s student learning memo for the 2009–10 academic year. Additionally, there are important principles applicable to all data collection that must be considered.

1. All students attending the school *at any time during the 2009–10 academic year* should be included in all student data files created by the school. This includes students who enroll after the first day of school and students who withdraw before the end of the school year. Be sure to include each student’s unique ID number in each data file.

2. All data fields must be completed for each student *enrolled at any time during the school year*. If a student is not enrolled when a measure is completed, record N/E for that student to indicate “not enrolled.” This may occur if a student enrolls after the beginning of the school year or withdraws prior to the end of the school year.

3. Record and submit a score/response for each student. *Please do not submit aggregate data* (e.g., 14 students scored 75.0%, or the attendance rate was 92.0%).

End-of-the-year data must be submitted to CRC by no later than the fifth working day after the end of the second semester or June 25, 2010.

Staff person responsible for mid-year data submission: Judy Merryfield/Jenny Berwanger
 Staff person responsible for year-end data submission: Judy Merryfield/Jenny Berwanger

Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
Student Roster		PowerSchool	
Attendance	For each student enrolled at any time during the year, include the following: <ul style="list-style-type: none"> • Student ID • Student name • Number of days expected attendance • Number of days attended • Number of days excused absent • Number of days unexcused absent • Number of days in-school suspension • Number of days out-of-school suspension 	Export data from PowerSchool into a usable data format such as a spreadsheet	Judy Merryfield/Jenny Berwanger

Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
Enrollment, Termination/Withdrawal	<p>For every student enrolled at any time during the year, include the following:</p> <ul style="list-style-type: none"> • Wisconsin Student ID • Local student ID • Student name • Grade • Enrollment date • Withdrawal date (if applicable) • Withdrawal reason (if applicable, including if the student was expelled and why) • Gender • Race/ethnicity • Free/reduced lunch status • Special education status • Disability type (if applicable) 	Export data from PowerSchool into a usable data format such as a spreadsheet	Judy Merryfield/Jenny Berwanger
Parent Participation	<p>For each student enrolled at any time during the year, include the following:</p> <ul style="list-style-type: none"> • Student ID • Student name • Parent participation in conference 1 (Y, N, N/A) • Type of conference 1 (school, phone, home, N/A) • Participants in conference 1 (parent/guardian, other party, parent/guardian and other) • Parent participation in conference 2 (Y, N, N/A) • Type of conference 2 (school, phone, home, N/A) • Participants in conference 2 (parent/guardian, other party, parent/guardian and other) • Parent participation in conference 3 (Y, N, N/A) • Type of conference 3 (school, phone, home, 	<p>Student data in a spreadsheet</p> <p>Provide conference dates via a document or email</p>	Judy Merryfield/Jenny Berwanger

Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
	<p>N/A)</p> <ul style="list-style-type: none"> • Participants in conference 3 (parent/guardian, other party, parent/guardian and other) 		
Special Education Needs Students	<p>For each student with a special education need, as noted on the student roster, include the following:</p> <ul style="list-style-type: none"> • Student ID • Student name • The special education needs type (e.g., ED, CD, LD) • The IEP team assessment date • The IEP completion date • Parent participation in IEP (Y, N) • The IEP review date • The IEP review result (whether the student no longer qualified for special education or continued to qualify for special education) • Parent participation in IEP review (Y, N) 		Judy Merryfield/Jenny Berwanger
Academic Achievement: Local Measures <i>K4 and K5 Literacy</i>	<p>For each student, include the following:</p> <ul style="list-style-type: none"> • Student ID • Student name • Grade • Spring 2009 quotient score for reciting ABCs • Spring 2009 quotient score for recognizing UC letters • Spring 2009 quotient score for recognizing LC letters • Spring 2009 quotient score for printing UC letters • Spring 2009 quotient score for printing LC letters <p>Note: For new enrollees, provide fall 2009 scores.</p> <ul style="list-style-type: none"> • Spring 2010 quotient score for reciting ABCs • Spring 2010 quotient score 	Spreadsheet	Judy Merryfield/Jenny Berwanger

Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
	for recognizing UC letters <ul style="list-style-type: none"> • Spring 2010 quotient score for recognizing LC letters • Spring 2010 quotient score for printing UC letters • Spring 2010 quotient score for printing LC letters 		
<i>K4 and K5 Math</i>	For each student, include the following: <ul style="list-style-type: none"> • Student ID • Student name • Grade • Spring 2009 quotient score for rote counting • Spring 2009 quotient score for counting objects • Spring 2009 quotient score for reading numbers Note: For new enrollees, provide fall 2009 scores. <ul style="list-style-type: none"> • Spring 2010 quotient score for rote counting • Spring 2010 quotient score for counting objects • Spring 2010 quotient score for reading numbers 	Spreadsheet	Judy Merryfield/Jenny Berwanger
<i>1st- Through 5th-grade Literacy</i>	For each student, include the following: <ul style="list-style-type: none"> • Student ID • Student name For first through third graders, including the following: <ul style="list-style-type: none"> • Fall 2009 Scholastic Guided Reading Level score • Spring 2010 Scholastic Guided Reading Level score For 4th and 5th graders, include the following: <ul style="list-style-type: none"> • Spring 2009 BRIGANCE word recognition GE score Note: For new enrollees, provide the fall 2009 BRIGANCE word recognition GE score. <ul style="list-style-type: none"> • Spring 2010 BRIGANCE word recognition GE score 	Spreadsheet	Judy Merryfield/Jenny Berwanger

Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
<i>1st- Through 5th-grade Math</i>	For each student, include the following: <ul style="list-style-type: none"> • Student ID • Student name • Grade For 1st through 5th graders, include the following: <ul style="list-style-type: none"> • Spring 2009 BRIGANCE math computation GE score Note: For new enrollees, provide the fall 2009 BRIGANCE math computation GE score. <ul style="list-style-type: none"> • Spring 2010 BRIGANCE math computation GE score 	Spreadsheet	Judy Merryfield/Jenny Berwanger
<i>3rd- Through 5th-grade Writing</i>	For each student, include the following: <ul style="list-style-type: none"> • Student ID • Student name • End-of-year purpose and focus score • End-of-year organization and coherence score • End-of-year development of content score • End-of-year sentence fluency score • End-of-year word choice score • End-of-year grammar score 	Spreadsheet	Judy Merryfield/Jenny Berwanger
Individualized Education Program (IEP)	For each student with an IEP, include the following: <ul style="list-style-type: none"> • Student ID • Student name • Number of goals or benchmarks on the IEP • Number of goals or benchmarks achieved 	Note: These data can be added to the data file that contains special education student IEP information.	Judy Merryfield/Jenny Berwanger
Academic Achievement: Standardized Measures <i>SDRT 1st Through 3rd grade</i>	For each student, include the following: <ul style="list-style-type: none"> • Student ID • Student name • Raw scores from each section of the SDRT • GLE scores from each section of the SDRT 	Spreadsheet; provide paper copies of the test publisher's printout	Judy Merryfield/Jenny Berwanger
Academic Achievement:	For each student, include the	Spreadsheet; provide	Judy

Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
Standardized Measures <i>WKCE</i> <i>3rd Through 5th grade</i>	following: <ul style="list-style-type: none"> • Student ID • Student name • Proficiency level, scale score, and statewide percentile for WKCE math test • Proficiency level, scale score, and statewide percentile for WKCE reading test For students in 4th grade: <ul style="list-style-type: none"> • Proficiency level and scale score for WKCE language arts test • Proficiency level and scale score for WKCE social studies test • Proficiency level and scale score for WKCE science test • Writing composite score Note: Enter absent in each column if the student was absent at the time of the test. Enter N/E if the student was not enrolled in the school at the time of the test.	paper copies of the test publisher's printout	Merryfield/Jenny Berwanger

Learning Memo for Milwaukee Academy of Science

To: Children's Research Center/Charter School Review Committee
From: Milwaukee Academy of Science Junior Academy/High School
Re: Student Learning Memorandum for the 2009–10 Academic Year
Date: August 26, 2009

Note: This memorandum of understanding includes the *minimum* measurable outcomes required by the City of Milwaukee Charter School Review Committee (CSRC). Schools can add outcomes to this memo if additional measures of academic progress are developed and the school desires them to be included in the final monitoring report (e.g., if a school administers additional standardized tests).

The specific outcomes have been defined by the leadership and/or staff at the school in consultation with staff from the Children's Research Center (CRC) and the CSRC. All data shall be reported to CRC in an electronic file, such as a spreadsheet or a database, **that includes a consistent student ID number**. CRC requests electronic submission of school-year data no later than the fifth day following the last day of student attendance for the academic year or June 25, 2010.

Milwaukee Academy of Science (MAS) will record student data in the PowerSchool (PS) database and Excel spreadsheets. The school will be able to generate a student roster that lists all students enrolled at any time during the school year. The roster will include student name, student ID, student enrollment date, withdrawal date and reason, grade, gender, race/ethnicity, and free/reduced lunch eligibility status.

Enrollment

The school will record enrollment dates for every student. Upon admission, individual student information and actual enrollment date will be added to the school's PS database.⁶³

Termination

The date and reason for every student leaving the school will be determined, and an exit date will be recorded in the school's PS database. Information will include the date of withdrawal/termination and the reason why the student left the school, such as expelled, dropped out, moved, transportation issues, dissatisfaction with the school, etc.

Attendance

The school will maintain appropriate attendance records. These records need to include student data on excused absences; unexcused absences; suspension data, both in-school and out-of-school; and expulsions. Attendance data will include student ID numbers. MAS will achieve an attendance rate of at least 90%. Junior academy students will be marked present for the day if they arrive at school prior to 10:00 a.m. High school students will be marked present for the day if they attend 90% of the instructional hours for that day.

Parent/Guardian Participation

At least 80% of parents will participate in each of the three scheduled parent-teacher conferences held for the junior academy students. If a high school parent(s) does not attend a scheduled

⁶³ Transfer student information will be obtained by the receiving school and transcript information will be entered into the receiving school's database.

conference at the school, respond to a phone call, or participate in a home visit, MAS will conduct the conference with the student and submit a written report to the parent via regular mail. The student name; student ID; date of each conference; who participated in the conference (student and/or parent); and whether the conference was held at the school, via phone, at the student's home, or via a written report (due to parent not attending the conference at the school and not being available for phone or home contact) will be recorded in a database or spreadsheet.

Special Education Needs Students

The school will maintain updated records on all special education students, including disability type, date of individualized education program (IEP) team assessment, assessment outcome, IEP completion date, parent participation in IEP, IEP review date(s), review/reassessment results, and parent participation in IEP review/reassessment(s).

High School Graduation Plan

A high school graduation plan will be developed for all students (ninth through twelfth grade) by the end of their first semester of enrollment at the school. Each student will incorporate the following into his/her high school graduation plan.

- Evidence of parent/guardian/family involvement. The guidance counselor/advisor will meet with each eleventh- and twelfth-grade student within the first quarter. After the guidance counselor/advisor meets with each eleventh and twelfth grader to review his/her graduation plan, a written update of the plan will be submitted to the parent/guardian for review. The school will record, by student ID, the date of the review, and indicate whether a report was submitted to the parent upon completion of the review. Parents who participate in parent conferences, whether at the school or via phone or home visit, will review their student's high school graduation plan as part of their regular involvement in the scheduled parent-teacher conference events.
- Information regarding the student's post-secondary plans.
- A schedule reflecting plans for completing four credits in English and mathematics; three credits in science and social studies; and two credits each in engineering, foreign language, physical education/health, and other electives.

Student schedules will be reviewed annually by the guidance counselor/advisor by the end of the school year. The school will record information in a spreadsheet that includes student name, student ID, review status (completed or pending), if the student is on track toward earning credits, and whether or not the student will need to enroll in summer school.

High School Graduation Requirements⁶⁴

- All ninth graders who earn at least 5.5 credits will be promoted to the tenth grade.
- All tenth graders who earn at least 11 credits will be promoted to the eleventh grade.

⁶⁴ This item depends on the school's high school graduation requirements and the timing of the student's coursework. Outcomes reflect what would be needed at each grade level to meet graduation requirements by the end of the fourth year.

- All eleventh graders who earn at least 16 credits will be promoted to twelfth grade.
- All twelfth graders who earn at least 22 credits, including the required courses, will graduate.

Academic Achievement: Local Measures⁶⁵

Literacy

All students will show some progress in their Lexile level score⁶⁶ in reading as measured by the Scholastic Reading Inventory (SRI) administered to all students by the end of September and again at the end of the school year.⁶⁷ Junior academy students will increase their Lexile level scores, on average, by at least 50 points. High school students will increase their Lexile level scores, on average, by at least 25 points.⁶⁸ If a student enrolls after the September testing date, he/she will be tested within 30 calendar days of enrollment.

Mathematics

All junior academy students will show some progress in their grade-level equivalency (GLE) score in mathematics as measured by the Wide Range Achievement Test (WRAT) administered to students in the spring of 2009 (during the prior school year) and again in the spring of 2010. The test will be administered to all new students within 30 days of their entrance into the junior academy during the 2009–10 school year and again at the end of the school year. On average, students will show at least one month gain for each month of instruction.

All high school students will show some progress in the acquisition of math competencies as measured by the comprehensive tests for their math course.⁶⁹ The tests will be administered in September and again at the end of the school year. At least 80% of the students in each math class will attain a score of at least 70% on their comprehensive course exam at the end of the school year. In addition, all new high school students will be given the WRAT within 30 days of their enrollment to assess their basic math competency level.⁷⁰

⁶⁵ Local measures of academic achievement are classroom- or school-level measures that monitor student progress throughout the year (formative assessment) and can be summarized at the end of the year (summative assessment) to demonstrate academic growth. They are reflective of each school's unique philosophy and curriculum. The CSRC requires local measures of academic achievement in the areas of literacy, mathematics, writing, and IEP goals.

⁶⁶ The Lexile Framework is a research-proven system for measuring students' reading levels and matching readers to text. The Lexile Framework is unique because it uses a common metric—a Lexile measure—to evaluate both reading ability and text difficulty. By placing both reader and text on the same scale, the Lexile Framework allows educators to forecast the level of comprehension a student will experience with a particular text, and to evaluate curriculum needs based on each student's ability to comprehend the materials.

⁶⁷ This test will regularly be given to all new students as per the requirement (#1) of the CSRC expectations policy dated February 1, 2008, for its high schools.

⁶⁸ These Lexile score increases would indicate that students in these respective grade levels had made one year of progress in the acquisition of comprehension and vocabulary skills.

⁶⁹ The math courses offered to high school students include algebra, geometry, advanced algebra, and advanced algebra/trigonometry.

⁷⁰ This test will regularly be given to all new students as per the requirement (#1) of the CSRC expectations policy dated February 1, 2008, for its high schools.

Writing

By the end of the final marking period, students in sixth through twelfth grade will have a writing sample assessed, and each grade cohort will be judged to have, on average, at least “adequate control,” as indicated by an average total score of 18 for junior academy students and 21 for high school students. Student writing skills will be assessed in the following six domains: purpose and focus, organization and coherence, development of content, sentence fluency, word choice, and grammar. Each domain will be assessed on the following scale for junior academy students: 1 = minimal control; 2 = basic control; 3 = adequate control; 4 = proficient control; and 5 = advanced control. Another assessment level, 6 = exemplary control, will be included for high school students.

IEP Goals

At least 80% of the special education students will meet one or more of the goals defined in their IEP. Data on each special education student’s goal achievements will be recorded in an Excel spreadsheet by student ID.

Academic Achievement: Standardized Measures

Sixth-, Seventh-, Eighth-, and Tenth-grade Students

All sixth-, seventh-, eighth-, and tenth-grade students are required to take the Wisconsin Knowledge and Concepts Examination (WKCE) in the timeframe identified by the Department of Public Instruction (DPI).

Ninth-grade Students

All ninth-grade students are required to take all subtests⁷¹ of the EXPLORE test (the first in a series of two pre-ACT tests that will identify students who are not ready for the ACT)⁷² in the same timeframe identified by the DPI for the WKCE. During the second semester, teachers of all ninth-grade students who scored below 13 on the EXPLORE test will review the test results with the achievement director and embed additional instructional activities appropriate for these students’ needs within the core courses related to the appropriate subtest content area. The achievement director will monitor and document the provision of additional instructional activities to the lower-achieving students.

Tenth-grade Students

All tenth-grade students are required to take all subtests of the PLAN (the second test in the pre-ACT series).⁷³ The PLAN will be administered in the fall of 2009. During the second semester of tenth grade, teachers of all tenth-grade students who scored below 15 on the PLAN will review the test results with the achievement director and embed additional instructional activities appropriate for these students’ needs within the core courses related to the appropriate

⁷¹ English, mathematics, reading, and science.

⁷² The Educational Planning and Assessment System (EPAS), developed by the American College Testing (ACT) service, provides a longitudinal, standardized approach to educational and career planning, assessment, instructional support, and evaluation. The series includes the EXPLORE, PLAN, and ACT tests. Score ranges from all three tests are linked to *Standards for Transition* statements that describe what students have learned and what they are ready to learn next. The *Standards for Transition*, in turn, are linked to *Pathways* statements that suggest strategies to enhance students’ classroom learning. *Standards* and *Pathways* can be used by teachers to evaluate instruction and student progress and advise students on courses of study.

⁷³ English, mathematics, reading, and science.

subtest content area. The achievement director will monitor and document the provision of additional instructional activities to the lower-achieving students.

Eleventh-grade Students

All eleventh-grade students are required to take the ACT or the SAT by the end of the school year. MAS will monitor students' participation in a spreadsheet.

Twelfth-grade Students

MAS will require all seniors who did not take the ACT or SAT test during eleventh grade to take one of these tests in the fall semester of 2009. MAS will monitor students' participation in a spreadsheet.

Learning Memo Data Addendum Milwaukee Academy of Science

This addendum has been developed to clarify the data collection and submission process related to each of the outcomes stated in the school's learning memo for the 2009–10 academic year. Additionally, there are important principles applicable to all data collection that must be considered.

4. All students attending the school *at any time during the 2009–10 academic year* should be included in all student data files created by the school. This includes students who enroll after the first day of school and students who withdraw before the end of the school year. Be sure to include each student's unique ID number in each data file.
5. All data fields must be completed for each student *enrolled at any time during the school year*. If a student is not enrolled and/or present when a measure is completed, record an N/E for that student to indicate "not enrolled." This may occur if a student enrolls after the beginning of the school year or withdraws prior to the end of the school year.
6. Record and submit a score/response for each student. Please do not submit aggregate data (e.g., 14 students scored 75.0%, or the attendance rate was 92.0%).

End-of-the-year data must be submitted to CRC by no later than the fifth working day after the end of the second semester or June 25, 2010.

Staff person(s) responsible for year-end data submission: Judy Merryfield/Katie Morrison

Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
Student Roster; Enrollment and Termination	<p>For each student enrolled at any time during the year, include the following:</p> <ul style="list-style-type: none"> • Wisconsin Student Number • Local student ID • Student name • Grade • Gender • Race/ethnicity • Free/reduced lunch status (free, reduced, not eligible) • Enrollment date • Termination (withdrawal) date, if applicable • Termination (withdrawal) reason, if applicable, including if the student was expelled • Special education (Y, N) 	PowerSchool	Katie Morrison/ Judy Merryfield
Attendance	<p>For each student enrolled at any time during the year, include the following:</p> <ul style="list-style-type: none"> • Student ID • Student name • Number of days expected attendance • Number of days attended • Number of days excused absence • Number of days unexcused absence • Number of days in-school suspension • Number of days out-of-school suspension 	PowerSchool	Katie Morrison/ Judy Merryfield
Parent Participation	<p>For each student enrolled at any time during the year, include the following:</p> <ul style="list-style-type: none"> • Student ID • Student name • Attend conference 1 (parent, student, parent and student, none, N/A) • Type conference 1 (school, phone, home, written report, none, N/A) • Attend conference 2 (parent, 	Spreadsheet designed by school	Katie Morrison/ Judy Merryfield

Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
	<p>student, parent and student, none, N/A)</p> <ul style="list-style-type: none"> • Type conference 2 (school, phone, home, written report, none, N/A) • Attend conference 3 (parent, student, parent and student, none, N/A) • Type conference 3 (school, phone, home, written report, none, N/A) 		
Special Education Needs Students	<p>For each student with special education needs (as indicated on the student roster), include the following:</p> <ul style="list-style-type: none"> • Special education disability type (e.g., CD, ED, LD, etc.) • IEP team assessment date • IEP team assessment outcome • IEP completion date • Parent participation in IEP (Y, N, N/A) • IEP review date(s) • IEP review result (whether the student continued to qualify or no longer qualified for special ed) • Parent participation in IEP review (Y, N, N/A) 	Spreadsheet designed by school	Katie Morrison/ Judy Merryfield
High School Graduation Plan	<p>For each 9th- through 12th-grade student, include the following:</p> <ul style="list-style-type: none"> • Student ID • Student name • Graduation plan developed (Y, N) • Date graduation plan developed • Graduation plan included evidence of parent/guardian/family involvement (Y, N, N/A) • Graduation plan included post-secondary plans (Y, N, N/A) • Graduation plan included a schedule that reflected credits required for graduating (Y, N, N/A) 	Spreadsheet designed by school	Katie Morrison/ Judy Merryfield

Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
	<ul style="list-style-type: none"> • Date guidance counselor/advisor reviewed student schedule • Review status (completed or pending) • Is student on track toward earning credits (Y, N) • Will student need to enroll in summer school (Y, N, N/A) <p>For each 11th- and 12th-grade student enrolled at any time in the school, also include the following:</p> <ul style="list-style-type: none"> • Date met with guidance counselor/advisor to review graduation plan (enter N/A if the meeting did not occur) • Submitted graduation plan to parent (Y, N, N/A) • Parent reviewed graduation plan at conference (Y, N, N/A) 		
High School Graduation Requirements	<p>For each 9th- through 12th-grade student, include the following:</p> <ul style="list-style-type: none"> • Student ID • Student name • The number of credits earned during the current school year • The number of cumulative credits earned at MAS and any other high school attended • If 9th through 11th grade, indicate if the student was promoted to the next grade level (Y, N) • If 12th grade, indicate if the student graduated (Y, N) 	PowerSchool	Katie Morrison/ Judy Merryfield
Academic Achievement: Local Measures Literacy and Math	<p>For all students, include the following:</p> <ul style="list-style-type: none"> • Student ID • Student name • Fall semester SRI Lexile reading level (or for new students, level from the test given within 30 days of enrollment) 	Spreadsheet designed by school	Katie Morrison/ Judy Merryfield

Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
	<ul style="list-style-type: none"> • Spring semester SRI Lexile reading level <p>For 6th-, 7th-, and 8th-grade students, also include the following:</p> <ul style="list-style-type: none"> • Spring 2009 WRAT math GLE (or for new students, GLE from the WRAT given within 30 days of enrollment) • Spring 2010 semester WRAT math GLE <p>For each 9th- through 12th-grade student, also include the following:</p> <ul style="list-style-type: none"> • Spring semester comprehensive course exam percentage correct • WRAT given within 30 days of enrollment (Y, N, N/A— not a new student) 		
<p>Academic Achievement: Local Measures</p> <p>Writing</p>	<p>For each student, enter the following:</p> <ul style="list-style-type: none"> • Student ID • Student name • Final writing total score 	<p>Spreadsheet designed by school</p>	<p>Katie Morrison/ Judy Merryfield</p>
<p>Academic Achievement: Local Measures</p> <p>IEP</p>	<p>For each student with an IEP, indicate the following:</p> <ul style="list-style-type: none"> • Student ID • Student name • Number of goals or benchmarks on the IEP • Number of goals or benchmarks achieved <p>Note: This information can be added to the special education needs student data file described above.</p>	<p>Spreadsheet designed by school</p>	<p>Katie Morrison/ Judy Merryfield</p>
<p>Academic Achievement: Standardized Measures</p> <p>WKCE</p>	<p>For each 6th-, 7th-, 8th-, and 10th-grade student, include the following:</p> <ul style="list-style-type: none"> • Student ID • Student name • Proficiency level, scale score, and state percentile for WKCE math test • Proficiency level, scale score, 	<p>Spreadsheet designed by school or grant CRC access to Turnleaf website</p>	<p>Katie Morrison/ Judy Merryfield</p>

Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
	<p>and state percentile for WKCE reading test</p> <p>For 8th- and 10th-grade students, also include the following:</p> <ul style="list-style-type: none"> • Proficiency level and scale score for WKCE language test • Proficiency level and scale score for WKCE social studies test • Proficiency level and scale score for WKCE science test • PLAN composite score from the fall semester • Total writing score <p>Note: Enter N/A in each column if the student was absent or not enrolled at the time of the test.</p>		
<p>Academic Achievement: Standardized Measures</p> <p>EXPLORE</p>	<p>For each 9th-grade student, include the following:</p> <ul style="list-style-type: none"> • Student ID • Student name • EXPLORE composite score from fall semester. Enter N/A if the student was not enrolled. • Reviewed by teacher and achievement director (Y, N, N/A) • Instructional activities embedded (Y, N, N/A) 	<p>Spreadsheet designed by school</p>	<p>Katie Morrison/ Judy Merryfield</p>
<p>Academic Achievement: Standardized Measures</p> <p>PLAN</p>	<p>For each 10th-grade student, include the following:</p> <ul style="list-style-type: none"> • Student ID • Student name • PLAN composite score from fall semester. Enter N/A if the student was not enrolled. • Reviewed by teacher and achievement director (Y, N, N/A) • Instructional activities embedded (Y, N, N/A) 	<p>Spreadsheet designed by school</p>	<p>Katie Morrison/ Judy Merryfield</p>
<p>Academic Achievement: Standardized Measures</p>	<p>For each 11th-grade student, include the following:</p> <ul style="list-style-type: none"> • Student ID • Student name 	<p>Spreadsheet designed by school</p>	<p>Katie Morrison/ Judy Merryfield</p>

Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
ACT or SAT	<ul style="list-style-type: none"> • Took the ACT (Y, N, N/A) • Took the SAT (Y, N, N/A) 		
Academic Achievement: Standardized Measures ACT or SAT	For each 12th-grade student, include the following: <ul style="list-style-type: none"> • Student ID • Student name • Took the ACT as 12th grader (Y, N, Y as 11th grader, N/A) • Took the SAT (Y, N, Y as 11th grader, N/A) 	Spreadsheet designed by school	Katie Morrison/ Judy Merryfield

Appendix C

Trend Information

Table C1					
Milwaukee Academy of Science Enrollment					
Year	Number Enrolled at Start of School Year	Number Enrolled During Year	Number Withdrew	Number at the End of School Year	Number/Percentage Enrolled for Entire School Year
2008–09	954	36	99	891	867 (90.9%)
2009–10	969	14	111	872	858 (88.5%)

Table C2			
Milwaukee Academy of Science Student Return Rates			
Year	Number Enrolled at End of 2008–09	Number Enrolled at Start of 2009–10	Student Return Rate
2009–10	869	715	82.3%

Figure C1

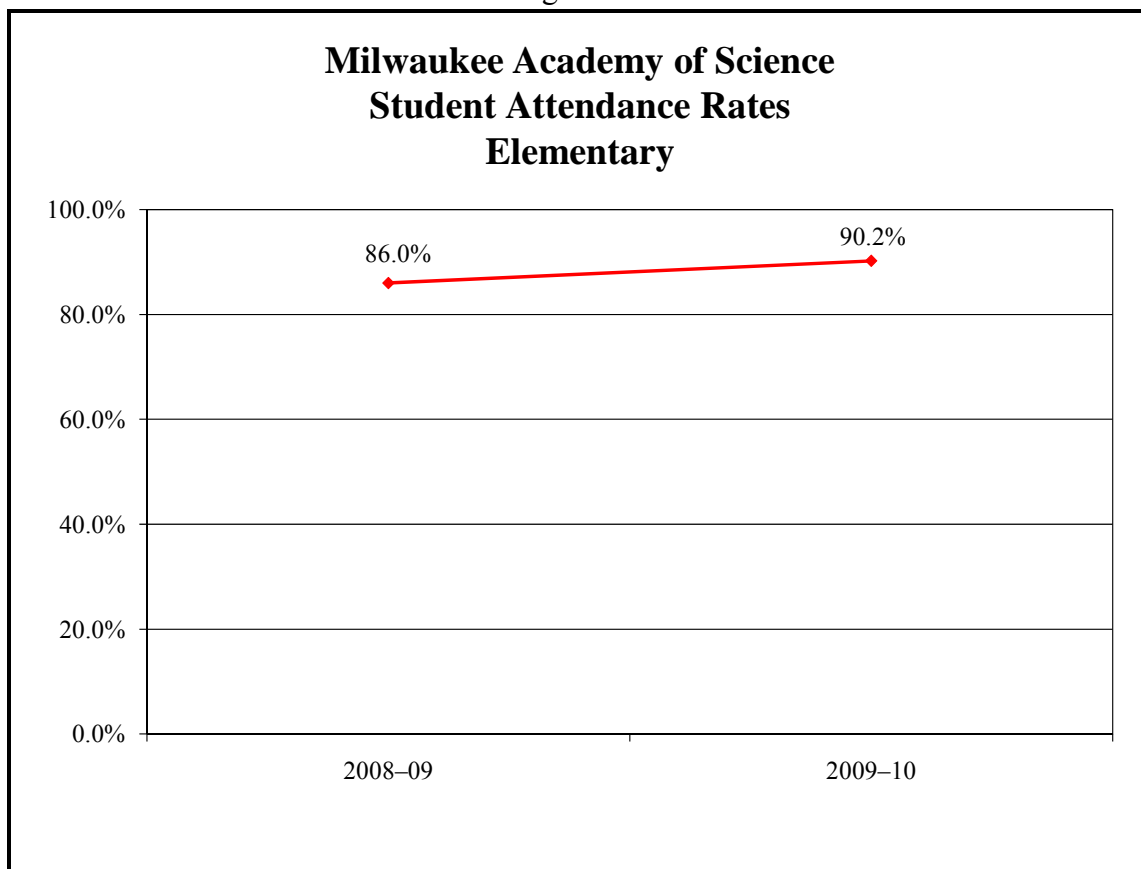


Figure C2

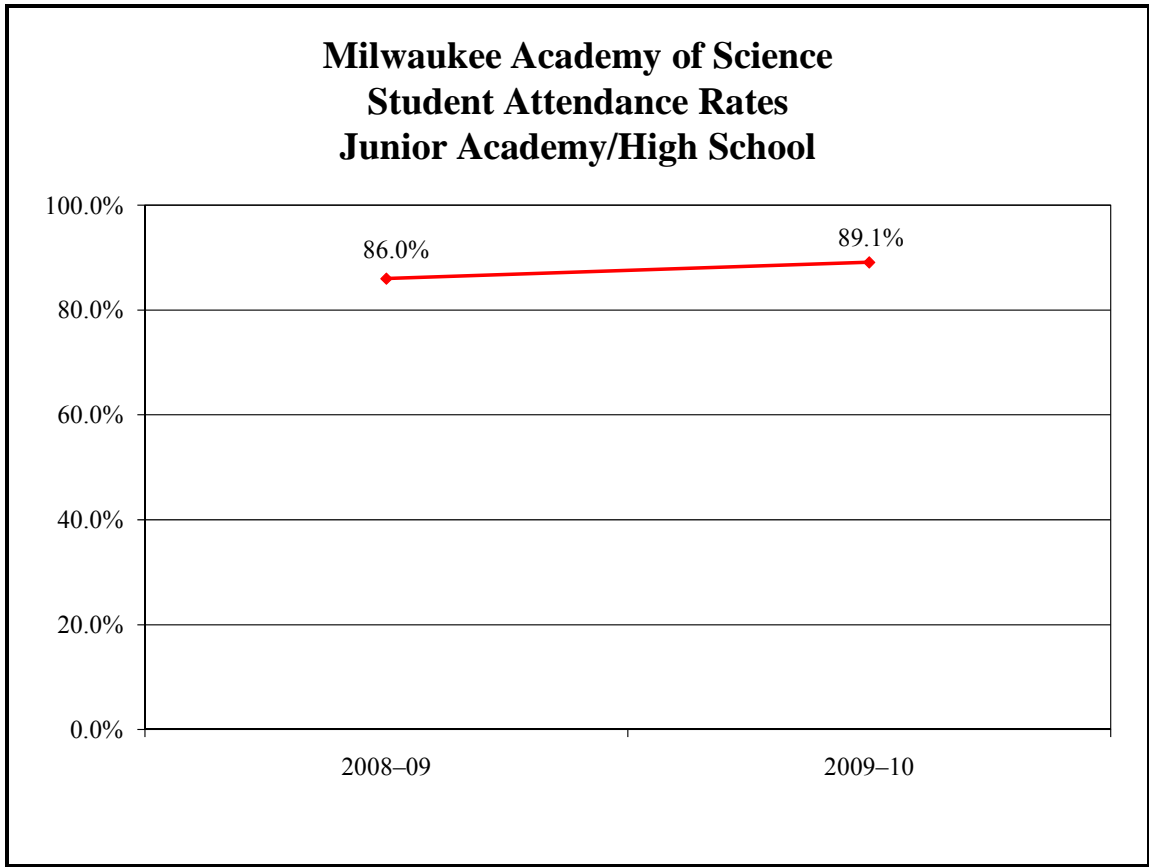


Figure C3

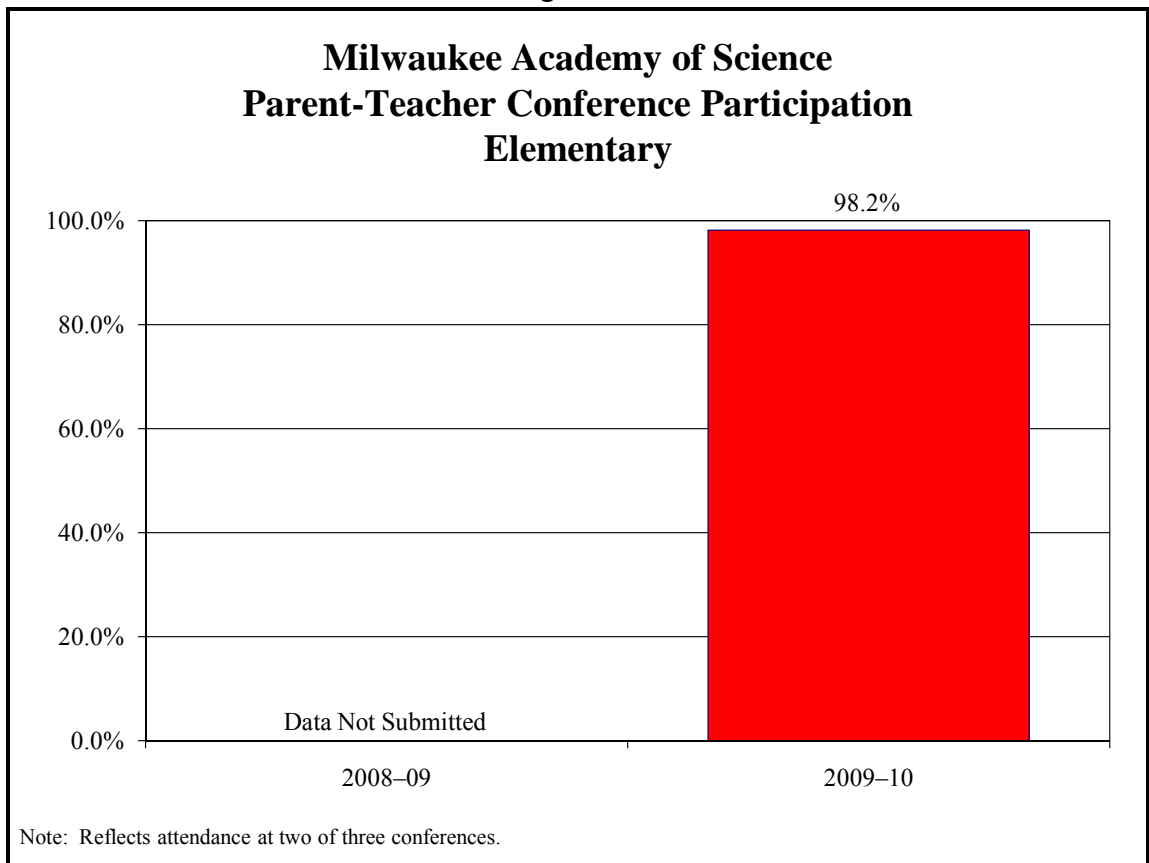


Figure C4

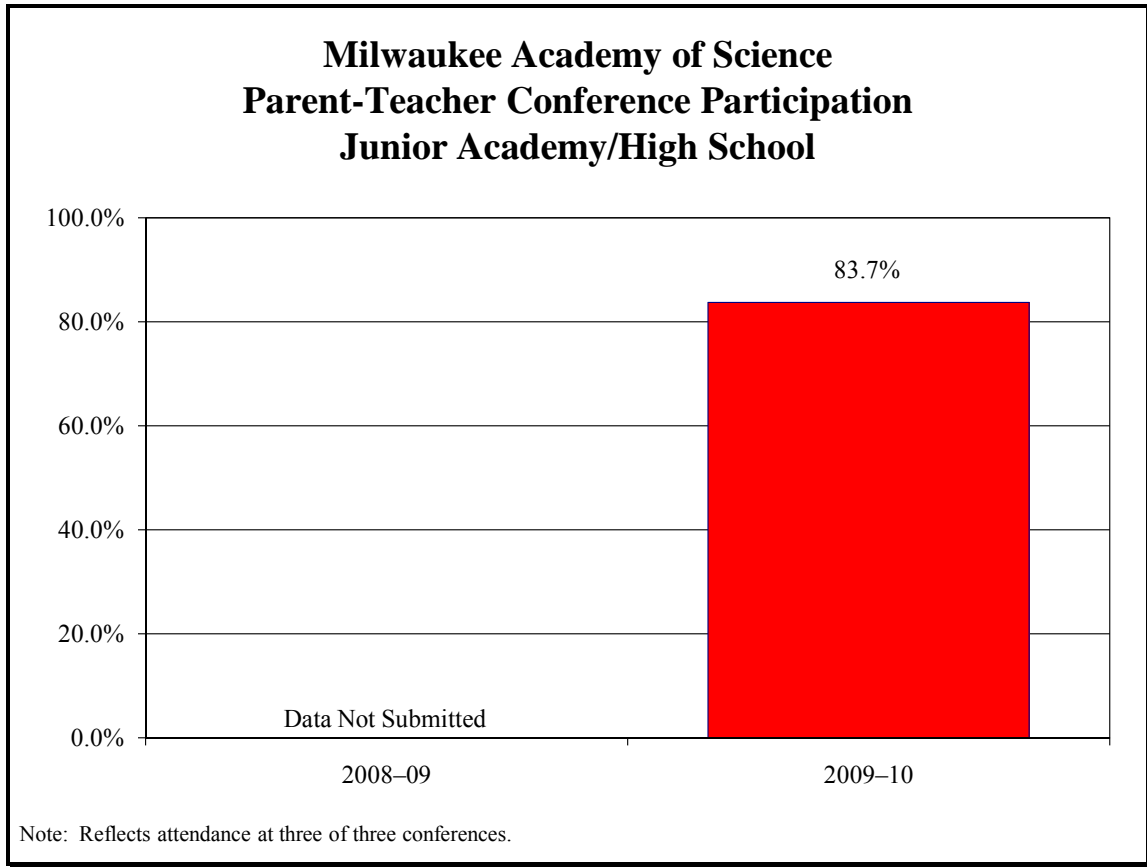


Table C3

**Milwaukee Academy of Science
SDRT Year-to-year Progress
Average Grade Level Advancement
1st Through 3rd Grades**

School Year	N	Average Grade Level Advancement
2009-10*	123	0.9

*The school was chartered by the city in 2008-09. Therefore, 2009-10 is the first year multiple-year progress was available.

Table C4

**Milwaukee Academy of Science
WKCE Year-to-year Progress
Students Who Remained Proficient or Showed Advancement
4th Through 8th Grades**

School Year	Reading	Math
2008-09*	85.6%	74.1%
2009-10	89.4%	91.0%

*Although not required, the school provided WKCE data.

Table C5		
Milwaukee Academy of Science WKCE Year-to-year Progress Students Who Were Minimal or Basic and Showed Improvement 4th Through 8th Grades		
School Year	Reading	Math
2008–09*	47.3%	52.3%
2009–10	63.9%	65.4%

*Although not required, the school provided WKCE data.

Table C6					
Milwaukee Academy of Science Teacher Retention					
Year	Number at Beginning of School Year	Number Started After School Year Began	Number Terminated Employment During the Year	Number at the End of School Year	Teacher Retention Rate: Number and Rate Employed at the School for Entire School Year
2009–10	64	0	2	62	62 (96.9%)

Table C7			
Milwaukee Academy of Science Teacher Return			
Year	Number at End of Prior School Year	Number Returned at Beginning of Current School Year	Teacher Return Rate
2009–10	64	47	73.4%

Table C8			
Milwaukee Academy of Science % Proficient or Advanced WKCE 3rd Through 8th Grades			
School Year	N	Reading	Math
2008–09*	506	42.7%	26.5%
2009–10	492	50.6%	43.9%

*First year as a City-chartered school.

Table C9		
Adequate Yearly Progress		
School Year	Met	Improvement Status
2002–03	No	Satisfactory
2003–04	No	Satisfactory
2004–05	Yes	Satisfactory
2005–06	Yes	Satisfactory
2006–07	No	Satisfactory
2007–08	No	Level 1
2008–09*	No	Level 2
2009–10	Yes	Level 2 Improved

*From 2000 to 2008, the school was chartered by UW-Milwaukee. In 2008, the school became a City of Milwaukee-chartered school.