



*"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 post-secondary level."*

#### About the Milwaukee Academy of Science (MAS)...

- 1) MAS is a **STEM school with an emphasis on Science, Technology, Engineering and Mathematics**. Students in all grades are engaged in experiential learning opportunities related to STEM.
- 2) Established in 2000, we are in our **16<sup>th</sup> year** and chartered by the City of Milwaukee.
- 3) **Approximately 1,075 students are currently enrolled** for the 2017-2018 school year – from four year old kindergarten through 12<sup>th</sup> grade.
- 4) Over 94% of MAS students qualify for free or reduced lunch, indicating many of our children are living in poverty.
- 5) Approximately 16% of MAS students have special education needs.
- 6) **100% of the graduating students were accepted into post-secondary schools and universities.**
- 7) MAS has an extended academic year – August 17 – June 9<sup>th</sup>. This is approximately two weeks longer than the traditional public school year.
- 8) 100% of our instructional staff holds a Wisconsin DPI license to teach our scholars.

#### **Strengths**

- ❖ MAS is a K4-12<sup>th</sup> grade school, allowing us to take ownership of the educational pathway and success of our children.
- ❖ Our STEM focus aligns with one of the largest sectors of the future job market. STEM jobs are expected to grow 17% compared to 9.8% for non-STEM jobs by 2018.
- ❖ Rigorous curriculum and requirements: For example, our high schoolers are required to fulfill six science credits, compared to three for non-STEM schools and four units of math with at least one being advanced math (Statistics, Pre-Calculus or Calculus).
- ❖ Proven performance results: **MAS graduates earned ACT scores that were among the highest in Milwaukee.** In 2016, 1 in 4 seniors received full scholarships to college.

#### **Challenges**

- ❖ Our children live in environments that are plagued with the consequences of poverty; under or unemployed parents, single or non-custodial heads of households, crime and a general lack of resources that help children thrive.
- ❖ **Unlike many other high-performing selective schools, MAS accepts all children.**
- ❖ As a 2R charter school, we receive less per pupil funding from the state of Wisconsin than other public schools.
- ❖ Over \$800,000 is paid for transportation costs without reimbursement.
- ❖ Currently, MAS students are coming from 21 different zip codes.



# MILWAUKEE ACADEMY OF SCIENCE

2000 W. Kilbourn Avenue, Milwaukee, WI 53233 • (414) 933-0302 • [milwaukeeacademyofscience.org](http://milwaukeeacademyofscience.org)

November 30, 2017

Dear members of the Steering and Rules Committee:

In July of 2016, I gladly accepted the role of Chief Executive Officer at the Milwaukee Academy of Science (MAS). For 18 months, I have worked with the exceptional students and staff at the school and am more excited than ever to lead this school into its charter renewal year.

One of the first students I met in the parking lot at MAS, Dontae, has a story that demonstrates why I believe this work is so important. At the time, Dontae was five years old. His mother struggles with substance abuse and throughout the year, she would forget she was even a mother, leaving young Dontae at the school well into the evening. Several times we had to drop him off at the police station after 8pm. Yet, Dontae was nothing but smiles and would even charm the police officers as he waited for a ride home.

The world would suggest that Dontae will not lead a long, prosperous life based on his circumstances, even just his zip code. However, Dontae, and students from similar backgrounds, will be successful at MAS because of the love, support, and academic rigor we provide. I believe that Dontae will graduate from MAS. The fact that we are a K4-12<sup>th</sup> grade school and can provide a continuous, quality education for kids like Dontae in Milwaukee is one of the main reasons I chose to join the team at MAS.

In evaluating the school, please consider the following achievements:

- Class of 2017 Alum, David Washington, attends Northwestern University on a full scholarship. MAS provided him opportunities to attend math courses at Marquette University. Class of 2016 Alum, Reiauna Taylor, attends UW-Madison on a full scholarship and continues to work on her project from senior year with researchers from the Medical College of Wisconsin.
- 100% of our seniors graduated, were accepted for college/post-secondary education, and earned over \$600,000 in scholarships.
- MAS has earned four first-time grants in the last twelve months, totaling over \$170,000, from Kohl Philanthropies, Bader Philanthropies, the Northwestern Mutual Foundation, and the Forest County Potawatomi Foundation.

Attached you will find letters of support from some of our most valued community partners. The new grants and partnerships have brought creative and engaging STEM-related opportunities. These engaging activities, along with a newly created after school and summer program and a caring, competent staff, will help us become Milwaukee's preferred school.

Thank you in advance for reviewing the attached information and your continued support in improving educational outcomes for students in Milwaukee.

Sincerely,

Anthony McHenry  
Chief Executive Officer



College of Education  
Office of the Dean

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November 17, 2017

Alderman Ashanti Hamilton  
Chair, Milwaukee Steering and Rules Committee  
City Hall  
200 E. Wells Street—Room 205  
Milwaukee, Wisconsin 53202

Dear Alderman Hamilton:

I'm writing this letter in support of the Milwaukee Academy of Science's upcoming charter renewal by the Milwaukee Steering and Rules Committee. My connection with the school is both as a member of the Education Committee (2014-present) and the Board of Directors (2015-present). Additionally, from my perspective of over 40 years as an educator, I've been impressed with the diligent, student-centered, and data-driven work that's being achieved by the school. Students are showing growth in academics, and student enrollment and retention rates are increasing. In the 2016-2017 academic year, 88% of the high school students persisted to graduation, and those graduates had a 100% acceptance into college, university, technical schools, and/or the military. The school is retaining its teachers at a 98.5% rate, and parent participation within the school is strong.

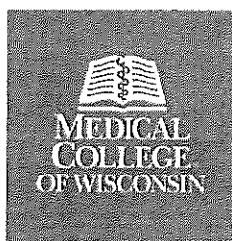
The Milwaukee Academy of Science (MAS) is also benefitting from ongoing and ever-expanding partnerships that are bringing valuable resources to the school in support of student success. Some examples are the following:

- Being a Partners Advancing Values in Education (PAVE) school and in 2017 being selected to participate in the Schools That Can Milwaukee initiative.
- Medical College of Wisconsin (DRIVE program teaming high school students from MAS and Kettle Moraine with MCW scientists to engage in public health research).
- Marquette University (MAS chosen as the 2017 Community Partner of the Year in recognition of its over 20 programming relationships with Marquette University—most notably with the College of Education, College of Health Sciences, the Service Learning Program, the Office of Community Service, and the School of Dentistry. Additionally, the MU Lacrosse Program will be doing a clinic on the essentials of lacrosse this month, in hopes of beginning a lacrosse program at MAS in the future.
- Northwestern Mutual (introducing a financial literacy curriculum that will span K4-12).
- Helen Bader Foundation (will be funding an after-school arts program).
- Forest County Potawatomi Foundation (will fund support for a summer enrichment program).
- Milwaukee Succeeds (supported MAS development of an academic career planning system for students).

Thank you for your consideration and support for Milwaukee Academy of Science's charter renewal. The school's staff and administration are doing well in providing a place of excellence and learning for its students. Please contact me at [victoria.fitzgerald@marquette.edu](mailto:victoria.fitzgerald@marquette.edu) if you have any questions.

Sincerely,

Dr. Victoria Fitzgerald  
Assistant Dean for College Operations  
College of Education, Marquette University



knowledge changing life

Office of the President

To the Steering and Rules Committee:

The Medical College of Wisconsin (MCW) has been intimately involved with the Milwaukee Academy of Science (MAS) since its inception, and I have personally have been involved for the last seven years through my role as president and CEO at MCW, and because of my position on the MAS Board of Directors. Over that time, I have seen the ongoing investment MAS makes in its students and in the community.

In the course of a year, MAS hosts several programs from MCW for its students, but one of the most immersive is the DRIVE program. In 2014, leadership from MAS reached out to MCW, in hopes of supplementing their science curriculum with an experiential learning program that would expose their students to the myriad of opportunities in health and science-related careers.

For the last three years, the DRIVE program has brought MAS juniors and seniors to the MCW campus, where they meet with advisors (research assistants, graduate students, and medical students) and consult with faculty and administrators to develop a research proposal and interventions around areas of science or health that interest them and that impact their daily lives. Students have researched topics as diverse as food allergies, mental health, homelessness, gun violence, food deserts and sexual health. The students develop partnerships with community organizations and academic partners to help guide their research and develop interventions that lead to actual, real-world changes.

This multi-level, multi-faceted approach means that students are doing more than learning how the research process works. They are building professional networks. They are discovering career and educational opportunities they would not otherwise. And most importantly, they are developing the confidence to know they can make a significant difference in their own community and beyond.

That is why it is so critical for MAS to receive its charter renewal. The work they do reaches far beyond the classroom, and gives students the tools to change their lives. Through the partnerships they establish and their unending dedication to each individual student, they play a truly unique and invaluable role in Milwaukee and urban education.

Best regards,

John R. Raymond, Sr., MD  
President and CEO  
Medical College of Wisconsin



November 29, 2017

To: City of Milwaukee Steering and Rules Committee

From: Dave Steele, PAVE President & CEO

Members of the Steering and Rules Committee:

On behalf of PAVE and our board of directors, I offer this letter in support of the renewal of Milwaukee Academy Science (MAS)'s charter with the City of Milwaukee.

PAVE has long supported the growth and development of MAS, and we formalized this relationship in 2012 when MAS became a PAVE Partner School in full standing. As a PAVE Partner School, MAS has access to a variety of PAVE services, including recruited and trained board members through PAVE's Board Corps program, consulting services in board development and strategic planning, and targeted financial support to assist in capacity building.

MAS has taken full advantage of their PAVE partnership. Over the past five years, MAS has made significant organizational progress, building their board of directors, and implementing a new strategic plan. This work has stabilized the school, leading to improved academic outcomes, as evidenced by the school's most recent ranking on the State of Wisconsin's School Report Card.

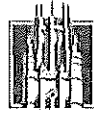
PAVE is fully supportive of the work MAS has done, and has tremendous confidence in their new leader, Anthony McHenry. MAS fills an important niche in Milwaukee's education landscape, and truly stands as an asset for the entire city.

I enthusiastically support MAS's continued status as a City of Milwaukee Charter School.

Sincerely,

A handwritten signature in black ink, appearing to read "DSteele", written over a white background.

Dave Steele  
President & CEO



MARQUETTE  
UNIVERSITY

To Whom it May Concern:

I strongly support the charter renewal for the Milwaukee Academy of Science (M.A.S). M.A.S has been a strong partner with Marquette University since its inception. The partnership has broadened and deepened throughout time, but one thing has remained consistent: a commitment to identifying mutually beneficial relationships between their teachers, staff, and students, and the MU community.

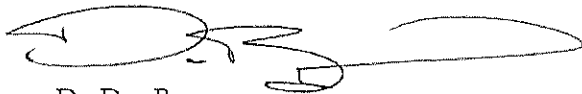
Here are just a few examples of the ways in which we have partnered with M.A.S.:

- Through the College of Education, M.A.S. provides field placement opportunities through which teachers provide MU students opportunities to observe teaching methods.
- The College of Health Sciences invites M.A.S. students for a visit to their cadaver lab annually. This annual visit aligns with the anatomy and physiology classes offered at M.A.S.
- Currently, M.A.S. in partnership with the College of Engineering, is hosting the DIY EKG workshop series, exposing high school students to the technology and use of heart rate monitors, while providing MU students teaching experience.
- Through the Service Learning Program and Office of Community Service-MU Volunteer Corps, MU students have served as tutors and mentors to M.A.S. students.
- Through the School of Dentistry, the Seal-A-Smile Program has been very successful, serving over 200 M.A.S. students annually.
- M.A.S. is in discussion with other colleges at MU to discuss how to deepen their partnerships to expose M.A.S. students to other health and science-related careers.

They have been a wonderful K-12 school in our Near West Side community and throughout the city. They have also been a remarkable partner to Marquette University, and in fact, they recently received the Community Partner Award at the annual Community Engagement Symposium.

Again, I strongly support their charter renewal and would be happy to respond to any questions regarding this letter of support.

Sincerely,



Dr. Dan Bergen  
Executive Director  
Office of Community Engagement

To Whom It May Concern,

Throughout my time spent at the Milwaukee Academy of Science, I have developed an appreciation for my teachers and how they have guided me through my academic career, but also appreciate how they have prepared me for my life. Mr. Paprocki has helped me embrace my love for science, and Mr. Trolio has helped me widen the horizons in my mind. Mrs. Frew has helped me engage in the community and has opened many opportunities for me. These are just a few of the teachers who have helped me along the way and I have many more to thank because they are all wonderful and truly care about the education of all of their students. I also want to acknowledge the tight knit community we have here. Everyone here is family to one another, and we are always looking out for each other. I wouldn't be the person I am today without the help of everyone here at the Milwaukee Academy of Science.

Sincerely,

Aaliyah McAfee

To whom it may concern,

There are many reasons as to why I like MAS. First of all, the way teachers here teach is far different from the way teachers teach at any other school that I've been to. For example, they don't just teach you something one day, and expect you to fully know, or master it that exact moment. They take their time, and simply go over all of the concepts thoroughly. If you don't understand something, they'll gladly help you until you understand it. Another reason why I love this school is because the staff, teachers, and administrators actually care about you and your education. They push you to work harder, and they provide you with resources and opportunities for later life. For example, they have you prepare for college early, with things such as ACT Prep, ACT aspire and even college level work. They also arrange field trips to college fairs, career fairs, and colleges. They provide you with resources for your personal life as well. We have someone here who you can privately talk to about anything, whether it's about something personal, jobs, etc, She'll provide you with the information you need to know to be set. Actually, the entire staff cares about you and treats you like family. There are many more reasons as to why I like MAS, but these are a few. Thank you for your time.

Sincerely,  
Keyanna Edwards



To whom it may concern,

I am a student at Milwaukee Academy of Science in grade 11. I have been enrolled in this school since K-4, and I want to recognise the teachers that have helped me, the students that have opened my eyes to new opportunities and the curriculums that help guide me through my life. Being in this school has made me realise that I'm not alone and that I can make my own decisions. Mr. Paprocki has shown me that I can be who I want to be and I can love being who I am. Mrs. Frew helped me to continue to do what I love to do, and to not give up on what I love. Mr. Troilo has helped me to widen my horizon and has helped me to love everything around me and be aware. I love my being at this school, and I would love for anyone to have the same experiences as I have had in my years of being here. I can't wait to graduate in a year and walk across of the stage at the school that taught me to be who I am.

Sincerely,

*Jordyn Roby*

Jordyn Roby

To whom it may concern,

I am a student at Milwaukee Academy of Science, and I am a 10th grader. I think everyone should come here because we have different classes that no other school has, like technological inquiry. This school also prepares African American students for futures in science and medicine, and no place else is doing that either! The teachers are the best! They try to make teaching fun as well as educational. They begin to prepare you for ACT's and college your freshman year. The teachers made me feel comfortable and capable, and even when I want to give up they push me to my fullest.

Sincerely,

Briyanna Eddins