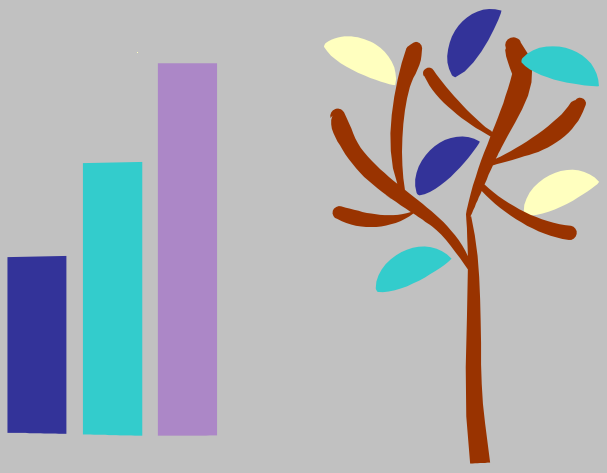
Milwaukee Academy of Science

Programmatic Profile and Educational Performance

2011–12 School Year

Report Date: September 2012



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EXECUTIVE SUMMARY
for
Milwaukee Academy of Science
2011–12

This is the fourth 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 SUMMARY[1]

The Milwaukee Academy of Science (MAS) has met all but five educational provisions in its contract with the City of Milwaukee and the subsequent requirements of the CSRC.

- Two provisions were substantially met: Not all eleventh and twelfth graders took the ACT as required, and a few new high school enrollees were not tested within 30 days of enrollment.

- Two provisions were not applicable due to the small number of high school students above the benchmarks on EXPLORE and PLAN.

- The five provisions that were not met were:

  - » Seventy-five percent of all second and third graders at or above grade-level equivalent (GLE) maintain that status;

  - » Second and third graders below GLE advance more than 1.0 GLE;

  - » All students below benchmark on any of the EXPLORE subtests or the composite score will reach benchmark or increase their score by one point at the time of the PLAN during the subsequent school year;

  - » All students below benchmark on any of the PLAN subtests or the composite score will reach benchmark or increase their score by one point at the time of the ACT during the subsequent school year; and

  - » All instructional staff hold a DPI license or permit.

[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.

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II. PERFORMANCE CRITERIA

A. Local Measures

1. 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 159 K4 and K5 students, 98.7% were proficient in literacy skills at the end of the school year. K4 and K5 proficiency were based on the BRIGANCE Comprehensive Inventory of Basic Skills. The school's goal was 90%.

- Of 227 first- through third-grade students, 92.5% showed improvement or reached proficiency in literacy skills. First through third graders were tested using the Scholastic Guided Reading Level. The school's goal was 90%.

- Of 151 fourth and fifth graders, 93.4% demonstrated growth or maintained grade equivalency in literacy, based on BRIGANCE. The school's goal was 80%.

- Measures of Academic Progress (MAP) for reading:

  » Of the 62 second through fifth graders at or above the normative mean for their grade level at the time of the fall MAP reading test, 36 (58.1%) remained at or above the normative mean on the spring test.

  » Of the 232 students below the normative mean for their grade level at the time of the fall MAP reading test, 22 (9.5%) had reached the normative mean for their grade level by the time of the spring test and 66 (28.4%) had increased at least the difference between Rasch Unit (RIT) means for the grade level at which they tested in the fall. Overall, 37.9% students showed progress from fall to spring.

  » Reading target RIT score data were available for 214 third, fourth, and fifth graders for whom fall and spring RIT scores were available; 109 (50.9%) of those students met their growth target scores at the time of the spring test.

- Of 159 K4 and K5 students, 97.5% exhibited proficiency in mathematics, based on BRIGANCE. The school's goal was 90%.

- Of 360 first through fifth graders, 90.8% showed improvement or maintained grade-level expectations in mathematics, based on BRIGANCE. The school's goal was 80%.

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- MAP for math:
    - » Of the 40 second through fifth graders at or above the normative mean for their grade level at the time of the fall MAP math test, 29 (72.5%) remained at or above the normative mean on the spring test.
    - » Of the 254 students below the normative mean for their grade level at the time of the fall MAP math test, 25 (9.8%) had reached the normative mean for their grade level by the time of the spring test and 84 (33.1%) had increased at least the difference between RIT means for the grade level at which they tested in the fall. Overall, 42.9% students showed progress from fall to spring.
    - » Math target RIT score data were available for 221 third, fourth, and fifth graders for whom fall and spring RIT scores were available; 117 (52.9%) of those met their growth target scores at the time of the spring test.
- Third- through fifth-grade students scored, on average, 13.1 points on the teacher-assessed writing sample. The school's goal was 12 points.
- Of 33 primary/elementary academy students with IEP goals, 94.3% met one or more 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):

- Junior academy students scored, on average, 45.0 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, 17.0 points higher. The school's goal was 50 points for junior academy and 25 points for high school.
- MAP for reading:
    - » Of the 60 junior academy students at or above the normative mean for their grade level at the time of the fall MAP reading test, 48 (80.0%) remained at or above the normative mean on the spring test.
    - » Of the 149 students below the normative mean for their grade level at the time of the fall MAP reading test, 24 (16.1%) had reached the normative mean for their grade level by the time of the spring test, and 61 (40.9%) had increased at least the difference between RIT means for the grade level at which they tested in the fall. Overall, 57.0% students showed progress from fall to spring.
- Of 220 junior academy students, 56.8% demonstrated progress in math based on the Wide Range Achievement Test (WRAT). On average, students demonstrated a 1.2 increase in grade level based on spring of 2011 to spring of 2012 scores. The school's goal was that, on average, students would show one month's increase for each month of instruction.

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- Of 162 high school students, 39.5% demonstrated math competency by scoring 70% or higher on the final course examination. The school's goal was 80%.

- MAP for math:

  » Of the 44 junior academy students at or above the normative mean for their grade level at the time of the fall MAP math test, 33 (75.0%) remained at or above the normative mean on the spring test.

  » Of the 168 students below the normative mean for their grade level at the time of the fall MAP math test, 18 (10.7%) had reached the normative mean for their grade level by the time of the spring test, and 42 (25.0%) had increased at least the difference between RIT means for the grade level at which they tested in the fall. Overall, 35.7% students showed progress from fall to spring.

- Junior academy students scored, on average, 20.3 points; and high school students scored, on average, 18.0 points on a teacher-assessed writing sample. The goal for all junior academy and high school students was 18 points.

- Of 36 junior academy and high school students with IEP goals, 100.0% met one or more of their goals this year. The school's goal was 80%.

- Graduation plans were developed for all (100.0%) 166 ninth- through twelfth-grade students. The school's goal was to develop a plan for all students.

- Ninth graders earned an average of 6.5 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, 25.7 credits. One hundred fifty-one (91.0%) students were promoted to the next grade or graduated from high school this year.

2. 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;
- Special education student records;
- Testing of new enrollees; and
- High school graduation plans.

The primary/elementary school met all three of its internal goals (attendance, parent conferences, and special education student records), but the junior academy/high school met only three (special

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education student records, testing of new enrollees, and high school graduation plans) of its five internal goals.[2]

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

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

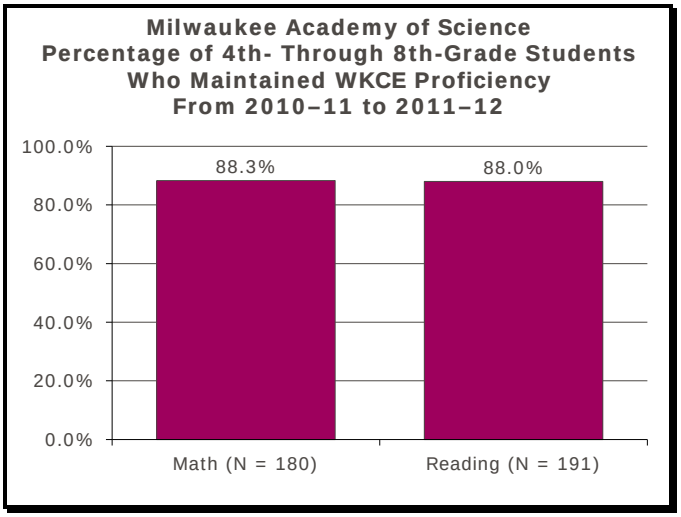
- Fifty-four second graders advanced, on average, 1.0 GLE; and 61 third graders advanced, on average, 0.7 GLE, based on Stanford Diagnostic Reading Test (SDRT) scores from consecutive years.

- Sixty-three (68.5%) second and third graders at or above GLE last year maintained GLE during the current school year. The CSRC goal is that 75% of these students maintain GLE from one year to the next.

- Twenty-seven second and third graders below GLE last year advanced, on average, 0.8 GLE. The CSRC goal is that these students advance more than 1 GLE.

- Of 191 fourth through eighth graders, 88.0% maintained proficiency in reading, and 88.3% of 180 students maintained proficiency in math. The CSRC goal is 75%. See Figure ES1.

Figure ES1



[2] The junior academy/high school met the special education student records, the testing of new enrollees, and the graduation plan goals but not its internal goals for attendance and parent conferences. Note that the junior academy met the attendance goal but the high school did not; when the two attendance rates were averaged together, the attendance rate was below 90%, excluding excused absences. When excused absences were included, the attendance rate rose to 90%, consistent with the school's goal. Similarly, the junior academy met the parent participation goal while the high school did not; the rates, when averaged together, were below the goal for this year.

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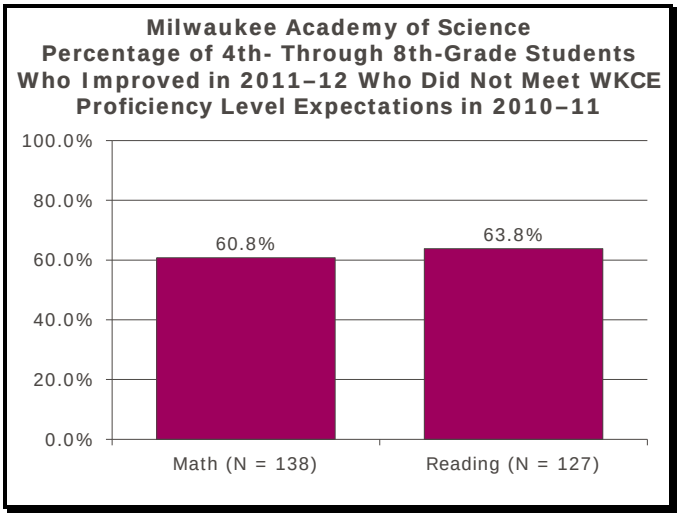
- Of 127 fourth- through eighth-grade students who were below proficient in reading, 63.8% showed improvement, while 60.8% of 138 students who were below proficient in math showed improvement (Figure ES2). The CSRC goal is 60.0%.

Figure ES2



- EXPLORE to PLAN: Forty-eight students took the EXPLORE in the fall of 2010 as ninth-grade students and the PLAN in the fall of 2011 as tenth graders. CRC examined progress for students who were at or above the EXPLORE benchmarks as well as those who were below benchmark at the time of the fall 2010 EXPLORE.

  Students at or above benchmark: Due to the small number of students at or above benchmark on the EXPLORE subtests and the composite score, progress on the PLAN could not be reported.

  Students below benchmark:

  » Thirty-three (89.2%) students were below the English benchmark on the fall 2010 EXPLORE; three (9.1%) of those students reached the benchmark and 18 (54.5%) had improved their scores by at least one point on the fall 2011 PLAN, for a total growth rate of 63.6%.

  » Thirty-six (97.3%) students were below the EXPLORE math benchmark; none of those students reached benchmark, but 16 (44.4%) students had improved their math scores by at least one point between the EXPLORE and PLAN, for a total growth rate of 44.4%.

  » Thirty-six (97.3%) students were below the EXPLORE reading benchmark; two (5.6%) of those students reached benchmark by the fall 2011 PLAN and 26 (72.2%) had improved their scale scores by at least one point, for a total growth rate of 77.8%.

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» Thirty-seven (100.0%) students were below the science benchmark; none of those students reached benchmark by the time of the fall 2011 PLAN, but 21 (56.8%) students increased their scale scores by at least one point, for a total growth rate of 56.8%.

» Thirty-six (97.3%) students had a composite score less than 17 on the fall 2010 EXPLORE; none of those students scored an 18 or higher on the PLAN, but 25 (69.4%) students improved their composite scores by at least one point, for a total growth rate of 69.4%.

- PLAN to ACT: Fourteen students took the PLAN in the fall of 2010 as tenth-grade students and the ACT during 2011–12 as eleventh graders. CRC examined progress for students who were at or above benchmark as well as those who were below benchmark at the time of the fall 2010 PLAN.

  Students at or above benchmark: Due to the small number of students at or above benchmark on the PLAN subtests and the composite score, progress on the ACT could not be reported.

  Students below benchmark:

  » Eighteen (66.7%) students were below the English benchmark on the fall 2010 PLAN; none of those students reached the benchmark, but eight (44.4%) had improved their scores by at least one point on the 2011–12 ACT, for a total growth rate of 44.4%.

  » Twenty-three (85.2%) students were below the PLAN math benchmark; none of those students reached benchmark, but 14 (60.9%) students had improved their math scores by at least one point between the PLAN and ACT, for a total growth rate of 60.9%.

  » Eighteen (66.7%) students were below the PLAN reading benchmark; one (5.6%) of those students reached benchmark by the 2011–12 ACT and eight (44.4%) had improved their scale scores by at least one point, for a total growth rate of 50.0%.

  » Twenty-six (96.3%) students were below the PLAN science benchmark; none of those students reached benchmark by the time of the 2011–12 ACT, but nine (34.6%) students increased their scale scores by at least one point, for a total growth rate of 34.6%.

  » Twenty-three (85.2%) students had a composite score less than 17 on the fall 2010 PLAN; none of those students scored an 18 or higher on the ACT, but 11 (47.8%) students improved their composite scores by at least one point, for a total growth rate of 47.8%.

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III. SURVEY/INTERVIEW RESULTS

Every other year CRC conducts parent surveys and interviews board members, teachers, and students to obtain feedback on their perceptions about the school. Some of the key results include:

- Parents of 357 (36.3%) of 983 children responded to the survey. Of these:
  - » More than three quarters (83.9%) would recommend this school to other parents; and
  - » Nearly two thirds (62.9%) rated the school's overall contribution to their child's learning as "excellent," and another 22.9% rated the contribution as "good."
- Eleven of 18 board members participated in interviews. Of these :
  - » More than half (54.5%) rated the school as "excellent" overall; and
  - » The same number (54.5%) said their main suggestion for improving the school was to secure funds to either cover the cost of transportation for students or for more resources overall.
- Nineteen of the 80 instructional staff participated in interviews. Of these:
  - » Ten (52.6%) listed the school's progress toward becoming an excellent school as "excellent," and nine (47.4%) of the teachers listed the school's progress as "good;" and
  - » Eleven (57.9%) rated the school's contribution to students' academic progress as "excellent" and the remaining eight (42.1%) rated the contribution as "good."
- Twenty-five randomly selected fifth-, eleventh-, and twelfth-grade students were interviewed. Of these:
  - » All (100%) who responded indicated they had improved in reading and 91.6% improved in math at the school;
  - » Twenty-three (92.0%) said they felt safe in school; and
  - » All (100.0%) of the high school students planned to go to college.

V. RECOMMENDATIONS

The school addressed all of the recommendations in its 2010–11 programmatic profile and educational performance report. To continue a focused school improvement plan, CRC reviewed MAS's academic achievement data for the last school year and solicited input from school staff to formulate these recommendations for the 2012–13 year.

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For the primary/elementary academy:

- Provide additional training to staff on Response to Intervention (RTI) to enable teachers to maximize the differentiation of instruction they provide to both the lower- and higher-performing students.

- Develop new strategies to improve the reading performance of the lower-achieving students in the early grades, i.e., first through third.

- Implement classroom and school-wide practices to reduce the number of suspensions.

For the junior academy:

- Develop new strategies to enable students to demonstrate higher levels of mastery in basic math and algebraic concepts.

- Consider providing students with more time and resources to enable them to focus more effectively on the acquisition of both reading and math competencies.

- Assist staff with their efforts to implement the MAP assessments and corresponding curriculum redesign approaches so that more students demonstrate progress on this local measure.

For the high school:

- Embed the college readiness standards into the high school curriculum and train staff to use periodic assessment data to identify areas requiring "reteaching" and to monitor students' progress on the mastery of these standards. Individual instructional plans may be needed to ensure that more students are making regular progress toward graduation and post-secondary success.

- Adopt new strategies to better engage students and parents in MAS as demonstrated by improved attendance rates and parental participation in school conferences.

- Consider implementing an incentive system, especially for lower-performing students, to increase their engagement in the learning lab both before and after school.

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I. INTRODUCTION

This is the fourth 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 necessary data collection. CRC staff also reviewed a representative sample of special education files.
- At the end of the school year, structured interviews were conducted with the primary/elementary academy and the junior academy/high school leadership teams.
- CRC staff conducted interviews with a random selection of students, teachers, and members of the school's board of directors.
- CRC conducted a survey of parents of all students enrolled in the school.
- The school provided electronic data to CRC, which CRC compiled and analyzed.

[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 science research organization and division of the National Council on Crime and Delinquency (NCCD).

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II. PROGRAMMATIC PROFILE

Milwaukee Academy of Science
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Telephone: (414) 933-0302
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President and Chief Executive Officer: Judy Merryfield
Associate Principal, Sixth Through Twelfth Grades: Jody Dungey[5]
Associate Principal, Kindergarten Through Fifth Grade: Jacqueline DeJean

A. Description and Philosophy of Educational Methodology

1. Mission and Philosophy

According to the MAS website, "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 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 to 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;

[5] MAS hired a new leader for the junior academy/high school at the beginning of this school year. However, this individual did not remain for the entire school year and was replaced by Mr. Dungey during the second semester of the school year.

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- 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; and
- 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 2008–13 strategic plan, are threefold.

- All students who are enrolled at MAS for three or more years will meet or exceed grade-level standards in reading, writing, and mathematics.
- By 2013, all MAS graduates will demonstrate 21st century skills necessary to make a successful transition to post-secondary education in science.
- Each student will design and complete challenging, meaningful science projects or experiences tailored to his/her interests, 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 the curricular areas in which they teach. Teachers use a variety of instructional groupings including one-on-one instruction, small-group instruction, cooperative

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learning, whole-group instruction, and independent study. For this school year, MAS added an instruction assistant to assist teachers in each of the grades from first to eighth. These assistants worked under the supervision of the classroom teachers to provide supplemental instructional support to small groups in reading and math. Teachers may also 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 lessons determine the most appropriate instructional techniques.[6]

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 and high school 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 primary/elementary and junior academy used the Measures of Academic Progress (MAP) to assess students' progress in reading. Both programs used the Scholastic Reading Inventory (SRI) to assess and monitor students' acquisition of higher-level reading skills.

For math, MAS uses the Real Math curriculum for the primary/elementary academy students. Prentice Hall is used for the junior academy students, with the focus for eighth graders on algebraic concepts. The high school math program allows students to progress through courses in algebra I, geometry, and algebra II/trigonometry. More advanced courses are provided based on students' needs.

[6] This information was taken from the school's city charter application.

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Students start their science learning at the youngest ages by focusing on themes aligned with their reading series. This year, a new science curriculum, the McGraw-Hill series, was adopted for K4 through fifth grade. 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. The older students' math and science curriculum has been strengthened by focusing on the concepts emphasized in the common core curriculum as well as the competencies embedded in the EXPLORE, PLAN, and ACT. Project Lead the Way (PLTW) continues to be an option for MAS students. 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.

Finally, MAS recognizes the importance of "specials" in a student's academic program, so each student receives instruction in art and physical education on a regular basis. A decision was made to drop instruction in music and replace it with a technology laboratory option for the 2011–12 school year.

B. School Structure

1. Board of Directors

MAS is governed by the Milwaukee Science Education Consortium, a 501c(3) organization. MAS is an unincorporated association under the control of the consortium. The consortium is governed by a board of directors. It has ultimate responsibility for the success of the school and is accountable directly to the City of Milwaukee and the Wisconsin Department of Public Instruction (DPI) to ensure that all of the terms of its charter are met. The board sets policy for the school and hires

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the school president, who, in turn, hires the staff of the school. The board has regular meetings where issues are discussed, policy is set, and business of the school is conducted.[7]

This year the board of directors consists of 18 members: a president, vice president, secretary/treasurer, and 15 other directors. Board members represent each of the institutions of higher education that contributed to the creation of the consortium (Medical College of Wisconsin, Cardinal Stritch University, Marquette University, Alverno College, Wisconsin Lutheran College, Mount Mary College, Milwaukee Area Technical College, Milwaukee School of Engineering, and the University of Wisconsin-Milwaukee). Other board members represent major local businesses and contribute their expertise in administrative and fiscal management.

Several members have been on the board since the school's inception 12 years ago. Others have served on the board from one to nine years. Board members reflect a variety of experience and expertise including educational administration, accounting, nonprofit leadership and management, law, development/construction, marketing/fundraising, and teaching, as well as a parent representative. Eleven (64.7%) of the eligible members of the board participated in the board interviews conducted this year. [8]

All board members reported that they participated in strategic planning, received a presentation on the school's annual academic performance report, and received and approved the school's annual budget as well as a copy of the annual financial audit. Almost every member highlighted the commitment/leadership/vision of the board, administration, and/or teachers as what they valued most about the MAS community. Several members also expressed the importance of seeing greater academic progress among students over the last couple of years. Over and over, the

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[7] This information is taken from the school's website and its original application to the City of Milwaukee.

[8] Board interviews, along with teacher and student interviews and parent surveys, are conducted every other year. All board members were contacted via email and requested to confirm a date and time for an interview. Not all of the members responded to these email requests and therefore interviews were not conducted with these members. One member had only recently joined the board and it was agreed that it was not appropriate for an interview to be conducted at this point in time.

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members expressed frustration about the burden the school confronts due to costs it incurs from transporting students to and from school. This burden was exacerbated in the minds of a few members by the inequitable level of per pupil allocations provided to charter schools for educating students in Milwaukee. The main suggestion for improving the school was to either secure funds to cover the cost of transportation for students or to secure additional resources through other means.

Other board opinions are related to specific topics covered elsewhere in this report and can be found within those sections.

2. Areas of Instruction

MAS administration is structured to support the ongoing improvement of the learning environment and academic achievement of all its students. The school 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. This year MAS added two deans of students to each of the school's organization units. The deans were expected to work with students to prevent and manage behavioral problems as well as to serve as the primary connection between home and school. The deans were also actively involved in working with parents/guardians to improve the attendance and engagement of students and parents with the MAS community. The primary/elementary academy serves students in K4 through fifth grade; 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 assessing and improving students' academic performance. In the earliest grades (K4 through 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

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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. This year the junior academy was departmentalized in every subject area. In an effort to better prepare students for the high school experience, they moved from classroom to classroom for their content instruction. These practices were also undertaken to maximize the teachers' expertise and enable them to operate more effectively as "teacher teams." Most recently, high school students were 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 5.0
- 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.

During the interview and survey process, board members, teachers, and parents were asked about the school's program of instruction. In all of the groups, nearly 100% of those who responded

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rated the program of instruction as excellent or good or were either satisfied or very satisfied with the school's curriculum and its science emphasis.

3. 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 2011–12 academic year, MAS had 38 primary/elementary academy classrooms and 25 junior academy/high school classrooms. Numerous, additional rooms are available for art, computer labs, libraries, science labs, resource areas, engineering labs, and conference rooms.

Classrooms were staffed by 32 primary/elementary academy teachers, lead teachers, and instructional assistants, 13 junior academy teachers and instructional assistants; and 12 high school teachers. These classroom teachers were supported by a special education coordinator, eight special education teachers; and a special education assistant, eight Title 1 support teachers/tutors; two art teachers; two physical education instructors; a building substitute teacher; and a computer technology specialist. [9] Other educational support staff at the school include eight classroom assistants and a guidance counselor for ninth- through twelfth-grade students. The school also employed three deans of students, one 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, four office staff, two security staff, and a food service worker.

[9] The special education teachers included two speech and language specialists.

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At the beginning of the year, 31 (38.8%) of the 80 instructional staff were newly hired.[10] The remaining 49 (61.3%) teachers returned from the 2010–11 school year and had been at the school from one to 11 years. The overall return rate from the 2010–11 to 2011–12 school year for eligible instructional staff was 77.8%.[11] During the 2011–12 school year, four (5.0%) of 80 teachers left the school prior to the end of the school year, resulting in an annual school year teacher retention rate of 95.0%. By the end of the 2011–12 school year, the instructional staff had been teaching at the school for an average of 3.3 years.

Five (6.3%)[12] of the 80 instructional staff employed during the year did not hold a Wisconsin DPI license or permit to teach. One of these teachers made an application for a license on September 28, 2011 but he still had not been granted a license by DPI at the time this report was written.

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.[13] 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;

[10] It should be noted that MAS ended last year with 67 instructional staff indicating that 13 (41.9%) of the new hires were also newly created positions.

[11] This rate was calculated excluding the teachers who were at MAS at the end of the 2010–11 school year but who were not offered contracts for the 2011–12 school year, either due to unacceptable performance or the elimination of their instructional position.

[12] Two of the non-certified instructional staff were grade-level teachers, two were instruction assistants, and one was a special education teacher.

[13] 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.

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- 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 staff members are encouraged to participate in professional development programs and are provided time for collaborative planning and departmental meetings. In addition, teachers are encouraged to attend relevant conferences and workshops. For example, some of the K4 through eighth-grade staff attend 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: student achievement gains (50%); contributions to the community (10%); and professional development in Character Counts (20%) and Teach Like a Champion (20%). The evaluation process is explained in detail in the MAS *Staff Handbook, 2010–2011*. These evaluation frameworks were revisited this school year and were also used to assess the performance of the associate principals as well as the achievement coordinators.[14]

During the interview process, teachers were asked about professional development opportunities; 17 (89.5%) of the 19 teachers rated professional development opportunities as excellent or good, and all (100%) teachers indicated they were satisfied with the opportunities for continuing education.

[14] The handbook was updated for the 2011–12 school year and will be updated again for the 2012–13 school year.

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4. Hours of Instruction/School Calendar

For primary/elementary students, the regular school day began at 8:30 a.m. and ended at 3:20 p.m. Students were served breakfast between 7:55 and 8:20 a.m. The junior academy students' school day began at 8:25 a.m. and ended at 3:20 p.m. Breakfast was provided for these students at 7:55 a.m. The high school students started their day between 7:40 and 9:00 a.m. and ended their day between 3:00 and 3:55 p.m. Breakfast was made available to high schoolers between 8:31 a.m. and 8:56 a.m. The first class period started at 7:40 a.m. and the last period ended at 3:51 p.m. High school students participated in seven 51-minute class periods each day. These students also had a 51-minute lunch break. The first day of student attendance was August 15, 2011, and the last day was June 12, 2012. The highest possible number of days for student attendance in the academic year was 171 and the contract provision of at least 875 hours of instruction was met.

MAS offers its students regular opportunities for afterschool activities and academic support. On Tuesdays or Wednesdays the primary/elementary students were encouraged to participate in science club activities. The activities were primarily for third to fifth graders in the first semester and K5 through second graders the second semester. These students were also able to participate in basketball, girl/boy scouts, tutoring, etc., for four days of the week from 3:35 until 5:00 p.m. The junior academy students were able to participate in the Learning Lab from 3:20 until 4:30 p.m. three days of the week (Tuesday through Thursday). Other activities were available for these youth and their high school peers from 3:20 until 5:00 pm.[15] The Learning Lab was available for all high school students both before (7:00 until 8:30 a.m.) and after (3:00 until 6:00 p.m.) school. The lab was staffed by the high school teachers, and students could do general studying, independent reading, research on the computer, prepare for the ACT, complete assessments or assignments, or obtain enrichment

[15] These activities included basketball; fitness; cheerleading; dance; career club; self-defense; Pearls for Teen Girls, Inc.; etc.

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instruction. Participation in the Learning Lab was strongly encouraged for students with the greatest needs.

5. 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 18 directors on the school's consortium board is a parent representative position. This board is responsible for making decisions related to school policies and for approving the school's strategic direction.
- MAS employs three deans of students, who are expected to work with parents/families to ensure that children are coming to school regularly. It is also their responsibility to provide parents with regular and diverse opportunities to participate in school functions.
- MAS seeks regular communication with its families by having each grade level send weekly newsletters. These newsletters highlight upcoming school activities and describe recent student achievements and school awards. Teachers are also 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 during parent/teacher conferences.[16]

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.

Teachers, parents, and board members were asked about parental involvement. A majority (72.0%) of board members indicated they were somewhat or very satisfied with the level of parental

[16] This information was extracted from MAS's charter school application and the high school's *Parent Handbook*.

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involvement with the school. Just over half (52.0%) of the teachers indicated they were somewhat dissatisfied with the level of parental involvement. A large majority (88.3%) of parents indicated that the opportunity for parent involvement with the school was excellent or good, and more than 90% indicated that opportunities for parental participation was an important reason for choosing MAS.

6. Waiting List

The school's administrators reported that as of May 2012, the school had a waiting list for two of the elementary grade levels and the ninth grade for the high school for the 2012–13 school year. The numbers of students on these lists, however, were small.

7. Discipline Policy

MAS places a strong emphasis on a safe and orderly learning environment. The school has adopted a "Code of Conduct," which 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 *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 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 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

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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.

This year teachers, parents, and board members were asked about the discipline policy at MAS. The opinions expressed were very favorable regarding discipline policy:

- Teachers:
  - » All (100%) teachers considered the discipline at the school as a "very important" or "somewhat important" reason for continuing to teach there; and
  - » Just over three quarters (78.0%) were either very satisfied or somewhat satisfied with both the discipline policy as stated and adherence to the discipline policy.
- Parents:
  - » More than 90% of the parents considered discipline as a "very important" or "somewhat important" factor in choosing MAS;
  - » Three quarters (75.1%) rated the discipline methods at the school as "good" or excellent"; and
  - » A slightly smaller number of parents (73.2%) were comfortable with how the staff handle discipline.[17]
- Board Members:
  - » All board members who responded to this item were either very or somewhat satisfied with the discipline policy;[18] and
  - » All of the board members who knew about adherence to the discipline policy were either very or somewhat satisfied.

[17] Agreed or strongly agreed with the statement, "I am comfortable with how the staff handles discipline."

[18] One board member did not feel that he/she had enough knowledge about the discipline policy or practice to respond to this question.

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8. 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. The leadership team at MAS indicated that most of their eighth graders continue at MAS for high school. At the end of the school year, 92.0% of the eight graders that were promoted to ninth grade were enrolled in MAS for the next school year. The remaining five students were enrolled in either MPS or choice high schools.[19] The reasons generally stated for students not returning to MAS for high school are the desire to participate in school athletics or to pursue interests other than science and/or engineering.

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 reported completing 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. Each senior had two subsequent individual meetings to review their progress toward graduation and movements for entry into colleges or a specific career field. The counselor also helped these students with ACT registration.

- All eleventh graders participated in an individual session to develop a graduation and career plan. Assistance was also given to these student with the ACT registration process. A "Timeline for Success" was presented to every grade level in the classroom. This session outlined things college-bound scholars should be doing to prepare for their future education and identified resources available to them through the guidance office.

[19] Some of the schools chosen by MAS eighth-grade graduates include King and Messmer.

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- 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. A special two-day career exploration activity was provided for the sophomores. Finally, the Wisconsin Covenant Scholars were provided with an outline of their responsibilities to continue with this program and copies of all necessary forms for completion.

- 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 provided by MAS 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.

- MAS continued the partnership with UWM Talent Search to find potential pre-college programs for ninth through eleventh graders and to recruit students to their programs. A booth was set up in the school cafeteria for these activities.

- Great Lakes Higher Education assisted the school as follows:

  » Presented to eleventh graders to assist them with their selection of specific colleges;

  » Helped to provide resources regarding post-secondary education financial aid to tenth and eleventh graders. Individual appointments were made for seniors to complete the FAFSA application and review their award letters.

  » Provided information for a “college land adventures” display for ninth graders.

  » Teamed up to present an ACT kickoff day with juniors in December and College 101 for parents in April.

- Students were assisted with completing applications, preparing for interviews, and getting to interviews for Mayor Barrett’s Summer Youth Internship Program.

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- Students were offered opportunities for trips to four different colleges.
- Recruiters from nine post-secondary institutions 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:

- Thirteen (81.2%) of the 16 high school graduates were accepted into post-secondary schools or a branch of the military; and
- The remaining three students were planning to work for a period of time.

All of the eleventh and twelfth graders interviewed at the end of the school year indicated that teachers had talked to them about college and that they were planning to attend college.

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C. Student Population

MAS started the school year on August 15, 2011. As of September 16, 2011, 1,039 students were enrolled in K4 through twelfth grades.[20] During the year, 40 students enrolled in the school and 128 students withdrew.[21] Students withdrew for a variety of reasons. Of the primary/elementary academy students, 28 moved out of the district, 22 students moved out of state, six withdrew due to behavior issues, six withdrew for other parental reasons, three were expelled, and two left due to transportation issues. Of the junior academy and high school students, 46 transferred to a different school, 14 were expelled for fighting or gang activity, five transferred out of state, and one student stopped attending for an unknown reason.

At the end of the year, there were 951 students enrolled. Student enrollment was as follows:

- There were 561 students in K4 through fifth grades, 224 in junior academy (sixth through eighth grades), and 166 students in high school (ninth through twelfth grades).
- There were 505 (53.1%) girls and 446 (46.9%) boys.
- The primary/elementary academy was comprised of 556 (99.1%) African American students, four (0.7%) Hispanic students, and one (0.2%) White student. The junior academy/high school was comprised of 386 (99.0%) African American students, three (0.8%) White students, and one (0.3%) Hispanic student.
- There were 111 students with special education needs. Twenty-nine students had speech and language needs (SPL); 23 had other health impairments (OHI); 17 had learning disabilities (LD); 12 had specific learning disabilities (SLD); 10 had SPL with OHI; seven had SLD with SPL; four had emotional/behavioral disabilities (EBD); three had EBD with OHI; two had autism with SPL; two had cognitive disabilities (CD) with SPL; one had CD with OHI and SPL; and one had SLD with OHI.
- There were 799 (84.0%) students eligible for free/reduced lunch.

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

[20] There were 600 students in primary/elementary academy, K4 through fifth grade; 256 in junior academy, sixth through eighth grade; and 183 students were in high school, ninth through twelfth grades.

[21] Twenty-three students enrolled and 62 withdrew from primary/elementary academy; 10 enrolled and 42 withdrew from junior academy; and seven enrolled and 24 withdrew from high school. Eleven of the students who withdrew from MAS had special education needs.

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Figure 1

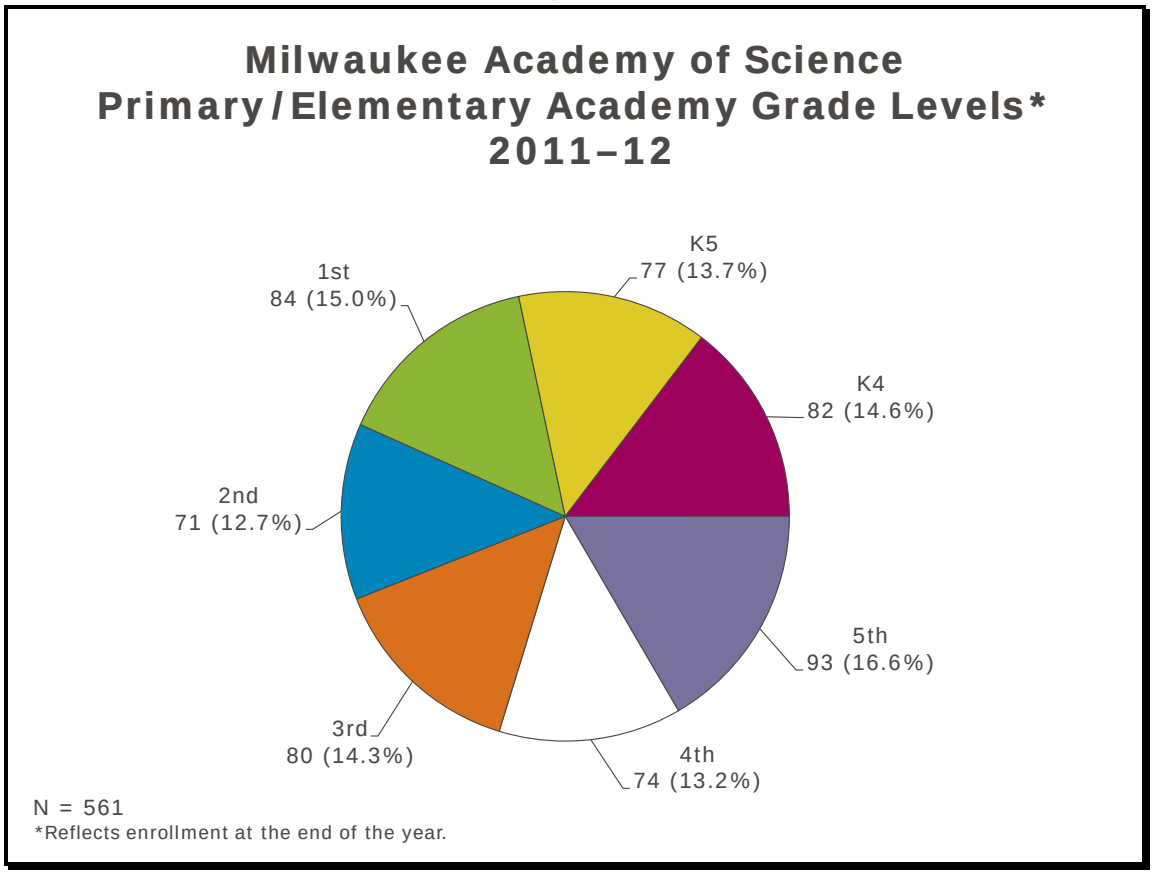
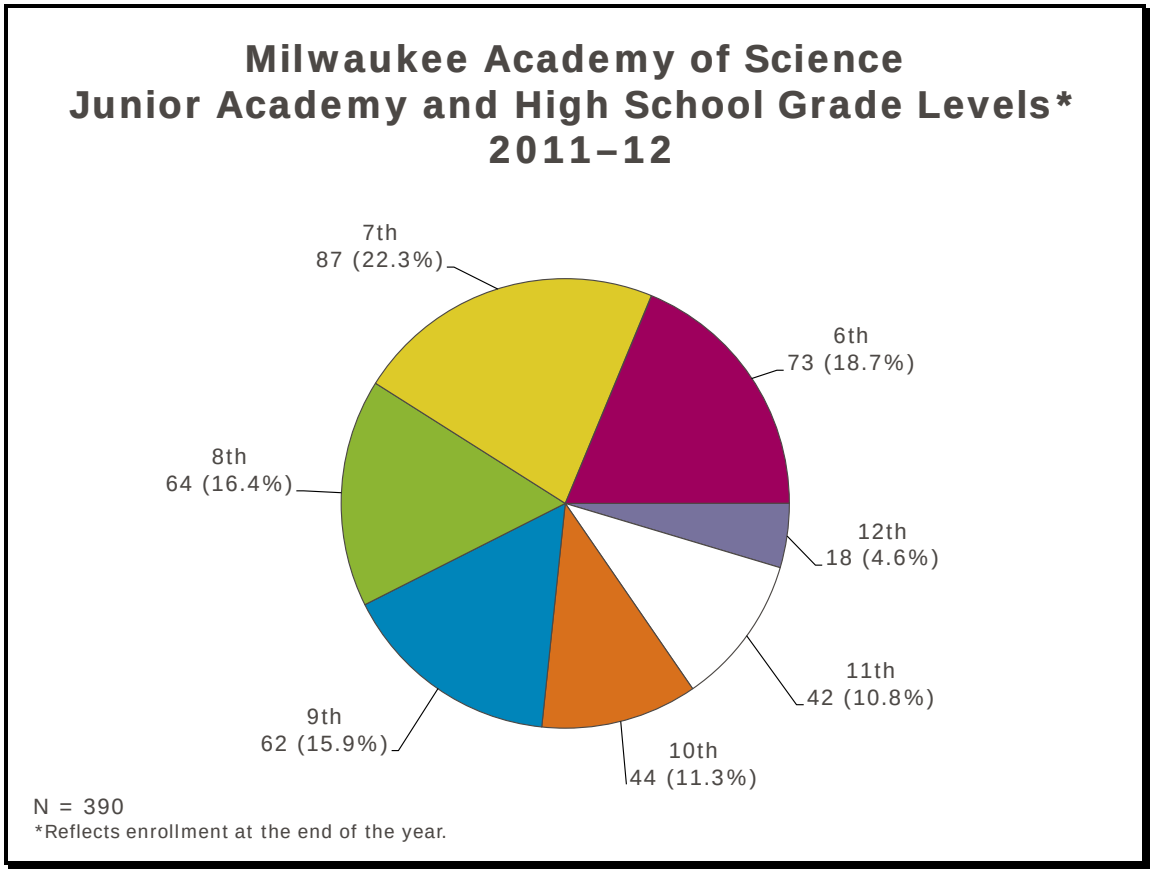


Figure 2



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There were 914 students who were enrolled for the entire school year. This represents a retention rate of 88.0%.[22] Of 600 primary/elementary academy students, 539 (89.8%) were enrolled for the year; and 375 (85.4%) of 439 junior academy and high school students were enrolled for the year.

There were 921 students enrolled at the end of the 2010–11 school year who were eligible to return to the school, i.e., had not graduated from high school. Of these, 761 were enrolled as of the third Friday in September 2011. This represents a student return rate of 82.6%.[23]

A random sample of 25 sixth, eleventh, and twelfth graders participated in satisfaction interviews at the end of the school year. At least 92.0% of the students interviewed reported that they felt safe in school, learned new things in school, and that they improved in reading and math. Of the students sampled, 96.0% reported that their teachers helped them at school and that they liked being in school. When asked what they liked best about the school, students most frequently mentioned their teachers, the science focus and the corresponding rigor of the academics, and the community feel about the school. When asked what they liked least about the school, the majority of the students said the rules or the uniforms. It should be noted, however, that six (24.0%) students could not identify anything they did not like about the school.

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 2010–11 academic year.

For the primary/elementary academy:

- Recommendation: Provide adequate professional development to staff to help them maximize MAP assessment data so they can differentiate their instruction to students

[22] Nine hundred and fourteen of 1,039 students enrolled at the beginning of the school year.

[23] Additionally, five students who were enrolled on the last day of the 2010–11 school year who were eligible to return were not enrolled on the third Friday of September but returned to MAS later in the school year.

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in reading and math based on students' individual needs. Staff will also be expected to use the MAP assessment results to monitor each student's individual progress in these two basic skill areas.

Response: At the beginning of the school year, staff participated in an in-service training session on MAP and learned how to administer it, review results, and revise curriculum to better meet the needs of all students in both reading and math. A second training session was held later in the school year to enhance staff members' ability to use the results and differentiate their instructional strategies. After each of the three assessments, the grade level teams reviewed the results, monitored for growth, and created plans to enable more students to make regular progress toward their expected growth levels.

- Recommendation: Engage staff in professional development activities related to Response to Intervention (RTI).[24] As part of this professional development process, staff will refine their RTI process as a group to promote consistency and effectiveness in daily practice.

  Response: Staff participated in a half-day inservice on RTI and discussed best practices related to this process for students. MAS staff also participated in monthly meetings of a local RTI consortium. The MAS RTI team participated in a second training that focused on teacher and student responses to the process and provided technical assistance on the components of RTI. The MAS team also completed a self-assessment and identified next steps for the school to undertake to improve its practice and student outcomes. Finally, the Title 1 team was given additional training to improve their competencies in the utilization of RTI assessment tools obtained from the RTI website.

- Recommendation: Utilize work completed over the summer by the reading improvement team in reviewing current reading tools, resources, and practice as compared to what research identifies as best practices as an improvement guide. This summer work resulted in an action plan that will require ongoing steps to create improvements in practice throughout the course of the next school year, including attention to the professional development of teachers related to these best practices.

  Response: All classroom teachers received training in the effective use of "running records," including strategies for redesigning instruction to better meet the needs of all students in the classroom. The reading improvement team continued its research to identify and expand its knowledge about "best practices" that could be utilized by teachers in their day-to-day learning environments. Team members also created a resource base so that teachers would have an array of diverse options that will enable them to differentiate instruction more readily on a regular basis. Finally, the upper

[24] RTI is typically viewed as a means to expand a school's capacity to reach and support diverse learners, especially those most likely to become disengaged from the learning process and at risk of dropping out of school.

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grade team utilized more literature materials with students to prepare them for the transition to middle school and departmentalized learning.

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

- Recommendation: Implement departmentalized instructional practices, starting in the sixth grade, at the beginning of the school year.

  Response: All instruction for junior academy school students was departmentalized for this school year. After the first semester, the practice of moving students for every class was adjusted for the sixth graders, and each teacher taught two subjects to reduce the number of times students were required to move; however, these students were still provided with experiences to prepare them for the high school learning environment.

- Recommendation: Engage sixth graders in the study of literature during the next school year.

  Response: Sixth graders transitioned from the use of Open Court to the Elements of Literature during the school year. This practice change enabled the middle school students to enrich their literacy skills and improve their ability to acquire the higher level skills required for success at the secondary and post-secondary levels.

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

- Recommendation: Focus on the implementation of college readiness standards in the high school for the next school year.

  Response: Some progress was made on this recommendation but additional attention will be given to the full implementation of these standards in the next school year. Staff are increasing their use of EXPLORE, PLAN, and ACT results to redesign their instructional activities and monitor students' progress on specific competencies and higher-level skill acquisition.

- Recommendation: Engage ninth and tenth graders in smaller reading and math classes to address basic skill deficits and better prepare them for more rigorous math and science courses.

  Response: An additional English and math position was added to enable the lower-level students to benefit from smaller class sizes. Special attention was given to monitoring the progress of the lower-level students in these two basic skill areas. Additionally, the students with basic skill deficits were encouraged to participate in both the before- and afterschool learning labs to obtain additional support and instructional time on problematic concepts that were uncovered by assessment results.

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III. EDUCATIONAL PERFORMANCE

To monitor performance as it relates to the CSRC contract, MAS 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, it identified local and standardized measures of academic performance to monitor student progress.

This year, 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,[25] the EXPLORE, the PLAN,[26] and the ACT or SAT. Results for measures of academic progress are presented for primary/elementary academy students in K4 through fifth grade 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 Grade)

1. Attendance

At the beginning of the 2011–12 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 was at the school between 8:30 a.m. and 3:20 p.m. A student was marked partial day if he/she arrived after 8:30 a.m. or left before 3:20 p.m. This year, students attended school an average of 92.3% of the

[25] The WKCE is a standardized test aligned with Wisconsin model academic standards.

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

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time. When excused absences were included, the attendance rate rose to 93.1%. The school has therefore met its goal.[27]

Note that 124 students were suspended from school at least once from school during the year. These students spent, on average, 2.1 days out of school due to suspension.

2. Parent-Teacher Conferences

At the beginning of the school year, the school set a goal that at least 80% of students enrolled for the entire school year would have their parent(s) attend two of three scheduled parent-teacher conferences. Conferences were scheduled for November 2011, January 2012, and April 2012. There were 539 primary/elementary academy students enrolled all year. Parents of 493 (91.4%) students attended two of three conferences. The school 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 68 special education students enrolled in the primary/elementary academy at the end of the year; one of those transferred in from MPS during the year and was not eligible for an annual IEP. An IEP had been developed and/or reviewed for all 67 students requiring one. 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 therefore met its goal to maintain records on all students with special needs.

[27] Attendance data were provided for 623 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.

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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 exhibit proficient or higher literacy skills by the final spring assessment, that 90% of students in first through third grades would reach a reading level that is at or above grade level or show progress of at least four reading levels, and that 80% of students in fourth and fifth grades would reach a grade equivalency (GE) at or above grade level or demonstrate one month's growth for each month of instruction.

Literacy skills for K4 and K5 included recognizing and printing uppercase and lowercase letters. Results were based on student performance at the time of the spring assessment. Results were provided as quotient scores; a quotient score of 85 or higher was considered proficient. 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

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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 2011 and spring of 2012; progress for returning students was measured from the spring of 2011 to the spring of 2012, and progress for new students was measured from the fall of 2011 to the spring of 2012.

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 2011 and spring of 2012. New students were tested in the fall of 2011 and spring of 2012.

Finally, second- through fifth-grade students completed the MAP reading test in the fall and the spring of the school year. Progress for students at or above the normative mean as well as for students below the normative mean for their grade level at the time of the fall test will be measured and used as baseline data in subsequent years.

At the end of the year, most (98.7%) K4 and K5 students were proficient or higher on recognizing and printing uppercase and lowercase letters (i.e., scored 85 or higher in both areas).[28] Therefore, the school met its internal literacy goal for K4 and K5 students (Figure 3).

[28] A score of 85 is considered proficient.

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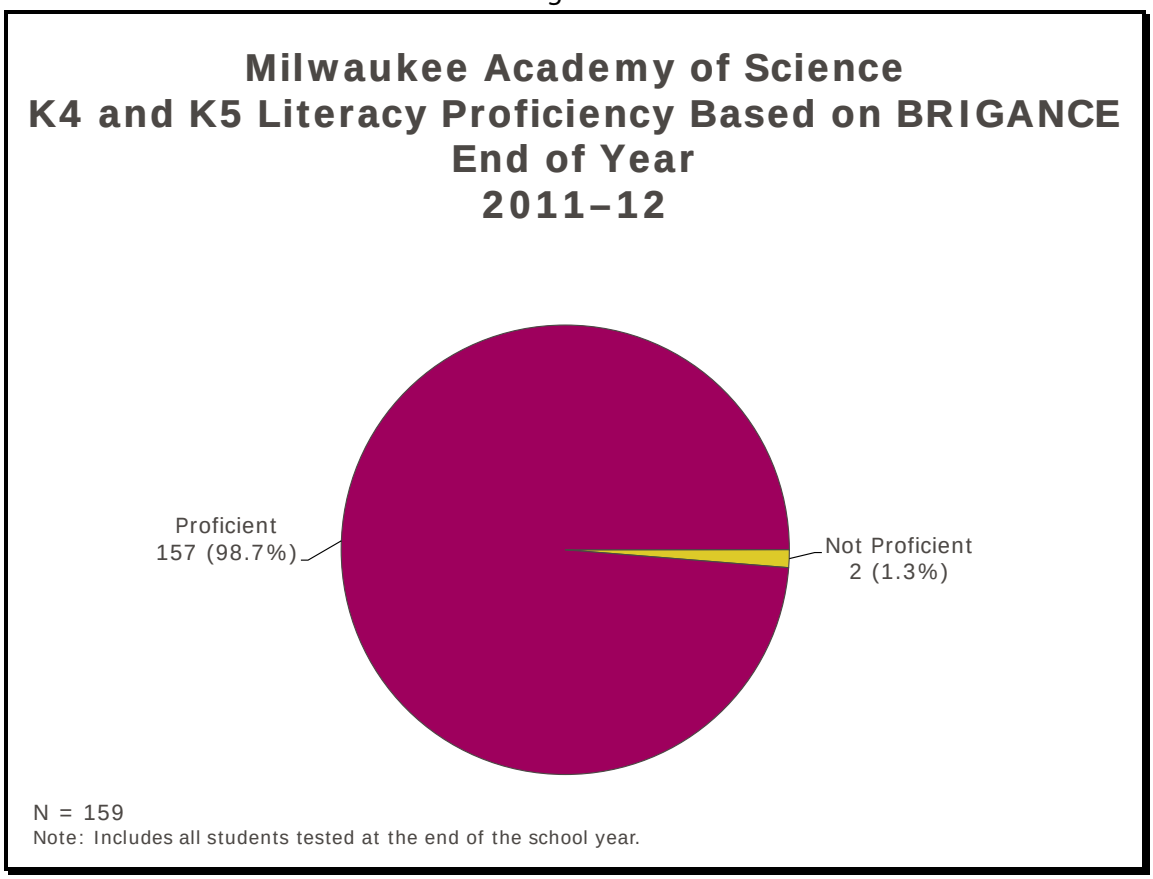
Figure 3



Of all first through third graders, 75.0% were reading at or above grade-level expectations (Table 1).[29]

Table 1

Milwaukee Academy of Science
Grades 1st – 3rd Grades
Reading Proficiency at End of Year Based on Scholastic Guided Reading Level
2011–12

Grade	Minimum SRI Level for Proficiency	N	Proficient or Higher	
			N	%
1st	H	80	50	62.5%
2nd	L	72	53	73.6%
3rd	O	80	71	88.8%
Total	**--**	**232**	**174**	**75.0%**

[29] Scores were provided as an alpha-character level.

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Of fourth through fifth graders, 85.0% were at or above GE in reading (Table 2).[30]

Table 2 Milwaukee Academy of Science Grades 4th – 5th Reading GE at End of Year Based on BRIGANCE 2011–12					
Grade	**N**	**Minimum GE**	**Maximum GE**	**Average GE**	**% at or Above GE**
4th	74	2.0	6.8	6.3	94.6%
5th	93	1.8	6.8	6.1	77.4%
Total	**167**	**--**	**--**	**--**	**85.0%**

Results for first- through third-grade students indicate that 92.5% of students showed improvement or reached proficiency or reading-level requirements in literacy skills (see Table 3). The school therefore met its internal literacy goal for first- through third-grade students.

Table 3 Milwaukee Academy of Science Literacy Progress for Grades 1st – 3rd Grades 2011–12					
Grade	**Test Administrations**	**Test**	**N**	**Met Goal**	
				N	**%**
1st	Fall 2011 and Spring 2012*	Scholastic Guided Reading Level	78	73**	93.6%
2nd	Spring 2011 and Spring 2012*	Scholastic Guided Reading Level	70	65**	92.9%
3rd	Spring 2011 and Spring 2012*	Scholastic Guided Reading Level	79	72**	91.1%
Total	--	**--**	**227**	**210**	**92.5%**

*New students were tested in the fall of 2011 and the spring of 2012.
**Reflects students who reached reading-level requirements or improved four or more levels on the test gradient scale.

[30] Fourth-grade GE scores of 4.8 or higher were considered at or above grade level. Fifth-grade GE scores of 5.8 or higher were considered at or above grade level.

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Results for fourth and fifth graders indicate that 93.4% 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 (Table 4).

Table 4

Milwaukee Academy of Science
Literacy Progress for 4th and 5th Grades Based on BRIGANCE
2011–12

Grade	Test Administrations	N	Maintained GE	Number Improved 1 GE/ Month	Percentage Maintained or Improved
4th	Fall 2011 and Spring 2012	68	64	2	97.1%
5th	Spring 2011 and Spring 2012*	83	65	10	90.4%
Total	--	**151**	**129**	**12**	**93.4%**

*New students were tested in the fall of 2011 and the spring of 2012.

This year, MAS used the MAP tests to measure student progress in reading and math. MAP tests are computerized, adaptive tests that measure student skills and provide educators with information necessary to build curriculum to meet their students' needs. Every item on the MAP tests corresponds to a value on the Rasch Unit (RIT) Scale.[31] A level of difficulty is assigned to each item and each value represents an equal interval measurement, meaning the difference between scores is the same regardless of where the student scores on the scale. The RIT scale shows student understanding, regardless of grade level, which allows easy comparison from year to year. Educators can use the RIT reference chart to determine the students' level of understanding in three subject areas (reading, math, and language usage).[32]

[31] The RIT score indicates student skills on developmental curriculum scales or continua. There are RIT scales for each subject, so scores from one subject are not the same as for another. Individual growth targets are defined as the average amount of RIT growth observed for students in the latest Northwest Evaluation Association (NWEA) norming study who started the year with a RIT score in the same 10-point RIT block as the individual student. For more information on the RIT score and the mean growth target score, see the NWEA website, www.nwea.org/assessments/researchbased.asp.
[32] See http://www.nwea.org/products-services/computer-based-adaptive-assessments/map.

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MAP scores can be used to measure progress in a number of ways:

- Based on the student's RIT score in each of the test areas at the time of the first test, he/she receives a target score relative to the standards set by the school, district, or state. At the time of the third test, progress can be measured by whether the student met his/her target score;

- Teachers, parents, and students may measure growth based on the change in RIT scores from the first test to the last test during the school year. Because the scores are scaled so that an increase in one point is the same regardless of where the student falls on the scale, progress may be determined by measuring how many RIT points the student gained or lost from one test to the other; and

- Student progress can be measured by comparing each student's performance to nationally normed scores for his/her grade level.

CRC used the first and third methods to measure growth in reading and math for ninth-grade students who completed both the fall and spring MAP tests.

In 2008 and 2011, the Northwest Evaluation Association (NWEA) conducted a norming study using data from school districts all over the country. By comparing average growth based on grade level and time between tests in each district, NWEA calculated a normative mean, or average, score for the fall, winter, and spring administrations of each of the MAP tests for each grade level. This allows schools to compare student scores in their school to the normative average score nationally. For example, sixth-grade students scored, on average, 212 RIT points on the fall MAP reading test and 216 points on the spring MAP reading test. On the math test, sixth graders scored, on average, 220 points on the fall test and 226 points on the spring test.[33] Normative mean scores for each grade level are presented in Table 5.

Table 5

2011 NWEA Measures of Academic Progress

[33] Scores are rounded to the nearest whole number for analysis.

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Normative Mean Scores Fall and Spring				
Grade Level	Reading		Math	
	Beginning-of-Year Mean	End-of-Year Mean	Beginning-of-Year Mean	End-of-Year Mean
K5	142.5	156.0	143.7	156.1
1st	160.3	176.9	162.8	179.0
2nd	175.9	189.6	178.2	191.3
3rd	189.9	199.2	192.1	203.1
4th	199.8	206.7	203.8	212.5
5th	207.1	212.3	212.9	221.0
6th	212.3	216.4	219.6	225.6
7th	216.3	219.7	225.6	230.5
8th	219.3	222.4	230.2	234.5
9th	221.4	222.9	233.8	236.0
10th	223.2	223.8	234.2	236.6
11th	223.4	223.7	236.0	238.3

Using these normative averages, teachers and parents can determine whether students are above, at, or below the normative average score for all students in the same grade level at each test administration. To examine progress for second- through fifth-grade students enrolled in the primary academy for the 2011–12 school year, CRC examined progress for students who were at or above the normative average for their current grade level at the time of the fall test as well as students who were below their grade-level average at the time of the fall test. Progress for students at or above the normative average in the fall of 2011 was measured by determining whether the student was able to again score at or above the normative average at the time of the spring test. For students below average, CRC examined how many improved to the normative grade average for their grade by the spring test. For students who were still below on the spring test, progress was measured by comparing the change in RIT scores to the change in means for the grade level mean at which the student tested in the fall of 2011. The following section describes progress on the MAP reading tests;

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math results for second through fifth graders, as well as reading and math results for junior academy students, are described later in the report.

The fall and spring MAP reading tests were completed by 294 second through fifth graders. At the time of the fall test, 62 (21.1%) students were at or above the normative average for their respective grade level (see Table 6).

Table 6

Milwaukee Academy of Science
Local Measures of Academic Progress: MAP Reading Assessment
Student Scores Relative to Normative Mean
Fall 2011

Grade Level	N	Students at or Above Normative Mean Fall 2011		Students Below Normative Mean Fall 2011	
		N	%	N	%
2nd	66	12	18.2%	54	81.8%
3rd	72	15	20.8%	57	79.2%
4th	69	18	26.1%	51	73.9%
5th	87	17	19.5%	70	80.5%
Total	**294**	**62**	**21.1%**	**232**	**78.9%**

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i. Students at or Above Normative Grade Level Average on the Fall MAP Reading Test

Of the 62 students at or above the normative average for their grade level on the fall test, 36 (58.1%) achieved the normative mean on the spring test (Table 7).

Table 7

Milwaukee Academy of Science
Local Measures of Academic Progress: MAP Reading Assessment
Progress for Students at or Above Normative Mean in Fall 2011
Fall 2011 to Spring 2012

Grade Level	Students at or Above Normative Mean Fall 2011	Students Maintained at or Above Normative Mean Spring 2012		Students Below Normative Mean Spring 2012	
		N	%	N	%
2nd	12	7	58.3%	5	41.7%
3rd	15	7	46.7%	8	53.3%
4th	18	12	66.7%	6	33.3%
5th	17	10	58.8%	7	41.2%
Total	**62**	**36**	**58.1%**	**26**	**41.9%**

ii. Students Below the Normative Grade-Level Average on the Fall MAP Reading Test

Of the 294 elementary academy students who completed both reading tests, 232 (78.9%) were below average at the time of the fall 2011 test. By the time of the spring test, 22 (9.5%) had reached the spring normative reading score for the grade level at which they tested in the fall, and 66 (28.4%) had improved their reading scores by at least the difference in RIT means for the grade level at which the student tested in the fall. This represents a total growth rate of 37.9% (Table 8) for all primary academy students. Results are also presented by grade level.

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Table 8 Milwaukee Academy of Science Local Measures of Academic Progress: MAP Reading Assessment Progress for Students Below Normative Mean in Fall 2011 Fall 2011 to Spring 2012							
Grade Level	**Students Below Normative Average on the MAP Reading Test Fall 2011**	**Students Who Reached Their Grade Level Normative Average Score Spring 2012**		**Students Who Did Not Reach Grade Level Average in Spring but Increased at Least the Difference Between Fall and Spring RIT Means for Grade Level at Which Student Tested in the Fall**		**Overall Progress of Students Below Normative Average on the Fall 2011 MAP Reading Test**	
	N	**N**	**%**	**N**	**%**	**N**	**%**
2nd	54	6	11.1%	23	42.6%	**29**	**53.7%**
3rd	57	5	8.8%	10	17.5%	**15**	**26.3%**
4th	51	2	3.9%	12	23.5%	**14**	**27.5%**
5th	70	9	12.9%	21	30.0%	**30**	**42.9%**
Total	**232**	**22**	**9.5%**	**66**	**28.4%**	**88**	**37.9%**

In addition to examining progress on normative mean scores, CRC also reports the number of students who met the target RIT score on the spring test based on the score from the fall test. Reading target RIT score data were available for 214 third, fourth, and fifth graders for whom fall and spring RIT scores were available. Of those 214 students, 109 (50.9%) met their growth target scores at the time of the spring test.

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 proficient or higher skills by the final spring math assessment, based on the BRIGANCE. Math skills included counting objects and reading numbers. Results for K4 and K5 students were provided as quotient scores. A student was considered

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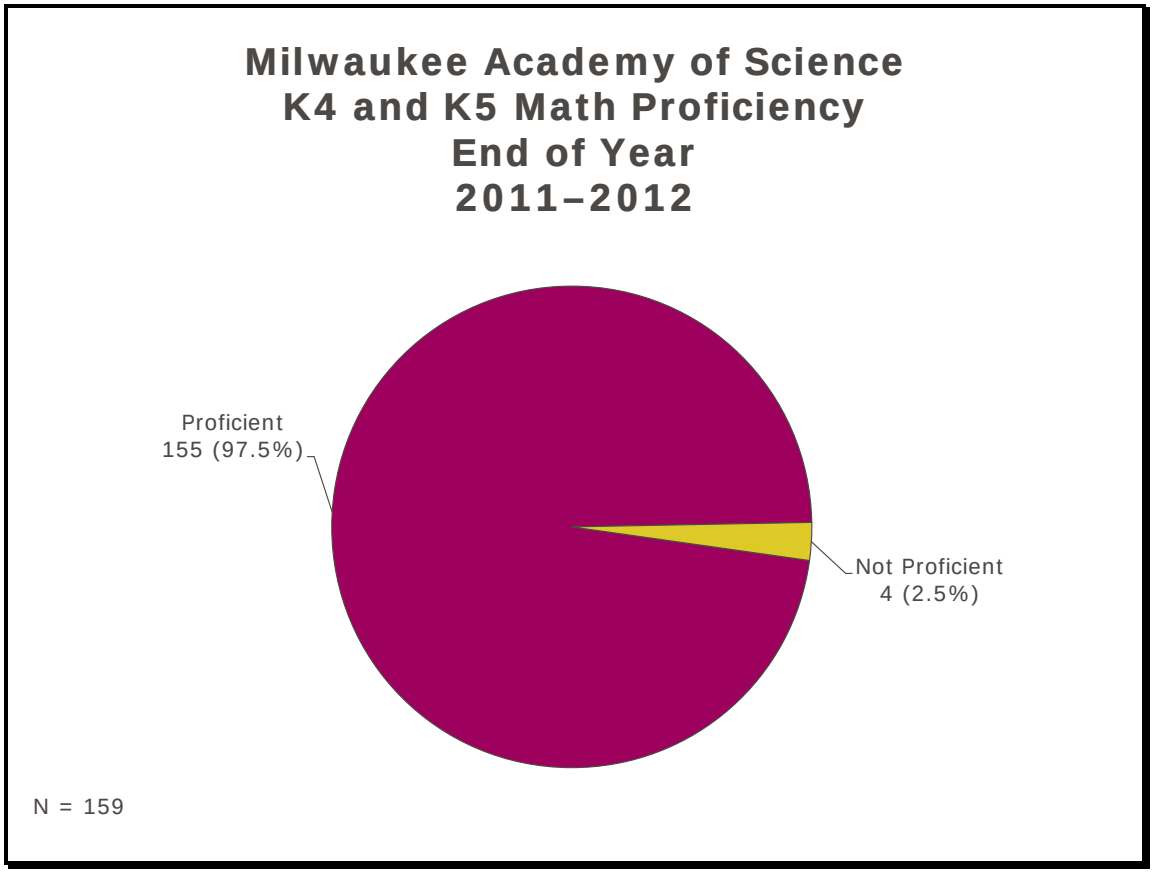
proficient if he/she scored 85 or higher on both tests. At the end of the year, most (97.5%) K4 and K5 students were proficient in math (Figure 4).

Figure 4



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 2011 and spring of 2012 for all returning students. All first graders and newly enrolled students were tested in the fall of 2011 and again in spring of 2012. At the end of the year, on

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average, 62.0% of first graders were functioning at grade level, as were 88.1% of second, 86.6% of third, 70.8% of fourth, and 71.4% of fifth graders (Table 9).[34]

Table 9

Milwaukee Academy of Science
Grades 1st – 5th
At or Above GE in Math Based on Spring 2011 BRIGANCE
2011–12

Grade	N Tested	At or Above GE	
		N	%
1st	80	56	70.0%
2nd	68	61	89.7%
3rd	80	78	97.5%
4th	74	57	77.0%
5th	89	74	83.1%
Total	**391**	**326**	**83.4%**

Academic progress for 327 first- through fifth-grade students with comparable test results from the spring of 2011 or fall of 2011 and the spring of 2012 indicated that 90.8% improved at least one month for every month of instruction or maintained GE (Table 10).[35] The school therefore exceeded its goal.

[34] At or above GE reflects students who scored GE equal to or greater than the minimum, end-of-year expected GE set by the school. For example, first-grade scores of 2.2 or higher, second-grade scores of 2.6 or higher, third-grade scores of 3.7 or higher, fourth-grade scores of 4.8 or higher, and fifth-grade scores of 6.0 or higher were considered at or above grade level.

[35] To be considered "maintained," a student's scores must be greater than or equal to the minimum, end-of-year expected GE set by the school. For example, first-grade scores of 2.2 or higher, second-grade scores of 2.6 or higher, third-grade scores of 3.7 or higher, fourth-grade scores of 4.8 or higher, and fifth-grade scores of 6.0 or higher were considered at or above grade level, and the student therefore "maintained."

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Table 10 Milwaukee Academy of Science Mathematics Progress for Grades 1st – 5th Based on BRIGANCE 2011–12					
Grade	**N**	**Number Maintained GE**	**Number Improved 1 GE per Month**	**Total**	
				N	**%**
1st	74	51	18	**69**	**93.2%**
2nd	61	54	2	**56**	**91.8%**
3rd	76	74	0	**74**	**97.4%**
4th	70	56	5	**61**	**87.1%**
5th	79	65	2	**67**	**84.8%**
Total	**360**	**300**	**27**	**327**	**90.8%**

Second- through fifth-grade students also completed the MAP math test in the fall and spring of the school year. Progress for students at or above the normative mean (normative mean scores are presented in Table 5) as well as for students below the normative mean for their grade level at the time of the fall test will be measured and used as baseline data in subsequent years.

The fall and spring MAP math tests were completed by 294 students. At the time of the fall test, 40 (13.6%) students were at or above the normative mean for their respective grade level (see Table 11). Progress for students at or above the average as well as those below is described below.

Table 11 Milwaukee Academy of Science Local Measures of Academic Progress: MAP Math Assessment Student Scores Relative to Normative Mean Fall 2011					
Grade Level	**N**	**Students at or Above Normative Mean Fall 2011**		**Students Below Normative Mean Fall 2011**	
		N	**%**	**N**	**%**
2nd	62	3	4.8%	59	95.2%
3rd	77	15	19.5%	62	80.5%
4th	68	13	19.1%	55	80.9%
5th	87	9	10.3%	78	89.7%
Total	**294**	**40**	**13.6%**	**254**	**86.4%**

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i. Students at or Above Normative Grade Level Average on the Fall MAP Math Test

Of the 40 primary academy students at or above the normative average for their grade level on the fall test, 29 (72.5%) achieved the normative mean on the spring test (Table 12). In order to protect student identity, CRC does not report results for fewer than 10 students; therefore, results for each grade level are not included in this report.

Table 12

Milwaukee Academy of Science
Local Measures of Academic Progress: MAP Math Assessment
Progress for Students at or Above Normative Mean in Fall 2011
Fall 2011 to Spring 2012

Grade Level	Students at or Above Normative Mean Fall 2011	Students Maintained at or Above Normative Mean Spring 2012		Students Below Normative Mean Spring 2012	
		N	%	N	%
2nd	3	Cannot report due to N size		Cannot report due to N size	
3rd	15	8	53.3%	7	46.7%
4th	13	9	69.2%	4	30.8%
5th	9	Cannot report due to N size		Cannot report due to N size	
Total	**40**	**29**	**72.5%**	**11**	**27.5%**

ii. Students Below the Normative Grade Level Average on the Fall MAP Math Test

Of the 294 primary academy students who completed both math tests, 254 (86.4%) were below average at the time of the fall 2011 test. By the time of the spring test, 25 (9.8%) had reached the spring normative math score for the grade level at which they tested in the fall, and 84 (33.1%) had improved their math scores by at least the difference in RIT means for the grade level at which the student tested in the fall. This represents a total growth rate of 42.9 % (Table 13) for all primary academy students. Results are also presented by grade level.

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Table 13 Milwaukee Academy of Science Local Measures of Academic Progress: MAP Math Assessment Progress for Students Below Normative Mean in Fall 2011 Fall 2011 to Spring 2012							
Grade Level	**Students Below Normative Average on the MAP Math Test Fall 2011**	**Students Who Reached the Normative Average Score Spring 2012**		**Students Who Did Not Reach Grade Level Average in Spring but Increased at Least the Difference Between Fall and Spring RIT Means for Grade Level at Which Student Tested in the Fall**		**Overall Progress of Students Below Normative Average on the Fall 2011 MAP Math Test**	
	N	**N**	**%**	**N**	**%**	**N**	**%**
2nd	59	7	11.9%	23	39.0%	**30**	**50.8%**
3rd	62	7	11.3%	23	37.1%	**30**	**48.4%**
4th	55	2	3.6%	17	30.9%	**19**	**34.5%**
5th	78	9	11.5%	21	26.9%	**30**	**38.5%**
Total	**254**	**25**	**9.8%**	**84**	**33.1%**	**109**	**42.9%**

In addition to examining progress on normative mean scores, CRC also reports the number of students who met the target RIT score on the spring test based on the score from the fall test. Math target RIT score data were available for 221 third, fourth, and fifth graders for whom fall and spring RIT scores were available. Of those 221 students, 117 (52.9%) met their growth target scores at the time of the spring test.

c. Writing

To assess student skills in writing, teachers judged student writing samples at the end of the school year 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 from each domain were totaled. A score of 12 or

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more indicated the student was writing at grade level. The school's goal was for students in third through fifth grades to reach a score of 12 or more, on average.

Results for students in third through fifth grades indicate that students, on average, scored 13.1, and 78.1% of students achieved an average score of 12 or above, meeting the school's goal (Table 14).

Table 14

Milwaukee Academy of Science
Writing Skills for Grades 3rd – 5th Based on Teacher Assessment
2011–12

Grade	N	Writing Score Average	% Met Goal*
3rd	80	12.9	80.0%
4th	74	13.2	75.7%
5th	88	13.2	78.4%
Total	**242**	**13.1**	**78.1%**

*Received a score of 12 or higher.

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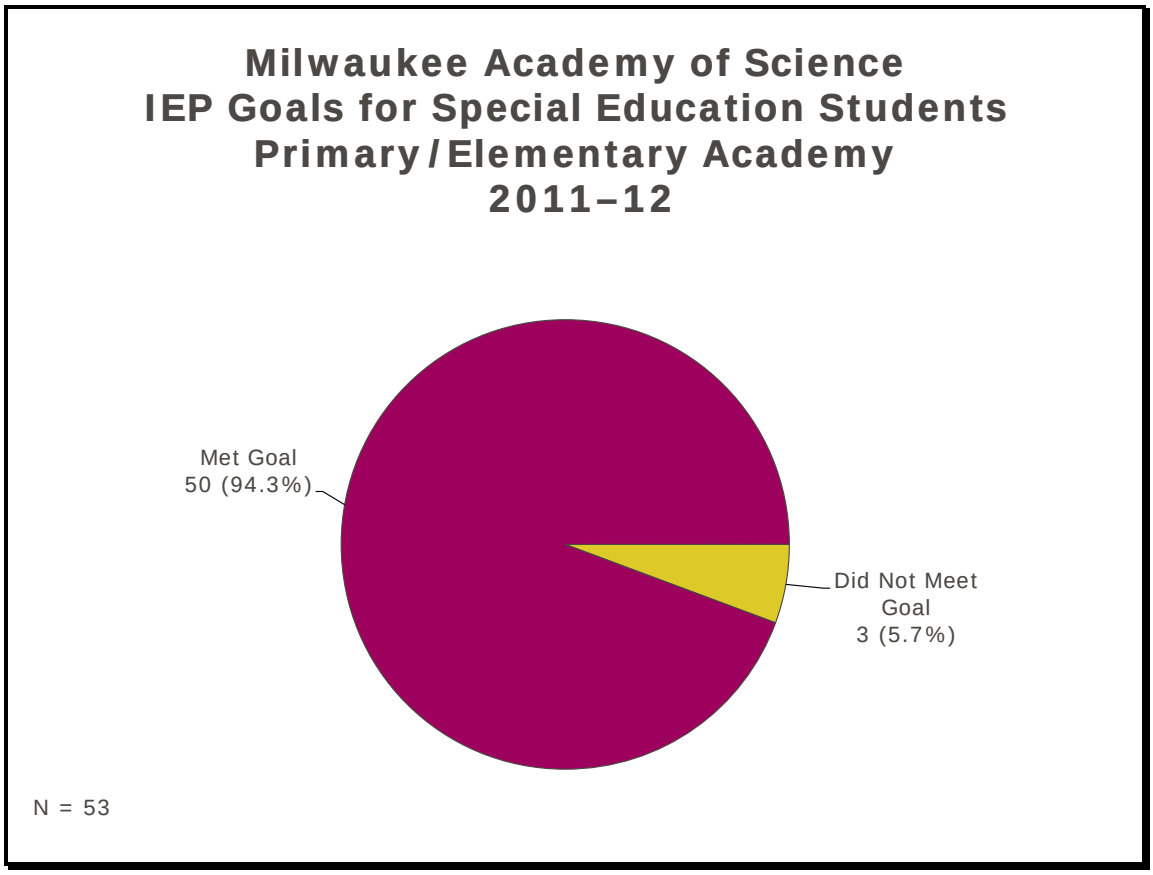
d. IEP Goals for Special Education Students

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 IEPs as assessed by the participants in their most recent annual IEP reviews. There were 68 special education students enrolled at the end of the year. One of those students transferred in from MPS, so an IEP was not completed this year. IEPs for 14 of the remaining 67 students had been in effect for less than one year and were not yet due for an assessment of student progress toward meeting goals. All 53 students with reviews due during the school year had one; of those students, 50 (94.3%) met at least one goal (Figure 5). Therefore, the elementary academy exceeded its goal.

Figure 5



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5. External Standardized Measures of Educational Performance

The CSRC required that the SDRT be administered to all first-, second-, and third-grade students between April 17 and May 12, 2012.[36] 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.[37] The WKCE 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 who took 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 April 2012 MAS administered the SDRT to first-grade students. Results indicate that first graders were functioning, on average, at 1.4 to 2.1 grade-level equivalents (GLE) in reading, depending on the area assessed (see Figure 6 and Table 15).

[36] During the 2010–11 school year, the SDRT test window was between March 15 and April 15.

[37] The WKCE is also given to students in sixth, seventh, eighth, and tenth grades. Students in fourth, eighth, and tenth grades are also tested in language arts, science, and social studies. The state WKCE testing period for 2011–12 was October 24 – November 23, 2011.

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Figure 6

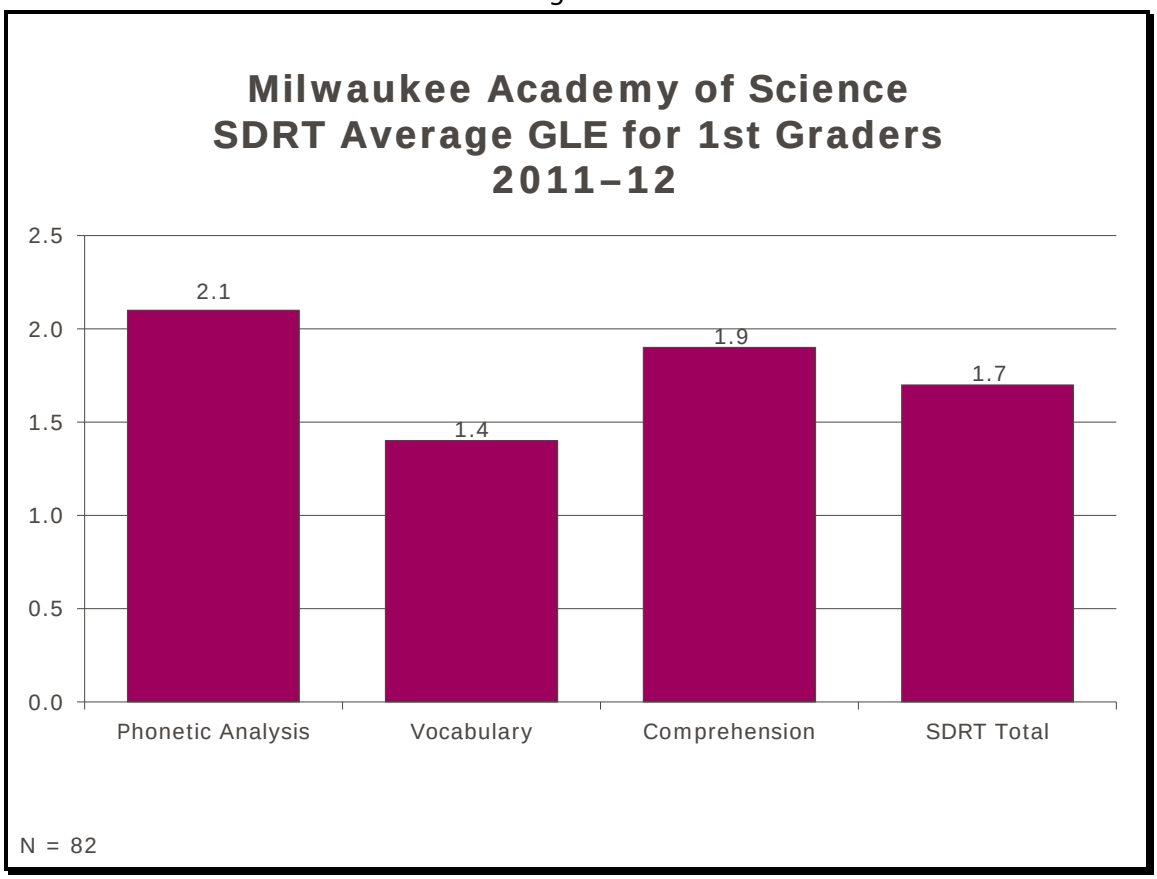

Table 15

Milwaukee Academy of Science
SDRT GLE for 1st Graders
2011–12
(N = 82)

Area Tested	Lowest GLE Scored	Highest GLE Scored	Median	% at or Above Grade Level
Phonetic Analysis	K.5	5.2	1.9	93.9%
Vocabulary	K.5	2.9	1.4	89.0%
Comprehension	K.6	5.3	1.8	82.9%
SDRT Total	**K.5**	**3.5**	**1.6**	**91.5%**

Note: Results are rounded to the nearest one tenth.

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b. SDRT for Second Graders

In May 2012, the SDRT was administered to 71 second-grade students. Second graders were functioning, on average, at or above GLE depending on the areas tested. Results are presented in Figure 7 and Table 16.

Figure 7

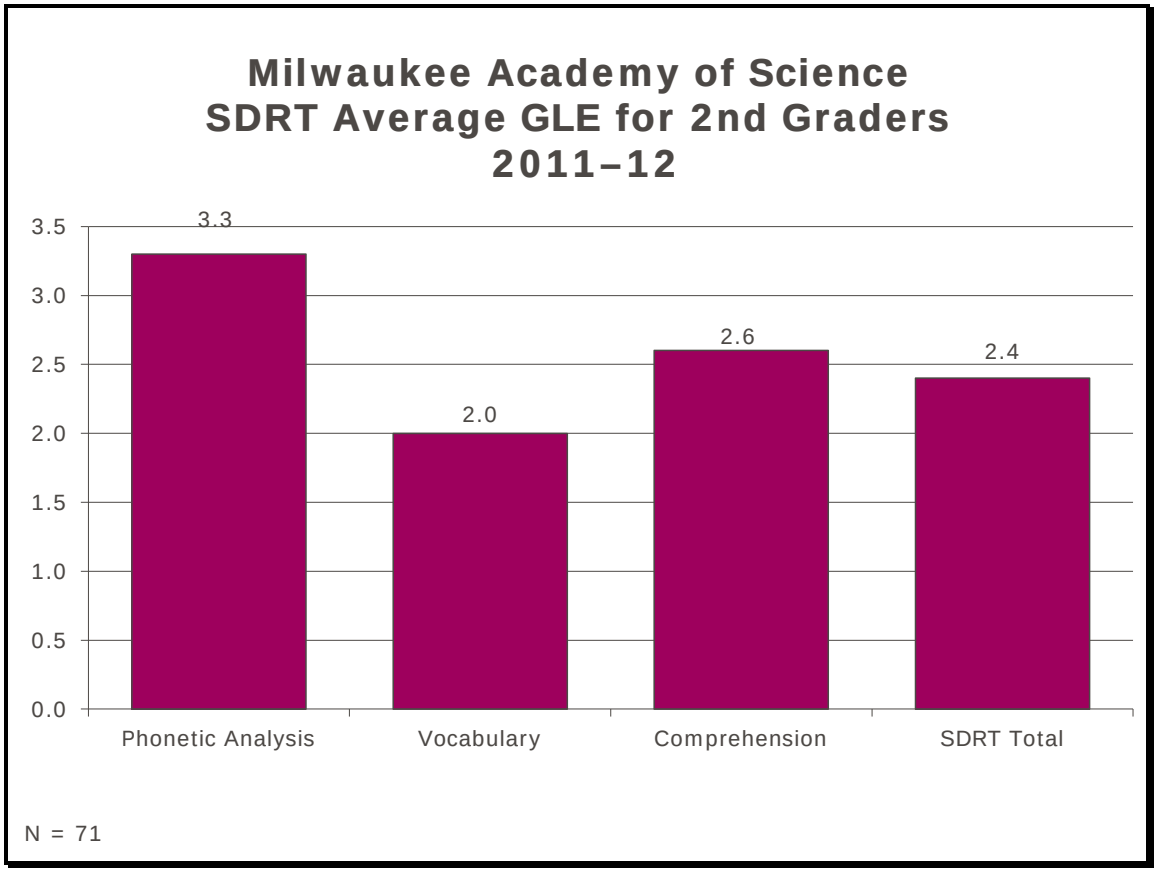

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Table 16 Milwaukee Academy of Science SDRT GLE for 2nd Graders 2011–12 (N = 71)				
Area Tested	**Lowest GLE Scored**	**Highest GLE Scored**	**Median**	**% at or Above Grade Level**
Phonetic Analysis	1.1	10.9	2.5	81.7%
Vocabulary	K.6	5.6	1.9	46.5%
Comprehension	1.1	PHS*	2.3	76.1%
SDRT Total	**1.3**	**9.7**	**2.1**	**66.2%**

Note: Results are rounded to the nearest one tenth.
*Post-high school (PHS) scores were entered as 12.9 for analysis.

c. Standardized Tests for Third Graders

i. SDRT for Third Graders

In April 2012, MAS administered the SDRT to 79 third graders. Results indicated that the third graders were, on average, reading at third- or fourth-grade levels, depending on the area tested (see Figure 8 and Table 17).

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Figure 8

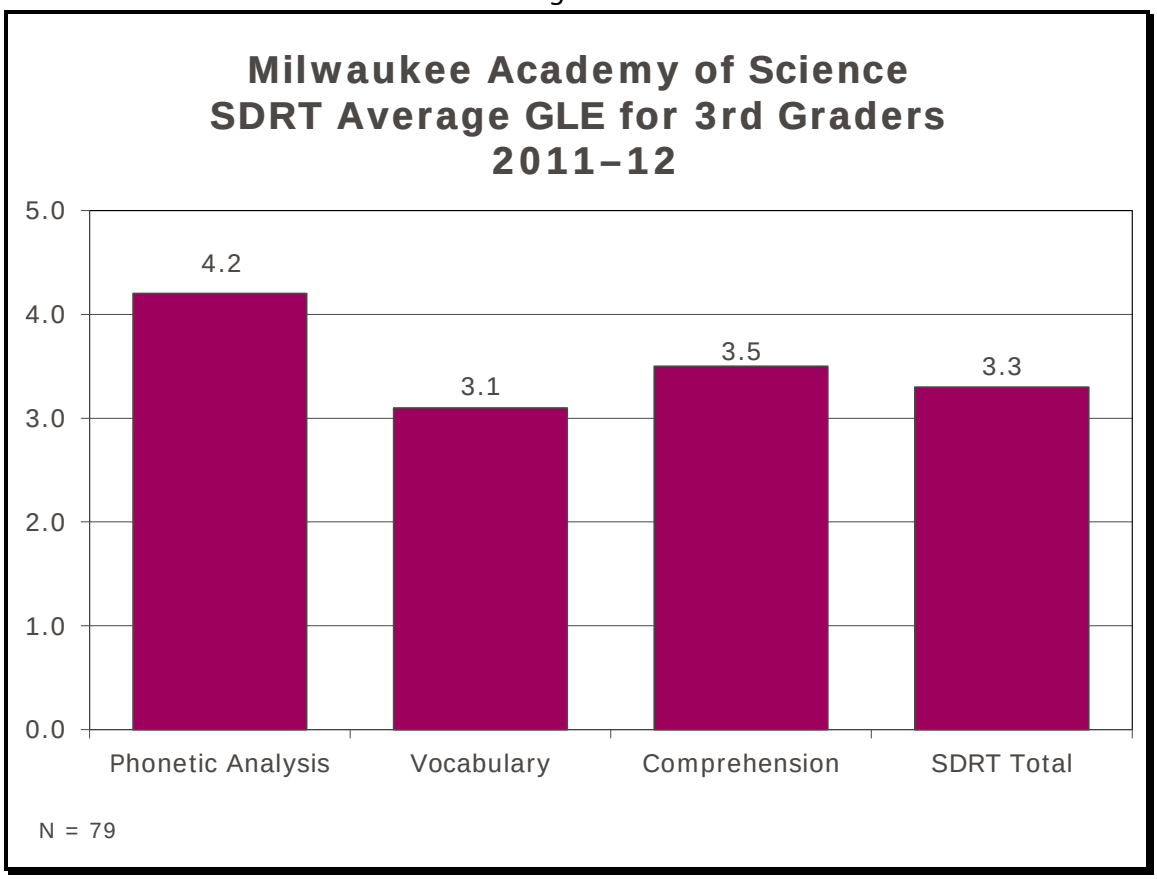

Table 17

Milwaukee Academy of Science
SDRT GLE for 3rd Graders
2010–11
(N = 79)

Area Tested	Lowest GLE Scored	Highest GLE Scored	Median	% at or Above Grade Level
Phonetic Analysis	1.1	PHS*	3.4	58.2%
Vocabulary	1.6	7.2	3.1	55.7%
Comprehension	1.7	PHS*	3.0	50.6%
SDRT Total	**1.9**	**10.7**	**3.0**	**50.6%**

Note: Results are rounded to the nearest one tenth.
*Post-high school (PHS) scores were entered as 12.9 for analysis.

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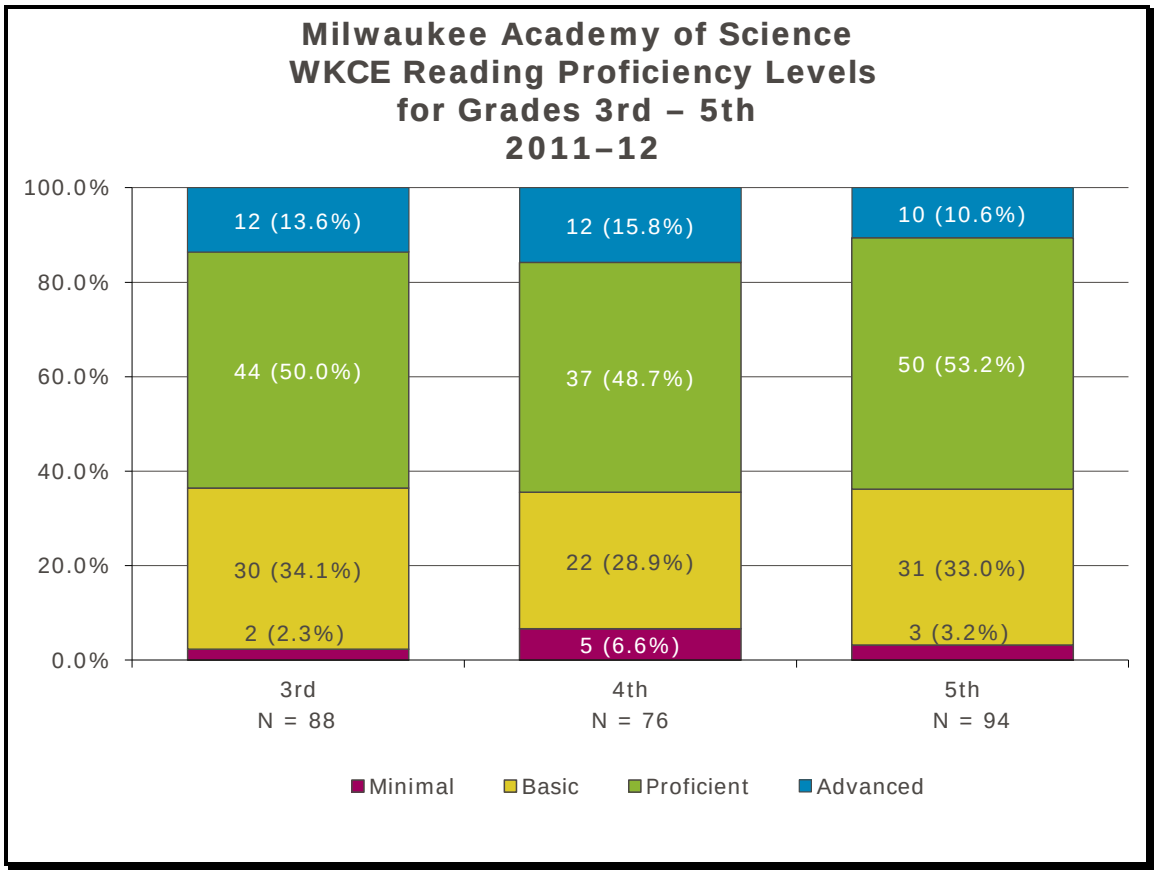
ii. WKCE for Third Through Fifth Graders

In October 2011, 88 third graders, 76 fourth graders, and 94 fifth graders were administered the WKCE. In reading, 12 (13.6%) third graders reached the advanced level, and 44 (50.0%) scored at the proficient level; 12 (15.8%) fourth graders scored at the advanced level, and 37 (48.7%) were proficient; and 10 (10.6%) fifth graders were advanced, and 50 (53.2%) were proficient in reading (Figure 9).

Figure 9



On average, MAS third-grade students scored in the 38th percentile statewide in reading, fourth grade students scored in the 36th percentile, and fifth graders scored in the 39th percentile in reading (not shown).

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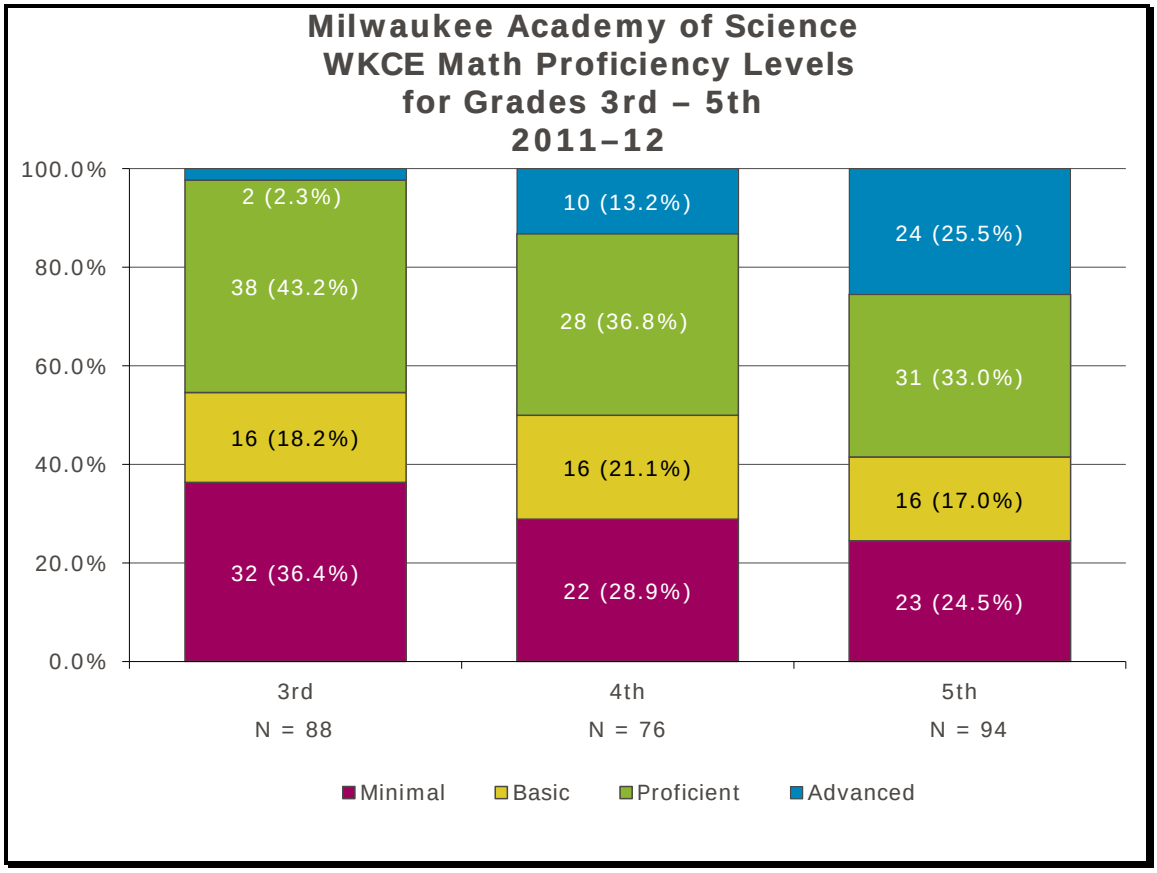
In math, two (2.3%) third-grade students reached the advanced level, and 38 (43.2%) scored at the proficient level; 10 (13.2%) fourth-grade students were at the advanced level, and 28 (36.8%) were proficient; and 24 (25.5%) fifth graders were advanced, and 31 (33.0%) scored at the proficient level (Figure 10).

Figure 10



On average, MAS third-grade students scored in the 32nd percentile statewide in math, fourth-grade students scored in the 34th percentile, and fifth graders scored in the 39th percentile in math (not shown).

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Fourth-grade students also complete the WKCE language arts tests. Results from the fall of 2011 indicate that eight (10.5%) students were in the advanced category and 37 (48.7%) were proficient in language arts.

The final score from the WKCE is a writing score for fourth, eighth, and tenth graders. 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 seven. The median score was five, meaning half of the students scored at or below five, and half scored five to seven on a scale of zero to nine.

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

1. Attendance

At the beginning of the 2011–12 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 five out of seven instructional periods for that day. Junior academy students attended school an average of 91.0% of the time and high school students attended school an average of 86.9% of the time. Overall, junior academy and high school students attended, on average, 89.3% of the time.[38] The overall rate did not meet the school's internal goal. However, the junior academy rate,

[38] Attendance data were provided for 455 students enrolled at any point during the school year; attendance data were available for 265 junior academy and 190 high school students. 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.

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when examined separately, did meet the school's goal. When excused absences were included, the attendance rate rose to 91.5% for junior academy students and 89.2% for high school students, for an overall rate of 90.5%, which was consistent with the school's goal.[39]

Note that 199 students were suspended at least once during the year. These students spent an average of four days out of school due to suspension.[40]

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 two of three scheduled parent-teacher conferences. Conferences were scheduled for October 2011, January 2012, and April 2012. There were 375 students enrolled for all three conferences (i.e., the entire year). Parents of 90.7% of junior academy and 24.4% of high school students attended all three conferences (attendance could occur in-person at the school, at the parents' home, or via telephone).[41] Overall, parents of 62.4% of students attended two of the three conferences, which falls short of the school's goal (Figure 11).

[39] Excused absences were reported by period for high school students. In order to determine the number of days of excused absence, CRC added the number of periods excused and divided by seven, the number of periods during the day.

[40] Out-of-school suspensions were reported by period for high school students. In order to determine the number of days assigned to out-of-school suspension, CRC added the number of periods of out-of-school suspension and divided by seven.

[41] Data were reported to CRC using letter codes and were interpreted as S = student, P = phone, G = guardian. If a parent met with any teacher, either at school or via phone, CRC coded parent participation as 'Yes.'

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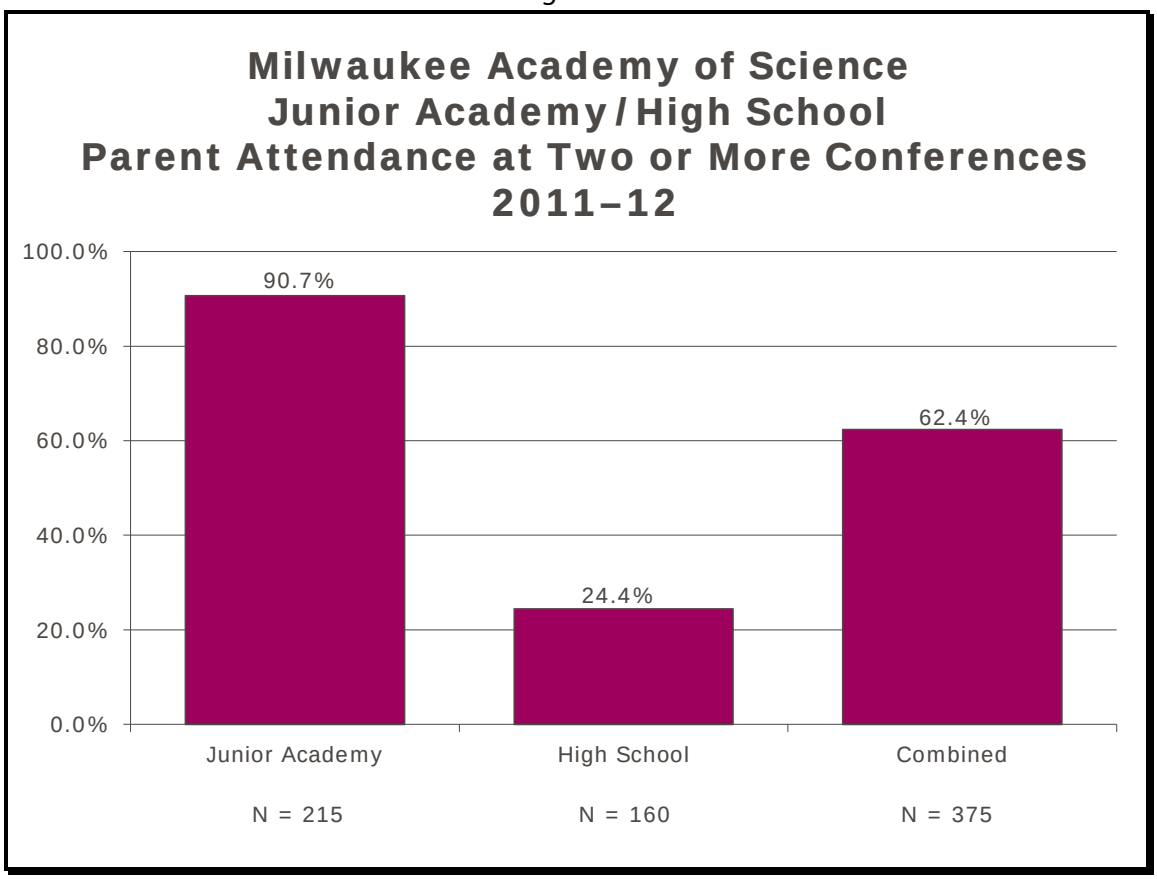
Figure 11



3. <u>Special Education Student Records</u>

The school established a goal to maintain up-to-date records for all special education needs students. There were 41 special education students enrolled in the junior academy or high school at the end of the school year. An IEP had been completed or reviewed for each of these 41 students. In addition, CRC conducted a random review of special education files indicating that IEPs were routinely completed and that parents were invited to develop and/or were involved in developing IEPs. The school has therefore met its goal to maintain records on all students with special needs.

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4. High School Graduation Plans

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 plan is 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, five credits in science, three credits in social studies, and two credits each in foreign language, physical education/health, and other electives.[42]

This year, plans were completed for all 166 high school students enrolled at the end of the year. Of these, 100.0% included the student's post-secondary plans, 99.4% 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 be referred for summer school. Counselors reviewed plans for 98.8% of students. This year, 87.3% of students were on track to graduate and 15 (25.0%) of 60 eleventh and twelfth graders were referred to summer school (Figure 12).

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

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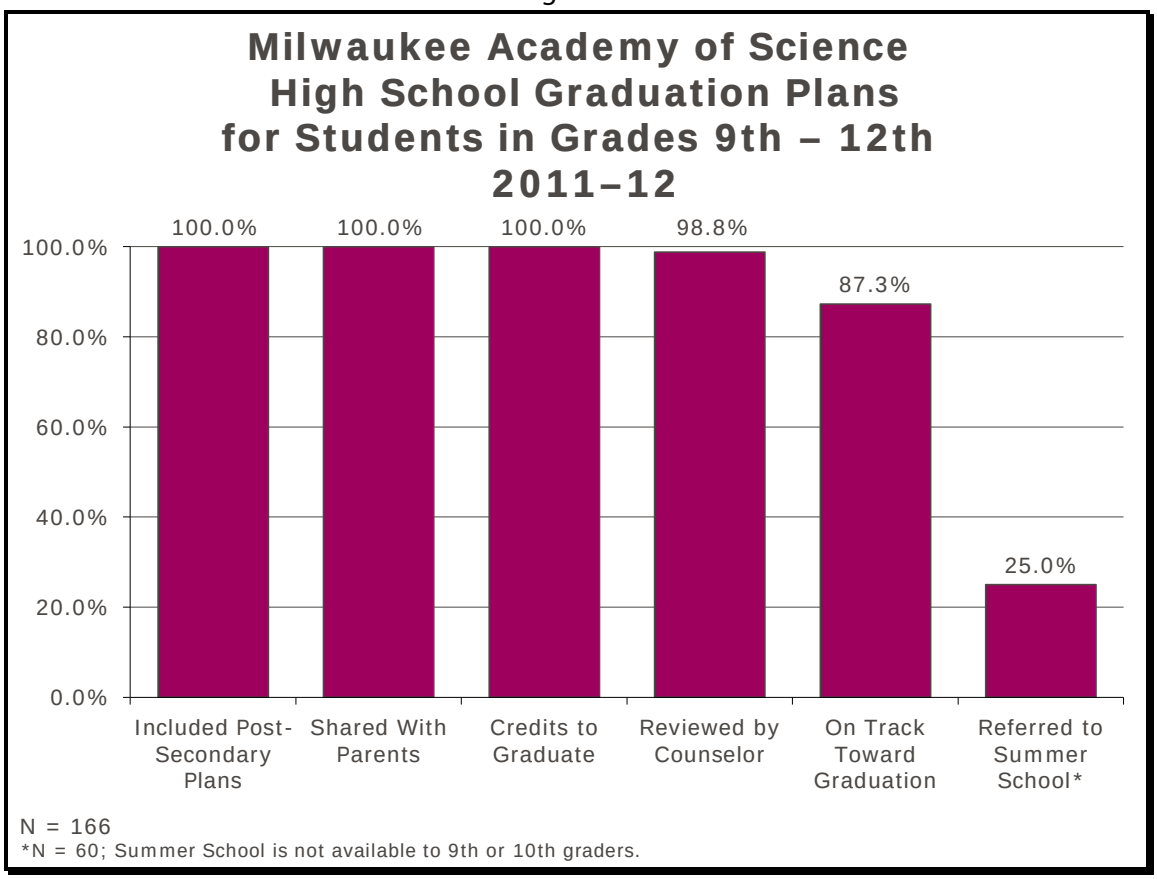
Figure 12



5. <u>High School Graduation Requirements</u>

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 16.5 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 166 students, 151 (91.0%) 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.

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Fifty-five (88.7%) of 62 ninth graders were promoted, 40 (90.9%) of 44 tenth graders were promoted, 40 (95.2%) of 42 eleventh graders were promoted, and 16 (88.9%) of 18 twelfth graders graduated. Ninth graders earned, on average, 6.5 credits; tenth graders accumulated, on average, 13.1 credits; eleventh graders earned, on average, 19.7 credits; and twelfth graders earned an average of 25.7 credits (Table 18).

Table 18

Milwaukee Academy of Science
High School Graduation Requirements
2011–12

Grade	N	Minimum Number of Credits Required	Average Credits Earned/Accumulated	Promoted/Graduated	
				N	%
9th	62	5.5	6.5	55	88.7%
10th	44	11.0	13.1	40	90.9%
11th	42	16.5	19.7	40	95.2%
12th	18	22.0	25.7	16[43]	88.9%
Total	**166**	**--**	**--**	**151**	**91.0%**

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. All new students are tested in literacy and math within 30 days of enrollment.

[43] The *Milwaukee Journal Sentinel* reported on May 18, 2012, that MAS had the second-highest graduation rate for the class of 2011; the MAS graduation rate was 91.2%. The only school with a higher graduation rate in Milwaukee was Rufus King, with a rate of 93.1%. This achievement is particularly noteworthy in light of the fact that Rufus King has admission criteria and is not open to all Milwaukee students.

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a. Literacy

i. Scholastic Reading Inventory (SRI)

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, of at least 50 points.[44] 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 literacy skills. Lexile measures can range from 0 (beginning reader) to 1700 and are used to help students find books that align with reading skills.[45] Lexile levels cannot be converted into grade-level units. Based on SRI scores from the spring of 2012 test administration, students scored, on average, the measures indicated in Table 19. (Note that Lexile measures are typically denoted with an "L." [46])

Table 19

Milwaukee Academy of Science
Junior Academy and High School
Scholastic Reading Inventory Lexile Measures at the End of the Year
Spring 2012

Grade	N	Minimum	Maximum	Average	Typical Reader Measures
6th	71	141L	1,359L	728.1L	665L to 1000L
7th	88	120L	1,404L	838.8L	735L to 1065L
8th	64	200L	1,431L	959.4L	805L to 1100L
9th	62	386L	1,325L	989.6L	855L to 1165L
10th	44	106L	1,380L	995.1L	905L to 1195L
11th	41	65L	1,309L	971.9L	940L to 1210L
12th	16	429L	1,489L	1,011.2L	940L to 1210L

[44] www2.scholastic.com/browse/article.jsp?id=1556

[45] www.lexile.com/about-lexile/lexile-overview; www.lexile.com/m/uploads/downloadablepdfs/WhatDoestheLexileMeasure Mean.pdf indicates that the largest maximum possible measure is 2000.

[46] www.lexile.com/about-lexile/grade-equivalent/grade-equivalent-chart/

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As illustrated in Table 20, 46.3% of 214 junior academy students and 43.9% of 157 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. [47]Overall, on average, junior academy students improved 45.0 points, and high school students improved 17.0 points. The school has therefore not met its internal goal.

Table 20

Milwaukee Academy of Science
Junior Academy and High School
Literacy Progress Based on SRI Measures
2011–12

Grade	N	Number Improved*	Percentage Improved (Met Goal)	Average Increase in Score
6th	71	30	42.3%	24.9L
7th	83	43	51.8%	76.8L
8th	60	26	43.3%	24.5L
Junior Academy Subtotal	**214**	**99**	**46.3%**	**45.0L**
9th	60	32	53.3%	42.7L
10th	41	16	39.0%	-1.5L
11th	40	18	45.0%	45.9L
12th	16	3	18.8%	-103.9L
High School Subtotal	**157**	**69**	**43.9%**	**17.0L**

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

ii. MAP

Sixth, seventh, and eighth graders (296 total) completed both the fall and spring MAP reading tests. At the time of the fall test, 17 (24.6%) sixth-grade students were at or above the sixth-grade

[47] In preparing the 2012–13 learning memo for high school students, CRC and MAS staff reviewed the SRI Technical Guide and its fall to spring normative tables. If MAS had used these tables to set its growth expectations for high school students during 2011–12, the expectation would have been for an average growth of 21 points and performance on this outcome might have improved.

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normative average, 18 (22.2%) seventh-grade students were at or above the normative mean, and 25 (42.4%) eighth-grade students were at or above the normative mean for their respective grade level (Table 21). Progress for students at or above the average as well as those below is described below.

Table 21

Milwaukee Academy of Science
Local Measures of Academic Progress: MAP Reading Assessment
Student Scores Relative to Normative Mean
Fall 2011

Grade Level	N	Students at or Above Normative Mean Fall 2011		Students Below Normative Mean Fall 2011	
		N	%	N	%
6th	69	17	24.6%	52	75.4%
7th	81	18	22.2%	63	77.8%
8th	59	25	42.4%	34	57.6%
Total	**209**	**60**	**28.7%**	**149**	**71.3%**

Students at or Above Normative Grade-Level Average on the Fall MAP Reading Test

Of the 60 junior academy students at or above the normative average for their grade level on the fall test, 48 (80.0%) achieved the normative mean on the spring test (Table 22).

Table 22

Milwaukee Academy of Science
Local Measures of Academic Progress: MAP Reading Assessment
Progress for Students at or Above Normative Mean in Fall 2011
Fall 2011 to Spring 2012

Grade Level	Students at or Above Normative Mean Fall 2011	Students Maintained at or Above Normative Mean Spring 2012		Students Below Normative Mean Spring 2012	
		N	%	N	%
6th	17	14	82.4%	3	17.6%
7th	18	15	83.3%	3	16.7%
8th	25	19	76.0%	6	24.0%
Total	**60**	**48**	**80.0%**	**12**	**20.0%**

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Students Below the Normative Grade-Level Average on the Fall MAP Reading Test

Junior academy students who completed both reading tests—149 (71.3%) of 209—were below average at the time of the fall 2011 test. By the time of the spring test, 24 (16.1%) had reached the spring normative reading score for their grade level and 61 (40.9%) had improved their reading scores by at least the difference in RIT means for the grade level at which the student tested in the fall. This represents a total growth rate of 57.0% for all junior academy students (Table 23). Results are also presented by grade level.

Table 23

Milwaukee Academy of Science
Local Measures of Academic Progress: MAP Reading Assessment
Progress for Students Below Normative Mean in Fall 2011
Fall 2011 to Spring 2012

Grade Level	Students Below Normative Average on the MAP Reading Test Fall 2011	Students Who Reached Their Grade Level Normative Average Score Spring 2012		Students Who Did Not Reach Grade Level Average in Spring but Increased at Least the Difference Between Fall and Spring RIT Means for Grade Level at Which Student Tested in the Fall		Overall Progress of Students Below Normative Average on the Fall 2011 MAP Reading Test	
	N	N	%	N	%	N	%
6th	52	10	19.2%	21	40.4%	**31**	**59.6%**
7th	63	6	9.5%	31	49.2%	**37**	**58.7%**
8th	34	8	23.5%	9	26.5%	**17**	**50.0%**
Total	**149**	**24**	**16.1%**	**61**	**40.9%**	**85**	**57.0%**

NWEA also provides a target RIT score for each student based on his/her fall test score. In addition to measuring progress based on normative mean scores, CRC also examined the number of students who met their target RIT score at the time of the spring test. Of the 209 students who completed both the fall and spring MAP reading tests, 128 (61.2%) met or exceeded their target score (not shown).

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iii. Noble Street School Quality Core Assessments[48]

At the beginning of the school year, high school staff indicated they would use the Noble Street School Quality Core Assessments as a second local measure of reading and math progress. These assessments are comprehensive; quality implementation requires ongoing training for staff on the assessment process, interpretation of results, and redesign of instructional activities to enable students to make regular and consistent progress.

MAS's new high school associate principal and achievement coordinator had no or only minimal training on this assessment model early in the first semester. Therefore, the staff made a decision to postpone using the assessment/instructional approach until the 2012–13 school year. Therefore, data are not available to describe student progress over the course of the school year based on this assessment approach.

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 2011 to the spring of 2012 assessment of their math skills, based on the Wide Range Achievement Test (WRAT).[49] The goal was that, on average, students would show at least one month gain for every month of instruction (0.9 or more GL improvement). To assess progress for high 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

[48] Noble Street's website indicates that the assessments they designed are fashioned after the ACT and indicate a student's progress toward acquisition of the skills required to be successful in a post-secondary setting. The website is www.noblestreetcharterschool.org.

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

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end of the school year indicate that students exhibited math skills, on average, at the following GL (Table 24).

Table 24 Milwaukee Academy of Science Junior Academy WRAT Math Average GL Scores at the End of the Year Spring 2012		
Grade	**N**	**Average GL**
6th	71	8.1
7th	87	8.0
8th	62	8.8
Total	**220**	**--**

High school results from exams at the end of the year indicate that, on average, students scored 56.2% correct (Table 25).

Table 25 Milwaukee Academy of Science High School Final Math Exam Percentage Correct at the End of the Year Spring 2012				
Grade	**N**	**Minimum %**	**Maximum %**	**Average %**
9th	62	16.0%	83.0%	43.1%
10th	43	20.0%	91.0%	56.7%
11th	40	30.0%	100.0%	72.8%
12th	17	10.0%	95.0%	63.7%
Total	**162**	**--**	**--**	**56.2%**

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As illustrated in Table 26, 56.8% of 220 junior academy students with comparable scores showed progress from the spring of 2011 to the spring of 2012 mathematics test.[50] On average, students showed 1.2 GL increase in scores, exceeding the school's goal.

Table 26

Milwaukee Academy of Science
Junior Academy
Math Progress Measured by WRAT GL Scores
2011–12

Grade	N	Met Goal*		Average GL Improvement
		N	%	
6th	71	59	83.1%	2.3
7th	87	48	55.2%	1.2
8th	62	18	29.0%	0.1
Total	**220**	**125**	**56.8%**	**1.2**

*Improved 0.9 GL or more.

As illustrated in Table 27, 39.5% of high school students scored 70% or higher on their end-of-year mathematics examinations; therefore, the school did not meet the goal for high school math progress.

Table 27

Milwaukee Academy of Science
High School End-of-Year Math Course Examination (a Measure of Progress)
Spring 2012

Grade	N	N Met Goal	% Met Goal
9th	62	9	14.5%
10th	43	18	41.9%
11th	40	27	67.5%
12th	17	10	58.8%
Total	**162**	**64**	**39.5%**

[50] Fall 2011 or intake test scores were used for new students.

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i. MAP

MAP normative means were described earlier in this report (see Table 5); normative means for the fall and spring math tests are shown in Table 28. This section describes student progress from fall 2011 to spring 2012.

Both the fall and spring MAP math tests were completed by 212 students. At the time of the fall test, 11 (15.7%) sixth-grade students were at or above the fall sixth-grade normative mean, 13 (15.7%) seventh-grade students were at or above the normative mean, and 20 (33.9%) eighth-grade students were at or above the normative mean for their respective grade level (see Table 28). Progress for students at or above the average as well as those below is described below.

Table 28

Milwaukee Academy of Science
Local Measures of Academic Progress: MAP Math Assessment
Student Scores Relative to Normative Mean
Fall 2011

Grade Level	N	Students At or Above Normative Mean Fall 2011		Students Below Normative Mean Fall 2011	
		N	%	N	%
6th	70	11	15.7%	59	84.3%
7th	83	13	15.7%	70	84.3%
8th	59	20	33.9%	39	66.1%
Total	**212**	**44**	**20.8%**	**168**	**79.2%**

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Students at or Above Normative Ninth-Grade Average on the Fall MAP Math Test

Of the 44 junior academy students at or above the normative average for their grade level on the fall test, 33 (75.0%) achieved the normative mean on the spring test (Table 29).

Table 29

Milwaukee Academy of Science
Local Measures of Academic Progress: MAP Math Assessment
Progress for Students at or Above Normative Mean in Fall 2011
Fall 2011 to Spring 2012

Grade Level	Students at or Above Normative Mean Fall 2011	Students Maintained at or Above Normative Mean Spring 2012		Students Below Normative Mean Spring 2012	
		N	%	N	%
6th	11	8	72.7%	3	27.3%
7th	13	7	53.8%	6	46.2%
8th	20	18	90.0%	2	10.0%
Total	**44**	**33**	**75.0%**	**11**	**25.0%**

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Students Below the Normative Ninth-Grade Average on the Fall MAP Math Test

Of the 212 junior academy students who completed both math tests, 168 (79.2%) were below average at the time of the fall 2011 test. By the time of the spring test, 18 (10.7%) had reached the spring normative math score for their grade level and 42 (25.0%) had improved their math scores by at least the difference in RIT means for the grade level at which the students tested in the fall. This represents a total growth rate of 35.7% (Table 30) for all junior academy students. Results are also presented by grade level.

Table 30

Milwaukee Academy of Science
Local Measures of Academic Progress: MAP Math Assessment
Progress for Students Below Normative Mean in Fall 2011
Fall 2011 to Spring 2012

Grade Level	Students Below Normative Average on the MAP Math Test Fall 2011	Students Who Reached the Normative Average Score Spring 2012		Students Who Did Not Reach Grade Level Average in Spring but Increased at Least the Difference Between Fall and Spring RIT Means for Grade Level at Which Student Tested in the Fall		Overall Progress of Students Below Normative Average on the Fall 2011 MAP Math Test	
	N	N	%	N	%	N	%
6th	59	4	6.8%	18	30.5%	**22**	**37.2%**
7th	70	10	14.3%	17	24.3%	**27**	**38.6%**
8th	39	4	10.3%	7	17.9%	**11**	**28.2%**
Total	**168**	18	10.7%	42	25.0%	**60**	**35.7%**

CRC also examined the number of students who met their target RIT score at the time of the spring test. Of the 212 students who completed both the fall and spring MAP math tests, 118 (55.7%) met or exceeded their target RIT score (not shown).

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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 0 to 6. Scores in each domain were totaled. A score of 18 or more for junior academy/high school students indicated that the student was writing at grade level. The goal was that students in sixth through twelfth grades would reach a score of 18 or more, on average.

Results for junior academy students indicated that students scored, on average, 20.3 points.[51] Results for high school students indicate that students' average score was 18.0 points (see Table 31).[52] The school has therefore met its goal.

Table 31

Milwaukee Academy of Science
Junior Academy and High School
Writing Skills Based on Teacher Assessment
2011–12

Grade	N	Writing Score Average
6th	73	18.2
7th	88	20.2
8th	64	22.9
Junior Academy Subtotal	**225**	**20.3**
9th	61	18.9
10th	42	18.7
11th	38	16.6
12th	15	16.5
High School Subtotal	**156**	**18.0**

[51] One hundred sixty-four (72.9%) of 225 junior academy students scored 18 or more points.

[52] Seventy-eight (50.0%) of 156 high school students scored 18 or more points.

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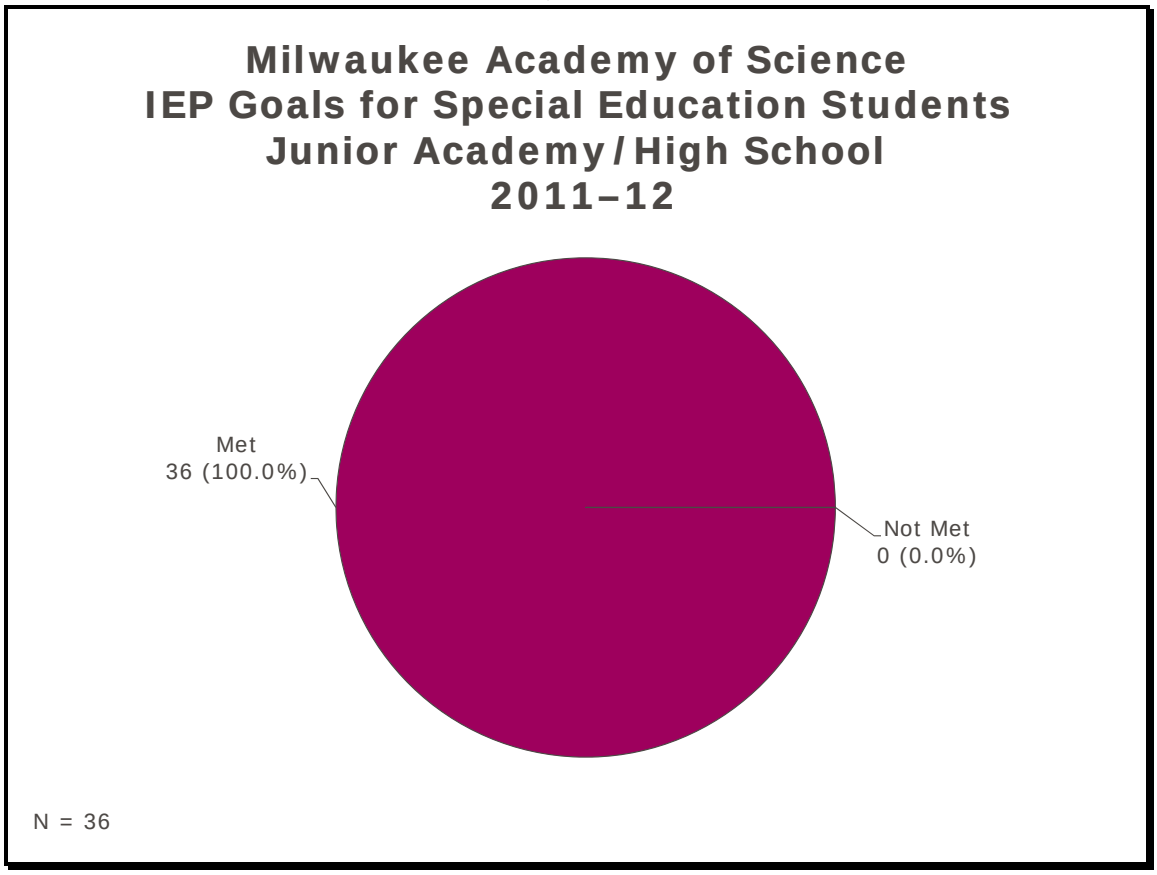
d. Special Education Students

This year, the goal for the junior academy and high school 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 41 special education students in sixth through twelfth grade at the end of the year with completed IEPs. IEPs for five students had been in effect for less than one year; therefore, progress toward meeting goals was not required. Annual IEPs were available for the remaining 36 students; all 36 (100.0%) of those students met one or more of the goals in their IEP (Figure 13). The junior academy/high school has therefore met its goal related to student progress on IEP goals.

Figure 13



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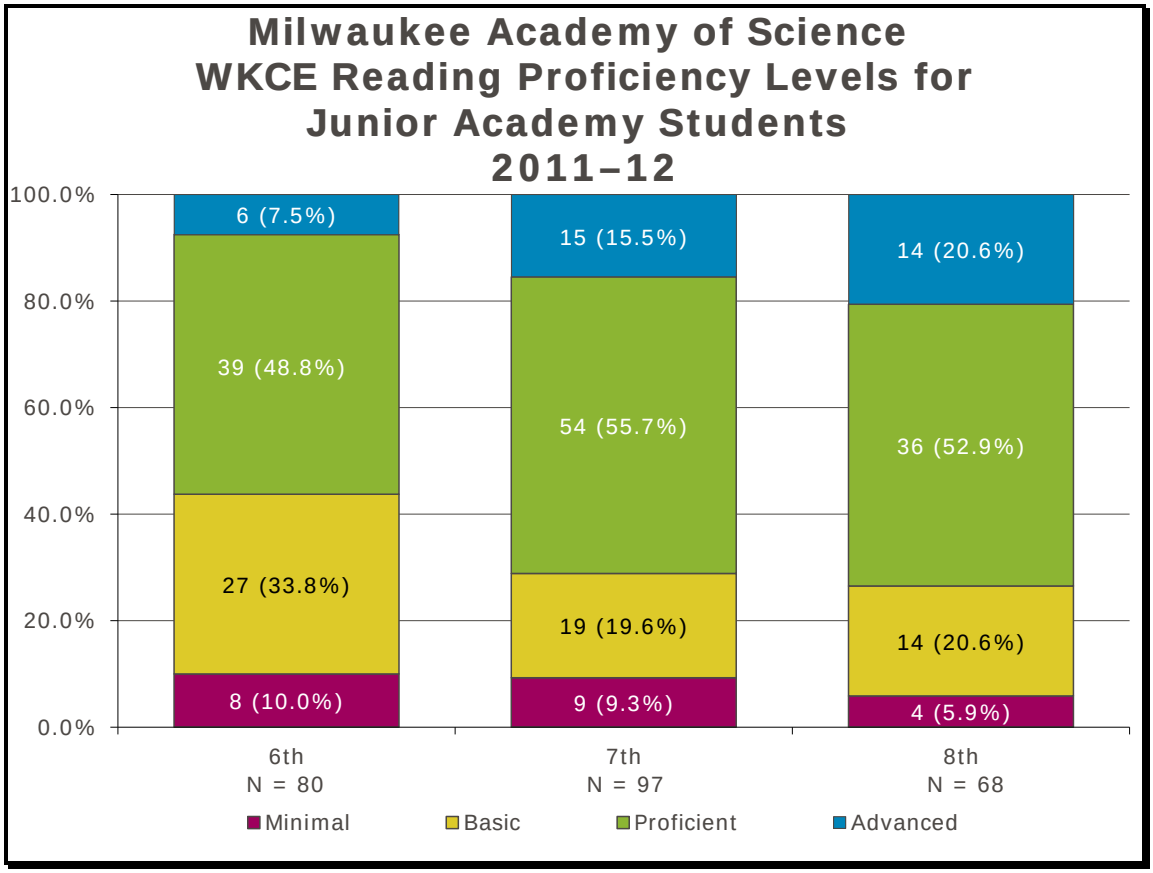
7. External Standardized Measures of Educational Performance

The CSRC required the administration of the WKCE to all sixth- through eighth- and tenth-grade students.[53] 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 Through Eighth Graders

Sixth through eighth graders were administered the WKCE in October 2011. As illustrated, six (7.5%) sixth graders showed advanced reading skills, and 39 (48.8%) scored proficient; 15 (15.5%) of 97 seventh graders were advanced in reading, and 54 (55.7%) scored at the proficient level; and 14 (20.6%) eighth graders scored at the advanced reading level, while 36 (52.9%) were proficient (Figure 14).

Figure 14



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

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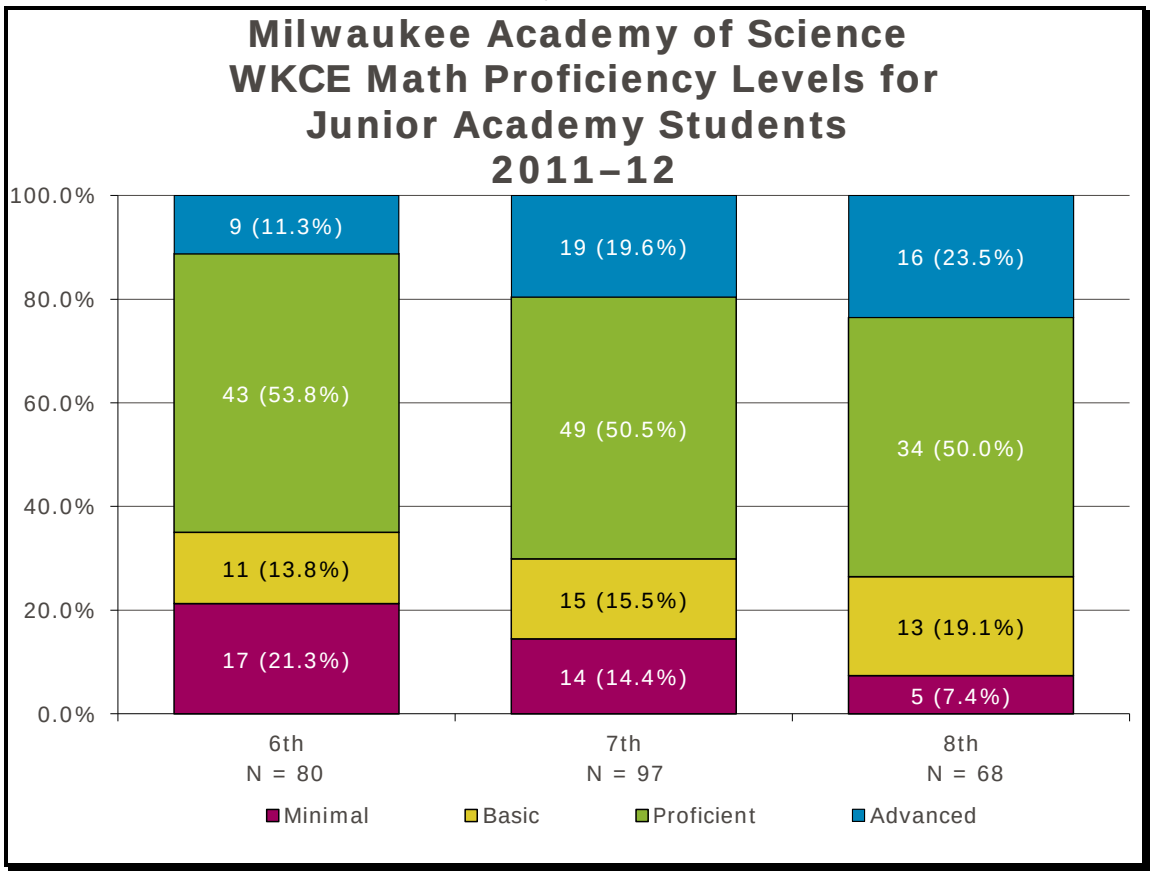
On average, MAS sixth-grade students scored in the 33rd percentile statewide in reading; seventh-grade students scored in the 36th percentile, and eighth graders scored in the 41st percentile in reading (not shown).

In math, nine (11.3%) sixth graders exhibited advanced skills, and 43 (53.8%) scored in the proficient range; 19 (19.6%) of 97 seventh graders scored in the advanced level, and 49 (50.5%) were proficient; and 16 (23.5%) eighth graders were advanced, and 34 (50.0%) scored in the proficient range (Figure 15).

Figure 15



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On average, MAS sixth-grade students scored in the 39th percentile statewide in math; seventh-grade students scored in the 42nd percentile; and eighth graders scored in the 48th percentile in math (not shown).

Eighth-grade students also complete the language arts section of the WKCE. Results from the fall of 2011 indicate that five (7.4%) eighth graders demonstrated advanced language arts skills and 21 (30.9%) scored in the proficient range.

The final score from the WKCE is a writing score for fourth, eighth, and tenth graders. 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.[54] The MAS eighth-grade writing scores ranged from two to seven. The median score was five, meaning half of the students scored at or below five, and half scored at or above five on a scale of zero to nine.

b. 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 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 one and 25 on each section of the test; the composite score, which also ranges from one to 25, is an average of the scores from all four subtests.[55]

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[54] See www.dpi.state.wi.us/oea/kc_writg.html for details.

[55] Information found at http://actstudent.org/explore/index.html, July 2008.

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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 one and 32 on each section of the test; the composite score, which also ranges from one to 32, is an average of the scores from all four subtests.[56]

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 courses. Table 32 shows ACT's benchmark scores for each subtest on the EXPLORE and PLAN.[57] ACT does not publish composite benchmark scores for the EXPLORE and PLAN. CRC created composite benchmark scores for these tests by averaging the benchmark scores from the four subtests. The ACT composite benchmark was created and published by ACT.

[56] Information found at http://www.act.org/plan, July 2008.

[57] For more information, see the ACT EXPLORE Technical Manual online at http://www.act.org/explore/pdf/TechManual.pdf.

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Table 32 Milwaukee Academy of Science ACT College Readiness Benchmarks for the EXPLORE and PLAN			
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
Composite*	17	18	21.25

*ACT does not publish a benchmark for the EXPLORE composite score; CRC calculated a composite benchmark equal to 17 by averaging the benchmark scores from the four subtests.

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 2011, the same timeframe the DPI established for the standardized WKCE. All students enrolled during the fall test period completed the EXPLORE. In addition to administering the EXPLORE in the fall of the school year to comply with the CSRC requirement, MAS also administered the test in the spring of 2012 to measure student progress from fall to spring. The following sections illustrate student performance relative to the ACT readiness benchmarks on each subtest, as well as the composite score for all students who took the test in the fall and spring of the school year. As shown, 11 (18.6%) students who completed both the fall and spring tests scored 14 or more on the fall English test, two (3.4%) scored 18 or higher on the math test, four (6.8%) scored 16 or better on the reading test, none scored at or above the benchmark for science, and two (3.4%) students were at or above the composite

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benchmark score in the fall of 2011. At the time of the spring 2012 test,16 (27.1%) students were at or above the English benchmark, six (10.2%) were at or above the math benchmark, eight (13.6%) were at or above the reading benchmark, and six (10.2%) students were at or above the composite benchmark (Table 33).

Table 33

Milwaukee Academy of Science
EXPLORE for 9th Graders
Minimum, Maximum, and Average Scores
Fall 2011 and Spring 2012
(N = 59)

Test Section	Minimum Score	Maximum Score	Average Score	Students At or Above Benchmark	
				N	%
Fall 2011					
English	6.0	16.0	11.1	11	18.6%
Math	7.0	22.0	13.1	2	3.4%
Reading	9.0	19.0	12.4	4	6.8%
Science	7.0	19.0	14.6	0	0.0%
Composite*	**8.0**	**17.0**	**12.9**	**2**	**3.4%**
Spring 2012					
English	6.0	21.0	12.3	16	27.1%
Math	3.0	25.0	13.2	6	10.2%
Reading	8.0	18.0	13.1	8	13.6%
Science	11.0	19.0	15.5	0	0.0%
Composite *	**9.0**	**20.0**	**13.6**	**6**	**10.2%**

*ACT does not publish a benchmark for the EXPLORE composite score; CRC calculated a composite benchmark equal to 17 by averaging the benchmark scores from the four subtests.

CRC also examined student progress from the fall 2011 to the spring 2012 EXPLORE. The following sections describe progress for students who were at or above the benchmark on each of the four subtests and the composite score at the time of the fall 2011 EXPLORE and then progress for the students who were below benchmarks at the time of the fall 2011 EXPLORE.

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Students at or Above Benchmarks on the Fall 2011 EXPLORE Subtests

CRC first examined scores for students who were at or above the college readiness benchmarks on the fall 2011 EXPLORE. Of the 11 students at or above benchmark on the fall English subtest, seven (63.6%) remained at or above benchmark on the spring test (Table 34). In order to protect student identity, CRC does not report results for cohorts with fewer than 10 students. Due to the small number of students who were at or above benchmark on the math, reading, and science subtests as well as the composite score, CRC could not include results in this report.

Table 34

Milwaukee Academy of Science
Progress for Students at or Above Benchmarks on the Fall 2011 EXPLORE
(N = 59)

Subtest	Students at or Above Benchmark on the EXPLORE Fall 2011		Students Who Remained at or Above Benchmark on the EXPLORE Spring 2012		Students Below Benchmark on the EXPLORE Spring 2012	
	N	%	N	%	N	%
English	11	18.6%	7	63.6%	4	36.4%
Math	2	3.4%	Cannot report due to N size		Cannot report due to N size	
Reading	4	6.8%	Cannot report due to N size		Cannot report due to N size	
Science	0	0.0%	Cannot report due to N size		Cannot report due to N size	
Composite*	2	3.4%	Cannot report due to N size		Cannot report due to N size	

*Note that ACT does not publish composite benchmark scores for the EXPLORE and PLAN. CRC created composite benchmark scores by averaging the benchmarks from the four subtests. The composite benchmark score for the ACT was published by ACT.

Students Below Benchmarks on the Fall 2011 EXPLORE Subtests

Next, CRC examined progress for students below benchmarks on each of the fall 2011 EXPLORE subtests. As Table 35 illustrates, 48 (81.4%) of the 59 students who took the fall 2011 and spring 2012 EXPLORE scored below the benchmark on the English subtest. At the time of the spring 2012 test, nine (18.8%) of those students reached the benchmark and 20 (41.7%) had improved their scores by at least one point. Four (7.0%) of the 57 students below the benchmark on the fall 2011

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math test reached benchmark by the spring test, and 16 (28.1%) had improved their scale scores by at least one point from the fall to the spring. Six (10.9%) of the 55 students below benchmark in reading reached benchmark by the spring test and 27 (49.1%) students improved their reading scores between tests. In science, none of the 59 students below benchmark in fall 2011 reached benchmark by the time of the spring test, but 33 (55.9%) students increased their scale scores between tests. Fifty-seven students scored below a 17 on the fall 2011 EXPLORE; by the time of the spring test, four (7.0%) of the students had reached benchmark, and 30 (52.6%) had improved their scores by at least one point.

Table 35

Milwaukee Academy of Science
Fall to Spring Student Progress: Fall 2011 to Spring 2012 EXPLORE
for Students Below Benchmarks on the Fall 2011 EXPLORE

Subtest	Students Below Benchmark on the EXPLORE Fall 2011 (N = 59)		Students Who Achieved Benchmark on the EXPLORE Spring 2012		Students Who Did Not Achieve Benchmark But Increased at Least One Point on the EXPLORE Spring 2012		Overall Progress of Students Below Benchmark on Fall 2011 EXPLORE	
	N	%	N	%	N	%	N	%
English	48	81.4%	9	18.8%	20	41.7%	**29**	**60.4%**
Math	57	96.6%	4	7.0%	16	28.1%	**20**	**35.1%**
Reading	55	93.2%	6	10.9%	27	49.1%	**33**	**60.0%**
Science	59	100.0%	0	0.0%	33	55.9%	**33**	**55.9%**
Composite*	57	96.6%	4	7.0%	30	52.6%	**34**	**59.6%**

*Note that ACT does not publish composite benchmark scores for the EXPLORE and PLAN. CRC created composite benchmark scores by averaging the benchmarks from the four subtests. The composite benchmark score for the ACT was published by ACT.

ii. PLAN for Tenth Graders

All tenth-grade students were required to take the PLAN in the fall of 2011. In addition to the fall PLAN, MAS administered the PLAN to tenth-grade students in the spring of 2012 in order to

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measure progress from fall to spring. Table 36 shows the minimum, maximum, and average scores at the time of each test for students who took the PLAN in the fall and spring of the school year. As shown, the average score for each subtest, as well as the average composite score, increased from fall to spring.

Table 36

Milwaukee Academy of Science
PLAN for 10th Graders
Minimum, Maximum, and Average Scores
Fall 2011 and Spring 2012
(N = 42)

Test Section	Minimum Score	Maximum Score	Average Score	Students at or Above Benchmark	
				N	%
	Fall 2011				
English	7.0	21.0	12.6	6	14.3%
Math	5.0	23.0	13.5	1	2.4%
Reading	6.0	23.0	13.5	3	7.1%
Science	12.0	20.0	15.5	0	0.0%
Composite*	**10.0**	**20.0**	**13.9**	**2**	**4.8%**
	Spring 2012				
English	7.0	31.0	14.0	13	31.0%
Math	7.0	37.0	14.1	1	2.4%
Reading	7.0	27.0	14.0	8	19.0%
Science	1.0	22.0	15.3	2	4.8%
Composite *	**8.0**	**21.0**	**14.5**	**3**	**7.1%**

*ACT does not publish a benchmark for the PLAN composite score; CRC calculated a composite benchmark equal to 18 by averaging the benchmark scores from the four subtests.

CRC also examined student progress from the fall 2011 to the spring 2012 PLAN. The following sections describe progress for students who were at or above the benchmark on each of the four subtests at the time of the fall 2011 PLAN, and then progress for the students who were below benchmark on the four subtests at the time of the fall 2011 PLAN.

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Students at or Above Benchmarks on the Fall 2011 PLAN Subtests

CRC first examined scores for students who were at or above the college readiness benchmarks on the fall 2011 PLAN. In order to protect student identity, CRC does not report results for cohorts with fewer than 10 students. Therefore, due to the small number of students who were at or above benchmarks on the fall PLAN tests, CRC could not include results in this report.

Table 37

Milwaukee Academy of Science
Progress for Students at or Above Benchmarks on the Fall 2011 PLAN
(N = 42)

Subtest	Students at or Above Benchmark on the PLAN Fall 2011		Students Who Remained at or Above Benchmark on the PLAN Spring 2012		Students Below Benchmark on the PLAN Spring 2012	
	N	%	N	%	N	%
English	6	14.3%	Cannot report due to N size		Cannot report due to N size	
Math	1	2.4%	Cannot report due to N size		Cannot report due to N size	
Reading	3	7.1%	Cannot report due to N size		Cannot report due to N size	
Science	0	0.0%	Cannot report due to N size		Cannot report due to N size	
Composite*	**2**	**4.8%**	Cannot report due to N size		Cannot report due to N size	

*Note that ACT does not publish composite benchmark scores for the EXPLORE and PLAN. CRC created composite benchmark scores by averaging the benchmarks from the four subtests. The composite benchmark score for the ACT was published by ACT.

Students Below Benchmarks on the Fall 2011 PLAN Subtests

Next, CRC examined progress for students below benchmarks on each of the fall 2011 PLAN subtests. As Table 38 illustrates, 36 (85.7%) of the 42 students who took the fall 2011 and spring 2012 PLAN scored below the benchmark on the English subtest. At the time of the spring 2012 test, 10 (27.8%) of those students reached the benchmark, and nine (25.0%) had improved their scores by at least one point. None of the 41 students below the benchmark on the fall math test reached benchmark in the spring, but 18 (43.9%) improved their scale scores by at least one point. Six (15.4%) of the 39 students below benchmark in reading reached benchmark, and 13 (33.3%) had improved

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their reading scores by the spring test. Of 42 students below benchmark in science on the fall test, two (4.8%) reached benchmark by the time of the spring test, and 17 (40.4%) increased their scale scores between tests. Finally, 40 (95.2%) students were below the composite benchmark at the time of the fall test; by the time of the spring test, one (2.5%) of those students had reached benchmark, and 21 (52.5%) students improved their scores by at least one point.

Table 38

Milwaukee Academy of Science
Fall to Spring Student Progress: Fall 2011 to Spring 2012 PLAN
for Students Below Benchmarks on the Fall 2011 PLAN

Subtest	Students Below Benchmark on the PLAN Fall 2011 (N = 42)		Students Who Achieved Benchmark on the PLAN Spring 2012		Students Who Did Not Achieve Benchmark But Increased at Least One Point on the PLAN Spring 2012		Overall Progress of Students Below Benchmark on Fall 2011 PLAN	
	N	%	N	%	N	%	N	%
English	36	85.7%	10	27.8%	9	25.0%	**19**	**52.8%**
Math	41	97.6%	0	0.0%	18	43.9%	**18**	**43.9%**
Reading	39	92.9%	6	15.4%	13	33.3%	**19**	**48.7%**
Science	42	100.0%	2	4.8%	17	40.4%	**19**	**45.2%**
Composite*	40	95.2%	1	2.5%	21	52.5%	**22**	**55.0%**

*Note that ACT does not publish composite benchmark scores for the EXPLORE and PLAN. CRC created composite benchmark scores by averaging the benchmarks from the four subtests. The composite benchmark score for the ACT was published by ACT.

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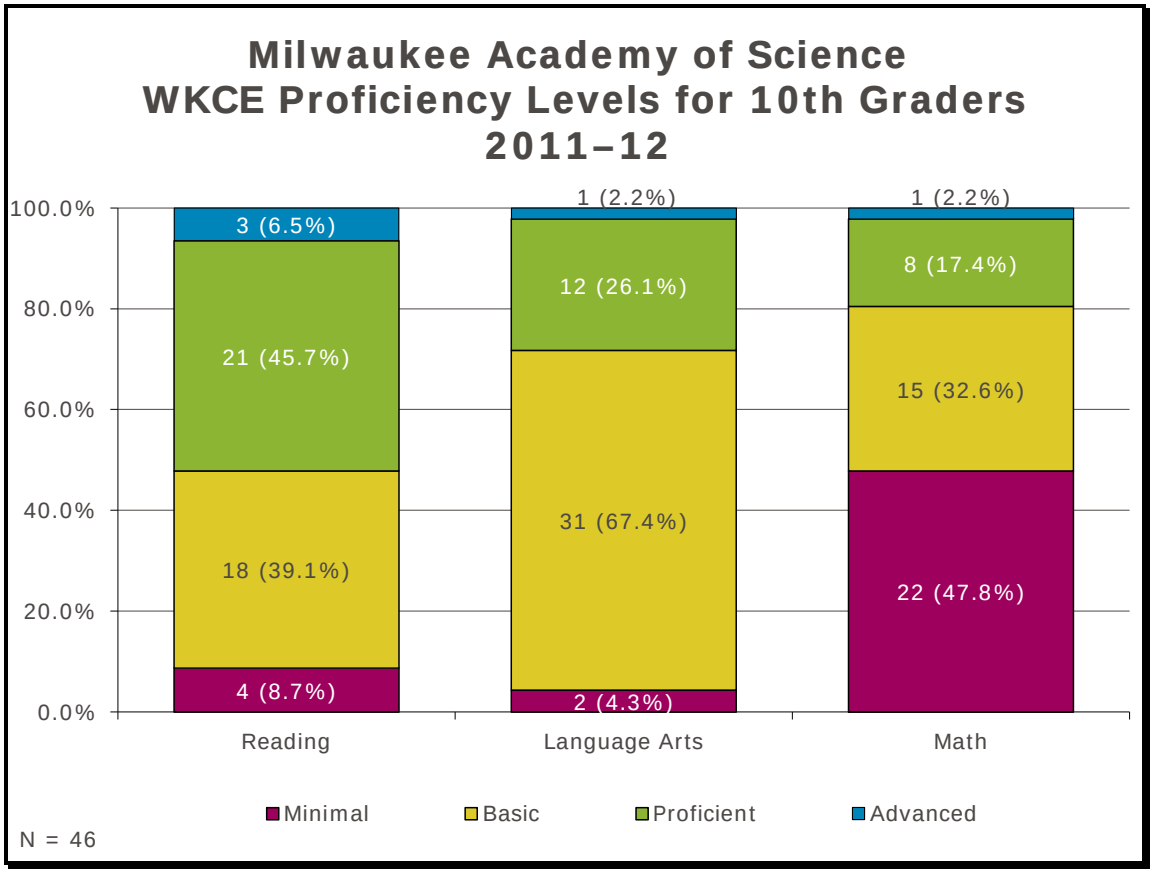
iii. WKCE for Tenth Graders

In October 2011, 46 tenth graders were given the WKCE. Three (6.5%) students scored advanced, and 21 (45.7%) scored proficient in reading; one (2.2%) scored advanced, and 12 (26.1%) scored proficient in language arts; and one (2.2%) student scored advanced, and eight (17.4%) scored proficient in math. Results are illustrated in Figure 16.

Figure 16



On average, MAS tenth-grade students scored in the 34th percentile statewide in reading and in the 29th percentile in math (not shown).

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e. ACT or SAT for Eleventh and Twelfth Graders

The final CSRC expectation was that all eleventh and twelfth graders will take the ACT or SAT. Eleventh graders were to have taken the test by the end of the school year. Twelfth graders were to have taken the test in the fall of their senior year. This year, there were 42 eleventh and 18 twelfth graders who were enrolled at the end of the year and therefore should have taken the test. Of these 60 students, 44 (73.3%) took the ACT by June 2012; eight (13.3%) took the test in June 2012; five were registered but did not take the test in June 2012; and three (5.0%) students did not register to take the ACT. None of the 60 students took the SAT. This falls short of CSRC expectations that all eleventh and twelfth graders take the ACT or SAT.

ACT scores were available for all 44 of the students who completed the test by the end of the school year and for the eight students who took the test in June 2012. Composite ACT scores for eleventh graders ranged from 11.0 to 24.0, with an average of 15.1 (Table 39). ACT scores for twelfth graders ranged from 12.0 to 23.0, with an average of 15.2. Overall, eleventh and twelfth graders scored, on average, 15.2 points on the ACT composite (not shown). Three (8.1%) of 37 eleventh graders and one (6.7%) of 15 twelfth-grade students with scores available scored at or above the ACT composite benchmark of 21.25 (21 when rounding).

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Table 39 Milwaukee Academy of Science ACT Scores for 11th and 12th Graders 2011–12					
ACT Test Subject	**Minimum**	**Maximum**	**Average**	**Students at or Above Benchmark**	
				N	**%**
11th Grade (N = 37)					
English	8.0	26.0	13.5	7	18.9%
Math	13.0	24.0	16.2	2	5.4%
Reading	8.0	23.0	14.9	4	10.8%
Science	9.0	23.0	15.3	0	0.0%
Composite	**11.0**	**24.0**	**15.1**	**3**	**8.1%**
12th Grade (N = 15)					
English	8.0	24.0	14.1	3	20.0%
Math	14.0	24.0	16.0	1	6.7%
Reading	10.0	24.0	15.4	2	13.3%
Science	9.0	21.0	14.7	0	0.0%
Composite	**12.0**	**23.0**	**15.2**	**1**	**6.7%**

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 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, and progress from tenth to eleventh grade is assessed using benchmarks from the PLAN to the ACT test. The CSRC requires that multiple-year progress be reported for students who met proficiency-level expectations

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(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 2010–11 school year.

The CSRC expectations on the SDRT are that at least 75% of students who were at or above grade level the previous year maintain at or above grade-level status during the current year. Students below grade level are expected to advance, on average, more than 1.0 GLE. For the WKCE, the expectation is that at least 75.0% of the students who were at the proficient or advanced levels on the previous year's WKCE reading and math subtests, and who met the full academic year definition, would maintain their status of proficient or above. 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, the expectation is that at least 60% of students would either advance to the next proficiency level or advance to the next highest quartile within their previous year's proficiency level.[58] Finally, expectations related to the EXPLORE, PLAN, and ACT are that at least 75% of the students at benchmark in any of the subtest areas or the composite score will maintain that status on the next test in the series (e.g., EXPLORE to PLAN and PLAN to ACT).

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.

There were 54 students enrolled at MAS as first graders in 2010–11 who took the test in 2011–12 as second graders, and 61 students enrolled in 2010–11 as second graders who took the test in

[58] Students had to be enrolled in the school on or before September 16, 2010, to meet the FAY definition.

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2011–12 as third graders. The average advancement from first to second grade was 1.0 GLE, and second to third graders advanced an average of 0.7 GLE. Overall, these students advanced, on average, 0.8 GLE from 2010–11 to 2011–12. Forty-six (85.2%) of 54 second graders and 46 (75.4%) of 61 third graders were at or above GLE at the time of the spring 2011 SDRT. The following sections describe progress for students at or above GLE and those below GLE in 2011 (Figure 40).

Table 40

Milwaukee Academy of Science
Average GLE Advancement in Reading
Based on SDRT Total

Grade (2010–11 to 2011–12)	Average GLE 2010–11	Average GLE 2011–12	Average GLE Advancement	Students at or Above Grade Level in 2010-11
1st to 2nd (n = 54)	1.5	2.4	1.0	46 (85.2%)
2nd to 3rd (n = 61)	2.5	3.2	0.7	46 (75.4%)
Total (N = 115)	**--**	**--**	**0.8**	**92 (80.0%)**

It is possible to compare SDRT results over two academic years for third-grade students who took the SDRT in 2009–10 as first graders to scores they earned as third graders in 2011–12. As illustrated, in 2009–10, first-grade students were reading at GLE and were able to maintain grade-level skills in 2011–12. Over two years, these students improved, on average, 1.7 GLE (Table 41).

Table 41

Milwaukee Academy of Science
Average GLE Advancement From 1st to 3rd Grade
Based on SDRT Total

Reading	Average GLE 2009–10	Average GLE 2011–12	Median GLE Advancement	Average GLE Advancement
1st to 3rd (n = 42)	1.6	3.4	1.6	1.7

Note: Results are rounded to the nearest tenth.

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b. Students At or Above GLE

Beginning in 2011–12, the CSRC required the school to measure progress for students who were at or above GLE at the time of the previous year's test. The expectation is that at least 75% of students at or above grade level will maintain grade-level status during the current school year. At the time of the 2010–11 test, 46 second graders and 46 third graders tested at or above grade level. Thirty-three (71.7%) of the 46 second graders and 30 (65.2%) of 46 third graders maintained grade-level status during 2011–12 (Table 42). Overall, 68.5% of 92 students at or above grade level in 2010–11 maintained grade level status in 2011–12; therefore, the school did not meet the CSRC goal related to this outcome.

Table 42

Milwaukee Academy of Science
Average GLE Advancement in Reading
for Students at or Above GLE

Grade (2010–11 to 2011–12)	# Met Goal*	% Met Goal*
1st to 2nd (n = 46)	33	71.7%
2nd to 3rd (n = 46)	30	65.2%
Total (N = 92)	**63**	**68.5%**

*Maintained GLE status in 2011–12.

c. 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, 23 second and third graders tested below GLE as first or second graders. These students advanced, on average, 0.8 GLE this year, short of the CSRC goal (Table 43).

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Table 43 Milwaukee Academy of Science Average GLE Advancement in Reading for Students Below GLE				
Grade (2010–11 to 2011–11)	**Average GLE 2010–11**	**Average GLE 2011–12**	**Average GLE Advancement**	**% Met Goal***
1st to 2nd (n = 8)	Cannot report due to N size	Cannot report due to N size	Cannot report due to N size	Cannot report due to N size
2nd to 3rd (n = 15)	1.7	2.5	0.8	20.0%
Total (N = 23)	**--**	**--**	**0.8**	**26.1%**

Note: Results are rounded to the nearest one tenth.
*Improved more than 1.0 GLE.

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

a. Students Who Met Proficiency-Level Expectations

Based on fall 2010 WKCE data, 191 students reached proficiency in reading, and 180 were proficient or higher in math. As illustrated in Tables 44 and 45, 88.0% of students maintained their reading levels and 88.3% maintained proficient or advanced levels in math, exceeding CSRC expectations.

Table 44 Milwaukee Academy of Science Reading Proficiency Level Progress for Students Proficient or Advanced in 2010–11 Based on WKCE			
Grade	**Students Proficient/Advanced in 2010–11**	**Students Maintained Proficient/Advanced in 2011–12**	
		N	**%**
3rd to 4th	43	38	88.4%
4th to 5th	33	30	90.9%
5th to 6th	33	27	81.8%
6th to 7th	39	38	97.4%
7th to 8th	43	35	81.4%
Total	**191**	**168**	**88.0%**

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Table 45 Milwaukee Academy of Science Math Proficiency Level Progress for Students Proficient or Advanced in 2010–11 Based on WKCE			
Grade	**Students Proficient/Advanced in 2010–11**	**Students Maintained Proficient/Advanced in 2011–12**	
		N	**%**
3rd to 4th	33	27	81.8%
4th to 5th	34	29	85.3%
5th to 6th	36	32	88.9%
6th to 7th	40	38	95.0%
7th to 8th	37	33	89.2%
Total	**180**	**159**	**88.3%**

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, basic to proficient, or minimal 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.[59]

There were 127 students who scored in the minimal or basic categories in 2010–11. Of these, 63.8% showed improvement by progressing to a higher proficiency level (N = 56) or quartile (N = 25) in reading (Table 46). The CSRC expectation is that at least 60.0% of students will show progress; therefore, MAS did meet this expectation.

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

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Table 46 Milwaukee Academy of Science Reading Proficiency Level Progress for Students Minimal or Basic in 2010–11 Based on WKCE					
Grade	**# Students Minimal/Basic 2010–11**	**# Students Who Advanced One Proficiency Level 2011–12**	**If Not Advanced, # Who Improved Quartile(s) Within Proficiency Level 2011–12**	**Total Proficiency Level Advancement**	
				N	**%**
3rd to 4th	21	6	6	**12**	**57.1%**
4th to 5th	39	21	8	**29**	**74.4%**
5th to 6th	25	8	5	**13**	**52.0%**
6th to 7th	31	17	4	**21**	**67.7%**
7th to 8th	11	4	2	**6**	**54.5%**
Total	**127**	**56**	**25**	**81**	**63.8%**

Proficiency-level progress in math is described in Table 47. There were 138 students who scored below proficient on the fall 2010 WKCE. Overall, 60.8% of these students either advanced one proficiency level (N = 68) or, if they did not advance a level, improved at least one quartile within their level (N = 16). The CSRC expectation is that at least 60.0% of students will show progress; therefore, MAS did meet this expectation.

Table 47 Milwaukee Academy of Science Math Proficiency Level Progress for Students Minimal or Basic in 2010–11 Based on WKCE					
Grade	**# Students Minimal/Basic 2010–11**	**# Students Who Advanced One Proficiency Level 2011–12**	**If Not Advanced, # Who Improved Quartile(s) Within Proficiency Level 2011–12**	**Total Proficiency Level Advancement**	
				N	**%**
3rd to 4th	31	12	3	**15**	**48.4%**
4th to 5th	38	14	3	**17**	**44.7%**
5th to 6th	22	14	3	**17**	**77.3%**
6th to 7th	30	17	3	**20**	**66.7%**
7th to 8th	17	11	4	**15**	**88.2%**
Total	**138**	**68**	**16**	**84**	**60.8%**

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3. Benchmark Progress From the Fall of 2010 EXPLORE to the Fall of 2011 PLAN

Students in ninth grade at MAS during the 2010–11 school year took the EXPLORE in the fall of 2010. Those same ninth-grade students who were enrolled as tenth graders at MAS during 2011–12 took the PLAN during the fall of 2011. Students, parents, and teachers can use scores from each year to determine areas in which students may need additional assistance.

Using the minimum benchmark scores for each subject area (shown in Table 25) on the EXPLORE, CRC examined student progress from ninth to tenth grade. There were 37 MAS students who took the EXPLORE in the fall of 2010 as ninth graders and the PLAN in the fall of 2011 as tenth graders. Of those students, four (10.8%) were at or above the English benchmark, one (2.7%) student was at or above the benchmark in math, one (2.7%) was at or above the benchmark for reading, and none of the students were at or above the benchmark for science at the time of the fall 2010 EXPLORE. The following sections describe progress for students who were at or above the EXPLORE benchmark for each test as well as students who were below the benchmark at the time of the fall 2010 test.

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a. Students at or Above Benchmarks on the EXPLORE Subtests

CRC first examined scores for students who were at or above benchmarks on the fall 2010 EXPLORE. The English and reading subtests were the only ones in which students reached benchmarks. In order to protect student identity, CRC does not report results for cohorts with fewer than 10 students. Therefore, due to the small number of students who were at or above benchmark, CRC could not include results in this report.

Table 48

Milwaukee Academy of Science
Progress for Students at or Above Benchmarks on the Fall 2010 EXPLORE
(N = 37)

Subtest	Students at or Above Benchmark on the EXPLORE Fall 2010		Students Who Remained at or Above Benchmark on the PLAN Fall 2011		Students Below Benchmark on the PLAN Fall 2011	
	N	%	N	%	N	%
English	4	10.8%	Cannot report due to N size		Cannot report due to N size	
Math	1	2.7%	Cannot report due to N size		Cannot report due to N size	
Reading	1	2.7%	Cannot report due to N size		Cannot report due to N size	
Science	0	0.0%	Cannot report due to N size		Cannot report due to N size	
Composite*	1	2.7%	Cannot report due to N size		Cannot report due to N size	

*ACT does not publish a benchmark for the EXPLORE or PLAN composite score; CRC calculated a composite benchmark equal to 17 for the EXPLORE and 18 for the PLAN by averaging the benchmark scores from the four subtests.

b. Students Below Benchmarks on the EXPLORE Subtests

Next, CRC examined progress for students below benchmarks on each of the fall 2010 EXPLORE subtests. As Table 49 illustrates, 33 (89.2%) of the 37 students who took the EXPLORE and PLAN scored below the benchmark on the EXPLORE English subtest. At the time of the fall 2011 PLAN, three (9.1%) of those students reached the benchmark, and 18 (54.5%) had improved their scores by at least one point. None of the 36 students below benchmark in math reached benchmark, and 16 (44.4%) students had improved their math scores between the EXPLORE and PLAN. Two (5.6%) of

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the 36 students below the benchmark on the fall 2010 EXPLORE reading test reached benchmark by the fall 2011 PLAN, and 26 (72.2%) had improved their scale scores by at least one point from the EXPLORE to PLAN. None of the 37 students below benchmark in science on the fall 2010 EXPLORE reached benchmark by the time of the fall 2011 PLAN, and 21 (56.8%) students increased their scale scores between tests. Finally, none of the students who scored a composite score below a 17 on the EXPLORE scored an 18 or higher on the PLAN, but 25 (69.4%) students improved their composite scores by at least one point.

Table 49

Milwaukee Academy of Science
Year-to-Year Student Progress: EXPLORE to PLAN
Progress for Students Below Benchmarks on the Fall 2010 EXPLORE

Subtest	Students Below Benchmark on the EXPLORE Fall 2010 (N = 37)		Students Who Achieved Benchmark on the PLAN Fall 2010		Students Who Did Not Achieve Benchmark But Increased at Least One Point on the PLAN Fall 2010*		Overall Progress of Students Below Benchmark on Fall 2010EXPLORE	
	N	%	N	%	N	%	N	%
English	33	89.2%	3	9.1%	18	54.5%	**21**	**63.6%**
Math	36	97.3%	0	0.0%	16	44.4%	**16**	**44.4%**
Reading	36	97.3%	2	5.6%	26	72.2%	**28**	**77.8%**
Science	37	100.0%	0	0.0%	21	56.8%	**21**	**56.8%**
Composite**	36	97.3%	0	0.0%	25	69.4%	**25**	**69.4%**

*Scores on the EXPLORE and PLAN are scaled so that a score on the EXPLORE represents the same level of skill as the same score on the PLAN. Therefore, a score increase in one subject from the EXPLORE to the PLAN demonstrates progress in that subject area from one year to the next.
**ACT does not publish a benchmark for the EXPLORE or PLAN composite score; CRC calculated a composite benchmark equal to 17 for the EXPLORE and 18 for the PLAN by averaging the benchmark scores from the four subtests.

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4. Benchmark Progress From the Fall of 2010 PLAN to the 2011–12 ACT

Students in tenth grade at MAS during the 2010–11 school year took the PLAN in the fall semester. Those same tenth-grade students who were enrolled as eleventh graders at MAS during 2011–12 took the ACT during the spring 2012 semester.

Using the minimum benchmark scores for each subject area (shown earlier in this report) on the PLAN, CRC examined student progress from tenth to eleventh grade. There were 27 MAS students who took the PLAN in the fall of 2010 as tenth graders and the ACT in the spring of 2012 as eleventh graders. Of those students, nine (33.3%) were at or above the English benchmark, four (14.8%) students were at or above the benchmark in math, nine (33.3%) were at or above the benchmark in reading, and one (3.7%) of the students was at or above the benchmark in science at the time of the fall 2010 PLAN. Four (14.8%) students scored an 18 or higher composite score on the fall 2010 PLAN. The following sections describe progress for students who were at or above the PLAN benchmark for each test as well as students who were below the benchmark at the time of the fall 2010 test.

a. Students at or Above Benchmarks on the Fall of 2010 PLAN Subtests

CRC first examined scores for students who were at or above the English benchmark on the fall 2010 PLAN. In order to protect student identity, CRC does not report results for cohorts with fewer than 10 students. Therefore, due to the small number of students who were at or above benchmark in English, math, reading, and science, CRC could not include the number of students who remained at or above the benchmark on each test in this report.

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Table 50 Milwaukee Academy of Science Year-to-Year Student Progress: PLAN to ACT Results Progress for Students at or Above Benchmarks on the Fall 2010 PLAN (N = 27)						
Subtest	**Students at or Above Benchmark on the PLAN Fall 2010**		**Students Who Remained at or Above Benchmark on the ACT Spring 2012**		**Students Below Benchmark on the ACT Spring 2012**	
	N	**%**	**N**	**%**	**N**	**%**
English	9	33.3%	Cannot report due to N size		Cannot report due to N size	
Math	4	14.8%	Cannot report due to N size		Cannot report due to N size	
Reading	9	33.3%	Cannot report due to N size		Cannot report due to N size	
Science	1	3.7%	Cannot report due to N size		Cannot report due to N size	
Composite*	4	14.8%	Cannot report due to N size		Cannot report due to N size	

*There is no composite benchmark score for the PLAN. CRC created a PLAN composite benchmark score by averaging the benchmark scores for the four subtests.

b. Students Below Benchmarks on the Fall 2010 PLAN Subtests

Next, CRC examined progress for students below benchmarks on each of the fall 2010 PLAN subtests. As Table 51 illustrates, none of the students below benchmark on English, math, or science subtests reached benchmark on the spring 2012 ACT. However, eight (44.4%) of the 18 students below benchmark in English, 14 (60.9%) of the 23 students below benchmark in math, and nine (34.6%) of the 26 students below benchmark in science had improved their scores by at least one point. Additionally, one (5.6%) of the 18 students below benchmark in reading had reached benchmark, and eight (44.4%) students had improved their reading scores by at least one point. There were 23 students who scored below 18 on the fall 2010 PLAN composite score; none of those students had reached the ACT composite benchmark in the spring of 2012, but 11 (47.8%) students improved their composite scores by at least one point between the PLAN and the ACT.

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Table 51 Milwaukee Academy of Science Year-to-Year Student Progress: PLAN to ACT Progress for Students Below Benchmarks on the Fall 2010 PLAN								
Subtest	**Students Below Benchmark on the PLAN Fall 2010 (N = 27)**		**Students Who Achieved Benchmark on the ACT Spring 2012**		**Students Who Did Not Achieve Benchmark But Increased at Least One Point on the ACT Spring 2012***		**Overall Progress of Students Below Benchmark on Fall 2010 PLAN**	
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**
English	18	66.7%	0	0.0%	8	44.4%	**8**	**44.4%**
Math	23	85.2%	0	0.0%	14	60.9%	**14**	**60.9%**
Reading	18	66.7%	1	5.6%	8	44.4%	**9**	**50.0%**
Science	26	96.3%	0	0.0%	9	34.6%	**9**	**34.6%**
Composite**	23	85.2%	0	0.0%	11	47.8%	**11**	**47.8%**

*Scores on the PLAN and ACT are scaled so that a score on the PLAN represents the same level of skill as the same score on the ACT. Therefore, a score increase in one subject from the PLAN to the ACT demonstrates progress in that subject area from one year to the next.
**There is no composite benchmark score for the PLAN. CRC created a PLAN composite benchmark by averaging the benchmark scores for the four subtests.

D. School Scorecard

In the 2009–10 school year, the CSRC piloted a scorecard for each school that it charters. The scorecard includes multiple measures of student academic progress such as performance on standardized tests and local measures as well as point-in-time academic achievement and engagement elements such as attendance and student and teacher retention and return. The score provides a summary indicator of school performance. In addition, the CSRC intends to examine scorecard results from all city-chartered schools over the past three years and establish policies that will guide decisions about contract renewal, probationary status, and school closure.

The school scored 73.8% on the K4–8 scorecard and 69.4% on the high school scorecard this year. This compares to 73.9% on the K4–8 and 73.9% on the high school's 2010–11 scorecard and 74.6% on the K4–8 scorecard and 67.3% on the high school 2009–10 scorecard.

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

Since passage of No Child Left Behind (NCLB), school performance in Wisconsin has been measured by Adequate Yearly Progress (AYP). AYP consists of four objectives: test participation, graduation rate or attendance rate, and achieving a designated proficiency rate on two academic indicators–reading and mathematics.

In July 2012, State Superintendent Tony Evers announced that Wisconsin's request for waivers from certain provisions of NCLB, including the AYP designation, was approved by the US Department of Education. AYP will be replaced with an alternate school progress indicator as part of a larger accountability system developed by the Wisconsin DPI that goes into effect in the 2012–13 school year. Therefore, there is no AYP determination for 2011–12 as the department transitions to the new accountability system. For more information please see the DPI website: http://dpi.wi.gov/oea/acct/accountability.html.

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IV. SUMMARY AND RECOMMENDATIONS

This report covers the fourth year of MAS's operation as a City of Milwaukee charter school. The school has met all but five provisions of its contract with the City of Milwaukee and the subsequent requirements of the CSRC. In addition, the school scored 73.8% on K4–8 and 69.4% on the high school scorecards.[60] Based on current and past contract compliance and the scorecard results, CRC's recommendation is that MAS continue regular, annual academic monitoring and reporting; and that the school be considered eligible for charter contract renewal. However, due to recent DPI findings related to school financial matters, CRC concurs with the recommendation of the fiscal monitors that renewal discussion regarding MAS be delayed until the spring of 2013.

[60] The high school experienced significant leadership changes during this school year and was viewed by the administration as being in "turn around" status. During the next school year, the MAS leadership needs to work closely with the high school leadership to improve the reading, math, and writing local measure outcomes and the math outcomes on standardized measures. Lack of improvement in these areas over the next school year would lead to a recommendation from CRC that the MAS high school be placed on probationary status with specific outcome expectations for the 2013–14 school year.

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Appendix A

Contract Compliance Chart

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Milwaukee Academy of Science Overview of Compliance for Education-Related Contract Provisions 2011–12			
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 p. 19	Met
Section I, V	Charter school operation under the days and hours indicated in its calendar.	p. 12	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. 43–49; pp. 68–70; pp. 70–81	 a. Met b. Substantially met[61]
Section I, D	All new high school students tested within 30 days of first day of attendance in reading and math.	p. 55	Substantially met[62]
Section I, D	Written annual plan for graduation.	pp. 53–54	Met
Section I, D	Academic criteria #1: Maintain local measures, showing pupil growth in demonstrating curricular goals in reading, math, writing, and special education.	pp.26–42 and pp. 55–67	Met[63]
Section I, D	Academic criteria #2: Year-to-year achievement measure for 1st through 12th grades: a. 2nd- through 3rd-grade students at or above GLE in reading: At least 75% maintain GLE. 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. d. 10th-grade students at or above benchmarks on the EXPLORE: At least 75% will maintain benchmarks on the	 a. p. 84 b. p. 85 c. pp. 85–86 d. p. 89	 a. Not met. 68.5% of 63 b. Met. 88.0% of 191 c. Met. 88.3% of 180 d. NA[64]

[61] Forty-four (73.3%) of the eleventh and twelfth graders still enrolled at the end of the school year had completed the ACT as required; eight (13.3%) took the test in June 2012; five were registered to but did not take the test in June 2012; and three (5.0%) students did not register to and did not take the ACT. None of the 60 students took the SAT.

[62] New high school students were tested in math, but not all new high school students had reading scores within 30 days of enrollment.

[63] The school met all but two of its internal goals; it did meet the expectations established by the CSRC.

[64] There were too few students at or above the EXPLORE benchmarks to include results in this report.

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Milwaukee Academy of Science Overview of Compliance for Education-Related Contract Provisions 2011–12			
Section of Contract	**Education-Related Contract Provision**	**Report Reference Page**	**Contract Provision Met or Not Met?**
	PLAN. e. 11th-grade students at or above benchmarks on the PLAN: At least 75% will maintain benchmarks on the ACT.	e. p. 90	e. NA[65]
Section I, D	Academic criteria #3: Year-to-year achievement measure for 1st through 12th grades: a. 2nd- and 3rd-grade students below grade level in reading: Advance more than 1 GLE in reading. b. 4th- through 8th-grade students below proficient level in reading: At least 60% will advance one level of proficiency or to the next quartile within the proficiency level range. c. 4th- through 8th-grade students below proficient level in math: At least 60% will advance one level of proficiency or to the next quartile within the proficiency level range. d. 10th-grade students below benchmarks on the EXPLORE: All students below benchmark on any EXPLORE subtest or the composite score will reach benchmark or gain at least one point on the same subtest or composite score on the PLAN. e. 11th-grade students below benchmarks on the PLAN: All students below benchmark on any PLAN subtest or the composite score will	a. p. 83 b. p. 87 c. p. 87 d. p. 90 e. p. 93	a. Not met[66] b. Met. 63.8% of 127 c. Met. 60.8% of 138 d. Not met.[67] e. Not met[68]

[65] There were too few students at or above the PLAN benchmarks to include results in this report.

[66] Second and third graders advanced 0.8 GLE, on average.

[67] Only 63.6% of students progressed on the English test from EXPLORE to PLAN, 44.4% showed progress on the math test, 77.8% on the reading test, 56.8% on the science test, and 69.4% of tenth graders showed progress on the composite score from EXPLORE to PLAN. CRC recommends the CSRC review expectations related to progress from EXPLORE to PLAN and set a standard for use with high school students in subsequent years.

[68] Only 44.4% of students progressed on the English test from PLAN to ACT, 60.9% showed progress on the math test, 50.0% on the reading test, 34.6% on the science test, and 47.8% of tenth graders showed progress on the composite score from EXPLORE to PLAN. CRC recommends the CSRC review expectations related to progress from PLAN to ACT and set a standard for use with high school students in subsequent years.

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Milwaukee Academy of Science Overview of Compliance for Education-Related Contract Provisions 2011–12			
Section of Contract	**Education-Related Contract Provision**	**Report Reference Page**	**Contract Provision Met or Not Met?**
	reach benchmark or gain at least one point on the same subtest or composite score on the ACT.		
Section I, E	Parental involvement.	pp. 13–14	Met[69]
Section I, F	Instructional staff hold a DPI license or permit to teach.	p. 10	Not met[70]
Section I, I	Pupil database information, including special education needs students.	pp. 19–21	Met
Section I, K	Discipline procedures.	pp. 14–16	Met

[69] The school met its contract requirements but the junior academy/high school did not meet its internal goals for parental involvement; when separated, the junior academy met the school's internal goal but the high school did not.

[70] Two grade-level teachers, two instructional assistants, and one special education teacher did not hold valid DPI licenses. The special education teacher applied for a license on 9/28/11 but had not received it at the time of this report.

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Appendix B

Outcome Measure Agreement Memos

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Student Learning Memorandum for Milwaukee Academy of Science Primary/Elementary Academy

To: Children's Research Center and the Charter School Review Committee
From: Milwaukee Academy of Science Primary/Elementary Academy
Re: Student Learning Memorandum for the 2011–12 School Year
Date: October 12, 2011

The following procedures and outcomes will be used for the 2011–12 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 19, 2012. Additionally, paper test printouts or data directly from the test publisher must be provided to CRC for all standardized tests.

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 ID number, Wisconsin Student Number (WSN), 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%. Attendance rates will be reported as present, excused absence, unexcused absence, and out-of-school suspension. MAS considers a student in attendance if the student arrives at the school between 8:05 a.m. and 3:20 p.m. A student is marked partial day (excused or unexcused) if he/she arrives after 8:05 a.m. or leaves before 3:20 p.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, WSN, 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, including expulsion, 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

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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 evaluated students and eligible special education students including date of the most recent individualized education program (IEP) team eligibility evaluation; evaluation results including outcome, ineligible, or disability type; IEP completion date; parent participation in IEP; number of IEP goals; IEP annual review dates; number of IEP goals achieved at the annual review; and planned date for the next evaluation/eligibility assessment.

Academic Achievement: Local Measures

Literacy and Math

At least 90% of the students in K4 and K5 will exhibit proficient or higher skills by the final spring assessment of their literacy skills (specifically recognizes uppercase letters and prints uppercase letters) and math skills (specifically, counting of objects and reading of numbers), based on student quotients on the BRIGANCE: Comprehensive Inventory of Basic Skills.[71] (Note: A quotient score of 85 or higher is considered proficient.)

At least 80% of the students in first through third grades will reach a reading level that is at or above grade level or will show progress of at least four levels on their Scholastic Guided Reading Level as measured by the text gradient scale, which assesses reading fluency and comprehension.[72] All new and retained students will take their pre-test in the fall of 2011. For returning students, results from the spring of 2011 will be used for the pre-test and all students will be post-tested in the spring of 2012.

At least 80% of the students in fourth and fifth grades will reach a grade-equivalency score that is at or above grade level in reading (word recognition) or demonstrate one month's growth for each month of instruction on the BRIGANCE.[73] All new and retained students will take their pre-test in the fall of 2011. Spring 2011 test results will be compared to spring 2012 test results for returning students. All students will be post-tested in the spring of 2012.

At least 80% of the students in first through fifth grades will reach a grade-equivalency score that is at or above grade level or demonstrate one month's growth for each month of instruction in mathematics (math computation) on the BRIGANCE.[74] All new and retained students will take their pre-test in the fall of 2011. Spring 2011 test results will be compared to spring 2012 test results for returning students. All students will be post-tested in the spring of 2012.

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

[72] The following are the text gradient levels that indicate a student is at grade level for the respective grades: first grade = H or above; second grade = L or above; and third grade = O or above.

[73] The reading end-of-year expected grade equivalent scores are as follows: fourth grade = 4.8 and fifth grade = 5.8.

[74] The math end-of-year expected grade equivalent scores are as follows: first grade = 2.2; second grade = 2.6; third grade = 3.7; fourth grade = 4.8; and fifth grade = 6.0.

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Second- through fifth-grade students will complete the Measures of Academic Progress (MAP) reading and math tests in the fall and spring of the school year. At the time of the fall test, each student's score will be compared to grade level means based on the 2011 NWEA normative study. For the cohort of students who complete the fall and spring tests, CRC will report the progress for students at or above the normative mean for their current grade level as well as progress for students below the normative mean for their grade level. A student will be considered to have made adequate progress if he/she increases his/her RIT scores by at least the difference in normative mean scores for the grade level average at which the student tested in the fall. CRC will also report whether students met their MAP growth target RIT score.

Writing

By the end of the final marking period, students in third through fifth grades will have a writing sample assessed. Each grade cohort will be judged to have at least "adequate control," as indicated by an average total score of 12. At least 75% of the students will achieve a score of 12 or above. Writing skills appropriate for each grade level 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: 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.

Academic Achievement: Standardized Measures

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

Grades 1, 2, and 3: The Stanford Diagnostic Reading Test (SDRT) will be administered each spring between April 17 and May 12.[75] Progress will be assessed based on the results of testing in reading in the second and subsequent years.

For current second- and third-grade students with comparison SDRT scores from the previous spring:

- At least 75% of the students who were at or above grade level the previous spring will maintain at or above grade level status;

- All students below grade level on the previous year's SDRT will advance, on average, more than one year using grade-level equivalencies (GLE) from spring test to spring test.

[75] The CSRC plans to make this change to conform to the information provided by the testing company for its spring norming period.

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Grades 3, 4, and 5: The Wisconsin Knowledge and Concepts Examination (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. For fourth graders, it will also include language arts, science, and social studies scale scores. Results will also reflect the student's statewide percentile score.

At least 75% of the students who were proficient or advanced in reading and/or math on the WKCE in 2010–11 will maintain their status of proficient or above in the subsequent year.

More than 60% of the students who tested below proficient (basic or minimal) in mathematics on the WKCE in 2010–11 will improve a level or at least one quartile within their level in the next school year. This is a schoolwide expectation.

More than 60% of the students who tested below proficient (basic or minimal) in reading on the WKCE in 2010–11 will improve a level or at least one quartile within their level in the next school year. This is a schoolwide expectation.

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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 2011–12 academic year. Additionally, important principles applicable to all data collection must be considered.

1. All students attending the school *at any time during the 2011–12 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%, or the attendance rate was 92%).

End-of-the-year data must be submitted to CRC no later than the fifth working day after the end of the second semester, or June 19, 2012.

Staff person responsible for year-end data submission: Jaqueline DeJean (JD)
Jenny Berwanger (JB)

Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
Student Roster	List of students enrolled at any time during the year. Include student name, student ID number, WSN, grade, gender, race/ethnicity, free/reduced lunch eligibility, special education status, and, if applicable, disability type.	PowerSchool	Elizabeth Rodriguez (ER)
Attendance	For each student enrolled at any time during the year, include the following: • WSN • Student name • Number of days expected attendance • Number of days attended • Number of days excused absence	Export data from PowerSchool into a usable data format such as a spreadsheet	ER

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Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
	• Number of days unexcused absence • Number of days in in-school suspension • Number of days in out-of-school suspension		
Enrollment, Termination/Withdrawal	For every student enrolled at any time during the year, include the following: • WSN • Local student ID • Student name • Grade • Whether student is repeating a grade (Y/N) • 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.	ER
Parent Participation	For each student enrolled at any time during the year, include the following: • WSN • Student name • Parent participation in conference 1 (Y, N, N/A) • Type of conference 1 (school, phone, home, N/A) • Parent participation in conference 2 (Y, N, N/A) • Type of conference 2 (school, phone, home, N/A) • Parent participation in conference 3 (Y, N, N/A) • Type of conference 3 (school, phone, home, N/A)	Student data in a spreadsheet Provide conference dates via a document or email.	JD

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Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
Special Education Needs Students	For each student with a special education need, as noted on the student roster, include the following: • WSN • Student name • The special education needs type (e.g., ED, CD, LD) • Date of most recent IEP eligibility evaluation • Most recent eligibility results (e.g., ineligible or disability type) • IEP completion date • Parent participation in IEP • IEP annual review date • Number of IEP goals • Number of IEP goals achieved at IEP review • Planned date for next evaluation/eligibility assessment	Spreadsheet	Vernay Gilliard (VG)
Academic Achievement: Local Measures *K4 and K5 Literacy*	For each student, include the following: • WSN • Student name • Grade • Spring 2012 quotient score • Recognizing UC letters • Spring 2012 quotient score for printing UC letters	Spreadsheet	JB
Academic Achievement: Local Measures *K4 and K5 Math*	For each student, include the following: • WSN • Student name • Grade • Spring 2012 quotient score for counting objects • Spring 2012 quotient score for reading numbers	Spreadsheet	JB

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Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
1st- Through 5th-grade Literacy	For each student, include the following: • WSN • Student name For 1st through 3rd graders, including the following: • New/retained student fall 2011 Scholastic Guided Reading Level • Spring 2012 Scholastic Guided Reading Level (Note: Spring 2011 scores will be used to gauge progress. These scores were provided to CRC in the summer of 2011.) For 4th and 5th graders, include the following: • New/retained student fall 2011 BRIGANCE word recognition GE score • Spring 2012 BRIGANCE word recognition GE score (Note: Spring 2011 scores will be used to gauge progress. These scores were provided to CRC in the summer of 2011.)	Spreadsheet	JB
1st- Through 5th-grade Math	For each student, include the following: • WSN • Student name • Grade • Spring 2012 BRIGANCE math computation GE score Note: For new enrollees, also provide fall 2011 BRIGANCE math computation GE score. (Note: Spring 2011 scores will be used to gauge progress. These scores were provided to CRC in the summer of 2011.)	Spreadsheet	JB
2nd- Through 5th-grade MAP Reading and Math	For each 2nd through 5th-grade student, include the following: • WSN • Student name • Grade • Fall 2011 reading RIT score • Reading growth target • Spring 2012 reading RIT score • Met reading target (Y/N)		

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Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
	• Fall 2011 math RIT score • Math growth target • Spring 2012 math RIT score • Met math target (Y/N)		
3rd- Through 5th-grade Writing	For each student, include the following: • WSN • Student name • Total, end-of-year writing score	Spreadsheet	JB
Academic Achievement: Standardized Measures *SDRT* *1st Through 3rd Grade*	For each student, include the following: • WSN • Student name • Raw scores from each section of the SDRT, including the total • GLE scores from each section of the SDRT, including the total	Spreadsheet; provide paper copies of the test publisher's printout.	JB
Academic Achievement: Standardized Measures *WKCE* *3rd Through 5th Grade*	For each student, include the following: • WSN • 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, include the following: • 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.	Spreadsheet; provide paper copies of the test publisher's printout.	JB

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Student Learning Memorandum for Milwaukee Academy of Science Junior Academy/High School

To: Children's Research Center and Charter School Review Committee
From: Milwaukee Academy of Science Junior Academy/High School
Re: Learning Memo for the 2011–12 Academic Year
Date: October 12, 2011

Note: This memorandum of understanding includes the *minimum* measurable outcomes required by the City of Milwaukee Charter School Review Committee (CSRC). It also describes outcomes defined by the school to monitor and report students' academic progress. These 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. Data will be provided to CRC, the monitoring agent contracted by the CSRC. Data will be reported in a spreadsheet or database that includes each student's Wisconsin Student Number (WSN). 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 19, 2012. Additionally, paper test printouts or data directly from the test publisher will be provided to CRC for all standardized tests.

The school will record student data in the PowerSchool (PS) database and/or 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, local student ID number, WSN, enrollment date, withdrawal date and reason, grade, gender, race/ethnicity, free/reduced lunch eligibility, special education status, and, if applicable, disability type.

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.

Termination/Withdrawal

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. Reasons for each expulsion will also be recorded.

Attendance

The school will maintain appropriate attendance records. These records need to include student data on excused absences, unexcused absences, and out-of-school suspensions. Attendance data will include WSN for each student. 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 five out of the seven instructional periods for that day. Attendance data will be reported separately for the junior academy and high school students.

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Parent/Guardian Participation
At least 80% of parents will participate in two out of the three scheduled parent-teacher conferences held for the junior academy/high school students. The WSN; student name; date of each conference; who participated in the conference (student and/or parent); and whether the conference was held at the school, via phone, or at the student's home will be recorded in a database or spreadsheet.

Special Education Needs Students
The school will maintain updated records on all students evaluated and eligible for special education services, including date of the most recent individualized education program (IEP) team eligibility evaluation; evaluation results, including if the student was ineligible; and if eligible, the disability type, IEP completion date, parent participation in IEP, number of IEP goals, IEP annual review dates, number of IEP goals achieved at the annual review, and planned date for the next evaluation/eligibility assessment.

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.

- Information regarding the student's post-secondary plans.
- A schedule reflecting plans for completing four credits each in English and mathematics; five credits in science; three credits in social studies; and two credits each in foreign language, physical education/health, and other electives.
- Evidence of parent/guardian/family involvement. Involvement means that during the first scheduled parent-teacher conference, teachers/staff will review each student's graduation plan with his/her parent(s) whether the conference is held at the school, via phone, or via home visit. If a parent does not participate in this conference, MAS will have a conference with the student and submit a written report to the parent via regular mail.

For eleventh- and twelfth-grade students, the guidance counselor/advisor will meet with each student during the first quarter to discuss the student's graduation plan.

For ninth through twelfth grades, student schedules will be reviewed by the guidance counselor/advisor by the end of the school year to determine if each student is on track toward earning credits and whether or not the student will need to enroll in summer school.

High School Graduation Requirements[76]

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

[76] 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.

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- All tenth graders who earn at least 11 credits will be promoted to eleventh grade.
- All eleventh graders who earn at least 16.5 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 Measures[77]

Literacy

Students' reading progress will be demonstrated by changes in their Lexile level scores[78] 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.[79] 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.[80] If a student enrolls in the high school after the September testing date, he/she will be tested within 30 calendar days of enrollment.

Junior academy students will complete Measures of Academic Progress (MAP) reading tests in the fall and spring of the school year. At the time of the fall test, each student's reading score will be compared to grade level means based on the 2011 NWEA normative study. For the cohort of students who complete the fall and spring tests, CRC will report the progress for students at or above the normative mean for their current grade level as well as progress for students below the normative mean for their grade level. A student will be considered to have made adequate progress if he/she increases his/her RIT scores by at the least the difference in normative mean scores for the grade-level average at which he/she tested in the fall. CRC will also report whether students met their MAP growth target RIT score.

All high school students' reading progress will be assessed quarterly using the pacing plan for reading designed by the Noble Street School in Chicago.[81,82] MAS will provide CRC with the aggregate mastery

[77] 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.

[78] 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.

[79] 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.

[80] 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.

[81] The eleventh-grade students will not complete the fourth-quarter assessment. They will instead complete the actual ACT test. For these individual students, CEO will provide CRC with their first- and third-quarter aggregate mastery percentages.

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percentages for the first and fourth assessments by individual student WSN for all high school students who completed these tests.

Mathematics

Junior academy students' progress in mathematics will be measured using grade-level equivalency (GLE) scores from the Wide Range Achievement Test (WRAT) administered to students in the spring of 2011 (during the prior school year) and again in the spring of 2012. The test will be administered to all new students within 30 days of their entrance into the junior academy during the 2011–12 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.

High school students' progress in the acquisition of math competencies will be measured by the comprehensive tests for their math course.[83] The end-of-year test results will be reported to CRC. At least 80% of the students 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.[84]

Junior academy students will complete the MAP math test in the fall and spring of the school year. At the time of the fall test, each student's math score will be compared to grade-level means based on the 2011 NWEA normative study. For the cohort of students who complete the fall and spring tests, CRC will report the progress for students at or above the normative mean for their current grade level as well as progress for students below the normative mean for their grade level. A student will be considered to have made adequate progress if he/she increases his/her RIT scores by at the least the difference in normative mean scores for the grade-level average at which he/she tested in the fall. CRC will also report whether students met their MAP growth target RIT score.

All high school students' math progress will be assessed quarterly using the pacing plan for reading designed by the Noble Street School in Chicago.[85,86] MAS will provide CRC with the aggregate mastery percentages for the first and fourth assessments by individual student WSN for all high school students who completed these tests.

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[82] Noble Street's website indicates that the assessments they designed are fashioned after the ACT and indicate a student's progress toward the acquisition of skills required to be successful in a post-secondary setting. The website is www.noblestreetcharterschool.org.

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

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

[85] Eleventh-grade students will not complete the fourth-quarter assessment. They will instead complete the actual ACT test. For these individual students, CEO will provide CRC with their first- and third-quarter aggregate mastery percentages.

[86] Noble Street's website indicates that the assessments they designed are fashioned after the ACT and indicate a student's progress toward the acquisition of skills required to be successful in a post-secondary setting. The website is www.noblestreetcharterschool.org.

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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 or higher. Student writing skills will be assessed in the following six domains based on grade level or IEP expectations: 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 control; 2 = basic control; 3 = adequate control; 4 = proficient control; and 5 = advanced control.

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 WSN.

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 subtests[87] 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)[88] in the fall of the school year.

Tenth-grade Students
All tenth-grade students are required to take all subtests of the PLAN (the second test in the pre-ACT series).[89] The PLAN will be administered in the fall of 2011.

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 and report the subtest and composite scores for each student as well as the date the test was administered.

Twelfth-grade Students
MAS will require all seniors to take the ACT or SAT test in the fall semester of 2011. MAS will monitor students' participation in a spreadsheet and report the subtest and composite scores for

[87] English, mathematics, reading, and science.

[88] 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 to advise students on courses of study.

[89] English, mathematics, reading, and science.

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each student. The spreadsheet needs to indicate the date (month/year) that each twelfth grader took the ACT or SAT test.

Year-to-year EXPLORE, PLAN, and ACT Progress

Scores from the EXPLORE, PLAN, and ACT will be used to track student progress from ninth- to tenth- and from tenth- to eleventh- or twelfth-grades.

- EXPLORE to PLAN: At least 75% of the tenth-grade students who were at or above benchmark for any of the four subtests (English, math, reading, and science) or the composite score at the time of the fall 2010 EXPLORE test will remain at or above benchmark on the fall 2011 PLAN. Tenth graders who were below benchmark for any of the four subtests or the composite score at the time of the fall 2010 EXPLORE will either achieve benchmark(s) or have increased their score by one or more points by the time of the fall 2011 PLAN.

- PLAN to ACT: At least 75% of the eleventh- or twelfth-grade students who were at or above benchmark for any of the four subtests (English, math, reading, and science) or the composite score at the time of either the fall 2009 or fall 2010 PLAN test will remain at or above benchmark on the most recently completed ACT test. Eleventh- or twelfth-grade students who were below benchmark for any of the four subtests or the composite score at the time of the fall 2009 or fall 2010 PLAN will either achieve benchmark(s) or have increased their score by one or more points by the time of the most recently completed ACT.[90]

[90] Eleventh-grade students who took the ACT during the 2011–12 school year took the PLAN in the fall of 2010; twelfth-grade students who took the ACT during the 2011–12 school year took the PLAN in the fall of 2009.

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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 2011–12 academic year. Additionally, important principles applicable to all data collection must be considered.

1. All students attending the school at any time during the 2011–12 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 WSN 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 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.

3. Record and submit a score/response for each student. Please do not submit aggregate data (e.g., 14 students scored 75%, or the attendance rate was 92%).

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 19, 2012.

Staff person(s) responsible for year-end data submission: Lyndee Belanger (LB)

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Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
Student Roster; Enrollment and Termination	For each student enrolled at any time during the year, include the following: • Wisconsin student number (WSN) • 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 • Assessed for special education (Y, eligible; Y, not eligible; N)	PowerSchool	Elizabeth Rodriguez (ER)
Attendance	For each student enrolled at any time during the year, include the following: • WSN • Student name • Number of days expected attendance • Number of days attended • Number of days excused absence • Number of days unexcused absence • Number of times out-of-school suspension • Number of days out-of-school suspension	PowerSchool	ER
Parent Participation	For each student enrolled at any time during the year, include the following: • WSN • Student name • Conference 1 date • Attend conference 1 (parent, student, parent and student, none, N/A) • Type conference 1 (school,	Spreadsheet designed by school	Kevin Johnikin (KJ)

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Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
	phone, home, written report, none, N/A) • Conference 2 date • Attend conference 2 (parent, student, parent and student, none, N/A) • Type conference 2 (school, phone, home, written report, none, N/A) • Conference 3 date • 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	For each student assessed for special education needs (as indicated on the student roster), include the following: • WSN • Most recent IEP eligibility evaluation date • Disability type (e.g., CD, ED, LD, etc.). If eligible, enter the disability type. If not eligible, enter N/E. • IEP completion date • Parent participation in IEP (Y, N, N/A) • IEP annual review date(s) • Number of IEP goals • Number of IEP goals met at time of annual evaluation • Date of next eligibility evaluation	Spreadsheet designed by school	Vernay Gillard (VG)
High School Graduation Plan	For each 9th- through 12th-grade student, include the following: • WSN • Student name • Graduation plan developed (Y, N) • Date graduation plan developed • Graduation plan includes post-secondary plans (Y, N, N/A) • Graduation plan includes a	Spreadsheet designed by school	Kelly Borkovitz (KB)

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Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
	schedule that reflects credits required for graduating (Y, N, N/A) • Graduation plan includes evidence of parent/guardian/family involvement (Y; N; N, but plan was mailed; or N/A) • Student met with guidance counselor • Is student on track toward earning credits (Y, N) • Will student need to enroll in summer school (Y, N, N/A) For 11th- and 12th-grade students, include the following: • Guidance counselor met with student to discuss graduation plan (Y, N, N/A) • Date guidance counselor met with student		
High School Graduation Requirements	For each 9th- through 12th-grade student, include the following: • WSN • 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	KB
Academic Achievement: Local Measures Literacy	For all students, include the following: • WSN • Student name • Fall semester SRI Lexile reading level (or for new students, level from the test given within 30 days of enrollment) • Spring semester SRI Lexile reading level	Spreadsheet designed by school	LB

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Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
	For 6th-, 7th-, and 8th-grade students, also include the following: • Fall MAP reading RIT score • MAP reading growth target • Spring MAP reading RIT score • Student met MAP reading growth target (Y/N) For high school students, also include the following: • Aggregate mastery percentage from first Noble Street reading assessment • Aggregate mastery percentage from fourth Noble Street reading assessment		
Academic Achievement: Local Measures Math	For 6th-, 7th-, and 8th-grade students, also include the following: • Spring 2011 WRAT math GLE (enter N/A if new student) • For new students, GLE from the WRAT given within 30 days of enrollment (enter N/A if returning student, i.e., spring 2011 WRAT score is available) • Spring 2012 semester WRAT math GLE For each 9th- through 12th-grade student, also include spring semester comprehensive course exam percentage correct. For 6th-, 7th-, and 8th-grade students, also include the following: • Fall MAP math RIT score • MAP math growth target • Spring MAP math RIT score • Student met MAP math growth target (Y/N) For high school students (9th–	Spreadsheet designed by school	(LB)

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Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
	12th grade), also include the following: • Aggregate mastery percentage from first Noble Street math assessment • Aggregate mastery percentage from fourth Noble Street math assessment		
Academic Achievement: Local Measures Writing	For each student, enter the following: • WSN • Student name • Final writing total score	Spreadsheet designed by school	LB
Academic Achievement: Local Measures IEP	See "Special Education Needs Students" section above.	Spreadsheet designed by school	VG
Academic Achievement: Standardized Measures WKCE	For each 6th-, 7th-, 8th-, and 10th-grade student, include the following: • WSN • Student name • Proficiency level, scale score, and state percentile for WKCE math test • Proficiency level, scale score, and state percentile for WKCE reading test For 8th- and 10th-grade students, also include the following: • 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 • Total writing score	Export results from the Turnleaf website to a spreadsheet. Also provide paper copies of all students' WKCE scores.	LB

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Learning Memo Section/Outcome	Data Description	Location of Data	Person(s) Responsible for Collecting Data
Academic Achievement: Standardized Measures EXPLORE	For each 9th-grade student, include the following: • WSN • Student name • EXPLORE English, mathematics, reading, and science scores from fall semester • EXPLORE composite score from fall semester. Enter N/A if the student was not enrolled.	Spreadsheet designed by school Also provide paper copies of all students' EXPLORE scores or data as provided by the test publisher.	LB
Academic Achievement: Standardized Measures PLAN	For each 10th-grade student, include the following: • WSN • Student name • PLAN English, mathematics, reading, and science scores from fall semester • PLAN composite score from fall semester. Enter N/A if the student was not enrolled.	Spreadsheet designed by school Also provide paper copies of all students' PLAN scores or data as provided by the test publisher.	LB
Academic Achievement: Standardized Measures ACT or SAT	For each 11th-grade student, include the following: • WSN • Student name • Took the ACT (Y, N, N/A) • Date student took the ACT • Took the SAT (Y, N, N/A) • Date student took the SAT	Spreadsheet designed by school Also provide paper copies of all students' ACT scores or data as provided by the test publisher.	LB
Academic Achievement: Standardized Measures ACT or SAT	For each 12th-grade student, include the following: • WSN • Student name • Took the ACT • Date student took the ACT • Took the SAT • Date student took the SAT	Spreadsheet designed by school Also provide paper copies of all students' EXPLORE scores or data as provided by the test publisher.	LB

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Appendix C

Trend Information

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Table C1 Milwaukee Academy of Science Enrollment					
Year	**Number Enrolled at Start of School Year**	**Number Enrolled During Year**	**Number Withdrew**	**Number at 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%)
2010–11	1,054	32	133	953	926 (87.9%)
2011–12	1,039	40	128	951	914 (88.0%)

Table C2 Milwaukee Academy of Science Student Return Rates			
Year	**Number Enrolled at End of Previous Year***	**Number Enrolled at Start of This School Year**	**Student Return Rate**
2009–10	869	715	82.3%
2010–11	849	712	83.9%
2011–12	921	761	82.6%

*Includes only students enrolled at the end of the previous year who were eligible for enrollment again the following year.

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Figure C1

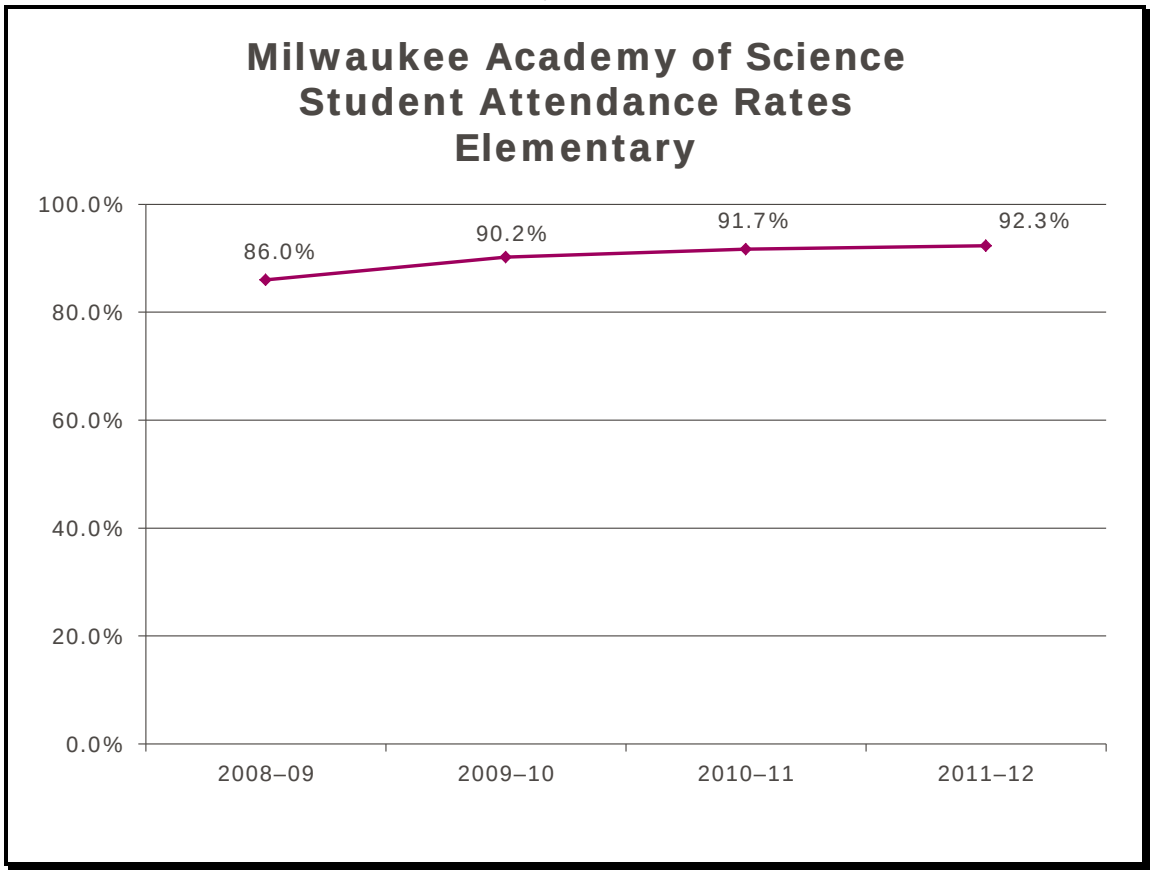

Figure C2

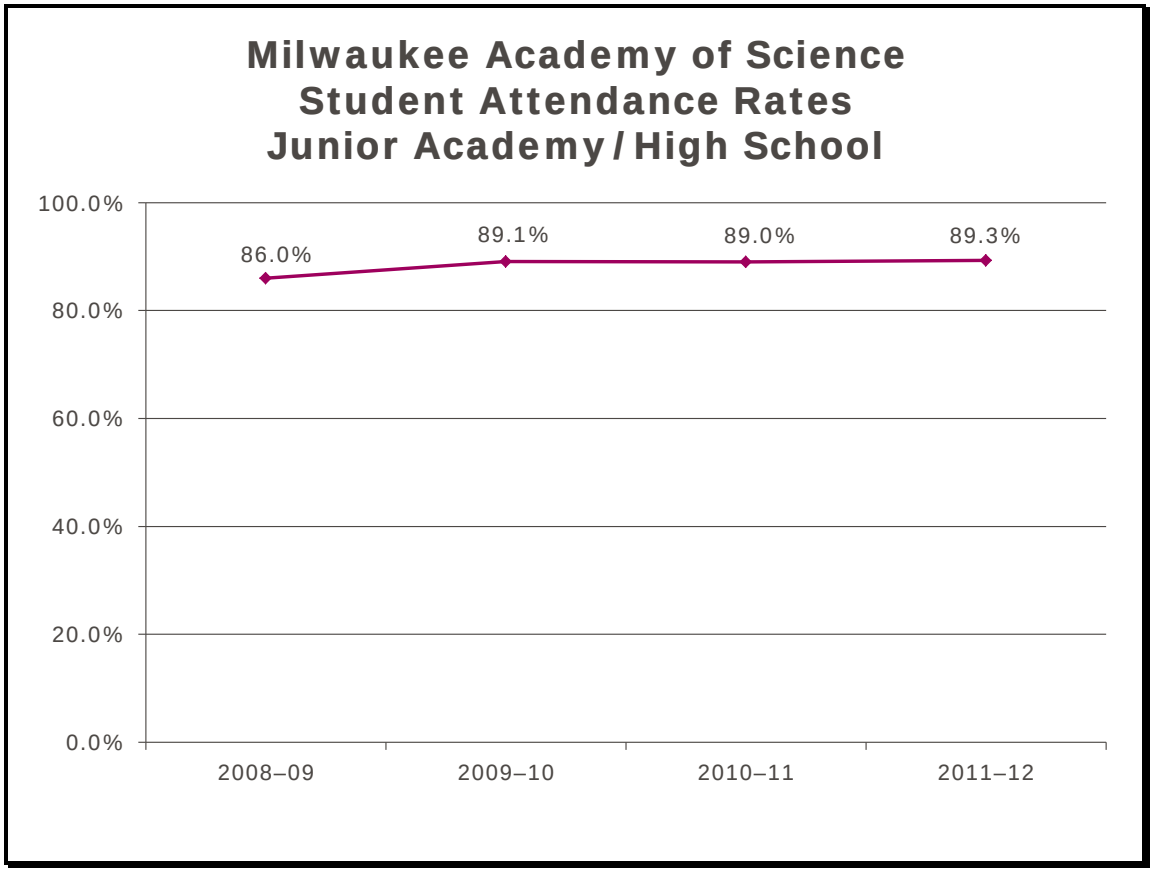

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Figure C3

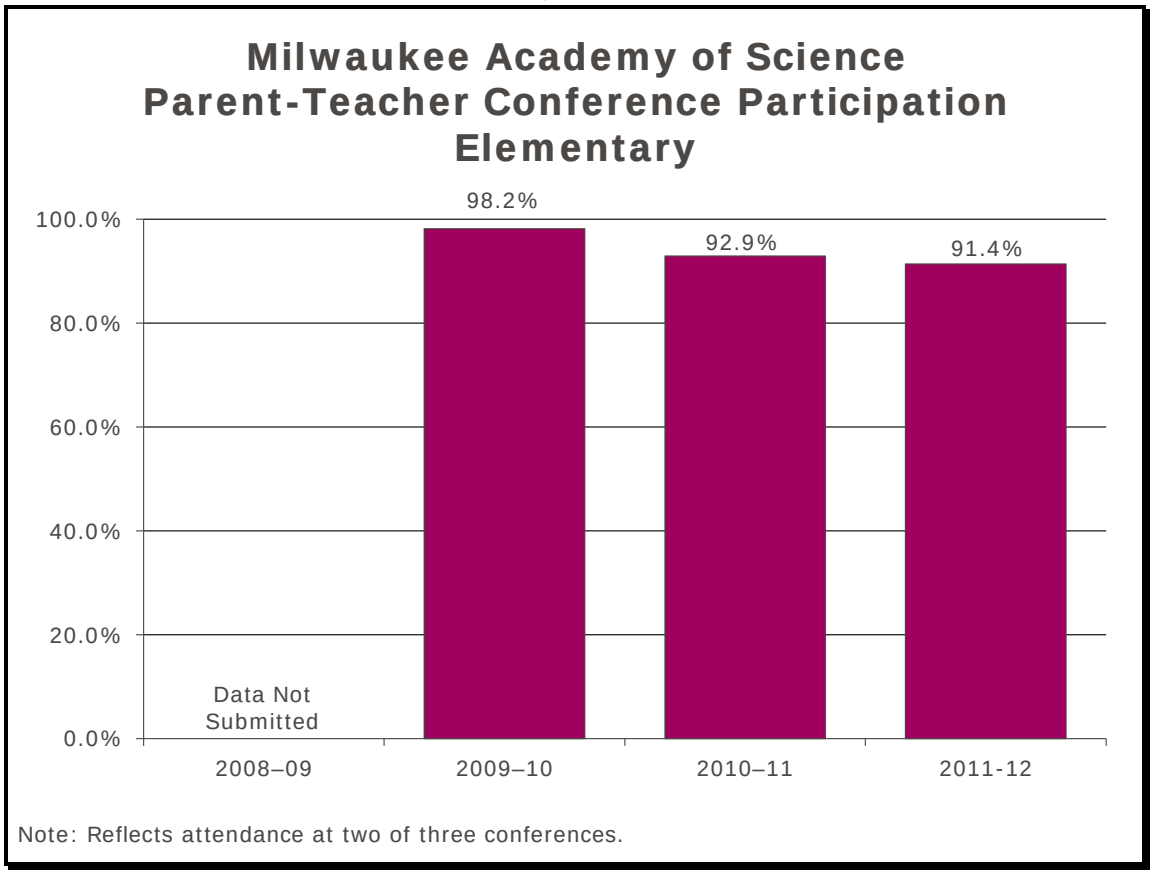

Figure C4

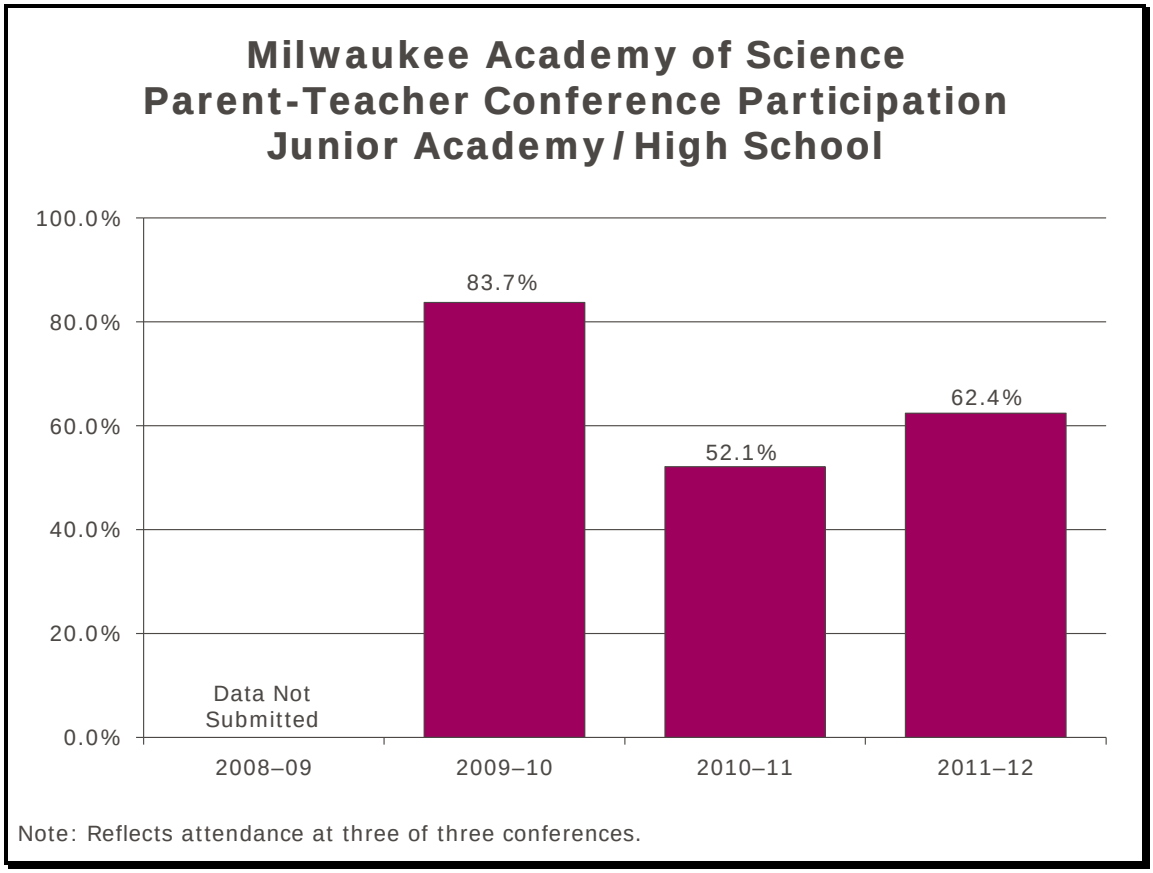

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Table C3 Milwaukee Academy of Science SDRT Year-to-Year Progress Percentage of Students Who Remained At or Above Grade Level Grades 2nd – 3rd	
School Year	**Percent**
2011–12	68.5%

Table C4 Milwaukee Academy of Science SDRT Year-to-Year Progress Average Grade Level Advancement of Students Below GLE Grades 2nd – 3rd		
School Year	**N**	**Average Grade Level Advancement**
2011–12	115	0.8

Table C5 Milwaukee Academy of Science WKCE Year-to-Year Progress Students Who Remained Proficient Grades 4th – 8th		
School Year	**Reading**	**Math**
2008–09*	85.6%	74.1%
2009–10	89.4%	91.0%
2010–11	87.3%	87.1%
2011–12	88.0%	88.3%

*Although not required, the school provided WKCE data.

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Table C6 Milwaukee Academy of Science WKCE Year-to-Year Progress Students Who Were Minimal or Basic and Showed Improvement Grades 4th – 8th		
School Year	**Reading**	**Math**
2008–09*	47.3%	52.3%
2009–10	63.9%	65.4%
2010–11	52.5%	64.4%
2011–12	63.8%	60.8%

*Although not required, the school provided WKCE data.

Table C7 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 End of School Year**	**Teacher Retention Rate: Number and Rate Employed at School for Entire School Year**
2009–10	64	0	2	62	62 (96.9%)
2010–11	67	1	1	67	66 (98.5%)
2011–12	80	4	4	80	76 (95.0%)

Table C8 Milwaukee Academy of Science Teacher Return[91]			
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%
2010–11	57	53	92.9%
2011–12	63	49	77.8%

[91] This number excludes the teachers who were not offered contracts at the end of the previous school year due to either unacceptable performance or the elimination of an instructional position.

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Table C9 Milwaukee Academy of Science % Proficient or Advanced WKCE Grades 3rd – 8th and 10th			
School Year	**N**	**Reading**	**Math**
2008–09*	506	42.7%	26.5%
2009–10	492	50.6%	43.9%
2010–11	542	56.1%	50.5%
2011–12	549	64.3%	56.8%

Table C10 Milwaukee Academy of Science Pilot Report Card Score		
School Year	**K4–8**	**High School**
2009–10	74.6%	67.3%
2010–11	73.9%	73.9%
2011–12	73.8%	69.4%

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Appendix D

CSRC Pilot Scorecard

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City of Milwaukee Charter School Review Committee
Pilot School Scorecard

r: 4/11

K5–8TH GRADE

STUDENT ACADEMIC PROGRESS: GRADES 1–3		
• SDRT—% remained at or above GL	(4.0)	10%
• SDRT—% below GL who improved more than 1 GL	(6.0)	

STUDENT ACADEMIC PROGRESS: GRADES 3–8		
• WKCE reading—% maintained proficient and advanced	(7.5)	35%
• WKCE math—% maintained proficient and advanced	(7.5)	
• WKCE reading—% below proficient who progressed	(10.0)	
• WKCE math—% below proficient who progressed	(10.0)	

LOCAL MEASURES		
• % met reading	(3.75)	15%
• % met math	(3.75)	
• % met writing	(3.75)	
• % met special education	(3.75)	

STUDENT ACHIEVEMENT: GRADES 3–8		
• WKCE reading—% proficient or Advanced	(7.5)	15%
• WKCE math—% proficient or advanced	(7.5)	

ENGAGEMENT		
• Student attendance	(5.0)	25%
• Student reenrollment	(5.0)	
• Student retention	(5.0)	
• Teacher retention	(5.0)	
• Teacher return*	(5.0)	

HIGH SCHOOL

STUDENT ACADEMIC PROGRESS: GRADES 9, 10, and 12		
• EXPLORE to PLAN—composite score at or above 17 on EXPLORE and at or above 18 on PLAN	(5)	30%
• EXPLORE to PLAN—composite score of less than 17 on EXPLORE but increased 1 or more on PLAN	(10)	
• Adequate credits to move from 9th to 10th grade	(5)	
• Adequate credits to move from 10th to 11th grade	(5)	
• DPI graduation rate	(5)	

POST-SECONDARY READINESS: GRADES 11 and 12		
• Post-secondary acceptance for graduates (college, university, technical school, military)	(10)	15 %
• % of 11th/12th graders tested	(2.5)	
• % of graduates with ACT composite score of 21.25 or more	(2.5)	

LOCAL MEASURES		
• % met reading	(3.75)	15 %
• % met math	(3.75)	
• % met writing	(3.75)	
• % met special education	(3.75)	

STUDENT ACHIEVEMENT: GRADE 10		
• WKCE reading—% proficient and advanced	(7.5)	15%
• WKCE math—% proficient and advanced	(7.5)	

ENGAGEMENT		
• Student attendance	(5.0)	25%
• Student reenrollment	(5.0)	
• Student retention	(5.0)	
• Teacher retention	(5.0)	
• Teacher return*	(5.0)	

*Teachers not offered continuing contracts are excluded when calculating this rate.

Note: If a school has less than 10 students in any cell on this scorecard, CRC does not report these data. This practice was adopted to protect student identity. Therefore, these cells will be reported as not available (NA) on the scorecard. The total score will be calculated to reflect each school's denominator.

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Table D1

Milwaukee Academy of Science Elementary (K4 – 8)
Charter School Review Committee Pilot Score Card
2011–12 School Year

Area	Measure	Max. Points	% Total Score	Performance	Points Earned
Student Academic Progress 1st – 3rd Grades	SDRT: % remained at or above GL	4	**10%**	68.5%	2.7
	SDRT: % below GL who improved more than 1 GL	6		26.1%	1.6
Student Academic Progress 3rd – 8th Grades	WKCE reading: % maintained proficient and advanced	7.5	**35%**	88.0%	6.6
	WKCE math: % maintained proficient and advanced	7.5		88.3%	6.6
	WKCE reading: % below proficient who progressed	10		63.8%	6.4
	WKCE math: % below proficient who progressed	10		60.8%	6.1
Local Measures	% met reading	3.75	**15%**	80.8%	3.0
	% met math	3.75		82.1%	3.1
	% met writing	3.75		75.6%	2.8
	% met special education	3.75		96.6%	3.6
Student Achievement 3rd – 8th Grades	WKCE reading: % proficient or advanced	7.5	**15%**	65.4%	4.9
	WKCE math: % proficient or advanced	7.5		60.2%	4.5
Engagement	Student attendance	5	**25%**	91.9%	4.6
	Student reenrollment[92]	5		84.3%	4.2
	Student retention rate	5		88.1%	4.4
	Teacher retention rate	5		95.0%[93]	4.8
	Teacher return rate	5		77.8%	3.9
TOTAL		**100**			**73.8%**

[92] Student was enrolled in grades K4 through 7 on the last day of the 2010-11 school year and was also enrolled on the third Friday of September 2011.

[93] Several teachers work across grade levels, therefore the teacher retention and return rates are based on all instructional staff for the entire school and are the same for the elementary and the high school's scorecards.

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Table D2

Milwaukee Academy of Science High School (9–12)
Charter School Review Committee Pilot Score Card
2011–12 School Year

Area	Measure	Max. Points	% Total Score	Performance	Points Earned
Student Academic Progress:	EXPLORE to PLAN: Composite score at or above 17 on EXPLORE and at or above 18 on PLAN	NA (5)	**30%**	Cannot report due to N size[95]	--
	EXPLORE to PLAN: Composite score of less than 17 on EXPLORE but increased 1 or more on PLAN	10		69.4%	6.9
9th to 10th[94] Grade	Adequate credits to move from 9th to 10th grade	5		88.7%	4.4
	Adequate credits to move from 10th to 11th grade	5		90.9%	4.5
10th to 11th Grade **12th Grade**	Graduation rate (DPI)[96]	5		91.2%	4.6
Postsecondary Readiness: 11th –12th Grades	Post-secondary acceptance for graduates (college, university, technical school, military)	10.0	**15%**	81.2%	8.1
	% of 11th/12th graders tested	2.5		73.3%[97]	1.8
	% of graduates with ACT composite score of 21.25 or more	2.5		7.7%	0.2
Local Measures	% met reading	3.75	**15%**	43.9%	1.6
	% met math	3.75		39.5%	1.5
	% met writing	3.75		50.0%	1.9
	% met special education	3.75		100.0%	3.8
Student Academic Achievement: 10th Grade	WKCE reading: % proficient and advanced	7.5	**15%**	52.2%	3.9
	WKCE math: % proficient and advanced	7.5		19.6%	1.5
Engagement	Student attendance	5	**25%**	86.9%	4.3
	Student reenrollment	5		76.6%[98]	3.8
	Student retention rate	5		87.4%	4.4
	Teacher retention rate	5		95.8%	4.8
	Teacher return rate	5		77.8%	3.9
TOTAL		**95**			**65.9 (69.4%)**

[94] EXPLORE is administered to ninth graders; PLAN is administered to tenth graders.

[95] Due to the N size of students who scored 17 or higher on the EXPLORE, CRC could not include results; therefore, five points were deducted from the total points possible.

[96] Four-year rate as of 2010–11; reported on DPI website: http://data.dpi.state.wi.us/Data/HSCompletionPage.aspx

[97] These students took the ACT by the end of the school year; additional students had registered to take the test in June 2012.

[98] Student was enrolled in grades 8 through 11 on the last day of the 2010–11 school year and was also enrolled on the third Friday of September 2011.

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Appendix E

Teacher Interviews

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Teacher Interviews

In the spring of 2012, CRC interviewed 19 teachers regarding their reasons for teaching and overall satisfaction with the school. At least one teacher from each grade from K4 through eighth, one seventh/eighth-grade teacher, four ninth- through twelfth-grade teachers, and one eleventh- through twelfth-grade teacher were interviewed. Teachers were responsible for 16 to 29 students at a given time. Twelve of the 19 teachers indicated that they share classroom responsibility with another teacher for at least one period of the day, and the other seven did not share classroom responsibility. All teachers indicated that they routinely use data to make decisions in the classroom, and that school leadership used data to make schoolwide decisions. Nine teachers' performance reviews occurred annually, six teachers' performance reviews occurred during each semester, and four teachers' performance reviews occurred monthly. Twelve teachers indicated that their school conducts classroom observations monthly, five indicated that observations occur each semester, and two teachers indicated that classroom observations occur annually. Eighteen teachers stated that the school provided informal feedback on a monthly basis, and one teacher indicated that informal feedback was provided by the school each semester. Nine of the teachers were satisfied with the review process, eight were somewhat satisfied, and two teachers were somewhat dissatisfied with the process. Eighteen of the 19 teachers interviewed reported that they had plans to continue teaching at the school; one teacher indicated no plans to continue teaching at the school.

Teachers were asked to rate how important various reasons were for teaching at the school. Teachers rated the general atmosphere, administrative leadership, colleagues, students, educational methodology, and discipline as somewhat important or very important for teaching at the school. See Table E1 for more details.

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Table E1 Reasons for Teaching at Milwaukee Academy of Science 2011–12 (N = 19)				
Reason	Importance			
	Very Important	Somewhat Important	Somewhat Unimportant	Not at All Important
Location	1	8	2	8
Financial	6	6	2	5
Educational methodology	11	7	0	1
Age/grade level of students	9	7	1	2
Discipline	9	10	0	0
General atmosphere	18	1	0	0
Class size	9	8	0	2
Type of school	3	8	3	5
Parental involvement	5	9	5	0
Administrative leadership	15	4	0	0
Colleagues	15	3	1	0
Students	15	3	0	1

Other reasons for teaching at the school included the dedication of the teachers, supportive administration, professional development opportunities, positive support, belief in the vision, and overall work environment. One teacher reported to be under contract with Teach for America as a reason for teaching at the school.

In terms of overall evaluation of the school, teachers were asked to rate the school's performance related to class size, materials and equipment, and student assessment plan, as well as shared leadership, professional support and development, and the school's progress toward becoming an excellent school. Teachers most often rated professional development opportunities, professional support, shared leadership, and student progress reports as excellent. Class size, the school's materials and equipment, student assessment plan, and standardized testing were most likely to be reported as good. Ten teachers listed the school's progress toward becoming an excellent school as excellent, and nine teachers listed the school's progress as good.

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Table E2 Milwaukee Academy of Science School Performance Rating 2011–12 (N = 19)				
Area	Rating			
	Excellent	Good	Fair	Poor
1. Class size	9	10	0	0
2. Materials and equipment	5	11	2	1
3. Student assessment plan	6	10	3	0
3a. Local measures	9	7	3	0
3b. Standardized tests	7	10	1	1
3c. Progress reports	12	4	3	0
4. Shared leadership, decision making, and accountability	10	6	2	1
5. Professional support	11	7	1	0
6. Professional development opportunities	13	4	1	1
7. Progress toward becoming an excellent school	10	9	0	0

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. Teachers' satisfaction in respect to parental involvement, however, tended to be reported with greater frequency as somewhat dissatisfied. Areas where the teachers expressed the most satisfaction were with teacher collaboration, professional staff performance, principal's performance, the opportunities for teacher involvement in policy/procedure decisions, the student-teacher ratio, opportunities for continuing education, and the frequency of staff meetings. Table E3 lists all of the teachers' responses.

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Table E3 Milwaukee Academy of Science Teacher Satisfaction 2011–12 (N = 19)					
Performance Measure	**Response**				
	Very Satisfied	**Somewhat Satisfied**	**Somewhat Dissatisfied**	**Very Dissatisfied**	**No Opinion/ N/A**
Program of instruction	8	9	2	0	0
Enrollment policy and procedure	9	7	2	0	1
Students' academic progress	7	12	0	0	0
Student-teacher ratio	12	7	0	0	0
Discipline policy	9	6	3	1	0
Adherence to discipline policy	8	7	3	1	0
Instructional support	11	7	1	0	0
Parent-teacher relationships	5	9	5	0	0
Teacher collaboration to plan learning experiences	14	4	1	0	0
Parent involvement	2	7	10	0	0
Community/business involvement	8	8	2	0	1
Performance as a teacher	5	12	2	0	0
Principal's performance	13	6	0	0	0
Professional support staff performance	14	4	1	0	0
Opportunities for teacher involvement	9	7	2	1	0
Opportunities for continuing education	12	7	0	0	0
Frequency of staff meetings	12	7	0	0	0
Effectiveness of staff meetings	8	10	1	0	0

When teachers were asked to name three things they liked most about the school, teachers noted the following:

- Collaboration/support (10 teachers);
- Staff (eight teachers);
- Atmosphere (five teachers);
- Administration (five teachers);
- Students (four teachers);
- Flexibility in teaching (three teachers);
- Curriculum (two teachers);
- Parental involvement (two teachers).

One teacher each mentioned the opportunity to see students grow, teacher looping, discipline mode, high standards, low class size, sharing of materials, urban setting, use of data as an instructional tool,

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student/teacher relationship, can make suggestions, have tools I need, school calendar, and the high expectation of staff to meet students' needs.

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

- Lack of parental involvement/support (five teachers);
- Limited resources (three teachers);
- Discipline policy/follow-through (three teachers);
- Curriculum (two teachers);
- Motivation level of students (two teachers); and
- Large size (two teachers)

One teacher each mentioned lack of hot-breakfast program, lack of staff diversity, limited input from teachers on decisions, school budget, time outside of school required to meet expectations, uniforms, busing young and old kids together, departmental teams not solidified, direct instruction, high needs of students, open court reading, student/teacher relationships, better use of library, lack of community school events, limited diversity of library, and school day is too long.

Teachers were then asked to comment on any barriers they identified that could affect their decision to continue teaching at the school. Two teachers cited behavioral concerns with students. One teacher each said limited resources/support and short summer break as reasons that could affect their decision to continue teaching. Fifteen teachers identified no barriers.

When asked for a suggestion to improve the school, two teachers said to improve the consistency in discipline enforcement; one teacher each said to locate a better place for consistently disruptive students, maintain consistency of expectations in the classroom, hire a social worker, develop an incentive program to motivate students, intra grade level planning, keep best practices in forefront, improve communication between administrators and teachers, improve parental involvement, increase math support, allow more staff input in decisions, provide more support for first-year teachers, increase technology in the classrooms, use role model speakers, decrease class size, and hold students accountable for their work ethic. One teacher indicated no suggestion for improving the school.

When asked to provide a suggestion to improve the classroom, teachers indicated the following:

- Improve the curriculum (two teachers); and
- Promote positive achievements of students (two teachers).

One teacher each said to increase access to technology, add white boards, add another special education teacher in high school, better organization system to maintain order, consistent behavior management, increase time special education students spend in classroom, increase expectations of students, lower class size, provide more in-class support, more small-group work, remove pillars that block view, provide two teachers for every classroom, and provide windows in classrooms. One teacher had no suggestion to improve the classroom in the school.

Teachers were also asked to rate the school's contribution to students' academic progress. On a scale of poor, fair, good, or excellent, 11 of the teachers rated the school's contribution as excellent; the remaining eight teachers rated the school's contribution as good.

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Appendix F

Parent Surveys/Interviews

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Parent Surveys/Interviews

Parent opinions are qualitative in nature and provide a valuable measurement of school performance. To determine how parents heard about the school, why they elected to send their children to the school, parental involvement with the school, and an overall evaluation of the school, parents were provided with a survey during the March parent-teacher conferences. Each parent was asked to complete the survey, place it in a sealed envelope, and return it to the school. CRC made at least two follow-up phone calls to parents who had not completed a survey. For families who had not submitted a survey, CRC completed the survey over the telephone or sent the parents/guardians a survey in the mail. All completed survey forms were forwarded to CRC for data entry. At the time of this report, 205 family surveys representing parents of 357 (36.3%) of 983 children had been completed and submitted to CRC. Results are presented below.

Many parents (62.4%) heard about the school from friends or relatives. Ten parents heard about the school through the TV/radio/or Internet (4.9%), and eighth parents heard about the school through the newspaper (3.9%). More than one quarter (27.8%) of the parents heard about the school from other sources. See Table F1 for more information.

Table F1

Milwaukee Academy of Science
How Parents Learned About the School
2011–12
(N = 205)

Method	Answer		
	Yes	No	No Response
Newspaper	8	197	0
Private School	2	203	0
Community Center	3	202	0
Church	1	204	0
Friends/Relatives	128	77	0
TV/Radio/Internet	10	195	0
Other	57	148	0

Parents listed the following as other ways they had heard about the school:

- Red book (six parents);
- School is in neighborhood (five parents);
- Drive-by (five parents);
- Researched school (four parents);
- MPS School board (four parents);

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- Co-workers (three parents);
- SEDA (two parents);
- Family members work in school (two parents); and
- One parent each heard about the school by: advertisement, flyer, social worker, walk-in, neighbor, and former students.

Parents chose to send their child to MAS for a variety of reasons. Most parents rated the school's safety (90.7%) and educational methodology (88.3%) as being very important reason for selecting this school. In addition, many parents (86.8%) indicated that the school's general atmosphere was also very important to them when choosing this school. Please see Table F2 for complete information.

Table F2

Milwaukee Academy of Science
Parent Reasons for Choosing the School
2011–12
(N = 205)

Factors	Response									
	Very Important		Somewhat Important		Somewhat Unimportant		Not at All Important		No Response	
	N	%	N	%	N	%	N	%	N	%
Location	114	55.6%	56	27.3%	6	2.9%	29	14.1%	0	0.0%
Other children or relative already attending this school	85	41.5%	54	26.3%	18	8.8%	39	19.0%	9	4.4%
Educational methodology	181	88.3%	15	7.3%	2	1.0%	2	1.0%	5	2.4%
Range of grades in school	167	81.5%	24	11.7%	2	1.0%	10	4.9%	2	1.0%
Discipline	176	85.9%	19	9.3%	3	1.5%	3	1.5%	4	2.0%
General atmosphere	178	86.8%	19	9.3%	1	0.5%	2	1.0%	5	2.4%
Class size	163	79.5%	27	13.2%	7	3.4%	6	2.9%	2	1.0%
Recommendation of family and friends	107	52.2%	49	23.9%	22	10.7%	19	9.3%	8	3.9%
Opportunities for parental participation	154	75.1%	43	21.0%	3	1.5%	2	1.0%	3	1.5%
School safety	186	90.7%	12	5.9%	3	1.5%	2	1.0%	2	1.0%
Frustration with previous school	57	27.8%	36	17.6%	22	10.7%	76	37.1%	14	6.8%

More than half of parents (51.2%) identified other reasons for enrolling their child into the school. Other reasons included: emphasis on math and science, good curriculum, good teachers, uniform policy, smaller school setting, school's location, and number of other family members attending the school.

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Parental involvement was utilized as an additional measure of satisfaction with the school and was measured by the number of contacts between the school and the parent(s) and parents' participation in educational activities in the home. Parents and the school were in contact for a variety of reasons, including the child's academic performance and behavior, assisting in the classroom, or engaging in fundraising activities. For example, 50.2% of parents reported contact with the school five or more times regarding their child's academic progress. Table F3 provides additional information relating to the type and frequency of contacts between the school and parents.

Table F3

Milwaukee Academy of Science
Parent-School Contacts
2011–12
(N=205)

Areas of Contact	Number of Contacts									
	0 Times		1–2 Times		3–4 Times		5+ Times		No Response	
	N	%	N	%	N	%	N	%	N	%
Your child(ren)'s academic performance	12	5.9%	27	13.2%	49	23.9%	103	50.2%	12	5.9%
The classes your child(ren) took	30	14.6%	33	16.1%	39	19.0%	90	43.9%	13	6.3%
Your child(ren)'s behavior	17	8.3%	36	17.6%	39	19.0%	101	49.3%	12	5.9%
Participating in fundraising	73	35.6%	63	30.7%	40	19.5%	17	8.3%	12	5.9%
Providing information for school records	71	34.6%	64	31.2%	35	17.1%	17	8.3%	18	8.8%
Helping in the classroom	81	39.5%	51	24.9%	38	18.5%	22	10.7%	13	6.3%
Other*	26	12.7%	5	2.4%	5	2.4%	5	2.4%	164	80.0%

*Other types of contact included: automated calls from the school notifying parents of events, requests by parents to hold meetings with teachers, and inquiries on special accommodations.

The second measure of parental participation was the extent to which parents engaged in educational activities while at home. During a typical week, 89.9% of 159 parents of younger children (K4 through fifth) worked on homework with their children; 86.2% of parents worked on arithmetic or math with their child; 86.2% of parents read to or with their child; 77.9% watched educational programs on television; and 71.2% participated in activities such as sports, library visits, or museum visits with their child. Parents of older children (grades sixth through eighth) engaged in similar activities during the week. For example, 85.8% of 113 parents monitored homework completion, 71.7% discussed their child's post-secondary plans with the child, 68.1% watched educational programs on television, 69.0% participated in activities outside of school, and 76.1% discussed their child's progress toward graduating with the child.

Parents were then asked to comment on what they liked best about the school. Approximately 21.5% of parents liked the teachers/staff and 15.1% of parents indicated that they liked the program/curriculum. Table F4 shows all of the parents responses.

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Table F4 Milwaukee Academy of Science Most Liked by Parents About the School 2011–12 (N = 205)		
Response	**N**	**%**
Teachers/staff	44	21.5%
Program/curriculum	31	15.1%
Supportive atmosphere	26	12.7%
Communication	15	7.3%
Parental involvement	10	4.9%
Discipline policy	10	4.9%
Class size/school size	9	4.4%
Academic progress	7	3.4%
Uniform policy	7	3.4%
Nothing	5	2.4%
No response	30	14.6%
Other*	11	5.4%

*Other responses included: openness, range of grades, likes everything (two); family attends school, convenience; location (two), length of school day, long school-year, children don't have much time outside of class.

Parents were then asked to comment on what they liked least about the school. Responses were categorized by similarities. Responses included discipline policy/behavioral concerns (10.2%), communication (8.8%), and transportation concerns (7.8%) See Table F5 for additional information.

Table F5 Milwaukee Academy of Science Least Liked by Parents About the School 2011–12 (N = 205)		
Response	**N**	**%**
Discipline policy/behavioral concerns	21	10.2%
Communication/lack of input	18	8.8%
Issues with transportation	16	7.8%
No extracurricular activities	11	5.4%
No open-door policy	9	4.4%
Concerns with principal/staff	7	3.4%
Lack of funding/resources	5	2.4%

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Table F5 Milwaukee Academy of Science Least Liked by Parents About the School 2011–12 (N = 205)		
Response	**N**	**%**
Uniform policy	5	2.4%
Concerns with academic progress	5	2.4%
Nothing	31	15.1%
No response	62	30.2%
Other*	15	7.3%

*Other responses included: not a year-round school, disorganized, location (2), doesn't like that coats and belongings are left outside of class, concerns regarding child's attitude, loitering, class size (2), start time, homework, poor parking, school safety, and the grading system.

Parents were also asked to rate the school on various aspects including the program of instruction, the school's responsiveness, and progress reports provided to parents/guardians. Most parents indicated that their child's academic progress was excellent (60.5%) or good (31.2%), and that the school's program/curriculum was excellent (59.5%) or good (26.3%). Where "no response" was indicated, the parent either had no knowledge or experience with that aspect or had no opinion (Table F6).

Table F6 Milwaukee Academy of Science Parental Satisfaction 2011–12 (N = 205)										
Area	**Response**									
	Excellent		**Good**		**Fair**		**Poor**		**No Response**	
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Program of instruction	122	59.5%	54	26.3%	23	11.2%	3	1.5%	3	1.5%
Ease of enrollment	111	54.1%	70	34.1%	14	6.8%	1	0.5%	9	4.4%
Child's academic progress	124	60.5%	64	31.2%	14	6.8%	2	1.0%	1	0.5%
Student-teacher ratio	101	49.3%	68	33.2%	25	12.2%	7	3.4%	4	2.0%
Discipline methods	95	46.3%	59	28.8%	30	14.6%	18	8.8%	3	1.5%
Parent-teacher relationships	115	56.1%	64	31.2%	15	7.3%	8	3.9%	3	1.5%
Communication regarding learning expectations	127	62.0%	53	25.9%	19	9.3%	5	2.4%	1	0.5%
Opportunities for parental involvement	112	54.6%	69	33.7%	23	11.2%	0	0.0%	1	0.5%
Teacher performance	130	63.4%	47	22.9%	22	10.7%	5	2.4%	1	0.5%
Principal performance	100	48.8%	59	28.8%	25	12.2%	13	6.3%	8	3.9%

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Table F6 Milwaukee Academy of Science Parental Satisfaction 2011–12 (N = 205)										
Area	Response									
	Excellent		Good		Fair		Poor		No Response	
	N	%	N	%	N	%	N	%	N	%
Teacher/principal availability	113	55.1%	57	27.8%	19	9.3%	13	6.3%	3	1.5%
Responsiveness to concerns	110	53.7%	60	29.3%	22	10.7%	10	4.9%	3	1.5%
Progress reports for parents/guardians	123	60.0%	53	25.9%	18	8.8%	3	1.5%	8	3.9%
Credits earned	22	10.7%	25	12.2%	11	5.4%	3	1.5%	144	70.2%
Post-secondary plans	23	11.2%	22	10.7%	11	5.4%	2	1.0%	147	71.7%

Parents were then asked to indicate their level of agreement with several statements about school staff. Many parents (65.4%) reported that they were comfortable talking with their child's teachers and/or school staff, and more than half of the parents (57.1%) said they believed that teachers and staff recognized their child's strengths in school. Table F7 provides additional details of parents' ratings of school staff.

Table F7 Milwaukee Academy of Science Parental Rating of School Staff 2011–12 (N = 205)												
Statement	Response											
	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		No Response	
	N	%	N	%	N	%	N	%	N	%	N	%
I am comfortable talking with staff	134	65.4%	51	24.9%	7	3.4%	6	2.9%	2	1.0%	5	2.4%
The staff welcomes suggestions from parents	97	47.3%	61	29.8%	26	12.7%	7	3.4%	7	3.4%	7	3.4%
The staff keeps me informed about my child(ren)'s performance	121	59.0%	56	27.3%	7	3.4%	12	5.9%	3	1.5%	6	2.9%
I am comfortable with how the staff handles discipline	92	44.9%	58	28.3%	22	10.7%	16	7.8%	11	5.4%	6	2.9%
I am satisfied with the number of adult staff	109	53.2%	62	30.2%	15	7.3%	10	4.9%	3	1.5%	6	2.9%

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Table F7 Milwaukee Academy of Science Parental Rating of School Staff 2011–12 (N = 205)												
Statement	Response											
	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		No Response	
	N	%	N	%	N	%	N	%	N	%	N	%
available to work with the students												
I am satisfied with the overall performance of the staff	100	48.8%	65	31.7%	22	10.7%	7	3.4%	5	2.4%	6	2.9%
The staff recognizes my child(ren)'s strengths and weaknesses	117	57.1%	55	26.8%	15	7.3%	6	2.9%	5	2.4%	7	3.4%

Lastly, parental satisfaction was evident in the following results:

- Most (172, or 83.9%) parents would recommend this school to other parents;

- Of the 205 surveyed parents, 154 (75.1%) will send their child to the school next year. Fifteen (7.3%) parents indicated that they would not send their child to the school next year and 36 parents (17.6%) were not sure if their child would be attending next year. Reasons for why parents were not re-enrolling their child into the school were mixed. Parents often cited that their child was graduating, or expressed concerns regarding the discipline policy, overall communication issues, lack of transportation, lack of extracurricular activities, and their child's overall academic progress as reasons for not wanting to re-enroll their child; and

- When asked to rate the school's overall contribution to their child's learning, 129 (62.9%) parents indicated "excellent," 47 (22.9%) parents rated the school "good," 20 (9.8%) parents rated the school "fair," and five (2.4%) parents believed the school's overall contribution was "poor." Four parents offered no response.

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Appendix G

Student Interviews

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Student Interviews

At the end of the school year, CRC staff asked 25 randomly selected students in fifth, eleventh, and twelfth grades several questions about their school. All students indicated that they use computers at school; nearly all students (n=24) indicated that they liked their school and/or that their teachers were helpful. Twenty-three students indicated that they improved their ability in reading and 22 students indicated that their mathematics skills improved. See Table G1 for additional information.

Table G1

Milwaukee Academy of Science
Student Interviews
2011–12
(N = 25)

Question	Answer		
	Yes	No	No Response/ Don't Know/ N/A
1. Do you like your school?	24	1	0
2. Are you learning new things every day?	24	1	0
3. Have you improved in reading?	23	0	2
4. Have you improved in math?	22	2	1
5. Do you use computers at school?	25	0	0
6. Is your school clean?	23	2	0
7. Do you like the school rules?	11	13	1
8. Do you think the school rules are fair?	18	7	0
9. Does your homework help you at school?	23	2	0
10. Do your teachers help you at school?	24	1	0
11. Do you like being in school?	24	1	0
12. Do you feel safe in school?	23	2	0
13. Do people work together in school?	22	2	1
14. Do you feel the marks you get on classwork, homework, and report cards are fair?	24	1	0
15. Do your teachers talk to your parents?	22	3	0
16. Does your school have afterschool activities?	24	1	0
17. Do your teachers talk with you about high school plans?	9	1	15
18. Do you have a high school graduation plan?	14	1	10
19. Do your teachers talk with you about college?	15	0	10
20. Are you planning to go to college?	15	0	10

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

- Teachers (seven students);
- Science focus/academic rigor (six students);
- Learning more/new things (three students);
- Community feeling/size (four students); and
- One student each said: learned more about myself, the library, field trips, and two students listed nothing.

When asked what they liked least, students responded as follows:

- Uniforms (six students);
- Rules (seven students);
- Nothing/Likes everything (six students);
- Student behavior (two students); and
- Lunches (two students).

One student each said: teacher's attitude when having a bad day and dislikes everything.

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Appendix H

Board of Director Interviews

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Board of Director Interviews

At the end of the school year, CRC emailed all 18 members of the board of directors requesting to schedule a time to conduct an interview to obtain their feedback on several factors related to their role and perceptions of MAS. Interviews were completed with 11 members of the board. One additional member was new to the board, so he/she indicated that completing the interview would not be appropriate this year. Overall, board members rated the school as excellent (54.5%) or good (45.5%). The majority went on to indicate that it was their perception that the school was making excellent progress toward becoming a high-performing school. See Table H1 for a summary of other feedback provided by the board.

Table H1

Milwaukee Academy of Science
Board Member Interview Results
2011–12
(N = 11)

Performance Measure	Response				
	Excellent	Good	Fair	Poor	Don't Know
Class size	4	7	0	0	0
Materials and equipment	2	7	1	1	0
Students' academic progress	5	5	1	0	0
Administrator's financial management	5	4	2	0	0
Professional support	7	4	0	0	0
Professional development opportunities	5	3	0	0	3
Progress toward becoming a high-performing school	7	3	1	0	0
As a board member, rate the school overall	6	5	0	0	0

In addition to rating the school on several measures, board members were asked about their personal level of satisfaction with how the school performs in several areas. All of the interviewed members indicated that they were very satisfied with the commitment of the school's leadership. All but one member were also very satisfied with the principal's performance and the MAS program of instruction. Responses indicated that members would like to see greater community/business and parental involvement as well as additional financial resources to enable the school to more effectively fulfill its mission.

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Table H2

Milwaukee Academy of Science
Board Member Interview Results
2011–12
(N = 11)

Performance Measure	Response				
	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Don't Know
Program of instruction	10	1	0	0	0
Enrollment policy/procedures	9	2	0	0	0
The students' academic progress	5	6	0	0	0
Student/teacher ratio/class size	6	5	0	0	0
Discipline policy	8	2	0	0	1
Adherence to discipline policy	9	1	0	0	1
Instructional support	4	6	0	0	1
Parent involvement	0	8	1	1	1
Community/business involvement	4	3	4	0	0
Teacher performance	6	5	0	0	0
Principal's performance	10	1	0	0	0
Current role of the board of directors	3	8	0	0	0
Board of directors' performance	4	7	0	0	0
Financial resources to fulfill school's mission	0	9	2	0	0
Commitment of school's leadership	11	0	0	0	0
Safety of the educational environment	5	6	0	0	0

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