# 2017-2018 Programmatic Profile and Educational Performance 

October 2018


Milwaukee Academy of Science

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This report includes text from Milwaukee Academy of Science's student/parent handbook and/or staff handbook. CRC obtained permission from the school to use this text for the purposes of this report.

## EXECUTIVE SUMMARY

FOR
MILWAUKEE ACADEMY OF SCIENCE
2017-18

This is the 10th annual report on the operation of Milwaukee Academy of Science (MAS), one of eight schools chartered by the City of Milwaukee during the 2017-18 school year. It is a result of intensive work undertaken by the City of Milwaukee Charter School Review Committee (CSRC), school staff, and NCCD Children's Research Center (CRC). Based on the information gathered and discussed in the attached report, CRC has determined the following.

## I. CONTRACT COMPLIANCE SUMMARY ${ }^{1}$

MAS met all provisions of the contract this year.

## II. PERFORMANCE CRITERIA

## A. Local Measures

## 1. Primary Measures of Educational Progress

The CSRC requires each school to track student progress in reading, writing, math, 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 local measures resulted in the following outcomes.

- Elementary Academy (K4 Through Fifth Grade)
» Of 54 K4 students who completed the fall and spring Phonological Awareness Literacy Screening PreK assessments, $94.4 \%$ were at or above the developmental range for five or more of seven completed tasks at the time of the spring test. The school's goal was $90.0 \%$.
"
Of 467 K5 through fifth graders who completed the fall and spring Measures of Academic Progress (MAP) reading tests, $65.7 \%$ showed progress on the spring test. The school's goal was 70.0\%.

[^0]» Of 473 K5 through fifth-grade students who completed the fall and spring MAP math tests, $64.1 \%$ showed progress on the spring test. The school's goal was $70.0 \%$.
» Of 225 third- through fifth-grade students assessed in writing, $81.3 \%$ achieved a score of 18 or more, meeting the school's goal of $80.0 \%$.

All (100.0\%) 38 elementary academy students with IEP goals reviewed during the year met one or more of their goals this year. The school's goal was 95.0\%.

## - Junior Academy (Sixth Through Eighth Grades)

» Of 212 of the students who completed the fall and spring MAP reading tests, $76.9 \%$ showed progress on the spring test. The school's goal was 75.0\%.
» Of 210 of the students who completed the fall and spring MAP math tests, $74.3 \%$ showed progress on the spring test. The school's goal was 75.0\%.
» A total of 216 students were assessed in writing. Nearly three quarters (72.7\%) received a score of 18 or more; the school's goal was $75.0 \%$.
» Of 21 junior academy students with IEP goals reviewed during the year, $94.1 \%$ met one or more of their goals; the school's goal was $85.0 \%$.

## - High School (Ninth Through Twelfth Grades)

» Of 141 high school students who completed fall and spring Scholastic Reading Inventory assessments, $54.6 \%$ showed improvement from fall to spring; the school's goal was 61.0\%.
» Of 180 high school students who completed final math assessments for the math course in which they were enrolled for the entire year, $48.3 \%$ scored $70.0 \%$ or better on the end-of-year assessment. The school's goal was 60.0\%.

Of 203 high school students who were enrolled for the entire school year and completed the spring writing assessments, $87.2 \%$ received a score of 18 or higher in the spring; the school's goal was $80.0 \%$.

All 17 (100.0\%) of the students with IEP goals reviewed during the year, and the school's goal was $95.0 \%$.

Graduation plans were developed for 208 of 209 high school students enrolled at the school year's end.

More than four-fifths $(169,82.8 \%)$ of 204 students enrolled for the entire school year with promotion status reported 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 participation
- Special education student records
- High school graduation plans

The elementary and junior academies met two of their three internal goals (parent participation and special education student records), and the high school met two of four internal goals (special education student records and high school graduation plans).

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

MAS administered all required standardized tests noted in its contract with the City of Milwaukee.

## C. CSRC School Scorecard

On the CSRC scorecard, the school scored 64.7\% for K4 through eighth grade (as compared to $68.6 \%$ for the last school year) and $72.7 \%$ for the high school (as compared to $73.5 \%$ for the prior year). The weighted overall score was 66.4\%, as compared to $69.5 \%$ for the 2016-17 school year.

## III. SURVEY/INTERVIEW RESULTS

Every other year, CRC conducts interviews or surveys with parents, board members, and teachers to obtain feedback on their perceptions about the school. Some key results include the following.

- There were 256 surveys completed, representing $38.6 \%$ of 656 families.
» Most (91.4\%) parents would recommend this school to other parents.
» A majority (85.9\%) of parents rated the school's overall contribution to their child's learning as "excellent" or "good."
- A total of 17 board members participated in interviews.
» Most (15) rated the school as "excellent" or "good" overall.
» The main suggestions made by board members for improving the school were to increase funding to attract teachers and provide better transportation, create and offer strong academic and community supportive services, and expand afterschool and summer school activities.
- A total of 28 instructional staff participated in interviews.
» Nearly two thirds (64.3\%) of teachers listed the school's progress toward becoming a high-performing school as "excellent" or "good."
» More than three quarters (78.6\%) of teachers rated the students' academic progress as "excellent" or "good."
- A total of 120 seventh and eighth graders and 71 eleventh and twelfth graders who were present on the day the survey was administered participated.
» A total of $94.2 \%$ of seventh and eighth graders and $73.2 \%$ of eleventh and twelfth graders indicated they had improved in English/reading, and $74.2 \%$ of seventh and eighth graders and $63.4 \%$ of eleventh and twelfth graders indicated they had improved in math.

More than two thirds (67.5\%) of younger students agreed or strongly agreed that they felt safe in school, while a slightly smaller proportion of older students (60.6\%) reported feeling safe.
» Two thirds (66.2\%) of 71 high school students said they plan to enroll in a postsecondary program after high school.

## IV. RECOMMENDATIONS FOR SCHOOL IMPROVEMENT

The school addressed all of the recommendations in its 2016-17 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 2018-19 year.

## A. Elementary Academy

- $\quad$ Staff will use a more proactive approach to stabilize student behaviors and enable staff to focus on academic content; this, in turn, will help reduce suspensions, expulsions, and other disciplinary actions. More attention will be paid to a student's character development and social/emotional needs, especially as they relate to past and current trauma in their lives.
- The elementary academy team will maintain its focus on fidelity to consistent implementation of the English/language arts curriculum. Elementary academy leadership and teachers will use data regularly to improve instructional practices and better meet the needs of the lowest-achieving students at all grade levels. Teachers will also give additional attention to improving students' writing skills.


## B. Junior Academy

- Junior academy teachers and leadership will pay special attention to stabilizing and gaining consistency in instruction practices in K4 through eighth grade. This will include adopting Eureka Math in the junior academy, which is aligned with the Common Core State Standards and used in the elementary academy. Leadership and teachers will give attention to improving reading and writing competencies of all students.
- All junior academy staff will strengthen strategies to improve the student culture and better monitor the effects of these efforts on students' behaviors. The team will take actions to increase the use of restorative justice to manage disruptive student behavior.


## C. High School

- The high school team will better align the curriculum to focus on skills and competencies emphasized in Aspire and ACT standards. The team should use data with greater regularity to increase the effectiveness of the instructional practices used by staff. Staff should give special attention to ensure more ninth-grade students earn adequate credits to transition to tenth grade at the end of the school year.
- The high school team should either improve and make effective the strategies incorporated into ClassDojo, a behavior management model; or implement more diverse strategies to reduce negative student behaviors. The team should make efforts to improve the overall culture of the high school and its systems and routines to better engage families in addressing issues that students encounter at school.


## V. RECOMMENDATIONS

From 2016-17 to 2017-18, the elementary scorecard percentage (covering the elementary and junior academies) decreased from $68.6 \%$ to $64.7 \%$, the high school scorecard percentage decreased from $73.5 \%$ to $72.7 \%$, and the overall rating decreased from $69.5 \%$ to $66.4 \%$. Based on past and current contract compliance status and the combined scorecard rating, CRC recommends MAS continue regular, annual academic monitoring and reporting with an expectation that reading and math achievements on both local and standardized measures improve, especially on the elementary scorecard. If the elementary and junior academies do not improve on these measures over the next school year, CRC will likely recommend probation for the 2019-20 school year. The other option that CSRC might consider is to place the elementary and junior academies on probation now.

## I. INTRODUCTION

This report was prepared as a result of a contract between the City of Milwaukee and the NCCD Children's Research Center (CRC). It is one component of the program that the Charter School Review Committee (CSRC) uses to monitor performance of all city-chartered schools.

To produce this report, CRC:

- Conducted an initial school visit to collect information related to contract requirements and to draft a learning memo for the new school year as well as a year-end interview to review progress on recommendations and changes that occurred during the year;
- Visited the school throughout the year to observe classrooms and overall school operations and to conduct a random review of special education files;
- Surveyed or interviewed parents, board members, and a sample of teachers and students to gather feedback about the school;
- Attended a school board of directors meeting, along with CSRC representatives, to provide an update regarding compliance with the City of Milwaukee's academic expectations and contract requirements; and
- Collected and analyzed data submitted by the school to complete an annual report.


## II. PROGRAMMATIC PROFILE

Milwaukee Academy of Science
2000 West Kilbourn Ave.
Milwaukee, WI 53233

Telephone: (414) 933-0302
Website: https://www.milwaukeeacademyofscience.org/

# President and Chief Executive Officer: Anthony McHenry Chief Academic Officer: Christopher Schwab <br> Principal, Kindergarten Through Fifth Grade: Michael Beaudoin <br> Principal, Sixth Through Eighth Grade: Jennifer Torosian <br> Principal, Ninth Through Twelfth Grade: Tom Schalmo 

## A. Description and Philosophy of Educational Methodology <br> 1. Mission

"The mission of the Milwaukee Academy of Science, an exemplary leader in STEM education, is to graduate urban students prepared to compete successfully at the postsecondary level."

The Milwaukee Academy of Science (MAS) opened in August 2000 and was chartered by the University of Wisconsin-Milwaukee. The school began a five-year charter agreement with the City of Milwaukee in July 2008 and started its second five-year charter agreement during the 2013-14 school year. The school serves students in K4 through twelfth grades with a challenging curriculum emphasizing science. MAS staff embrace the 5E instructional model (engage, explore, explain, evaluate, and extend). Also, MAS enhances its curriculum with science-related community partnerships.

## 2. Instructional Design

MAS emphasizes integrating science into the general curriculum and provides its students with unique science opportunities at all levels. MAS teachers are trained in differentiated instruction and in the curricular areas in which they teach. Teachers use a variety of instructional groupings, including one on one, small group, cooperative learning, whole group, and independent study. MAS used K4 and K5 assistants, Reading Corps members, and

Marquette University volunteers to assist K4 through fifth-grade classroom teachers. Under the supervision of classroom teachers, these assistants provided supplemental instructional support to small groups in reading and math. Teachers also team teach, which commonly occurs in inclusion classrooms with the regular education teacher and the special education teacher. Student needs and lesson objectives determine the most appropriate instructional techniques. ${ }^{2}$ The challenging curriculum is designed to meet the needs of individual learners. First through eighth grades are departmentalized, and classes are taught by content-area specialists.

The elementary and junior academies used the Measures of Academic Progress (MAP) to assess student progress in reading and math. Both programs used Compass Learning to assess and monitor students' acquisition of higher-level reading and math skills. ${ }^{3}$

MAS uses the Eureka Math curriculum for the elementary and junior academies. The high school math program allows students to progress through courses in Algebra I, geometry, Algebra II/trigonometry, precalculus, statistics, and potentially calculus. More advanced courses are provided based on student needs.

Students' science learning starts young with themes aligned with their reading series. The science curriculum draws on the McGraw-Hill series Science: A Closer Look for K4 through fifth grade. The junior academy students use Science Plus, an active, hands-on curriculum based on the Constructivist Learning Model, which encourages students to build their own understanding of science. The older students' math and science curriculum focuses on the concepts emphasized in the Common Core State Standards, the Next Generation Science

[^1]Standards, and the competencies embedded in the Aspire and ACT. Finally, MAS recognizes the importance of "specials" in a student's academic program, so each student receives instruction in physical education; technology; and two science, technology, engineering, and math (STEM) labs on a regular basis.

## B. School Structure

1. Board of Directors

MAS is an unincorporated association governed by the Milwaukee Science Education Consortium, a 501(c)(3) organization. The consortium is governed by a board of directors. It has ultimate responsibility for the school's success and is accountable directly to the City of Milwaukee and the Wisconsin Department of Public Instruction (DPI) to ensure that all terms of its charter are met. The board sets policy for the school and hires the school president/CEO, who, in turn, hires the staff of the school. The board meets regularly to discuss issues, set policy, and conduct school business. ${ }^{4}$

This year, there were 21 members on the board of directors: a chair, a vice chair, a secretary, a treasurer, and 17 other members. 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, Milwaukee Area Technical College, and Milwaukee School of Engineering).

Other board members represent major local businesses and contribute their expertise in administrative and fiscal management; there are also two parent representatives. Board

[^2]members reflect a variety of experience and expertise, including educational administration, accounting, nonprofit leadership and management, law, development/construction, marketing/fundraising, and teaching.

This year, CRC conducted phone interviews with the 17 (81.0\%) of 21 board members who responded to a request for feedback. All 17 said they participated in strategic planning for the school, attended a presentation on the school's annual academic performance report, reviewed the school's annual financial audit, and received and approved the school's annual budget. Most (15) rated the school as "excellent" or "good" overall. Some suggestions made by board members for improving the school included to increase funding to attract teachers and provide better transportation, to create and offer strong academic and community supportive services, and to expand afterschool and summer school programs.

## 2. Areas of Instruction

The MAS administration is structured to support ongoing improvement of the learning environment and academic achievement of all MAS students. The school has a president/CEO, a chief academic officer, a chief financial officer, a finance and operations coordinator, and a development and community engagement manager, all of whom are responsible for the school and its academic and financial outcomes. Three additional principals oversee MAS's three academies. The academies are assisted with their core instructional activities by special education teachers, intervention staff, other instructional specialists, a technology team, and a student support team.

The elementary academy serves students in K4 through fifth grades, the junior academy serves students in sixth through eighth grades, and the high school serves students in ninth through twelfth grades.

A major part of the school's overall strategic plan is to identify 21 st-century skills, integrate them into the entire curriculum, and develop appropriate means for assessing and improving students' academic performance. In the earliest grades (K4 through third), instruction focuses primarily acquiring literacy and mathematical skills. At these early ages, students are also introduced to science, social studies, and technology. As students move into the next two grades in the elementary academy, the curriculum expands its focus with additional instructional time on scientific constructs and social studies material.

Students in the junior academy and high school receive instruction in language arts, writing, reading, literature, math, technology, social studies, science, and physical education. High school students also have foreign language instruction. Grade-level standards and benchmarks have been established for each of these curricular areas, and progress is measured against these standards. Most recently, high school students were given expanded opportunities to participate in Advanced Placement (AP) classes and other more advanced courses.

To graduate from MAS, students must acquire 24 credits. The minimum credit requirements are: English (4.5), math (4.0), social studies (3.0), science (6.0), foreign language (2.0), physical education/health (2.0), and electives (2.5).

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

To participate in the graduation ceremony, students must take the ACT during their junior and senior years. As seniors, they must also maintain a $90.0 \%$ attendance rate and have no outstanding disciplinary assignments or fees. ${ }^{5}$

During the interview and survey process, board members and teachers were asked about the school's program of instruction. All 17 (100.0\%) board members agreed or strongly agreed that the program of instruction is consistent with the school's mission, and $64.3 \%$ of teachers rated the program of instruction as "excellent" or "good."

## 3. Teacher Information

At the end of the 2016-17 school year, 58 staff were eligible to return for the 2017-18 school year; of those, 49 returned for an overall return rate of $84.5 \% .{ }^{6}$ In addition, 16 new staff members were hired.

During the year, MAS classrooms were staffed by 63 teachers: 22 elementary academy teachers, 11 junior academy teachers, 13 high school teachers, eight special education teachers ${ }^{7}$, four intervention teachers, three STEM/technology teachers, and two physical education teachers. These teachers were supported by a special education coordinator and a library media

[^3]specialist. ${ }^{8}$ Other educational support staff included a guidance counselor for ninth- through twelfth-grade students; a technology team; and several assistants, including AmeriCorps volunteers. ${ }^{9}$

All instructional staff employed during the year held a DPI license or permit. During the year, one teacher's employment was terminated; all other teachers finished the school year, resulting in an annual teacher retention rate of 100.0\%.

Professional staff members are accountable for professional growth and development, collectively and individually. Expectations include: Teachers will create Educator Effectiveness Plans, Student Learning Objectives, and Professional Practice Goals; designated teams will assess their common professional development needs; and staff attendance is mandatory on professional development days.

The school supports professional development through pre-service training and ongoing professional development opportunities. Staff members are provided with in-house support and multiple opportunities to grow professionally. ${ }^{10}$ The school maintains an in-depth new educator induction program, which includes:

- An orientation program before the school year's start;
- Strong, cohesive teams;

[^4]- Professional development plan reviews, administrator observation, and academy meetings-all focused on new teacher needs; and
- Membership in and through the Southeastern Wisconsin Project. The school has peer mentors trained through the project who are then assigned to mentor firstand second-year teachers.

All staff members are required to participate in professional development programs and are provided with time for collaborative planning and departmental meetings. In addition, teachers are encouraged to attend relevant conferences and workshops.

Formal teacher evaluations occur twice annually and are used to guide decisions about contract renewals and salaries for the next school year. Evaluations of MAS teaching staff are based on an employee's commitment to personal professional development and evidence of progress.

During the interview process, teachers were asked about the teacher assessment process. A majority (67.9\%) agreed or strongly agreed that the school has a clear teacher assessment process, but just over three fifths (60.7\%) were satisfied with the teacher assessment criteria.

Parents were also asked about school staff. Nearly all (91.8\%) parents agreed or strongly agreed with the statement: "I am comfortable talking with the staff;" $84.8 \%$ agreed or strongly agreed that they were satisfied with overall staff performance. Three quarters (75.8\%) of parents agreed or strongly agreed that people in this school treat each other with respect.

Most (82.5\%) seventh and eighth graders surveyed agreed or strongly agreed that the teachers help them to succeed in school, and more than half (52.1\%) of eleventh and twelfth graders agreed that adults help them understand what they need to succeed in school.

## 4. School Hours and Calendar ${ }^{11}$

For elementary and junior academy students, the regular school day began at 7:55 a.m. and ended at 3:20 p.m. High school students began their classes at 7:51 a.m. and ended their day at 2:56 p.m. Breakfast was available to all students beginning at 7:25 a.m.

The first day of student attendance was August 16, 2017, and the last day was
June 7, 2018. The school met the contract requirement for instructional and attendance days.
MAS offers students regular opportunities for afterschool activities and academic support. For elementary academy students, afterschool activities-such as science club, Boy and Girl Scouts, dance team, and sports—are held from 3:30 to 5:00 p.m.

MAS offered tutoring services, science club, athletics, etc., to junior academy students from 3:25 until about 5:30 p.m. Other activities were available for these youth and their high school peers during this same time period. ${ }^{12}$ High school students were able to meet with individual teachers after school to obtain enrichment instruction or to complete general studying, independent reading, online research, ACT preparation, and assignments.

## 5. Parent Involvement

MAS recognizes family involvement is a critical component of student success and encourages parent/family engagement and involvement in the following ways.

[^5]- All parents are encouraged to attend a registration meeting at the beginning of the school year. At this session, staff review the appropriate student/parent handbook. Subsequent to this review, parents and older students sign an agreement to follow the school's policies and procedures.
- Administrative and teaching staff are expected to work with families to ensure students are attending school regularly. It is also their responsibility to provide parents with regular, diverse opportunities to participate in school functions.
- Each grade level seeks regular communication with its families by staff sending out newsletters that 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 and be prepared to meet with parents during parent-teacher conferences. ${ }^{13}$

The school also has a parent committee that holds meetings monthly. All parents are encouraged to participate so the team can achieve its vision, which is to make MAS the preferred school in Milwaukee. The team provides parents with an additional link to teachers; bridges communication between parents, school, and teachers; provides leadership for the school community; and raises funds for school programs and projects.

When asked about parental involvement during the survey/interview process, almost all (91.8\%) parents indicated that they felt welcome at the school. Many reported that what they like most about the school is the communication between teachers and parents.

A majority (65.4\%) of the 28 teachers who were interviewed agreed or strongly agreed that the staff encourage all families to become involved in school activities, but only $28.6 \%$ rated parent involvement as "good."

[^6]
## 6. Waiting List

According to the administrators, the school did not have a waiting list as of May 2018. They anticipated that a waiting list might develop over the summer for certain grades, but staff did not expect the number of students to be significant.

## 7. Discipline Policy

MAS places a strong emphasis on a safe, orderly learning environment and has adopted this code of conduct.

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 handbooks, the school emphasizes its use of Positive Behavioral Intervention and Supports as a proactive systems approach to maximize student achievement. It requires a commitment to maintaining a positive learning environment that promotes cooperation, fosters creativity, and encourages and nurtures students to take risks involved in learning. MAS believes parents play a critical role in supporting this learning environment through the use of common, respectful language that inspires students while setting clear limits.

The parent handbooks also contain detailed information about MAS's discipline code and what MAS considers level 1, 2, and 3 violations. It provides clear and concrete descriptions of the range of disciplinary consequences to be used by MAS staff. The handbooks identify each type of consequence, describe each consequence in some detail, indicate who can assign the
consequence, and associate each consequence with a set of violations. For example, a warning might be issued to a student with a Level 1 violation, and expulsion is possible for a Level 3 violation.

MAS also uses strategies consistent with strong Response to Intervention (RTI) practices. RTI is a framework for implementing high-quality instruction, balanced assessment, and collaboration. It uses a multi-tiered system to provide the support needed to increase success for all students. MAS's RTI has three tiers for both academics and behaviors. Each tier contains detailed information about the school's expectations and the consequences for deviation from the expectations. Details about MAS's RTI can be found in the parent handbooks.

This year teachers, students, and parents were asked about the discipline policy at MAS; they expressed mixed opinions.

- Teachers: A majority (82.1\%) of teachers considered the discipline at the school a very or somewhat important reason for continuing to teach there, but only $32.1 \%$ rated the school's adherence to the discipline policy as excellent or good.
- Students: Less than half (40.8\%) of seventh- and eighth-grade students and only $31.0 \%$ of eleventh and twelfth graders agreed or strongly agreed that the rules are enforced fairly.
- Parents: Just under three quarters (71.9\%) of parents are comfortable with how staff handle discipline.


## 8. Graduation Information

MAS's guidance department assists the school's eighth graders. In addition, the junior academy staff work with these students and their parents throughout the year and strongly encourage them to continue their MAS education through high school graduation. The MAS
leadership team indicated that most eighth graders continue at MAS for high school. At the end of the school year, $91.5 \%$ of the eighth graders who were promoted to ninth grade were enrolled in MAS for the next school year. The remaining students were either enrolled in another school or had not informed the school of their chosen high school. ${ }^{14}$ The primary reasons for students not returning to MAS for high school were the desire to participate in school athletics or to pursue interests other than science or engineering.

MAS employs a full-time guidance counselor whose primary responsibility is to work with high school students as they prepare for postsecondary careers and educational experiences. The counselor and staff completed the following activities with students.

- Some juniors and seniors went on group visits to several colleges and universities, both in and out of state; and admission representatives from around the country spoke with students onsite.
- Juniors and seniors attended career fairs and participated in field trips to local manufacturers, and the counselor worked with all students to complete a career interest inventory using the Career Cruising website; results were used in graduation plan conferences.
- The school continued partnerships with organizations like Great Lakes, Marquette University's Upward Bound program, and the UW-Milwaukee Talent Search program to support postsecondary planning.
- Families attended an informational session, and the counselor met individually with students to guarantee Free Application for Federal Student Aid (FAFSA) completion.

[^7]All 35 twelfth-grade students who graduated were accepted into one or more postsecondary schools (in and out of state) or a branch of the military. These students were offered $\$ 3,140,594$ in scholarship funds.

Two thirds (66.2\%) of 71 high school students said they plan to enroll in a postsecondary program after high school.

## C. Student Population

As of September 15, 2017, 1,057 students were enrolled in K4 through twelfth grade. ${ }^{15}$
During the year, 32 students enrolled in the school, and 108 students withdrew. ${ }^{16}$ Students withdrew for a variety of reasons.

Of the elementary academy students who withdrew, nine transferred to other schools in Milwaukee; one transferred to another school in Wisconsin; four transferred out of state; four withdrew because of parent dissatisfaction with the school; 13 withdrew because of chronic absences; two withdrew to avoid potential expulsion; six withdrew for chronic behavior issues; and 10 withdrew for other, unknown reasons.

Of the junior academy students, 12 withdrew to avoid potential expulsion; three transferred out of Milwaukee; one withdrew because of chronic attendance issues; two withdrew because of chronic behavior issues; and six withdrew for other, unknown reasons.

Of the high school students, 14 withdrew to avoid potential expulsion; four transferred to other schools in Milwaukee; three transferred out of state; four withdrew because of chronic

[^8]attendance issues; one withdrew because of chronic behavior issues; one withdrew due to dissatisfaction with MAS; and seven withdrew for other, unknown reasons.

A total of 981 students were enrolled at the school year's close.

- Most students were enrolled in the elementary academy (Figures 1 and 2 ).
- More than half (508, 51.8\%) were girls, and 473 (48.2\%) were boys.
- There were 972 (99.1\%) African American students, five (0.5\%) Hispanic students, three ( $0.3 \%$ ) Caucasian students, and one ( $0.1 \%$ ) student in the Other category.
- There were 91 (9.3\%) students with special education needs. ${ }^{17}$ A total of 30 had speech and language impairments, 25 had other health impairments, 21 had learning disabilities, eight had emotional behavioral disabilities, four had significant developmental delays, one had cognitive disabilities, one was autistic, and one had an intellectual disability.
- Most (95.1\%) of the school's students were eligible for free/reduced price lunch.

Figure 1

> Milwaukee Academy of Science Elementary Academy Grade Levels $2017-18$

$N=549$

[^9]Figure 2
Milwaukee Academy of Science Junior Academy and High School Grade Levels 2017-18

$N=432$

There were 1,057 students enrolled on the third Friday of September. ${ }^{18}$ Of these, 953 students were still enrolled on the last day of the school year. This represents an overall retention rate of $90.2 \%$. Of the 579 elementary academy students who were enrolled at the beginning of the year, 532 (91.9\%) were still enrolled at the end; in the junior academy, 216 (90.0\%) of 240 enrolled at the beginning stayed for the entire year; and 205 (86.1\%) of 238 high school students were retained for the year. ${ }^{19}$

[^10]Of 891 students enrolled at the end of the 2016-17 school year who were eligible to return to the school (i.e., they did not graduate from eighth grade or high school), 752 were enrolled on the third Friday in September 2017. This represents a student return rate of 84.4\%. ${ }^{20}$

## D. Activities for Continuous School Improvement

During the year, MAS responded to all of the activities recommended in the 2016-17 programmatic profile and educational performance report. Below is a description of each recommendation and the school's corresponding response.

The elementary academy focused on the following.

- Recommendation: Stabilize student behaviors to enable staff to focus on academic content, which, in turn, would help staff reduce suspensions, expulsions, and other disciplinary actions.

Response: Staff altered their criteria for responding to various student behavior issues and reduced expulsions, but these changes did not result in significant reductions in other disciplinary actions. They also created a behavior team to look at discipline in a holistic manner, and this effort will continue in the next school year. The school leader reported that many lessons were learned throughout the year; and as a result, staff plan to take more proactive steps next year to create a more positive overall learning environment.

- Recommendation: Implement a new English/language arts (ELA) curriculum for K4 through fifth grade with fidelity and consistency.

Response: The new ELA curriculum was implemented during the school year. The reading coach leads this process and has all teachers posting weekly lesson plans for review. These plans are used to improve fidelity and consistency in the implementation process.

[^11]The junior academy centered on improving student competencies through the following.

- Recommendation: Strengthen the science programming through use of additional technological and online resources and implementation of a new sixththrough eighth-grade science curriculum. An additional teacher with scientific expertise would be hired to assist with these enhancement efforts.

Response: A new science curriculum was implemented, and additional online resources were identified for use by the science instructional team. An additional science teacher was hired, and the science/math team will work throughout the year to contribute to strengthening these efforts for the next school year.

- Recommendation: Enhance low-achieving students' ownership of their learning by encouraging them to track their own competencies with parents' active collaboration.

Response: Staff used a practice of academic probation for the lower-achieving students. Students on academic probation carried packets with them every day describing learning tasks and goals. The packets were to be monitored by teachers and parents to ensure completion of assigned work. This process resulted in academic improvement for most of the participants, most of whom were on academic probation for only a single quarter of the school year.

For the high school, the focus was on the following.

- Recommendation: Increase attention to students' reading and math competencies, especially for students starting the year with lower-level skills. Special attention should also be given to ensure more ninth-grade students earn adequate credits to transition to tenth grade at the end of the school year.

Response: Teachers used ACT-aligned instruction in reading and math courses as well as in all other classes. Staff reviewed students' progress quarterly using assessment data and then retaught any competencies that had not been mastered in initial class periods. The ninth-grade team met weekly, reviewed students' course progress, and designed interventions to enable those who were falling behind to accelerate their progress and credit accumulation.

- Recommendation: Reduce leadership and staffing turnover by creating a stronger team culture and providing adequate supports to enhance teachers' success with students in all academic areas.

Response: The new principal will be continuing in this role for the next school year, and a significant majority of the teachers will be returning as well. Work was undertaken to create a stronger team culture, and staff were provided additional support in response to their requests for assistance. The team also worked to structure the schedule for the next school year so that teachers have more preparation time during the school day.

## III. EDUCATIONAL PERFORMANCE

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

This year, local assessment measures included student progress in literacy, math, and writing; and IEP goals for special education students. The standardized assessment measures were the Phonological Awareness Literacy Screening (PALS), the Wisconsin Forward Exam, the ACT Aspire, and the ACT.

## A. Attendance

The 2017-18 attendance goals for MAS's three academies were $92.0 \%$ for elementary, 95.0\% for junior, and 93.0\% for high school.

Elementary academy students were marked as "partial day" if they arrived after 10:40 a.m. or left before 12:40 p.m. Junior academy students were marked present for the day if they arrived at school prior to 10:45 a.m. High school students were marked present only if they attended for the entire day.

- Elementary Academy: Students attended school an average of $91.6 \%$ of the time. When excused absences were included, the attendance rate rose to $99.3 \%$. There were 128 students suspended from school at least once during the year. These students spent, on average, 2.0 days out of school because of suspension.
- Junior Academy: Students attended school an average of $92.4 \%$ of the time. When excused absences were included, the attendance rate rose to $98.6 \%$. There were 97 students suspended from school at least once during the year. These students spent, on average, 2.6 days out of school because of suspension.
- High School: Students attended school an average of $90.5 \%$ of the time. When excused absences were included, the attendance rate rose to $96.2 \%$. There were 84 students suspended from school at least once during the year. These students spent, on average, 5.7 days out of school because of suspension.

The school fell just short of its attendance goals for all academies. ${ }^{21}$

## B. Parent-Teacher Conferences

The goal of the elementary and junior academies was that parents of at least $95.0 \%$ of students enrolled for the entire school year would attend two of three scheduled parent-teacher conferences; the goal for the high school was $90.0 \% .{ }^{22}$ Conferences were scheduled for the fall, winter, and spring quarters.

- Parents of 529 (99.4\%) of 532 elementary academy students enrolled all year attended at least two of three conferences.
- Parents of 215 ( $99.5 \%$ ) of 216 junior academy students enrolled all year attended at least two of three conferences.
- Parents of 179 ( $87.3 \%$ ) of 205 high school students enrolled all year attended at least two of three conferences.

[^12]MAS, therefore, met their parent-participation goal for two of three academies.

## C. Special Education Student Records

The school's goal was to maintain up-to-date records for all special education students. An IEP was developed, reviewed, and adopted for all 50 elementary, all 21 junior, and all 20 high school special education students enrolled at the end of the year who qualified for and were not dismissed from special education services.

In addition, CRC conducted a random review of special education files. This review indicated that IEPs are routinely being completed and that parents are being invited to help develop IEPs for their students. The school has, therefore, met its goal of maintaining records on all students with special needs.

## D. Local Measures of Educational Performance

Charter schools, by their definition and nature, are autonomous schools with curricula reflecting each school's individual philosophy, mission, and goals. In addition to administering standardized tests, each charter school must describe goals and expectations for its students in the context of that school's unique approach to education. Each City of Milwaukee charter school establishes these goals and expectations at the academic year's start to measure students' educational performance. These local measures are used to monitor and report progress, guide and improve instruction, clearly express the expected quality of student work, and provide evidence that students are meeting local benchmarks.

At the beginning of the year, MAS designated literacy, math, and writing as core areas in which to measure students' competencies. The school also set a goal related to special education IEP goal progress.

## 1. Elementary Academy

a. Literacy
i. PALS for K4 Students

MAS elected to use the PALS-PreK as their local measure for students in K4. The school's goal was that at least $90.0 \%$ of students enrolled for the entire year who completed both the fall and spring assessments would be at or above the developmental range for at least five of the seven tasks at the time of the spring assessment. (The PALS assessment is described in Section F.)

A total of 54 K4 students completed the fall and spring PALS-PreK. Almost all ( $51,94.4 \%$ ) of those students were at or above the developmental range for five of the seven tasks at the time of the spring assessment, exceeding the school's goal. ${ }^{23}$

## ii. MAP Reading Test for K5 Through Fifth Graders

K5 through fifth-grade literacy skills were assessed using the MAP reading test. MAP assessments result in a Rasch unit (RIT) score; scores can be used a variety of ways to identify student understanding and progress throughout the year. ${ }^{24} \mathrm{MAP}$ tests are given multiple times

[^13]during the year. Based on performance in the fall, each student receives a spring target RIT score. Additionally, the Northwest Evaluation Association developed normative mean scores, or average RIT scores for each grade level at the time of each MAP administration. ${ }^{25}$ Elementary academy MAP progress goals were set based on whether the student was above the normative mean or at or below the normative mean for their grade level at the time of the fall test.

Students above the normative mean for their grade level at the time of the fall test were expected to increase their RIT scores. At the time of the spring test, K5 through second graders were expected to increase scores by six or more points; third and fourth graders, by four or more points; and fifth graders, by two or more points. The school's overall goal was that at least $70.0 \%$ of elementary academy students would show progress as described above.

A total of 467 K 5 through fifth graders enrolled for the entire school year completed both the fall and spring MAP reading tests. Overall, 307 (65.7\%) of 467 students progressed from fall to spring, meeting their MAP reading goal (Table 1).

| Table 1 |  |  |  |
| :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science <br> Local Measures of Academic Progress: MAP Reading Assessment Progress for K5 Through 5th Graders Fall of 2017 to Spring of 2018 |  |  |  |
| Grade Level | Students | Met Goal | \% Met Goal |
| Above the Normative Mean in the Fall |  |  |  |
| K5 | 18 | 17 | 94.4\% |
| 1st | 32 | 30 | 93.8\% |
| 2nd | 20 | 16 | 80.0\% |
| 3rd | 14 | 8 | 57.1\% |
| 4th | 12 | 9 | 75.0\% |
| 5th | 13 | 9 | 69.2\% |
| Total | 109 | 89 | 81.7\% |

[^14]| Table 1 |  |  |  |
| :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science <br> Local Measures of Academic Progress: MAP Reading Assessment Progress for K5 Through 5th Graders Fall of 2017 to Spring of 2018 |  |  |  |
| Grade Level | Students | Met Goal | \% Met Goal |
| At or Below the Normative Mean in the Fall |  |  |  |
| K5 | 45 | 34 | 75.6\% |
| 1st | 65 | 38 | 58.5\% |
| 2nd | 61 | 32 | 52.5\% |
| 3rd | 63 | 42 | 66.7\% |
| 4th | 64 | 38 | 59.4\% |
| 5th | 60 | 34 | 56.7\% |
| Total | 358 | 218 | 60.9\% |
| OVERALL PROGRESS | 467 | 307 | 65.7\% |

b. Math
i. Math Skills Assessment for K4 Students

To assess student progress in math, the school set the goal that at least $90.0 \%$ of K4 students enrolled for the entire year and who complete spring math skill assessments would acquire at least $80.0 \%$ of the math competencies designated as benchmarks for their grade level at the time of the spring assessment. These assessments were designed by MAS staff based on their alignment with DPI Wisconsin Model Early Learning Standards and Common Core standards. At the spring assessment, 51 (87.9\%) of 58 K4 students enrolled for the entire year had met the math goal, falling short of the school's goal (not shown).

## ii. MAP Math Assessment for K5 Through Fifth Graders

The elementary academy math goal was identical to the reading goal described above; progress goals were set depending on how students' fall scores compared to the normative mean for their current grade level. The school expected at least $70.0 \%$ of students would show progress from fall to spring.

A total of 473 K5 through fifth-grade students completed both the fall and spring MAP math tests. Overall, 303 (64.1\%) of 473 students progressed from fall to spring, short of the elementary MAP math goal (Table 2).

| Table 2 |  |  |  |
| :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science <br> Local Measures of Academic Progress: MAP Math Assessment Progress for K5 Through 5th Graders Fall of 2017 to Spring of 2018 |  |  |  |
| Grade Level | Students | Met Goal | \% Met Goal |
| Students Above the Normative Mean in the Fall |  |  |  |
| K5 | 11 | 11 | 100.0\% |
| 1st | 32 | 31 | 96.9\% |
| 2nd | 18 | 15 | 83.3\% |
| 3rd | 15 | 14 | 93.3\% |
| 4th | 7 | Canno | o $n$ size |
| 5th | 12 | 11 | 91.7\% |
| Total Above | 95 | 89 | 93.7\% |
| Students at or Below the Normative Mean in the Fall |  |  |  |
| K5 | 52 | 48 | 92.3\% |
| 1st | 66 | 33 | 50.0\% |
| 2nd | 67 | 45 | 67.2\% |
| 3rd | 63 | 31 | 49.2\% |
| 4th | 69 | 39 | 56.5\% |
| 5th | 61 | 18 | 29.5\% |
| Total at or Below | 378 | 214 | 56.6\% |
| OVERALL PROGRESS | 473 | 303 | 64.1\% |

## 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 students in each of six domains: purpose and focus, organization and coherence, development of content, sentence fluency, word choice, and grammar. For each domain, students received a score of one for minimal control, two for basic control, three for adequate control, four for proficient control, and five for advanced control; these were totaled for an overall score. An overall score of 18 or more indicated the student had adequate control. The school's goal was for $80.0 \%$ of students in third through fifth grades enrolled for the entire year to achieve an overall average score of 18 or more.

Most (183, 81.3\%) of 225 third- through fifth-grade students enrolled for the entire year scored 18 or more, meeting the school's goal (Table 3).

|  | Table 3 |  |  |
| :--- | :---: | :---: | :---: |
|  | Milwaukee Academy of Science <br> Teacher-Assessed Writing Skills for 3rd - 5th Graders <br> 2017-18 |  |  |
| Grade | Students | Met Goal | \% Met Goal |
| 3rd | 77 | 62 | $80.5 \%$ |
| 4th | 75 | 66 | $88.0 \%$ |
| 5th | 73 | 55 | $75.3 \%$ |
| Total | $\mathbf{2 2 5}$ | $\mathbf{1 8 3}$ | $\mathbf{8 1 . 3 \%}$ |

## d. Special Education Student Progress

This year, the goal of the elementary academy was that at least $95.0 \%$ 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 50 special education students
enrolled in the elementary academy at the end of the year. Of those students, 38 were enrolled in special education services at MAS last year and had an IEP review this year; all (100.0\%) 38 met at least one of their IEP goals, exceeding the school's goal.

## 2. Junior Academy

a. MAP Reading Assessment for Sixth, Seventh, and Eighth Graders

Like the elementary academy, the junior academy MAP progress goals were set based on whether the student was above the normative mean or at or below the normative mean for their grade level at the time of the fall test.

- $\quad$ Students above the normative mean for their grade level at the time of the fall test were expected to increase their scores by at least one RIT point on the spring test.
- $\quad$ Students at or below the normative mean for their grade in the fall were expected to meet the MAP growth target.

The school's overall goal was that $75.0 \%$ of students would progress as described above.
A total of 212 sixth through eighth graders completed both the fall and spring MAP reading tests. Overall, 163 ( $76.9 \%$ ) of 212 students progressed from fall to spring, exceeding the academy's MAP reading goal (Table 4).

| Table 4 |  |  |  |
| :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science <br> Local Measures of Academic Progress: MAP Reading Assessment Progress for 6th - 8th Graders Fall of 2017 to Spring of 2018 |  |  |  |
| Grade Level | Students | Met Goal | \% Met Goal |
| Above the Normative Mean in the Fall |  |  |  |
| 6th | 20 | 15 | 75.0\% |
| 7th | 26 | 24 | 92.3\% |
| 8th | 29 | 14 | 48.3\% |
| Total Above | 75 | 53 | 70.7\% |
| At or Below the Normative Mean in the Fall |  |  |  |
| 6th | 51 | 45 | 88.2\% |
| 7th | 47 | 38 | 80.9\% |
| 8th | 39 | 27 | 69.2\% |
| Total At or Below | 137 | 110 | 80.3\% |
| OVERALL PROGRESS | 212 | 163 | 76.9\% |

b. MAP Math Assessment for Sixth, Seventh, and Eighth Graders

The junior academy math goal was identical to the reading goal described above;
progress goals were set depending on how student scores in the fall compared to the normative mean for their current grade level. The school expected at least $75.0 \%$ of junior academy students would show progress from fall to spring.

A total of 210 sixth- through eighth-grade students completed both the fall and spring MAP math tests. Overall, 156 (74.3\%) progressed from fall to spring, just under the junior academy's MAP math goal (Table 5).

| Table 5 |  |  |  |
| :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science <br> Local Measures of Academic Progress: MAP Math Assessment <br> Progress for 6th - 8th Graders <br> Fall of 2017 to Spring of 2018 |  |  |  |
| Grade Level | Students | Met Goal | \% Met Goal |
| Above the Normative Mean in the Fall |  |  |  |
| 6th | 10 | 10 | 100.0\% |
| 7th | 20 | 17 | 85.0\% |
| 8th | 31 | 27 | 87.1\% |
| Total Above | 61 | 54 | 88.5\% |
| At or Below the Normative Mean in the Fall |  |  |  |
| 6th | 61 | 44 | 72.1\% |
| 7th | 55 | 38 | 69.1\% |
| 8th | 33 | 20 | 60.6\% |
| Total At or Below | 149 | 102 | 68.5\% |
| OVERALL PROGRESS | 210 | 156 | 74.3\% |

## c. Writing

At the end of the school year, teachers judged student writing samples in six domains:
purpose and focus, organization and coherence, development of content, sentence fluency, word choice, and grammar. Teachers assigned 0 to 5 points in each of the six domains and combined them for an overall writing score. For junior academy students, an overall score of 18 or more indicated that the student demonstrated at least adequate control. The goal was that at least $75.0 \%$ of students in sixth through eighth grades would achieve a score of 18 or more.

Nearly three quarters (72.7\%) of students received a score of 18 or more, just short of the junior academy's writing goal (Table 6).

| Table 6 <br>  <br>  <br>  <br>  <br> Milwaukee Academy of Science <br> Teacher-Assessed Junior Academy Writing Skills <br> 2017-18 |  |  |  |
| :--- | :---: | :---: | :---: |
| Grade | Students | Met Goal | \% Met Goal |
| 6 th | 71 | 59 | $83.1 \%$ |
| 7 th | 75 | 46 | $61.3 \%$ |
| 8th | 70 | 52 | $74.3 \%$ |
| Total | $\mathbf{2 1 6}$ | $\mathbf{1 5 7}$ | $\mathbf{7 2 . 7 \%}$ |

d. Special Education Student Progress

This year, the junior academy's goal was that $85.0 \%$ of special education students would meet one or more goals on their IEPs, as assessed by the participants' most recent annual IEP review. At the end of the year, there were 21 special education students enrolled in sixth through eighth grades. Of those, 17 were enrolled in special education services at MAS last year and had an IEP review this year. Of these, 16 (94.1\%) met one or more of the goals in their IEP, exceeding the junior academy's special education goal.

## 3. High School

a. Literacy Progress Based on the Scholastic Reading Inventory ${ }^{26}$

The school administered the Scholastic Reading Inventory (SRI) ${ }^{27}$ to high school students in the fall and again in the spring. The goal was that at least $61.0 \%$ of students would show improvement in scores, called Lexile measures, of at least 13 points.

Of 205 high school students enrolled all year, 141 had comparable Lexile scores. Of those, 77 (54.6\%) improved their scores by 13 points, short of the goal (Table 7).

| Table 7 <br> High School Literacy Progress: <br> Milwaukee Academy of Science <br> Scholastic Reading Inventory Measures |  |  |  |
| :--- | :---: | :---: | :---: |
| Grade | Students | Met Goal | \% Met Goal |
| 9th | 77 | 43 | $55.8 \%$ |
| 10th | 35 | 15 | $42.9 \%$ |
| 11th | 22 | 12 | $54.5 \%$ |
| 12th | 7 | Cannot report due to $n$ size |  |
| Total | $\mathbf{1 4 1}$ | $\mathbf{7 7}$ | $\mathbf{5 4 . 6 \%}$ |

## b. Math Progress Based on the Comprehensive Math Assessment

To assess math progress for these students, the school set a goal that at least $60.0 \%$ of high school students enrolled in the same math class for the entire year would attain a score of $70.0 \%$ or more on their comprehensive course examinations at the end of the school

[^15]year. ${ }^{28}$ Scores were reported as the percentage of items a student got correct. Of the 180 students enrolled for the entire year with scores available, $48.3 \%$ scored $70.0 \%$ or higher, falling short of the school's goal (Table 8).

| Table 8 |  |  |  |
| :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science <br> High School: End-of-Year Math Assessment |  |  |  |
| Grade | Students | Met Goal | \% Met Goal |
| 9th | 77 | 30 | 39.0\% |
| 10th | 42 | 24 | 57.1\% |
| 11th | 35 | 21 | 60.0\% |
| 12th | 26 | 12 | 46.2\% |
| Total | 180 | 87 | 48.3\% |

## c. 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 5, and the scores from each domain were totaled. A score of 18 or higher indicated that the student demonstrated at least adequate control. The goal was that $80.0 \%$ of students in each grade level enrolled for the entire year would reach a score of 18 or more.

[^16]Of 205 high school students enrolled for the entire year, 203 had a writing score recorded. Overall, $87.2 \%$ of students received a score of 18 or higher, but only $76.3 \%$ of eleventh graders met the goal (Table 9).

| Table 9 |  |  |  |
| :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science Teacher-Assessed High School Writing Skills 2017-18 |  |  |  |
| Grade | Students | Met Goal | \% Met Goal |
| 9th | 82 | 69 | 84.1\% |
| 10th | 47 | 45 | 95.7\% |
| 11th | 38 | 29 | 76.3\% |
| 12th | 36 | 34 | 94.4\% |
| Total | 203 | 177 | 87.2\% |

## d. Special Education Student Progress

The high school's goal was that $95.0 \%$ of special education students would meet one or more goals on the IEP, as assessed by students in their most recent annual IEP review. At the end of the year, there were 20 special education students with completed IEPs in high school. Of these, 17 were enrolled in special education at MAS last year; all 17 (100.0\%) met one or more of their IEP goals, exceeding the high school goal.

## E. Additional Requirements for High School Students

In addition to local and externalized measures, the high school must also measure completion of student graduation plans and track students' progress toward graduation.

## 1. Graduation Plans

Most (208) of 209 high school students enrolled at the end of the year developed a graduation plan. Graduation plan outcomes are shown in Table 10. Additionally, all eleventh and twelfth graders were required to meet with the counselor during the school year to discuss their graduation plans; all did so.

| Table 10 <br> Milwaukee Academy of Science <br> High School <br> Graduation Plans <br> 2017-18 <br> $\mathbf{N = 2 0 8}$ |  |  |  |
| :--- | :---: | :---: | :---: |
| Measure | \% Plans Including Measure |  |  |
| Included postsecondary plans $100.0 \%$ <br> Shared with parents $100.0 \%$ <br> Included schedule reflecting credits to graduate $100.0 \%$ <br> Reviewed by counselor $100.0 \%$ <br> On track toward graduation $97.6 \%$ <br> Need to enroll in credit recovery activities $32.2 \%$ |  |  |  |

2. High School Graduation and Grade-Level Promotion Requirements

MAS's minimum credit requirements are as follows.

- $\quad$ Ninth graders who earned six credits moved to tenth grade.
- Tenth graders who accumulated 12 credits moved to eleventh grade.
- Eleventh graders who earned 18 credits were promoted to twelfth grade.
- Twelfth graders who earned 24 credits in the required courses graduated. ${ }^{29}$

[^17]The school provided credit and grade-promotion information for 204 of 205 high school students enrolled for the entire school year at MAS. Of the 204 students with promotion status recorded, 169 (82.8\%) earned the minimum number of credits to be promoted to the next grade or, in the case of twelfth graders, to graduate from high school (Table 11).

| Table 11 <br> Milwaukee Academy of Science <br> High School Graduation Requirements <br> 2017-18 |  |  |  |
| :--- | :---: | :---: | :---: |
| Grade | Students | Promoted/Graduated | \% Promoted/Graduated |
| 9th | 83 | 58 | $69.9 \%$ |
| 10th | 47 | 42 | $89.4 \%$ |
| 11th | 38 | 34 | $89.5 \%$ |
| 12th | 36 | 35 | $97.2 \%$ |
| Total | $\mathbf{2 0 4}$ | $\mathbf{1 6 9}$ | $\mathbf{8 2 . 8 \%}$ |

## F. External Standardized Measures of Educational Performance

DPI requires all schools to administer a DPI-approved reading achievement test to K4 through second-grade students. In 2016, the CSRC selected the PALS assessment for students in first and second grade at all city-chartered schools; MAS also chose PALS to meet the DPI requirement for students in K4 and K5.

For students in third through eighth grade, DPI requires the Forward Exam. Schools are required to assess ninth and tenth graders using the ACT Aspire, and eleventh graders must complete the ACT Plus Writing in the spring of the school year. Additionally, the CSRC required that high schools administer the ACT to twelfth-grade students in the fall of the school year. These tests and results are described in the following sections.

## 1. PALS $^{30}$

The PALS assessment is available in three versions: PALS-PreK for K4 students, PALS-K for K5 students, and PALS Plus for first and second graders.
a. PALS-PreK

The PALS-PreK includes five required tasks (name writing, uppercase alphabet recognition, beginning sound awareness, print and word awareness, and rhyme awareness). Two additional tasks (lowercase alphabet recognition and letter sounds) are completed only by students who reach a high enough score on earlier tasks. There is no summed score benchmark for the PALS-PreK.

A total of 54 K4 students completed the PALS-PreK in the fall and spring. Although the spring developmental ranges relate to expected development by the time of the spring semester, CRC applied the spring ranges to both test administrations to see if more students were at or above the range for each test by the time of the spring administration (Table 12).

[^18]|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science PALS-PreK for K4 Students <br> Students at or Above the Spring Developmental Range $\begin{gathered} 2017-18 \\ \mathrm{~N}=54 \end{gathered}$ |  |  |  |  |
| Task | Fall |  | Spring |  |
|  | n | \% | n | \% |
| Name writing | 8 | 14.8\% | 53 | 98.1\% |
| Uppercase alphabet recognition | 11 | 20.4\% | 47 | 87.0\% |
| Lowercase alphabet recognition* | Too few students qualified to complete these tasks to show fall results. |  | 43 | 100.0\% |
| Letter sounds* |  |  | 43 | 100.0\% |
| Beginning sound awareness | 6 | 11.1\% | 52 | 96.3\% |
| Print and word awareness | 3 | 5.6\% | 53 | 98.1\% |
| Rhyme awareness | 8 | 14.8\% | 46 | 85.2\% |

*The percentages for these tasks are based on the number of students who qualified to complete them; spring percentages are based on an $n$ size of 43 for both lowercase alphabet and letter sounds.

## b. PALS-K and PALS Plus

CRC examined spring reading readiness for students who completed both the fall and spring tests. More than two thirds of students in K5 and second grade, and more than half of students in first grade, were at or above the spring summed score benchmark (Figure 3).

Figure 3
Milwaukee Academy of Science Spring 2018 Reading Readiness
Students With Fall and Spring PALS Scores


## 2. Wisconsin Forward Exam ${ }^{31}$

The Forward Exam was implemented as the state's standardized test for ELA and math for third through eighth graders; science for fourth and eighth graders; and social studies for fourth, eighth, and tenth graders. Scores for each test are translated into one of four levels: advanced, proficient, basic, and below basic. The Forward Exam is administered in the spring of each school year.

In the spring of 2018, 448 third- through eighth-grade students completed the ELA and 446 completed the math assessments. Of all students enrolled in the school for the entire school year (i.e., the third Friday of September until the date of the Forward test in the spring),
$10.3 \%$ were proficient or advanced in ELA, and $12.3 \%$ were proficient or advanced in math.
Results by grade level are presented in Figures 4 and 5.

[^19]Figure 4
Milwaukee Academy of Science Forward Exam English/Language Arts Assessment 2017-18


Figure 5
Milwaukee Academy of Science Forward Exam Math Assessment

2017-18

$N=446$

Of the 147 fourth and eighth graders who completed the social studies and science tests, $10.9 \%$ were proficient or advanced in social studies and $8.2 \%$ were proficient in science (Figure 6).

Figure 6
Milwaukee Academy of Science
Forward Exam Social Studies and Science Assessments
2017-18


In the spring of 2018, 50 tenth graders took the Forward Exam social studies test (not shown). Just less than one fifth (eight, 16.0\%) were proficient or advanced (not shown).

## 3. ACT Aspire and ACT Plus Writing

ACT has set college-readiness benchmarks for the subject-specific subtests of both the Aspire and the ACT. The most recent benchmarks (published in 2013) for each grade level and test are shown in Table 13. ${ }^{32}$

Table 13
ACT College Readiness Benchmark Scores for the Aspire and ACT

| Subtest | 9th-Grade Aspire | 10th-Grade Aspire | 11th-Grade ACT |
| :--- | :---: | :---: | :---: |
| English | 426 | 428 | 18 |
| Math | 428 | 432 | 22 |
| Reading | 425 | 428 | 22 |
| Science | 430 | 432 | 23 |
| Composite* | 427 | 430 | 21 |

*ACT does not publish composite benchmark scores for the Aspire or the ACT. CRC created composite benchmark scores by averaging each grade level's benchmark scores from the four subtests, as published by ACT.

Student progress on these tests is based on year-to-year results, which are included in a separate section of this report. The results presented in the tables that follow reflect student achievement on the Aspire and ACT during the current school year.

## a. Aspire for Ninth and Tenth Graders

The Aspire was administered in the spring of 2018. Ninth- and tenth-grade students enrolled during those time periods completed the tests, meeting the CSRC expectation that students be tested. A total of 83 ninth and 47 tenth graders completed the Aspire (Table 14).

[^20]| Table 14 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science <br> Aspire for 9th and 10th Graders <br> Students at or Above Benchmark, Spring of 2018 |  |  |  |  |
| Test Section | 9th Grade ( $\mathrm{N}=83$ ) |  | 10th Grade ( $\mathrm{N}=47$ ) |  |
|  | n | \% | n | \% |
| English | 18 | 21.7\% | 19 | 40.4\% |
| Math | 4 | 4.8\% | 5 | 10.6\% |
| Reading | 2 | 2.4\% | 9 | 19.1\% |
| Science | 5 | 6.0\% | 7 | 14.9\% |
| Composite* | 5 | 6.0\% | 5 | 10.6\% |

*ACT does not publish a benchmark for the Aspire composite score; CRC calculated an Aspire composite benchmark-427 for ninth graders and 430 for tenth graders-by averaging the benchmark scores from the four subtests.

## b. ACT for Eleventh and Twelfth Graders

The final CSRC expectation was that all eleventh graders take the ACT Plus Writing and the ACT WorkKeys in the timeframe required by DPI (spring semester) and that twelfth graders take the ACT or ACT Plus Writing in the fall semester. There were 38 eleventh and 36 twelfth graders enrolled at the end of the school year; all but one of those students completed testing as required. ${ }^{33}$

Composite ACT scores for eleventh graders ranged from 11 to 24, with an average of 15.7 (not shown). For twelfth graders, scores ranged from 10 to 32 , with an average of 17.9 (not shown). Four (10.8\%) eleventh graders and nine (25.0\%) twelfth graders scored at or above the ACT composite benchmark (Table 15).

[^21]| Table 15Milwaukee Academy of ScienceStudents at or Above Benchmark for ACT Subtests and Composite Score11th and 12th Graders2017-18 |  |  |
| :---: | :---: | :---: |
|  |  |  |
| Subtest | Students | \% |
| 11th Grade ( $\mathrm{N}=37$ ) |  |  |
| English | 11 | 29.7\% |
| Math | 4 | 10.8\% |
| Reading | 3 | 8.1\% |
| Science | 3 | 8.1\% |
| Composite | 4 | 10.8\% |
| 12th Grade ( $\mathrm{N}=36$ ) |  |  |
| English | 13 | 36.1\% |
| Math | 9 | 25.0\% |
| Reading | 7 | 19.4\% |
| Science | 7 | 19.4\% |
| Composite ${ }^{34}$ | 9 | 25.0\% |

## G. Multiple-Year Student Progress

Year-to-year progress is measured by comparing scores on standardized tests from one year to the next. Year-to-year progress expectations apply to all students with scores in consecutive years. Students in K4 through second grade take the PALS reading assessment. The PALS summed score benchmark indicates when a student requires additional reading assistance—not that the student is reading at grade level. Additionally, there are three versions of the test, which include different formats, sections, and scoring. Because only students who are in first and second grade during two consecutive years complete the same version of the test,

[^22]CRC only examined year-to-year results for students who were in first grade in the spring of 2017 and second grade in in the spring of 2018. The CSRC's performance expectation is that at least $75.0 \%$ of students who were at or above the summed score benchmark in first grade will remain at or above the summed score benchmark as second graders in the subsequent school year.

Students in third through eighth grade take the Forward Exam in the spring of the school year. This is only the second year that year-to-year progress can be measured using Forward Exam results from two consecutive school years; results will be used as baseline data to set expectations in subsequent school years.

Progress toward college readiness from ninth to tenth grade is assessed using benchmarks from the Aspire. ${ }^{35}$ Progress from tenth to eleventh grade cannot be validly measured, using available data, in the same way that progress was measured from the PLAN to the ACT in previous years. Therefore, year-to-year progress from tenth to eleventh grade will not be reported. Additionally, because the use of Aspire is relatively new, the CSRC has not yet revised its expectations for year-to-year progress measures for high school students. Results from ninth to tenth grade will be reported, and CRC will make recommendations for CSRC consideration, in the fall of 2018. These recommendations will be based on data from the last three school years on Aspire. Only when the CSRC makes a decision will there be new expectations for subsequent years.

[^23]
## 1. Second-Grade Progress Based on PALS

A total of 72 students completed the PALS spring assessment in 2016-17 as first graders and 2017-18 as second graders. Of those, 48 were at or above the spring summed score benchmark as first graders, and all (100.0\%) 48 remained at or above the summed score benchmark in the spring of 2018 as second graders (not shown).

## 2. Fourth- Through Eighth-Grade Progress Based on Forward Exam

A total of 320 students completed the Forward Exam in the spring of 2017 and the spring of 2018. Year-to-year progress was measured for students at or above proficient and for students below proficient in ELA and/or math in the spring of 2017.

## a. Students at or Above Proficient

In the spring of 2017, 31 students were proficient or advanced in ELA; $64.5 \%$ of them maintained proficiency in the spring of 2018 (Table 16a). There were 52 students at or above proficient in math in the spring of 2017, and 48.1\% maintained proficiency in the spring of 2018 (Table 16b).

| Table 16a |  |  |  |
| :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science <br> Year-to-Year Progress in English/Language Arts for 4th - 8th Graders Wisconsin Forward Exam: Students Proficient in 2017 |  |  |  |
| Current Grade Level | Students Proficient/Advanced in 2017 | Maintained Proficiency in 2018 |  |
|  |  | n | \% |
| 4th | 1 | Cannot report due to $n$ size |  |
| 5th | 6 |  |  |
| 6th | 8 |  |  |
| 7th | 6 |  |  |
| 8th | 10 | 7 | 70.0\% |
| Total | 31 | 20 | 64.5\% |


|  | Table 16b <br> Milwaukee Academy of Science |  |  |
| :--- | :---: | :---: | :---: |
|  | Year-to-Year Progress in Math for 4th - 8th Graders <br> Wisconsin Forward Exam: Students Proficient in 2017 |  |  |
| Current Grade <br> Level | Students <br> Proficient/Advanced <br> in 2017 | Maintained Proficiency in 2018 |  |

## b. Students Below Proficient

To determine if students who were not proficient or advanced the previous year were
making progress, CRC examined whether these students improved scores by moving up one or more categories (e.g., below basic to basic, basic to proficient, or below basic to proficient).

If students did not improve by a level, CRC examined student progress within the student's skill level by equally dividing the below-basic and basic levels into quartiles. The lower threshold for below basic 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. ${ }^{36}$

In the spring of 2017, 289 students were below proficient in ELA, and $38.1 \%$ of those students showed progress in 2018 (Table 17a). For math, 266 students were at or below proficient in the spring of 2017, and 36.1\% demonstrated progress in 2018 (Table 17b).

| Table 17a <br> Milwaukee Academy of Science <br> Year-to-Year Progress in English/Language Arts for 4th - 8th Graders Wisconsin Forward Exam: Students Below Proficient in 2017 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Current Grade Level | Students Below Proficient in 2016 | Students Progressed in 2017 |  |  |  |
|  |  | Increased 1+ Level | Increased a Quartile | Overall Progress |  |
|  |  |  |  | n | \% |
| 4th | 72 | 11 | 10 | 21 | 29.2\% |
| 5th | 57 | 10 | 16 | 26 | 45.6\% |
| 6th | 57 | 13 | 9 | 22 | 38.6\% |
| 7th | 51 | 17 | 11 | 28 | 54.9\% |
| 8th | 52 | 3 | 10 | 13 | 25.0\% |
| Total | 289 | 54 | 56 | 110 | 38.1\% |

[^24]| Table 17b |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science Year-to-Year Progress in Math for 4th - 8th Graders Wisconsin Forward Exam: Students Below Proficient in 2017 |  |  |  |  |  |
| Current <br> Grade Level | Students Below Proficient in 2017 | Students Progressed in 2018 |  |  |  |
|  |  | Increased 1+ Level | Increased a Quartile | Overall Progress |  |
|  |  |  |  | n | \% |
| 4th | 64 | 14 | 12 | 26 | 40.6\% |
| 5th | 59 | 4 | 9 | 13 | 22.0\% |
| 6th | 58 | 15 | 20 | 35 | 60.3\% |
| 7th | 34 | 5 | 5 | 10 | 29.4\% |
| 8th | 51 | 7 | 5 | 12 | 23.5\% |
| Total | 266 | 45 | 51 | 96 | 36.1\% |

## 3. Progress From the Spring of 2017 Aspire to the Spring of 2018 Aspire

Students in ninth grade at MAS during the 2016-17 school year took the Aspire in the spring semester. If the same students were enrolled as tenth graders at MAS during 2017-18, they took the Aspire in the spring of 2018.

Using the minimum benchmark scores for each grade level and subject area on the Aspire, CRC examined student progress from ninth to tenth grade. There were 35 students who took the Aspire in the spring of 2017 as ninth graders and in the spring of 2018 as tenth graders. The following sections describe progress for students who were at or above the 2016 benchmark and for students who were below the benchmark on the 2017 test.
a. Students at or Above Benchmark on the Spring of 2017 Aspire

Of the 18 students who were at or above the 2017 Aspire English benchmark,
61.1\% maintained benchmark on the spring of 2018 English test. In order to protect student
identity, CRC does not report results for cohorts with fewer than 10 students. Therefore, because of the small number of students who were at or above benchmark for the other subtests and the composite score, CRC could not include results in this report (Table 18).

| Table 18 <br> Milwaukee Academy of Science <br> Year-to-Year Student Progress on the Aspire Spring of 2017 to Spring of 2018 $N=35$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science <br> Year-to-Year Student Progress on the Aspire Spring of 2017 to Spring of 2018 $N=35$ |  |  |  |  |
| Subtest | Students at or Above Benchmark Spring of 2017 |  | Students Who Remained at or Above Benchmark Spring of 2018 |  |
|  | n | \% | n | \% |
| English | 18 | 51.4\% | 11 | 61.1\% |
| Math | 9 | 25.7\% | Cannot report due to $n$ size |  |
| Reading | 4 | 11.4\% |  |  |
| Science | 5 | 14.3\% |  |  |
| Composite* | 6 | 17.1\% |  |  |

*ACT does not publish a benchmark for the Aspire composite score; CRC calculated a composite benchmark score by averaging the benchmark scores from the four subtests, as published by ACT.

## b. Students Below Benchmark on the Spring of 2017 Aspire

The percentage of students below benchmark who progressed on the Aspire subtests and the composite score ranged from $41.9 \%$ to $76.5 \%$ (Table 19). These results will be used by the CSRC to set future expectations related to progress for lower-achieving ninth- to tenthgrade students (i.e., those below benchmark as ninth graders).

| Table 19 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science |  |  |  |  |  |  |
| Year-to-Year Student Progress for Students Below Benchmark on the Spring of 2017 Aspire |  |  |  |  |  |  |
| Subtest | Spring of 2017$(\mathrm{N}=35)$ |  | 2018 Progress |  |  |  |
|  | n | \% | Achieved Benchmark | Increased 1+ Point | Overall | Overall \% |
| English | 17 | 48.6\% | 6 | 7 | 13 | 76.5\% |
| Math | 26 | 74.3\% | 1 | 12 | 13 | 50.0\% |
| Reading | 31 | 88.6\% | 5 | 8 | 13 | 41.9\% |
| Science | 30 | 85.7\% | 4 | 15 | 19 | 63.3\% |
| Composite* | 29 | 82.9\% | 2 | 14 | 16 | 55.2\% |

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

## H. CSRC School Scorecard

In the fall of 2012, after a three-year pilot, the CSRC adopted its first school scorecard with related standards and expectations. In 2014-15, due to significant changes required by DPI for new standardized tests, the scorecard was revised. Like the original, the revised scorecard includes multiple measures of student academic progress including performance on standardized tests and local measures, point-in-time academic achievement, and engagement elements, such as attendance and student and teacher retention and return. The revised scorecard was partially piloted for the first two years. In February 2017, after the same standardized tests had been used for two consecutive school years, the revised scorecard was accepted by the CSRC to replace the original as an indicator of school performance. However, it will remain a pilot for an additional two to three years. The overall scorecard percentage (percentage of available points earned) is used to monitor school improvement from year to year.

The school scored $64.7 \%$ for K4 through eighth grade and $72.7 \%$ for the high school. This compares to $68.6 \%$ on the K4 through eighth grade and $73.5 \%$ on the school's 2016-17 pilot scorecards. See Appendix D for school scorecard information.

Additionally, for schools with students in both kindergarten through eighth grade and in high school, CRC calculated a weighted average score for the entire school (kindergarten through twelfth grade). The weighted average is simply a measure that considers the number of students to which it was applied. CRC assigned the weight of each individual report card's score based on the number of students enrolled in each academy at the end of the school year. When combined, MAS had an overall weighted average score of $66.4 \%$ for the current school year, which compares to $69.5 \%$ for the 2016-17 school year. ${ }^{37}$

## I. Satisfaction Regarding Student Academic Progress

Sections E through H above describe student academic progress across several measures using multiple metrics. In addition to those quantitative measures, CRC received 256 parent surveys and interviewed 28 teachers and 17 board members regarding student academic progress at MAS. Of the parents surveyed, most (89.5\%) agreed or strongly agreed that their child is learning what is needed to succeed in life, $86.7 \%$ indicated that they are informed about their child's academic performance, and 85.9\% parents rated the school's contribution to their child's learning as excellent or good. Of the 28 teachers, $78.6 \%$ rated student academic progress as excellent or good. Of 17 board members, 15 agreed that students are making significant

[^25]academic progress, and all 17 agreed or strongly agreed that the school is making progress toward becoming a high-performing school.

## IV. SUMMARY AND RECOMMENDATIONS

From 2016-17 to 2017-18, the elementary scorecard percentage (covering the elementary and junior academies) decreased from $68.6 \%$ to $64.7 \%$, the high school scorecard percentage decreased from $73.5 \%$ to $72.7 \%$, and the overall rating decreased from $69.5 \%$ to 66.4\%. Based on past and current contract compliance status and the combined scorecard rating, CRC recommends MAS continue regular, annual academic monitoring and reporting with an expectation that reading and math achievements on both local and standardized measures improve, especially on the elementary scorecard. If the elementary and junior academies do not improve on these measures over the next school year, CRC will likely recommend probation for the 2019-20 school year. The other option that CSRC might consider is to place the elementary and junior academies on probation now.

## Appendix A

## Contract Compliance Chart

| Table A |  |  |  |
| :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science Overview of Compliance With Education-Related Contract Provisions 2017-18 |  |  |  |
| Contract Section | Education-Related Contract Provision | Report Reference Page(s) | Provision Met or Not |
| Section I, B | Description of educational program; student population served. | pp. 2-4 and 15-18 | Met |
| Section I, V | School will provide a copy of the calendar prior to the end of the previous school year. | p. 10 | Met |
| Section I, C | Educational methods. | pp. 2-4 | Met |
| Section I, D | Administration of required standardized tests: <br> a. K4 through 8th grade and <br> b. 9th -12 th grade. | $\begin{aligned} & \text { pp. 37-42 } \\ & \text { pp. 42-44 } \end{aligned}$ | a. Met <br> b. Met |
| Section I, D | All new high school students tested within 60 days of first day of attendance in reading and math. | pp. 42-44 | Met |
| Section I, D | Written annual plan for graduation. | p. 35 | Met |
| Section I, D | Academic criterion \#1: Maintain local measures, showing pupil growth in demonstrating curricular goals in reading, math, writing, and special education. | pp. 24-34 | Met |
| Section I, D | Academic criterion \#2: Year-to-year achievement measure for 1st through 12th grades. <br> a. Year-to-year progress for 4 th -8 th graders at or above proficient the previous year. <br> b. Year-to-year progress for 10th-grade students at or above benchmarks on the Aspire the previous year. <br> Due to recent changes in standardized assessments no expectations are currently in place for fourth through tenth graders. <br> c. Second-grade students at or above summed score benchmark in reading. | a. pp. 46-47 <br> b. pp. 49-50 <br> c. p. 46 | a. Not available (N/A) <br> b. N/A <br> c. Met |


| Table A |  |  |  |
| :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science <br> Overview of Compliance With Education-Related Contract Provisions 2017-18 |  |  |  |
| Contract Section | Education-Related Contract Provision | Report Reference Page(s) | Provision Met or Not |
| Section I, D | Academic criterion \#3: Year-to-year achievement measure for 1st through 12th grades. <br> a. Progress for 4 th -8 th graders below proficiency level. <br> b. Progress for 10th-grade students below benchmark on the Aspire the previous year. <br> Due to recent changes in standardized assessments, no expectations are currently in place for year-to-year progress. | a. pp. 47-49 <br> b. pp. 50-51 | $\begin{aligned} & \text { a. N/A } \\ & \text { b. N/A } \end{aligned}$ |
| Section I, E | Parental involvement. | pp. 10-11 | Met |
| Section I, F | Instructional staff hold a DPI license or permit to teach. | pp. 7-9 | Met |
| Section I, I | Pupil database information, including information on students with special education needs. | pp. 15-18 | Met |
| Section I, K | Discipline procedures. | pp. 12-13 | Met |

## Appendix B

## Student Learning Memorandums

# Student Learning Memorandum for Milwaukee Academy of Science Elementary Academy 

To: $\quad$ NCCD Children's Research Center and Charter School Review Committee From: Milwaukee Academy of Science Elementary Academy<br>Re: Learning Memo for the 2017-18 Academic Year<br>Date: October 24, 2017

This memorandum of understanding includes the minimum measurable outcomes required by the City of Milwaukee Charter School Review Committee (CSRC) 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 NCCD Children's Research Center (CRC) and the CSRC. The school will record student data in PowerSchool and/or MS Excel spreadsheets and provide them to CRC, the educational monitoring agent contracted by the CSRC. Additionally, paper test printouts or data directly from the test publisher or DPI will be provided to CRC for all standardized tests. All required elements related to the outcomes below are described in the "Learning Memo Data Requirements" section. 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 15, 2018.

## Enrollment

Milwaukee Academy of Science (MAS) will record enrollment dates for every student. Upon admission, individual student information and actual enrollment dates will be added to the school's database. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Termination/Withdrawal

The exit date and reason for every student leaving the school will be determined and recorded in the school's database. A specific reason for each expulsion is required for each student. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Attendance

The school will maintain appropriate attendance records. A student is marked partial day (excused or unexcused) if he/she arrives after 10:40 a.m. or leaves before 12:40 p.m. MAS will achieve an attendance rate of at least $92 \%$ for all students enrolled at any time during the school year. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Parent Participation

Parents of at least 95\% of students enrolled for the entire school year will participate in two of three scheduled parent-teacher conferences. If a parent does not attend a scheduled conference at the school, MAS will conduct the conference with the parent via phone or home visit; all methods will count as participation. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Special Education Needs Students

The school will maintain updated records on all students who received special education services at the school, including students who were evaluated but not eligible for services. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Academic Achievement: Local Measures

## Literacy and Math

At least $90 \%$ of K4 students who are enrolled for the entire year and complete the fall and spring Phonological Awareness Literacy Screening (PALS)-PreK will be at or above the developmental range for at least five of seven tasks at the time of the spring assessment.

At least $90 \%$ of K4 students who are enrolled for the entire year and complete the spring math skill assessments will demonstrate that they have acquired at least $80 \%$ of the math competencies designated as benchmarks for their grade level by the end of the school year. These assessments were designed by the MAS staff based on their alignment with the DPI Wisconsin Model Early Learning Standards and the Common Core State Standards.

K5- through fifth-grade students will complete 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 reading and math scores will be compared to national grade-level averages based on the 2015 Northwest Evaluation Association (NWEA) normative study. For the cohort of students who were enrolled for the entire year and complete both the fall and spring tests, CRC will report progress for students above the normative mean for their grade level and students at or below the normative mean for their grade level. Based on fall test scores and the student's current grade level, the student receives a target growth Rasch unit (RIT) score for the spring test.

- $\quad$ Progress for students above the normative mean for their current grade at the time of the fall test will be measured by examining the change in RIT scores from fall to spring. For K5 through second graders, an increase of six or more RIT points will indicate progress; for third and fourth graders, an increase of at least four RIT points will indicate progress; and for fifth graders, and increase of at least two RIT points will indicate progress.
- For students at or below the normative grade-level average, progress will be determined by examining whether the student met the MAP growth target based on her/his fall test score and current grade level; students who met their growth target for the year will be judged to have made adequate progress for the year.

At least $70 \%$ of students in the cohort described above will show progress this year. Required data elements for all literacy and math measures are described in the "Learning Memo Data Requirements" section.

## Writing

By the end of the final marking period, students in third through fifth grades will have a writing sample assessed. 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 control; $2=$ basic control; $3=$ adequate control; $4=$ proficient control; and 5 = advanced control. Each grade cohort will be judged to have at least "adequate control," as indicated by a total score of 18 . At least $80 \%$ of students enrolled for the entire year will achieve a total score of 18 or above. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Individualized Education Program Goals

At least $95 \%$ of the special education students who had been enrolled in special education services for a full year at MAS and were still receiving special education services at the end of the school year will meet one or more of the goals defined in their individualized education program (IEP). Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Academic Achievement: Standardized Measures

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

## PALS for K4- Through Second-Grade Students ${ }^{38}$

The PALS will be administered to all K4- through second-grade students in the fall and spring. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

[^26]
## Wisconsin Forward Exam for Third- Through Fifth-Grade Students

The Wisconsin Forward Exam will be administered on an annual basis within the timeframe specified by DPI. This standardized assessment will produce an English/language arts and a math score for all third, fourth, and fifth graders. Additionally, fourth-grade students will complete the science and social studies tests. Data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Year-to-Year Achievement ${ }^{39}$

1. CRC will report 2017-18 Forward Exam results. CRC will also report progress for students who completed the assessment in consecutive school years at the same school. ${ }^{40}$ When sufficient year-to-year data are available, the CSRC will set its expectations for student progress, and these expectations will be effective for all subsequent years.
2. The CSRC's PALS expectation for students maintaining reading readiness is that at least $75 \%$ of students who were in first grade in the 2016-17 school year, and who met the summed score benchmark in the spring of 2017, will remain at or above the secondgrade summed score benchmark in the spring of 2018.
[^27]
# Student Learning Memorandum for Milwaukee Academy of Science Junior Academy 

To: $\quad$ NCCD Children's Research Center and Charter School Review Committee<br>From: Milwaukee Academy of Science Junior Academy<br>Re: Learning Memo for the 2017-18 Academic Year<br>Date: October 24, 2017

This memorandum of understanding includes the minimum measurable outcomes required by the City of Milwaukee Charter School Review Committee (CSRC) 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 NCCD Children's Research Center (CRC) and the CSRC. The school will record student data in PowerSchool and/or MS Excel spreadsheets and provide data to CRC, the educational monitoring agent contracted by the CSRC. Additionally, paper test printouts or data directly from the test publisher or the Wisconsin Department of Public Instruction (DPI) will be provided to CRC for all standardized tests. All required elements related to the outcomes below are described in the "Learning Memo Data Requirements" section. 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 15, 2018.

## Enrollment

Milwaukee Academy of Science (MAS) will record enrollment dates for all students. Upon each student's admission, individual student information and the actual enrollment date will be added to the school's database. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Termination/Withdrawal

The exit date and reason for withdrawal will be determined for every student leaving the school and recorded in the school's database. Specific reasons for each expulsion are required for each student. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Attendance

The school will maintain appropriate attendance records. Students who arrive at school prior to 10:45 ${ }^{41}$ a.m. will be marked present for the entire day. Late arrivals will be considered in attendance for part of the day. MAS will achieve an attendance rate of at least $95 \%$. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Parent Participation

Parents of at least 95\% of students enrolled for the entire school year will participate in two of three scheduled parent-teacher conferences. Participation will count if the parent meets with any teacher in person at the school, via phone, or at the student's home during each of the three conference periods. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Special Education Needs Students

The school will maintain updated records on all students who receive special education services at the school, including students who were evaluated but not eligible for services. Required data elements related to the special education outcome are described in the "Learning Memo Data Requirements" section.

## Academic Achievement: Local Measures

## Literacy

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 national grade-level averages (i.e., normative means) based on the 2015 Northwest Evaluation Association (NWEA) normative study. For the cohort of students who complete the fall and spring tests, CRC will report progress for students above the normative mean for their grade level and students at or below the normative mean for their current grade level. Based on fall test scores and the student's current grade level, the student receives a target growth Rasch unit (RIT) score for the spring test.

- $\quad$ Progress for students above the normative mean for their current grade at the time of the fall test will be measured by examining the change in RIT scores from fall to spring; an increase of one RIT point will indicate progress for the current school year.

[^28]- For students at or below the normative grade-level average for their current grade, progress will be determined by examining whether students met the MAP growth target based on their fall test score and current grade level; students who met their growth target for the year will be considered to have made adequate progress for the school year.

At least $75 \%$ of all students who complete both the fall and spring assessments and are enrolled for the entire school year will show progress this year. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Math

Junior academy students will complete MAP math tests 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 national grade-level averages based on the 2015 NWEA normative study. For the cohort of students who complete the fall and spring tests, CRC will report progress for students above the normative mean for their grade level and students at or below the normative mean for their current grade level.

Based on fall test scores and the student's current grade level, the student receives a target growth RIT score for the spring test.

- Progress for students above the normative mean for their current grade at the time of the fall test will be measured by examining the change in RIT scores from fall to spring; an increase of one RIT point will indicate progress for the current school year.
- For students at or below the normative grade-level average for their current grade, progress will be determined by examining whether the student met the MAP growth target based on their fall test score and current grade level; students who met their growth target for the year will be considered to have made adequate progress for the school year.

At least $75 \%$ of all students who complete both the fall and spring assessments and are enrolled for the entire school year will show progress this year. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Writing

Writing samples from students in sixth through eighth grades will be assessed by the end of the final grading period in the following six domains based on grade level or individualized education program (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. At least $75 \%$ of students enrolled for the entire school year will have at least "adequate control," as indicated by a total score of 18 or higher.

IEP Goals
At least $85 \%$ of the special education students will meet one or more of the goals defined in their IEPs. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Academic Achievement: Standardized Measures

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

## Wisconsin Forward Exam for Sixth-, Seventh-, and Eighth-Grade Students

The Wisconsin Forward Exam will be administered on an annual basis within the timeframe specified by DPI. This standardized assessment will produce an English/language arts and a math score for all sixth, seventh, and eighth graders. Additionally, eighth-grade students will complete the science and social studies tests. Data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Year-to-Year Achievement

CRC will report year-to-year progress for students who completed the Forward assessment in two consecutive school years at the same school. ${ }^{42}$ When sufficient year-to-year data are available, the CSRC will set its expectations for student progress, and these expectations will be effective for all subsequent years.

[^29]
# Student Learning Memorandum for Milwaukee Academy of Science High School 

To: $\quad$ NCCD Children's Research Center and Charter School Review Committee From: Milwaukee Academy of Science High School<br>Re: Learning Memo for the 2017-18 Academic Year<br>Date: $\quad$ October 24, 2017

This memorandum of understanding includes the minimum measurable outcomes required by the City of Milwaukee Charter School Review Committee (CSRC) 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 NCCD Children's Research Center (CRC) and the CSRC. The school will record student data in PowerSchool and/or MS Excel spreadsheets and provide that data to CRC, the educational monitoring agent contracted by the CSRC. Additionally, paper test printouts or data directly from the test publisher or Wisconsin Department of Public Instruction (DPI) will be provided to CRC for all standardized tests. All required elements related to the outcomes below are described in the "Learning Memo Data Requirements" section of this memo. 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 15, 2018.

## Enrollment

Milwaukee Academy of Science (MAS) High School will record enrollment dates for every student. Upon admission, individual student information and actual enrollment date will be added to the school's database. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Termination/Withdrawal

The exit date and reason for every student leaving the school will be determined and recorded in the school's database. Specific reasons for each expulsion are required for each student. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Attendance

The school will maintain appropriate attendance records. High school students who miss any portion of the school day are considered truant. MAS will achieve an attendance rate of at least $93 \%$. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Parent/Guardian Participation

Parents of at least $90 \%$ of students enrolled for the entire school year will participate in two of the three scheduled parent-teacher conferences. Note that a parent conference with any teacher during each of the three conference periods will be counted as participation. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Special Education Needs Students

The school will maintain updated records on all students who received special education services at the school, including students who were evaluated but not eligible for services. Required data elements related to the special education outcome are described in the "Learning Memo Data Requirements" section.

## High School Graduation Plan

All ninth- through eleventh-grade students will develop a high school graduation plan by the end of the school year. All twelfth-grade students will complete their graduation plans by the end of the first semester. Each student will incorporate the following into his/her high school graduation plan.

- Information regarding the student's postsecondary plans.
- A schedule reflecting plans for completing 4.5 credits in English; four credits in math; six credits in science; three credits in social studies; two credits in foreign language; 1.5 credits in physical education; 0.5 credits in health; and 2.5 credits in other electives.
- Evidence of parent/guardian/family involvement. Involvement means that the guidance counselor will review each student's graduation plan with his/her parent(s) by the end of the school year via either a face-to-face or phone conference. If a parent does not participate in one of these sessions, MAS will have a conference with the student and submit a written report to the parent via regular mail.

The guidance counselor/advisor will meet with each twelfth-grade student by the end of the first semester 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 whether each student is on track toward earning credits and whether the student will need to enroll in summer school.

Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## High School Graduation Requirements ${ }^{43}$

- All ninth graders who earn at least 6.0 credits will be promoted to tenth grade.
- All tenth graders who earn at least 12.0 credits will be promoted to eleventh grade.
- $\quad$ All eleventh graders who earn at least 18.0 credits will be promoted to twelfth grade.
- All twelfth graders who earn at least 24.0 credits, including the required courses, will graduate.

Results will be reported for the cohort of students enrolled for the entire school year.

Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Academic Achievement: Local Measures


#### Abstract

Literacy Reading progress for ninth through twelfth graders will be demonstrated by changes in their Lexile level scores as measured by the Scholastic Reading Inventory (SRI) administered by the end of September and again at the end of the school year. At least $61 \%$ of students enrolled for the entire school year will increase their Lexile level scores by at least 13 points from fall to spring. ${ }^{44}$ Any student who enrolls after the beginning of the school year will be tested within 60 calendar days of enrollment using the SRI. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.


[^30]
## Math

Math progress for ninth through twelfth graders enrolled in a math course during the school year will be measured by the comprehensive tests for the math course in which they are enrolled. ${ }^{45}$ The end-of-year test results will be reported to CRC. At least $60 \%$ of students enrolled for the entire school year and enrolled in the same math class for the entire year will attain scores of at least $70 \%$ on their comprehensive course exams at the end of the school year. ${ }^{46}$ In addition, students who enroll after the start of the school year will be given the Wide Range Achievement Test (WRAT) within 60 days of their enrollment to assess their basic math competency levels. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Writing

By the end of the final marking period, students in ninth through twelfth grades will have had writing samples assessed. Student writing skills will be assessed in the following six domains based on grade level or individualized education program (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. At least $80 \%$ of students in each grade enrolled for the entire year will be judged to have at least "adequate control," as indicated by a total score of 18 or higher. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## IEP Goals

At least $95 \%$ of the special education students will meet one or more of the goals defined in their IEPs. Required data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

[^31]
## Academic Achievement: Standardized Measures

## Ninth- and Tenth-Grade Students

All ninth- and tenth-grade students are required to take all subtests of the ACT Aspire (the pre-ACT test that will identify student readiness for the ACT and college courses) ${ }^{47}$ in the timeframe required by DPI. Specific data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Wisconsin Forward Exam Social Studies Assessment for Tenth-Grade Students

All tenth graders are required to complete the Wisconsin Forward Exam social studies assessments in the timeframe(s) specified by DPI. Specific data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Eleventh-Grade Students

All eleventh-grade students are required to take all subtests of the ACT Plus Writing and the ACT WorkKeys in the timeframe required by DPI. Specific data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Twelfth-Grade Students

MAS will require all seniors to take the ACT or ACT Plus Writing in the fall of 2017. The ACT for twelfth graders is not required by DPI but is a CSRC requirement. Specific data elements related to this outcome are described in the "Learning Memo Data Requirements" section.

## Year-to-Year Progress

Required data elements related to year-to-year outcomes are described in the "Learning Memo Data Requirements" section.

## ACT Aspire for Ninth- to Tenth-Grade Students

CRC will report year-to-year progress from the ninth- to tenth-grade Aspire for students who complete the test two consecutive years. Progress will be reported for students at or above benchmark on any of the subtests or the composite score and for students below benchmark. Results from 2015-16 and 2016-17 will be used as baseline data to set expectations for subsequent years.

[^32]Appendix C

Trend Information

| Table C1 <br> Milwaukee Academy of Science <br> Student Retention Rate |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Number <br> Enrolled at <br> Start of <br> School Year | Enrolled <br> During Year | Withdrew | Number at <br> End of School <br> Year | Enrolled for <br> Entire School <br> Year |
| $2013-14$ | 958 | 42 | 111 | 889 | $849(88.6 \%)$ |
| $2014-15$ | 1,025 | 21 | 179 | 872 | $851(83.0 \%)$ |
| $2015-16$ | 1,039 | 35 | 125 | 949 | $920(88.5 \%)$ |
| $2016-17$ | 1,056 | 29 | 98 | 987 | $966(91.5 \%)$ |
| $2017-18$ | 1,057 | 32 | 108 | 981 | $953(90.2 \%)$ |


| Table C2 <br> Milwaukee Academy of Science <br> Student Return Rate |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Year | Enrolled at End of <br> Previous Year* | Enrolled at Start of <br> This School Year | Return Rate |  |
| $2013-14$ | 734 | 581 | $79.2 \%$ |  |
| $2014-15$ | 798 | 652 | $81.7 \%$ |  |
| $2015-16$ | 776 | 661 | $85.2 \%$ |  |
| $2016-17$ | 859 | 733 | $85.3 \%$ |  |
| $2017-18$ | 891 | 752 | $84.4 \%$ |  |

*Excludes students in eighth and twelfth grades during previous school year.

Figure C1

## Milwaukee Academy of Science Student Attendance Rates



| 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
| ---: | :--- | :--- | :--- | :--- |
| $\rightarrow$-Elementary Academy | $\sim-J u n i o r ~ A c a d e m y ~$ | $\approx$ High School |  |  |

Figure C2
Milwaukee Academy of Science

## Parent-Teacher Conference Participation



| $2013-14$ | $2014-15$ | $2015-16$ | $2016-17$ | $2017-18$ |
| :---: | :---: | :---: | :---: | :---: |
| $\rightarrow$-Primary/Elementary Academy | $\rightarrow$ Junior Academy | $\rightarrow$ High School |  |  |


| Table C3 <br> Milwaukee Academy of Science <br> Teacher Retention Rate |  |
| :---: | :---: |
| Year | Retention Rate: Employed Entire School Year |
| $2013-14$ | $98.6 \%$ |
| $2014-15$ | $90.4 \%$ |
| $2015-16$ | $97.0 \%$ |
| $2016-17$ | $98.5 \%$ |
| $2017-18$ | $100.0 \%$ |


| Table C4 <br> Milwaukee Academy of Science <br> Teacher Return Rate |  |
| :--- | :---: |
| Year | Rate |
| $2013-14$ | $86.9 \%$ |
| $2014-15$ | $75.4 \%$ |
| $2015-16$ | $80.9 \%$ |
| $2016-17$ | $87.5 \%$ |
| $2017-18$ | $84.5 \%$ |

Table C5

| Milwaukee Academy of Science <br> CSRC Scorecard Score |  |  |  |
| :--- | :---: | :---: | :---: |
| School Year |  |  |  |
| K4 Through 8th Grade | High School | Combined Average $^{*}$ |  |
| $2013-14$ | $72.2 \%$ | $78.1 \%$ | $73.3 \%$ |
| $2014-15$ | $79.4 \%$ | $79.6 \%$ | $79.4 \%$ |
| $2015-16$ | $81.2 \%$ | $82.7 \%$ | $81.4 \%$ |
| $2016-17^{+}$ | $68.6 \%$ | $73.5 \%$ | $69.5 \%$ |
| $2017-18+$ | $64.7 \%$ | $72.7 \%$ | $66.4 \%$ |

*Based on a weighted average; weight is based on the number of students at each grade level who were enrolled at the end of the school year.
†The revised scorecard was implemented in 2016-17; results are not directly comparable to scorecard percentages in previous years.

## Appendix D

CSRC 2017-18 School Scorecards

## STUDENT READING READINESS: GRADES 1-2

- PALS—\% 1st graders at or above spring summed score benchmark this year
PALS-\% 2nd graders who maintained spring summed score benchmark two consecutive years


## STUDENT ACADEMIC PROGRESS: GRADES 3-8

- Forward Exam reading-\% maintained proficient
- Forward Exam math—\% maintained proficient
- Forward Exam reading-\% below proficient who progressed
- Forward Exam math-\% below proficient who progressed

| LOCAL MEASURES |  |  |
| :--- | :--- | :---: |
| - \% met reading | 6.25 | y |
| - \% met math | 6.25 |  |
| - \% met writing | 6.25 | $25.0 \%$ |
| - \% met special education | 6.25 |  |


| STUDENT ACHIEVEMENT: GRADES 3-8 |  |  |
| :--- | :--- | :--- | :--- |
| - Forward Exam reading-\% proficient or |  |  |
| advanced |  |  |
| - Forward Exam math—\% proficient or advanced | 5.0 | $10.0 \%$ |

## ENGAGEMENT

- Student attendance
- Student reenrollment
- Student retention 5.0 5.0
- Teacher retention
5.0
25.0\%
- Teacher return*
5.0

STUDENT ACADEMIC PROGRESS: GRADES 9, 10, AND 12

- ACT Aspire-\% 10th graders who were at or above the composite benchmark score two consecutive 5.0 years
- ACT Aspire-\% 10th graders below the composite benchmark in 9th grade but progressed at least one point in 10th grade
30.0\%
- Adequate credits to move from 9th to 10 th grade 5.0
- Adequate credits to move from 10th to 11th grade5.0
- DPI graduation rate
5.0

POSTSECONDARY READINESS: GRADES 11 AND 12

- Postsecondary acceptance for graduates (college, university, technical school, military)
- \% of graduates with ACT composite score of 21.25 or higher


## LOCAL MEASURES

- \% met reading
- \% met math5.0
- \% met writing
5.0
- \% met special education
5.0


## STUDENT ACHIEVEMENT: GRADES 9 AND 10

- ACT Aspire English—\% students at or above spring benchmark
- ACT Aspire math-\% students at or above spring

ACT Aspire
benchmark
5.0

## ENGAGEMENT

- Student attendance
- Student reenrollment
- Student retention
25.0\%
- Teacher retention

| - Teacher retention | 5.0 |
| :--- | :--- |
| - Teacher return* | 5.0 |

0
*Teachers not offered continuing contracts are excluded when calculating this rate.
NOTE: To protect student identity, CRC does not report data on scorecard items with fewer than 10 students. These cells will be reported as not available (N/A) on the scorecard and the total score will be calculated to reflect each school's denominator.

| Table D1 <br> Milwaukee Academy of Science <br> CSRC Pilot Elementary School (K Through 8th Grade) Scorecard 2017-18 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Measure | Maximum Points | \% Total Score | Performance | Points Earned |
| Student <br> Reading | \% 1st graders at or above spring summed score benchmark this year | 4.0 | 10.0\% | 56.4\% | 2.3 |
| Readiness: <br> PALS, <br> 1st-2nd <br> Grades | \% 2nd graders who maintained spring summed score benchmark two consecutive years | 6.0 |  | 100.0\% | 6.0 |
| Student <br> Academic <br> Progress: <br> 3rd-8th <br> Grades | Forward Exam reading: \% maintained proficient/advanced | 5.0 | 30.0\% | 64.5\% | 3.2 |
|  | Forward Exam math: <br> \% maintained proficient/advanced | 5.0 |  | 48.1\% | 2.4 |
|  | Forward Exam reading: <br> \% below proficient who progressed | 10.0 |  | 38.1\% | 3.8 |
|  | Forward Exam math: \% below proficient who progressed | 10.0 |  | 36.1\% | 3.6 |
| Local Measures* | \% met reading | 6.25 | 25.0\% | 71.1\% | 4.4 |
|  | \% met math | 6.25 |  | 68.8\% | 4.3 |
|  | \% met writing | 6.25 |  | 77.1\% | 4.8 |
|  | \% met special education | 6.25 |  | 98.2\% | 6.1 |
| Student <br> Academic <br> Achievement: <br> 3rd - 8th <br> Grades | Forward Exam English/ language arts: <br> \% at/above proficient | 5.0 | 10.0\% | 10.3\% | 0.5 |
|  | Forward Exam math: \% at/above proficient | 5.0 |  | 12.3\% | 0.6 |
| Engagement | Student attendance rate | 5.0 | 25.0\% | 91.8\% | 4.6 |
|  | Student return rate | 5.0 |  | 85.2\% | 4.3 |
|  | Student retention | 5.0 |  | 91.3\% | 4.6 |
|  | Teacher retention rate | 5.0 |  | 100.0\% ${ }^{+}$ | 5.0 |
|  | Teacher return rate | 5.0 |  | 84.5\% ${ }^{+}$ | 4.2 |
| TOTAL |  | 100.0 |  |  | 64.7 |
| ELEMENTARY SCHOOL SCORECARD PERCENTAGE |  |  |  |  | 64.7\% |

*Elementary local measure scorecard percentages were calculated by combining outcomes for reading, math, writing, and special education measures across students in K4 through eighth grade. These percentages do not correspond directly to numbers shown in the report, which uses different grade-level groupings.
+Combined rate for all academies.

| Milwaukee Academy of Science CSRC Pilot High School (9th - 12th Grade) Scorecard 2017-18 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Measure | Maximum Points | \% Total <br> Score | Performance | Points Earned |
| Student <br> Academic <br> Progress: <br> 9th to 10th <br> Grade <br> 10th to 11th <br> Grade <br> 12th Grade | ACT Aspire-\% 10th graders who were at or above the composite benchmark score two consecutive years | 5.0 | 30.0\% | Cannot report due to $n$ size | - |
|  | ACT Aspire-\% 10th graders below the composite benchmark in 9th grade but progressed at least one point in 10th grade | 10.0 |  | 55.2\% | 5.5 |
|  | Adequate credits to move from 9th to 10th grade | 5.0 |  | 69.9\% | 3.5 |
|  | Adequate credits to move from 10th to 11th grade | 5.0 |  | 89.4\% | 4.5 |
|  | Graduation rate (DPI)* | 5.0 |  | $86.2 \%{ }^{48}$ | 4.3 |
| Postsecondary Readiness: 11th and 12th Grades | Postsecondary acceptance for graduates (college, university, technical school, military) | 10.0 | 15.0\% | 100.0\% | 10.0 |
|  | $\%$ of 11th/12th graders tested on ACT | 2.5 |  | 100.0\% | 2.5 |
|  | \% of graduates with ACT composite score of 21.25 or more | 2.5 |  | 25.7\% | 0.6 |
| Local Measures | \% met reading | 5.0 | 20.0\% | 54.6\% | 2.7 |
|  | \% met math | 5.0 |  | 48.3\% | 2.4 |
|  | \% met writing | 5.0 |  | 87.2\% | 4.4 |
|  | \% met special education | 5.0 |  | 100.0\% | 5.0 |
| Student <br> Academic <br> Achievement: <br> 9th and 10th <br> Grades | ACT Aspire English: <br> \% of 9th and 10th grade students at or above benchmark | 5.0 | 10.0\% | 28.5\% | 1.4 |
|  | ACT Aspire math: <br> $\%$ of 9th and 10th grade students at or above benchmark | 5.0 |  | 6.9\% | 0.3 |
| Engagement | Student attendance | 5.0 | 25.0\% | 90.5\% | 4.5 |
|  | Student reenrollment | 5.0 |  | 80.5\% | 4.0 |
|  | Student retention | 5.0 |  | 86.1\% | 4.3 |
|  | Teacher retention rate | 5.0 |  | 100.0\% + | 5.0 |
|  | Teacher return rate | 5.0 |  | 84.5\% ${ }^{+}$ | 4.2 |
| TOTAL |  | 95.0 |  |  | 69.1 |
| HIGH SCHOOL SCORECARD PERCENTAGE |  |  |  |  | 72.7\% |

*Based on 2016-17 four-year rate, the most recent available at the time of this report.
+Combined rate for all academies.

[^33]Appendix E

## Board Interview Results

Board member opinions are qualitative and provide valuable, although subjective, insight regarding school performance and organizational competency. MAS's board of directors consists of 21 members. CRC conducted phone interviews using a prepared interview guide with 17 (81.0\%) board members who agreed to participate (Table E).

Board members have served for an average of just under six years. Their backgrounds include business management, medical, education, real estate, special education, banking, marketing, workforce development, community relations, and higher education experiences.

All 17 board members said they participated in strategic planning for the school, that they received a presentation on the school's annual academic performance report and reviewed the school's annual financial audit, and that they received and approved the school's annual budget.

All 17 members reported that the board uses data to make decisions regarding the school. On a scale of excellent to poor, five of the board members rated the school as excellent, 10 rated it as good, and one rated it as fair. All 17 agreed or strongly agreed that the school was making progress toward becoming a high-performing school and that board members took their responsibilities seriously.

| Table E |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science Board Member Interview Results$\begin{gathered} \text { 2017-18 } \\ \mathrm{N}=17 \end{gathered}$ |  |  |  |  |  |
| Measure | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| Teacher-student ratio/class size at this school is appropriate. | 1 | 15 | 1 | 0 |  |
| Program of instruction (includes curriculum, equipment, and building) is consistent with the school's mission. | 8 | 9 | 0 | 0 |  |
| Students make significant academic progress at this school. | 10 | 5 | 1 | 1 |  |
| The administrator's financial management is transparent and efficient. | 16 | 1 | 0 | 0 | 0 |
| This school is making progress toward becoming a high-performing school. | 12 | 5 | 0 | 0 |  |
| This school has strong linkages to the community, including businesses. | 16 | 1 | 0 | 0 |  |
| The administrative staff's performance meets the board's expectations. | 12 | 5 | 0 | 0 |  |
| The majority of the board of directors take their varied responsibilities seriously. | 12 | 5 | 0 | 0 |  |


| Tab |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science Board Member Interview Results$\begin{gathered} \text { 2017-18 } \\ \mathrm{N}=17 \\ \hline \end{gathered}$ |  |  |  |  |  |
| Measure | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| This school has the financial resources to fulfill its mission. | 14 | 3 | 0 | 0 |  |
| The environment of this school ensures the safety of its students and staff. | 13 | 4 | 0 | 0 |  |

When asked what they liked most about the school, the board members mentioned the following.

- Excellent administrative leadership
- Dedicated and passionate teachers
- Partnership with higher education institutes and local community

Regarding things they like least, the board members mentioned the following.

- Insufficient funding
- Lack of resources (fewer resources than other public schools)
- Limited access to transportation

When asked for one suggestion for improving the school, board members said the following.

- Increase funding to attract teachers and provide better transportation
- Create and offer strong academic and community supportive services
- Expand afterschool and summer school programs

Appendix F

Parent Survey/Interview Results

Parent opinions are qualitative and provide a valuable measurement of school performance. To determine parent's satisfaction with the school, parental involvement with the school, and an overall evaluation of the school, each school distributed paper surveys during spring parent-teacher conferences as well as offered the ability to complete the survey online. CRC made at least two follow-up phone calls to parents who had not completed a survey. If these parents were available and willing, CRC completed the survey over the telephone. There were 256 surveys, representing 253 (38.6\%) of 656 MAS families, completed and submitted to CRC.

Parents were asked their level agreement with several statements about satisfaction with the school. Most parents agreed or strongly agreed with all of the statements, but level of agreement varied. Some of the statements with the strongest agreement were that parents feel comfortable talking with staff and feel welcome at the school. Items with the lowest agreement included how staff handle discipline, that people at the school treat each other with respect, and that the school has a variety of courses (Table F1).

| Table F1 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science Parent Satisfaction with School$\begin{aligned} & \text { 2017-18 } \\ & \mathrm{N}=256 \\ & \hline \end{aligned}$ |  |  |  |  |  |  |
| Factor | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | No Response |
| I am comfortable talking with the staff. | 66.4\% | 25.4\% | 4.7\% | 2.0\% | 1.2\% | 0.4\% |
| The staff keep me informed about my child's academic performance. | 62.1\% | 24.6\% | 7.0\% | 4.7\% | 1.6\% | 0.0\% |
| I am comfortable with how the staff handle discipline. | 42.2\% | 29.7\% | 14.5\% | 8.6\% | 5.1\% | 0.0\% |
| I am satisfied with the overall performance of the staff. | 50.0\% | 34.8\% | 8.6\% | 3.5\% | 2.7\% | 0.4\% |
| The staff recognize my child's strengths and weaknesses. | 55.1\% | 35.5\% | 5.9\% | 1.2\% | 2.0\% | 0.4\% |
| I feel welcome at my child's school. | 62.5\% | 29.3\% | 4.7\% | 1.2\% | 1.6\% | 0.8\% |
| The staff respond to my worries and concerns. | 52.7\% | 32.0\% | 8.6\% | 3.5\% | 3.1\% | 0.0\% |
| My child and I clearly understand the school's academic expectations. | 60.9\% | 32.4\% | 3.9\% | 1.2\% | 0.4\% | 1.2\% |
| My child is learning what is needed to succeed in life. | 57.4\% | 32.0\% | 6.6\% | 2.7\% | 0.8\% | 0.4\% |
| My child is safe in school. | 54.3\% | 34.0\% | 6.6\% | 3.1\% | 2.0\% | 0.0\% |
| People in this school treat each other with respect. | 42.6\% | 33.2\% | 15.6\% | 5.1\% | 2.7\% | 0.8\% |
| The school offers a variety of courses and afterschool activities to keep my child interested. | 41.4\% | 29.7\% | 13.3\% | 9.0\% | 5.9\% | 0.8\% |

The second measure examined the extent to which parents engaged in educational activities while at home. During a typical week, most or many of the parents of younger children (K4 through fifth grades) participated in all of the listed activities (Table F2).

| Table F2 <br> Milwaukee Academy of Science <br> Parent Participation in Activities <br> K4 - 5th Grade <br> 2017-18 <br> N = 174 |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Activity | Never | Monthly | Weekly | Daily | No <br> Response |
| Read with or to your child(ren) | $1.7 \%$ | $3.4 \%$ | $20.1 \%$ | $74.1 \%$ | $0.6 \%$ |
| Encourage the use of phones, <br> tablets, or computers for <br> learning | $4.0 \%$ | $2.3 \%$ | $19.5 \%$ | $73.6 \%$ | $0.6 \%$ |
| Work on arithmetic or math | $1.7 \%$ | $3.4 \%$ | $20.7 \%$ | $73.6 \%$ | $0.6 \%$ |
| Work on homework | $1.7 \%$ | $0.0 \%$ | $11.5 \%$ | $85.1 \%$ | $1.7 \%$ |
| Participate together in activities <br> outside of school (e.g., sports, <br> library/museum visits) | $0.0 \%$ | $12.6 \%$ | $39.7 \%$ | $47.1 \%$ | $0.6 \%$ |

Parents of older children (sixth through twelfth graders) engaged in similar activities during the week (Table F3).

| Table F3 <br> Milwaukee Academy of Science Parent Participation in Activities $\begin{gathered} \text { 6th }-12 \text { th Grade } \\ 2017-18 \\ \mathrm{~N}=136 \\ \hline \end{gathered}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Activity | Never | Monthly | Weekly | Daily | No Response |
| Monitor homework completion | 5.9\% | 3.7\% | 22.8\% | 65.4\% | 2.2\% |
| Encourage the use of phones, tablets, or computers to do research | 4.4\% | 7.4\% | 22.8\% | 62.5\% | 2.9\% |
| Participate together in activities outside of school (e.g., sports, library/museum visits) | 4.4\% | 19.1\% | 36.8\% | 36.0\% | 3.7\% |
| Discuss with your child his/her progress toward graduation | 1.5\% | 11.8\% | 21.3\% | 62.5\% | 2.9\% |
| Discuss plans for education after graduation | 2.2\% | 14.7\% | 24.3\% | 55.9\% | 2.9\% |

Parents of high school students were also asked to rate the school on two measures related to progress toward graduation and school assistance in helping the family understand and plan for life after high school. Two thirds of parents rated their child's progress toward graduation ( $67.2 \%$ ) and school assistance in helping them understand and plan for education after high school (68.7\%) as excellent or good (Table F4).

| Table F4 <br> Milwaukee Academy of Science <br> Graduation and Life After High School: Parent Ratings <br> 2017-18 <br> N = 67 |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Factor | Excellent | Good | Fair | Poor | No <br> Response |
| Your child's progress toward <br> graduation | $34.3 \%$ | $32.8 \%$ | $17.9 \%$ | $9.0 \%$ | $6.0 \%$ |
| School assistance in helping my <br> child and me understand and plan <br> for my child's education after high <br> school | $38.8 \%$ | $29.9 \%$ | $14.9 \%$ | $9.0 \%$ | $7.5 \%$ |

Parental satisfaction was also evident in the following results.

- Most (91.4\%) parents would recommend this school to other parents.
- Most (80.9\%) parents said will send their child to the school next year, $7.4 \%$ said they will not send their child to the school next year, and $10.9 \%$ were not sure.
- When asked to rate the school's overall contribution to their child's learning, a majority ( $85.9 \%$ ) of parents rated the school's overall contribution as excellent or good.

When asked what they liked most about the school, responses included the following.

- Academics
- Communication
- Care and support of staff

When asked what they like least about the school, responses included the following.

- Bussing/transportation
- Behavior issues/discipline
- Lack of activities


## Appendix G

## Student Survey Results

At the end of the school year, 120 students in seventh and eighth grade completed an online survey about their school. Survey responses were generally positive (Table G1).

- Most (94.2\%) students said they had improved their reading ability, and $74.2 \%$ said that their math abilities had improved.
- Most (90.0\%) students said MAS has afterschool activities.
- Most (82.5\%) students said the teachers help them succeed in school and that the marks they get on classwork, homework, and report cards are fair (77.5\%).

Some areas deserving attention from the school leadership and its staff include the following.

- Only $29.2 \%$ of the students agreed or strongly agreed that students at MAS respect each other and their different points of view.
- Less than half (40.8\%) of seventh- and eighth-grade students said that school rules are fair, and just over half (55.0\%) said that teachers at MAS respect students and their different points of view.

| Table G1 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science Elementary/Junior Academy Student Survey$\begin{aligned} & \text { 2017-18 } \\ & \mathrm{N}=120 \end{aligned}$ |  |  |  |  |  |  |
| Item | Strongly Agree | Agree | Neither Agree nor Disagree | Disagree | Strongly Disagree | No Response |
| I like my school. | 20.0\% | 50.0\% | 15.0\% | 10.0\% | 4.2\% | 0.8\% |
| My reading/writing skills have improved. | 42.5\% | 51.7\% | 2.5\% | 0.0\% | 0.8\% | 2.5\% |
| My math skills have improved. | 39.2\% | 35.0\% | 16.7\% | 3.3\% | 2.5\% | 3.3\% |
| I regularly use computers/tablets in my schoolwork. | 25.8\% | 42.5\% | 20.0\% | 5.8\% | 4.2\% | 1.7\% |
| The school rules are fair. | 15.8\% | 25.0\% | 29.2\% | 14.2\% | 14.2\% | 1.7\% |
| The teachers at my school help me to succeed in school. | 30.0\% | 52.5\% | 10.0\% | 5.0\% | 0.8\% | 1.7\% |
| I like being in school. | 25.0\% | 35.8\% | 20.8\% | 8.3\% | 8.3\% | 1.7\% |
| I feel safe in school. | 25.0\% | 42.5\% | 16.7\% | 7.5\% | 5.8\% | 2.5\% |


| Table G1Milwaukee Academy of ScienceElementary/Junior Academy Student Survey2017-18$\mathrm{N}=120$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| Item | Strongly Agree | Agree | Neither Agree nor Disagree | Disagree | Strongly Disagree | No Response |
| The marks I get on classwork, homework, and report cards are fair. | 23.3\% | 54.2\% | 13.3\% | 6.7\% | 1.7\% | 0.8\% |
| My school has afterschool activities (e.g., field trips, clubs, computers). | 54.2\% | 35.8\% | 4.2\% | 2.5\% | 1.7\% | 1.7\% |
| My teachers talk with me about high school plans. | 30.0\% | 36.7\% | 11.7\% | 10.8\% | 9.2\% | 1.7\% |
| The students at my school respect each other and their different points of view. | 5.8\% | 23.3\% | 35.0\% | 15.0\% | 18.3\% | 2.5\% |
| Teachers at my school respect students and their different points of view. | 20.8\% | 34.2\% | 20.8\% | 11.7\% | 10.8\% | 1.7\% |

At the end of the school year, 71 students in the eleventh and twelfth grades completed an online survey about their school.

High school survey responses were mixed (Table G2).

- $\quad$ Nearly three quarters (73.2\%) of students said they had improved their reading ability, $63.4 \%$ said that their math abilities had improved, and $67.6 \%$ said that they regularly use computers/tablets in their schoolwork.
- Most (70.4\%) students said the teachers expect that they will continue their education after high school, and 66.2\% indicated that they plan to enroll in a postsecondary program after high school.
- Most (67.6\%) students agreed or strongly agreed that this school is important to them.

Some areas deserving attention from the school leadership and its staff include the following.

- Only $25.4 \%$ of the students agreed or strongly agreed that teachers at MAS respect students' different points of views, and $35.2 \%$ of students agreed or strongly agreed that teachers at MAS respect students.
- Less than one third (31.0\%) of students indicated that MAS offers enough classes and activities to keep me interested in school; $31.0 \%$ said that discipline is fairly enforced; and $36.7 \%$ said that they like being in school.

| Table G2 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Milwaukee Academy of Science } \\ \text { High School Student Survey } \\ \text { 2017-18 } \\ \mathrm{N}=71 \\ \hline \end{gathered}$ |  |  |  |  |  |  |
| Question | Strongly Agree | Agree | Neither Agree nor Disagree | Disagree | Strongly Disagree | No Response |
| This school is important to me. | 22.5\% | 45.1\% | 21.1\% | 8.5\% | 2.8\% | 0.0\% |
| My English/writing skills have improved. | 23.9\% | 49.3\% | 22.5\% | 2.8\% | 1.4\% | 0.0\% |
| My math skills have improved. | 26.8\% | 36.6\% | 12.7\% | 12.7\% | 9.9\% | 1.4\% |
| I regularly use computers/tablets in my schoolwork. | 29.6\% | 38.0\% | 16.9\% | 11.3\% | 4.2\% | 0.0\% |
| Discipline is enforced fairly at my school. | 7.0\% | 23.9\% | 19.7\% | 21.1\% | 25.4\% | 2.8\% |
| I like being in school. | 5.6\% | 31.0\% | 26.8\% | 19.7\% | 16.9\% | 0.0\% |
| I feel safe in school. | 14.1\% | 46.5\% | 25.4\% | 5.6\% | 8.5\% | 0.0\% |
| The grades I get on classwork, homework, and report cards are fair. | 14.1\% | 32.4\% | 32.4\% | 7\% | 14.1\% | 0.0\% |
| My school offers enough classes and activities to keep me interested in school. | 11.3\% | 19.7\% | 19.7\% | 28.2\% | 21.1\% | 0.0\% |
| The adults at my school help me understand what I need to do in order to succeed in school. | 18.3\% | 33.8\% | 33.8\% | 4.2\% | 8.5\% | 1.4\% |
| The adults in my school help me develop goals that challenge me academically. | 23.9\% | 32.4\% | 26.8\% | 9.9\% | 7\% | 0.0\% |
| Teachers at my school respect students. | 8.5\% | 26.8\% | 33.8\% | 16.9\% | 14.1\% | 0.0\% |
| Teachers respect students' different points of view. | 5.6\% | 19.7\% | 40.8\% | 26.8\% | 7.0\% | 0.0\% |
| My school has helped me develop a high school graduation plan. | 21.1\% | 36.6\% | 16.9\% | 19.7\% | 4.2\% | 1.4\% |


| Table G2 <br> Milwaukee Academy of Science <br> High School Student Survey <br> 2017-18 <br> N = 71 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Question |  |  |  |  |  |  |
|  | Strongly <br> Agree | Agree | Neither <br> Agree nor <br> Disagree | Disagree | Strongly <br> Disagree | No <br> Response |
| Teachers expect that I will <br> continue my education <br> after high school <br> graduation. | $40.8 \%$ | $29.6 \%$ | $11.3 \%$ | $4.2 \%$ | $11.3 \%$ | $2.8 \%$ |
| l plan to enroll in a <br> postsecondary program <br> after high school. | $36.6 \%$ | $29.6 \%$ | $18.3 \%$ | $11.3 \%$ | $2.8 \%$ | $1.4 \%$ |

When asked what they liked best about the school, elementary school students said the following.

- $\quad$ Supportive teachers working to ensure every student gets the help they need
- Assistance provided to prepare students to succeed in high school and college
- Afterschool activities and academic activities, especially field trips

High school students said the following.

- $\quad$ Supportive teachers and rigorous curriculum preparing students for college
- Afterschool activities, especially field trips and sports
- Family-like environment and close relationships with friends

When asked what they liked least, elementary school students said the following.

- Lunch food (expired milk and underprepared meat)
- Live point system with unnecessarily many rules and inconsistent standard of taking away points
- Uniform policy

High school students said the following.

- Lack of interesting extracurricular activities and trips
- Lack of students' voice
- Unfair discipline


## Appendix H

## Teacher Interview Results

In the spring of 2018, CRC interviewed 28 teachers regarding their reasons for teaching at MAS and solicited feedback on their overall satisfaction with the school. Interviews included classroom teachers from all grade levels from K4 through high school as well as many specialties including English, history, math, special education, science, social studies, physical education, and technology.

The teachers interviewed had been teaching/working in schools for an average of seven years. The number of years at MAS ranged from one to 16 years.

Of staff, $14.3 \%$ rated the school's overall progress in contributing to students' academic progress as excellent, $60.7 \%$ rated it as good, and $25.0 \%$ rated it as fair. Nearly two thirds (64.3\%) of teachers listed the school's progress toward becoming a high-performing school as excellent or good.

Two thirds (67.9\%) of teachers agreed or strongly agreed that the school has clear teacher performance assessment processes, and nearly as many (60.7\%) were satisfied with the performance assessment criteria (Table H1).

| Table H1 <br> Milwaukee Academy of Science <br> Teacher Performance Assessment <br> 2017-18 <br> $\mathbf{N ~ = 2 8}$ |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Question | Strongly <br> Agree | Agree | Neutral | Disagree | Strongly <br> Disagree |
| The school has a clear teacher <br> performance assessment process | $17.9 \%$ | $50.0 \%$ | $21.4 \%$ | $10.7 \%$ |  |
| I am satisfied with my school's <br> teacher performance assessment <br> criteria | $14.3 \%$ | $46.4 \%$ | $32.1 \%$ | $7.1 \%$ | $0.0 \%$ |
| Student academic performance is an <br> important part of teacher assessment | $25.0 \%$ | $50.0 \%$ | $17.9 \%$ | $7.1 \%$ |  |

Staff at MAS seem to have a favorable view of school climate. Most (80.8\%) staff agreed or strongly agreed that staff respect students and their points of view, and $85.7 \%$ agreed or strongly agreed that staff typically work well together. The one area that received lower ratings was encouraging all families to become involved in school activities-only $65.3 \%$ of staff interviewed agreed or strongly agreed with that statement (Table H2).

| Table H2 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science School Climate$\begin{gathered} 2017-18 \\ \mathrm{~N}=28 \\ \hline \end{gathered}$ |  |  |  |  |  |
| Question | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| Adults who work in this school respect students and their different points of view* | 22.2\% | 55.6\% | 22.2\% | 0.0\% |  |
| Staff at this school typically work well with one another | 28.6\% | 57.1\% | 7.1\% | 7.1\% | 0.0\% |
| Staff at this school encourage all families to become involved in school activitiest | 38.5\% | 26.9\% | 30.8\% | 3.8\% |  |

*n=27
$\dagger \mathrm{n}=26$

When asked to rate the importance of various reasons for continuing to teach at the school, nearly all teachers ( $96.4 \%$ ) agreed that general atmosphere, class size, administrative leadership, and colleagues were very or somewhat important reasons for continuing to teach at the school (Table H3).

Table H3

| Reasons for Continuing to Teach at Milwaukee Academy of Science$\begin{gathered} \text { 2017-18 } \\ \mathrm{N}=28 \\ \hline \end{gathered}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Reason | Very Important | Somewhat Important | Somewhat Unimportant | Not at All Important |
| Financial considerations | 21.4\% | 64.3\% | 14.3\% | 0.0\% |
| Educational methodology/ curriculum approach | 39.3\% | 39.3\% | 21.4\% | 0.0\% |
| Age/grade level of students | 64.3\% | 28.6\% | 3.6\% | 3.6\% |
| Discipline practices/procedures | 42.9\% | 39.3\% | 17.9\% | 0.0\% |
| General atmosphere | 75.0\% | 21.4\% | 3.6\% | 0.0\% |
| Class size | 53.6\% | 42.9\% | 0.0\% | 3.6\% |
| Administrative leadership | 64.3\% | 32.1\% | 3.6\% | 0.0\% |
| Colleagues | 57.1\% | 39.3\% | 3.6\% | 0.0\% |
| Students | 64.3\% | 28.6\% | 3.6\% | 3.6\% |

CRC asked teachers to rate the school's performance across several measures. Areas with the highest ratings (ratings of excellent or good) included student academic performance and their own performance as a teacher. The areas that received the most "fair" or "poor" ratings were parent involvement and adherence to discipline policy (Table H4).

| Table H4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Milwaukee Academy of Science School Performance Rating$\begin{gathered} 2017-18 \\ N=28 \end{gathered}$ |  |  |  |  |
| Area | Excellent | Good | Fair | Poor |
| Class size/student-teacher ratio | 17.9\% | 42.9\% | 39.3\% | 0.0\% |
| Program of instruction | 7.1\% | 57.1\% | 21.4\% | 14.3\% |
| Shared leadership, decision making, and accountability | 7.1\% | 32.1\% | 50.0\% | 10.7\% |
| Professional support/development opportunities | 3.6\% | 32.1\% | 60.7\% | 3.6\% |
| Progress toward becoming a high-performing school | 17.9\% | 46.4\% | 32.1\% | 3.6\% |
| Students' academic progress | 3.6\% | 75.0\% | 17.9\% | 3.6\% |
| Adherence to discipline policy | 3.6\% | 28.6\% | 28.6\% | 39.3\% |
| Instructional support | 14.3\% | 42.9\% | 39.3\% | 3.6\% |
| Parent/teacher relationships | 10.7\% | 60.7\% | 21.4\% | 7.1\% |
| Teacher collaboration to plan learning experiences | 25.0\% | 32.1\% | 32.1\% | 10.7\% |
| Parent involvement | 0.0\% | 28.6\% | 53.6\% | 17.9\% |
| Your performance as a teacher | 3.6\% | 75.0\% | 21.4\% | 0.0\% |
| Administrative staff's performance | 7.1\% | 57.1\% | 28.6\% | 7.1\% |

When asked to name two things they liked most about the school, teachers noted the following.

- $\quad$ Supportive and committed colleagues
- Relationships with students
- The school's mission: closing achievement gap and help students make progress

Things teachers liked least about the school included the following.

- Lack of follow through with behavioral issues and inconsistency with handling discipline
- Lack of accountability
- Administrative decisions

Teachers also identified barriers that could affect their decision to remain at the school. Some examples include:

- Lack of effective discipline to control students' behavioral problems
- Lack of support and incentive to improve from administration
- Stagnated in the process of becoming a professional school
- Family issues


[^0]:    ${ }^{1}$ See Appendix A for a list of each education-related contract provision, page references, and a description of whether each provision was met.

[^1]:    ${ }^{2}$ This information was taken from the school's city charter application and annual interview sessions.
    ${ }^{3}$ Compass Learning is a computer-based program that matches learning activities to students' MAP scores.

[^2]:    ${ }^{4}$ This information is taken from the school's website and its original application to the City of Milwaukee.

[^3]:    ${ }^{5}$ This requirement is articulated in the 2017-18 Student and Parent High School Handbook.
    ${ }^{6}$ This rate excludes teachers who were at MAS at the end of the 2016-17 school year but were not offered contracts for the 2017-18 school year because of either unacceptable performance or the elimination of their instructional position; it also excludes teachers who moved out of the city for family reasons. Returning teachers had been at the school for between one and 16 years.
    ${ }^{7}$ There were also two special education aides who assisted teachers.

[^4]:    ${ }^{8}$ The special education coordinator and library media specialist positions are excluded from staff return and retention rates.
    ${ }^{9}$ The average length of service was 3.8 years for MAS teachers, 2.5 years for principals/assistant principals, and 5.7 years for other administrative staff.
    ${ }^{10}$ The material in this section was extracted from pages 24 and 25 of MAS's application to the city to be authorized as a charter school in July 2008 and from the 2017-18 Staff Handbook.

[^5]:    ${ }^{11}$ All information in this section is available in the school calendar; MAS provided CRC with a copy of the school calendar at the beginning of the school year.
    ${ }^{12}$ Examples include science club; job/career club; basketball; fitness; cheerleading; dance; career club; self-defense; Project Empower Nova; and Personal Responsibility, Empathy, Awareness, Respect, Leadership, and Respect (PEARLS) for Teen Girls, Inc.

[^6]:    ${ }^{13}$ This information was extracted from MAS's charter school application and the student and parent handbooks for the 2017-18 school year.

[^7]:    ${ }^{14}$ One of the MAS eighth-grade graduates enrolled in Wauwatosa East High School; one enrolled in Martin Luther High School; one enrolled in West Allis Nathan Hale High School; and three were unsure of their MAS re-enrollment status.

[^8]:    ${ }^{15}$ There were 579 students in the elementary academy, 240 in the junior academy, and 238 in the high school.
    ${ }^{16}$ A total of 19 students enrolled and 49 withdrew from the elementary academy, eight enrolled and 25 withdrew from the junior academy, and five enrolled and 34 withdrew from the high school.

[^9]:    ${ }^{17}$ Includes students with identified special education needs who qualified and were not dismissed at evaluation.

[^10]:    ${ }^{18}$ The third Friday of September is considered the beginning of the school year for student tracking purposes.
    ${ }^{19}$ The combined retention rate for the elementary and junior academies was $91.3 \%$.

[^11]:    ${ }^{20}$ Of the 732 students in K4 through seventh grade who were enrolled at the end of the 2016-17 school year, 624 (85.2\%) were enrolled on the third Friday of September 2017. Of the 159 students who were enrolled as ninth, tenth, or eleventh graders at the end of the 2016-17 school year, 128 ( $80.5 \%$ ) returned for the 2017-18 school year.

[^12]:    ${ }^{21}$ The combined attendance rate for students in K4 through eighth grade was $91.8 \%$.
    ${ }^{22}$ Conferences with any teacher-at the school, via phone, or at the student's home-were counted in the participation rate.

[^13]:    ${ }^{23}$ Count includes spring lowercase letter and sound tasks for all students who completed those tasks.
    ${ }^{24}$ For more information about MAP assessments, visit https://www.nwea.org/.

[^14]:    ${ }^{25}$ Based on results of a 2015 Northwest Evaluation Association normative study: https://www.nwea.org/content/uploads/2015/11/Normative-Data-2015.pdf

[^15]:    ${ }^{26}$ All but five students who enrolled in MAS after the year's start were given the SRI reading assessment within 60 days.
    ${ }^{27}$ For more about the SRI, see:
    http://teacher.scholastic.com/products/product_info/pdf/SRI_Research\%20Summary_Revised.pdf

[^16]:    ${ }^{28}$ The school tested math skills (using the Wide Range Achievement Test) for all but four students who enrolled after the beginning of the year within 60 days of enrollment.

[^17]:    ${ }^{29}$ This grade-level promotion schedule reflects the credits needed at each grade level to graduate in four years. IEPs for some special education students indicate the student will need more than four years of study to graduate. These students are promoted based on the following credit requirements: 4.5 credits to move from ninth to tenth grade, nine credits to move from tenth to eleventh grade, 13.5 credits to move from eleventh to twelfth grade, and 22 credits to graduate.

[^18]:    ${ }^{30}$ Information about the PALS assessments taken from https://palsresource.info/wisconsin/ and https://pals.virginia.edu/; for more information, visit these sites.

[^19]:    ${ }^{31}$ Information taken from the Wisconsin DPI website. For more information, visit http://dpi.wi.gov/assessment/forward.

[^20]:    ${ }^{32}$ For more information about ACT Aspire and ACT Plus Writing benchmarks, see the ACT Aspire website (https://www.discoveractaspire.org/) and the ACT website (http://www.act.org/)

[^21]:    ${ }^{33}$ One eleventh grader completed the ACT Aspire instead of the ACT.

[^22]:    ${ }^{34}$ Nine (25.7\%) of the 35 students who graduated this year received a composite score of 21 or higher on this year's ACT.

[^23]:    ${ }^{35}$ Prior to 2014-15, schools used the ACT Explore for ninth graders, the ACT Plan for tenth graders, and the ACT for eleventh and twelfth graders; beginning in 2014-15, ninth and tenth graders took the Aspire instead of the Explore or Plan. Aspire benchmarks were created by concording Aspire scores with the Explore/Plan benchmarks. Those benchmarks will be used until ACT publishes updated Aspire benchmarks based on Aspire results.

[^24]:    ${ }^{36}$ This method is used by CRC to examine student progress in the schools chartered by the city

[^25]:    ${ }^{37}$ Of the 981 students enrolled at the end of the school year, $78.7 \%$ were in $K 4$ through eighth grades and $21.3 \%$ were in high school. Those percentages were used to calculate the weighted scorecard percentages.

[^26]:    ${ }^{38}$ Students who meet the summed score benchmark have achieved a level of minimum competency and can be expected to show growth given regular classroom literacy instruction. It does not guarantee that the student is at grade level. Information from https://palsresource.info/.

[^27]:    ${ }^{39}$ The CSRC will not have year-to-year achievement measurements for students in K4 and K5.
    ${ }^{40}$ Includes only students who advanced a grade level from last year to this year.

[^28]:    ${ }^{41}$ Students who arrive before 10:45 a.m. are in attendance at least $67 \%$ of the entire school day.

[^29]:    ${ }^{42}$ Includes only students who advanced a grade level from last year to this year.

[^30]:    ${ }^{43}$ 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. Some special education students' individualized education programs indicate that they will need more than four years of study to graduate. However, these students are promoted for this school year from ninth to tenth grade with 4.5 credits, tenth to eleventh grade with 9.0 credits, and eleventh to twelfth grade with 13.5 credits. All special education students are required to accumulate 22.0 credits to graduate from MAS.
    ${ }^{44}$ These Lexile score increases would indicate that students in these respective grade levels made one year of progress in the acquisition of comprehension and vocabulary skills.

[^31]:    ${ }^{45}$ The math courses offered to high school students include algebra, geometry, advanced algebra, advanced algebra/trigonometry, pre-calculus, and statistics. Not all eleventh- and twelfth-grade students are enrolled in a math class. Some students have already completed the requirement to earn four credits in math prior to graduation; students not enrolled in a math class during the school year will not be tested.
    ${ }^{46}$ The school will provide scores for students enrolled in the same math course for the entire school year.

[^32]:    ${ }^{47}$ Subtests include English, math, reading, science, and writing.

[^33]:    ${ }^{48}$ MAS provided documentation of additional graduates which, if accepted by DPI, will raise their 2016-17 graduation rate to $92.6 \%$.

