HOWARD UNIVERSITY

(MS)$^2$ Howard University Middle School of Mathematics and Science

# ANNUAL REPORT 2015-16

Location
405 Howard Place, NW
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Mr. Wendell Johns
Board Chair

(MS)² do something extraordinary™

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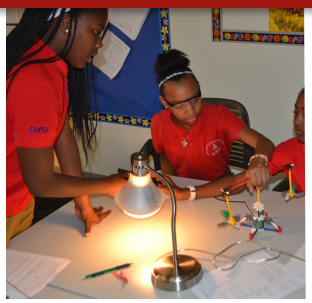
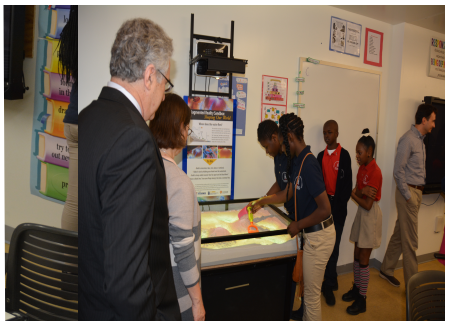
# Annual Report Narrative

## School Description





## Mission Statement

Howard University Math and Science PCS' mission is to provide a sound foundation in all academic subjects, with a concentration in mathematics and science; the intellectual, social and emotional growth of each student will be nurtured, while an appreciation for diversity and sensitivity of all individuals will be encouraged in an enriched educational environment that will prepare students to succeed in high school and beyond.

## Vision Statement

To graduate responsible and productive citizens with strong critical thinking and academic skills by providing a rigorous, dynamic, comprehensive curriculum delivered in partnership with the community, family, and a competent, qualified staff in a safe and caring environment. Teachers and staff work hard to provide the best educational experience for students. Parent partnership is a high priority and is essential

for student success. Howard University Middle Public Charter School has a rich tradition of outstanding student achievement and provides a sound, standards-based education while promoting high moral character of all students.

## Curriculum Design and Instructional Approach

The Howard University Public Charter Middle School of Mathematics and Science is committed to academic excellence or all students. The inquiry- and standards-based curriculum offered is designed to excel students in the areas of mathematics and science and to connect and integrate these disciplines into all core subjects. The educational framework is build on a curriculum supported by problem-solving, critical thinking, and scientific inquiry. Further, commitment to developing the "whole" student that balances intellectual development with psychological, social, and emotional growth is a priority and evident within the learning environment.

This actively engages students in critical thinking activities that develop their problem-solving skills, creativity, and academic confidence. Teachers paint an intellectual picture throughout the school year that promotes in-depth and enduring knowledge and understanding of mathematics and science. Teachers use an interdisciplinary, pedagogical approach that encourages students to make connections to the mathematics and/or science concepts. Cross curricular planning allows the science and/or mathematical theme to flow naturally throughout the day as students move from course to course, helping them gain deeper understanding and often addresses the importance of why they are learning the content.

The curriculum is intended to reach all students regardless of skill levels, learning styles, personalities and cultures, and to prepare them to meet and exceed the *learning standards* requirements for the District of Columbia. Students are encouraged to accept more rigorous academic challenges through advanced coursework through the incorporation of individual projects, activities, games, competitions and computer-assisted technologies. $(MS)^2$ teachers were charged with customizing the learning environment to accommodate the individual learner. $(MS)^2$ teachers facilitate multi-level, heterogeneous, cooperative learning, peer-coaching classrooms that emphasize the importance of relationships between the teacher and the students, and among the students themselves.

$(MS)^2$ is a school that has fully integrated technology in the delivery of instruction. $(MS)^2$ teachers use Google for Education. Google for Education is a suite of tools designed to assist educators in collaborating with each other and with their students. Using Google for Education, teachers at $(MS)^2$ have the ability to manage, personalize, and distribute curriculum through the Google suite of applications. Collaboration among teachers has greatly increased, and students are becoming more engaged in learning through Google classroom.

# Core Subjects

## Reading/Language Arts Course Descriptions

6th Grade English/Language Arts

In this course, students explore works of literature through various literary genres (short story, non-fiction, novel, poetry, biography). Sixth grade students further develop skills essential to language development and the mastery of English language written and oral conventions. They strengthen their reading comprehension skills and their ability to analyze literary and informational texts. They develop solid research and writing skills, and they broaden their usage of electronic media for literary purposes.

7th Grade English/Language Arts

In this course students explore various genres of literature, with special emphasis being placed on world literature texts from ancient to modern times. Emphasis is placed on analyzing literature from a cultural and historical context. Students read imaginative, expository, persuasive, and informational texts of increasing complexity, and gain an understanding of the elements and structure of different genres.

8th Grade English/Language Arts

In this course, students explore works of literature through various literary genres. Eights grade students further develop skills essential to language development and the mastery of English language conventions, reading comprehension, analysis of literary and informational texts, research and writing, and the usage of electronic mediums for literary purposes.

## Reading Intervention Course Description

STEM Literacy

This course is an interactive and cooperative learning experience, in which students learn to develop and strengthen self-regulating reading behaviors. Instruction for the course is driven by student interest, student background knowledge and science, technology, engineering and mathematics curriculum at $(MS)^2$. Many different reading strategies are introduced and students adopt those that meet their needs. Additionally, students develop comprehension, vocabulary, and writing skills by engaging with text written at an appropriate instructional level. Students are challenged to transfer reading skills and strategies to the curriculum or all subjects. Multiple assessments (e.g. NWEA, portfolios, Gates-MacGinitie) are used to assess student's progress over time.

## Mathematics Department Course Descriptions

6th Grade Mathematics – Pre-Algebra

Sixth graders begin their study by addressing factors, prime and composite numbers as a prerequisite for subsequent units on data analysis, rational numbers, geometry, and probability. Students work with angles, which provides them with a solid background for later work with surface area and volume of solid figures and other work with two and three-dimensional figures. Fluency with rational numbers dominates several advisory groups. By the end of the year, students are ready to begin their formal study of algebraic concepts i.e. operating with unknowns, and working with negative and positive numbers in a variety of operations.

Algebra I for 7th and 8th Grade

Algebra I provides the opportunity for students to learn algebra as a style of thinking for formalizing patterns, functions, and generalizations. In this course, students expand previously learned quantitative rational number relationships to include the irrational numbers. The focus is on students becoming proficient in recognizing and working effectively with linear relationships and their corresponding representations in tables, graphs, and equations. Such proficiency also includes competence in solving linear equations, generating equivalent expressions, using formulas, and applying proportionality. Other key algebraic topics include operations with exponents, radicals, polynomials, and rational expressions, solving systems of equations, and an introduction to quadratic equations.

To develop proficiency in symbolic and graphical representations, students use physical models, visual models, and technology. While mathematical skills are addressed, teaching is focused on developing an understanding of concepts in depth, enabling students to apply the mathematical skills and make meaningful connections to life's experiences. The use of graphing calculators is an integral part of the course, allowing for exploration of a variety of approaches to solving problems.

8th Grade - Geometry

This course introduces students to the basic geometry concepts using an inductive approach. Students investigate the concepts of points, lines, planes, and properties of triangles.

## Science Department Course Descriptions

Grade 6 Earth and Space Science

The content emphasis for 6th grade science focuses on Earth and Space Science. Students are actively engaged in space science, the earth's atmosphere, the changing earth, earth's waters, and the earth's surface. In addition to these core elements, the curriculum also stresses laboratory safety, the scientific method, and experimental designs. Students utilize problem solving, critical thinking, time management, and inquiry skills throughout the course.

Grade 7 Life Science

Seventh grade Life Science focuses on biological science. The major goal of the course is for students to actively engage in and develop an understanding of living things, including the human body, patterns in ecosystems, and the cellular dimensions of living systems. In addition to these core elements, the curriculum emphasizes laboratory safety, the scientific method, and experimental designs. Mathematics is integrally related in course instruction to specify precise and general terms when quantitatively observing natural phenomenon. Additionally, students utilize problem solving, critical thinking, and inquiry skills throughout the course.

Grade 8 Physical Science

The content emphasis for 8th grade science is on physical science concepts (chemistry and physics) and technology applications. In addition to these core elements, the curriculum also stresses laboratory safety, the scientific method, and experimental designs. Students will utilize problem solving, critical thinking, time management, and inquiry skills throughout the course.

## Social Studies Department Course Descriptions

6th Grade World Cultures and Geography

In grade 6, students use maps, globes, graphs, and information technologies, such as global positioning systems, to study geography and patterns of land use and culture around the world. They learn to think geographically, and they become aware of the locations and special features of different places. Grade 6 students learn how people and their activities affect the earth's surface. They identify how living in cities or rural areas affect people's social relationships and the kinds of jobs they have. They study important physical relationships, for example earth's relationship to the sun, and the relationship of the earth's climate and ecosystems.

7th Grade World History and Geography: Ancient World

In grade 7, students explore the world outside the United States and North America. They study the origins of human beings in Africa and learn how early societies formed in the Middle East (Mesopotamia), India, and China. These students consider how geography affects the human story, and how societies in different places developed in different ways. Students gain a sense of how people lived long ago, their problems, accomplishments, tools, technology, work, and homes. Grade 7 students also explore the religions, governments, trade, philosophies, and art of these first civilizations, as well as their ideas, which shaped the history of the world.

8th Grade U.S. History and Geography I: Growth and Conflict

In 8th grade, students learn about the United States during the colonial period, and they explore major events and ideas that led to the Revolutionary War. They explore the effect that the war for independence had on other nations, and they examine the basic concepts of American government, such as individual rights and the rule of law. Grade 8 students also learn how America expanded into the West, formed political parties, and experienced other economic and social changes. They learn how conflict between the North and South led to the Civil War, and how the Civil War led to other changes, including the economic and political punishment of the South during Reconstruction.

## Spanish Course Descriptions

Grade 7 and 8 Introduction to Spanish

Using cooperative learning, dialogues, projects, and web-based activities, the course addresses the DC Foreign Language Standards as well as the National Foreign Language Standards, including communication, cultures, connections, comparisons, and communities. Students explore basic grammar concepts via the following themes: The Spanish culture and geography, salutations, introductions, time, and personal information (name, age, likes, dislikes, personality traits, physical characteristics, and family) about themselves and their peers.

## Music Course Descriptions

Grade 6 and 7 Music Appreciation

Students develop an appreciation for music through the introduction of various aspects, including singing, performing on classroom instruments such as the recorder and fretted instruments, reading and notating music, composing, arranging, improvising, listening, and evaluating music and music performances. Students explore the relationship of music to disciplines outside the arts, as well as history and culture.

Grade 8 Music

This course is designed to broaden the arts education opportunities of students, to offer musical experiences beyond those of the traditional performing ensembles, and to provide students with real-world applications of technologies currently in use in the music industry. Instruction includes a combination of lecture, hands-on exploration and creating, guided individual and group projects, and supplemental reading assignments. The course explores sound production, recording and transmission, electronic music composition and arranging, live audio reinforcement, multi-track studio recording, editing, mixing, and mastering. There is also an examination of current legal and ethical issues regarding digital music and the recording industry.

## Physical Education/Health

The Health Education course is designed to enrich the lives of $(MS)^2$ students in a healthy and meaningful way. After this course, students are able to make more informed choices when faced

with everyday life decisions from food intake to violence prevention. This course has been aligned with DC health standards.

### STEM

**Design & Modeling**

Students apply the design process to solve problems and understand the influence of creativity and innovation in their lives. They work in teams to design a playground and furniture, capturing research and ideas in their engineering notebooks. Using Autodesk® design software, students create a virtual image of their designs and produce a portfolio to showcase their innovative solutions.

**Automation & Robotics**

Students trace the history, development, and influence of automation and robotics as they learn about mechanical systems, energy transfer, machine automation, and computer control systems. Students use the VEX Robotics® platform to design, build, and program real-world objects such as traffic lights, toll booths, and robotic arms.

### Computer Skills and Microsoft Academy

Students learn the technology skills that are essential to their success. Students learn essential computing skills that include typing and keyboarding skills as wells as developing a broader understanding of information technology from hardware to software to cloud computing. In the Microsoft Academy, students are trained on the intricacies of the Microsoft Office Suite in preparation for completing the Microsoft Office Certification Exam.

## Brief Description of Key Mission-Related Programs

### The Extended Day Learning Program

The Extended Day Learning Program continues to provide students with the opportunity to engage in exciting and unique activities and clubs designed to target personal interests, learning styles, and/or talents. We offered students a plethora of diverse activities to enhance and support their formal academic education. Since some of the activities and clubs are not specifically mathematics and science based, all teachers and advisors were charged with integrating science and mathematics when feasible. For example, this year, we offered a *mathematics and weaving class* that highlighted the role that mathematics plays in the weaving of various patterns. In addition to extracurricular activities and school clubs, the Extended Day Program also provided several supervised study halls, called Academic Reinforcement. Academic Reinforcement provided both individual and small group tutoring sessions for students in need of intense academic assistance. Also it provided a perfect (in school) environment for students who just wanted a quiet place to study and/or begin their home assignments.

The availability and focus of the Academic Electives in the Extended Day Program will continue to be expanded in the 2016/17 academic year to include aeronautics creative arts; student inventions; and other clubs and activities consistent with the school's focus on mathematics, science and technology.

During the 2015/16 academic year, students were engaged in the following extended day activities:

- ***Architecture Club:*** *To introduce students to the field of architecture and planning by relating architecture to their lives in the District of Columbia.* The curriculum is designed to educate students on the use of architecture while applying the lessons they have learned in mathematics and science. Students learned the importance of design, programming of spaces and design presentation. They are introduced to building materials and how these materials are put together to form structures. The end result provides students the opportunity to think and act like professional architects. Club activities and exercises will include designing projects that will allow students to creatively program spaces to make buildings functional just as professional architects do. Students will learn the use of building codes and how to apply graphical legends to create architectural plans that are compliant with building codes. Students will be able to graphically put a building together from the lessons of building materials (concrete, brick, and wood). Students will visit Howard University's School of Architecture and tour the department. They will experience the undergraduate training on a collegiate level and witness a design presentation from one of the design studios. They will also learn the history of architecture in DC through class trips in which reports will display their learning experience. Finally they will redesign and build the 14th Street Bridge, adding residential, office, and retail space, along with the necessary pedestrian access.

- ***Band***: *To provide students an overview of the basics of music through various instruments.* Students were instructed in reading music and interpreting the notes appropriately using instruments and/or voice. The club promoted students working cooperatively in groups while supporting the advancement of their musical talents.

- ***Broadcast & Digital Media****: To provide students the opportunity to learn the various aspects of video production.* Students learned skills needed to produce a video including, but not limited to, the use of equipment, lighting, positioning, recording, and the writing of scripts. The activity addressed creative thinking skills, encouraged teamwork, and provided students with an enriched learning experience in the world of digital media.

- ***Drama Club***: *To provide students the opportunity to participate in supervised creative dramatic activities culminating in a final production.* Students were exposed to different aspects of theatre production including skits, costume design, set design, and props. The club worked on creative thinking skills, encouraged teamwork, and provided students with enriching learning experiences in the area of performing arts. In addition, the students were exposed to various dramatic works. The club encouraged creativity and also supported discourse around *life* as presented within the content of some of the dramatic works introduced.

- ***Intramural Sports*****:** *To provide students the opportunity to experience a variety of athletic activities including, but not limited to, flag football, bowling, soccer, badminton, and kickball.* The activities promoted skills, such as teamwork, warm-up techniques, appropriate exercise, and understanding of rules for various sports. In addition, students were mandated to always maintain good sportsmanship, a transferable life skill.

- ***MathCounts:*** *To provide students the opportunity to engage in high level problem solving in preparation for the local and national MathCounts Middle School Competition.* Students studied problems in algebra, geometry, probability, measurement and data analysis. The problems are designed so that middle school students can build on the mathematics that they have mastered to solve strategies in creative ways through reasoning and representation. Students worked both in teams and as individuals in preparation for the competition.

- ***Academic Reinforcement***: *To provide students the opportunities to receive direct instruction, both one-on-one or in small groups with content based tutors and teachers.* Students were enabled to address specific problems and receive extra assistance on concepts, skills or even specific assignments. Scholars Hall also provided a safe haven for students who just wanted to study on their own.

- ***Spelling Bee Club***: *To provide students with the skills and etymological understanding of words to support their personal desire to become excellent spellers.* Students engage in the (MS)² Spelling Bee with the goal of being able to compete at the national Spelling Bee competitions.

- ***Robotics:*** *To provide students the opportunity to build and program working robots.* This activity exposed students to several different aspects of robotics using VEX robotics kits and the accompanying software. Students built and programmed working robots.

- ***Yearbook***: *To provide students with the framework and the skills to create a pictorial reflection of the school year.* Students learned all the aspects of composing a yearbook and the skills required to complete these tasks. The yearbook provides a glimpse into the 2015/2016 school year including all Extended Day activities, Parent-Teacher Conferences, daily classroom activities, award ceremonies, and much more.

## Saturday Academy

The Saturday Academy is a special educational program that provided instruction in mathematics, English/language arts, reading and study skills. Sessions were held bi-weekly from October to May. Participation in the Saturday Academic Enrichment Program was mandatory for students who were on *academic probation*. Sessions were held from 9:00 a.m. – 12:00 p.m.

In March and April, the Saturday Academic Enrichment Program's instructional focus was preparing students for the Partnership for Assessment of Readiness for College and Careers (PARCC) standardized tests in mathematics and reading. Analysis of students' pre-performance on internally generated standardized testing materials helped to isolate individual student deficiencies. Teachers were then able to specifically address students' deficiencies in these targeted areas.

The program will continue to emphasize fundamental study skills and academic enrichment activities that focus on reading, mathematics and science during the 2016/17 academic year.

## Summer Academy, Summer Bridge and Summer Camp

(MS)² hosted three distinct programs in the Summer months. From late June through late July, students were enrolled in the *Summer Academy* program, the *Summer Bridge, and a variety of Summer Camp offerings.* Overall the academic programs were designed to improve student's skills and knowledge in the core academic subjects (mathematics, science, and language arts). Students were required to attend the Summer Academy program if they were on academic probation (failed mathematics, English/language

arts, science or social studies). An extended day component was added where students participated in sports, dance, robotics, and swimming. Summer camps provided students with an opportunity to learn computer programming, become entrepreneurs, build and program robots.

## (MS)² and Howard University Liaison Programs

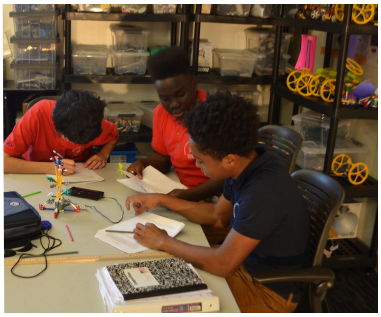
The Howard University Middle School of Mathematics and Science is actively engaged in partnering with numerous schools on the campus of Howard University. These partnerships provide a variety of resources to the staff and students in the middle school. The School of Mathematics provides a professor who is a part time mathematics coach for our teachers. The partnership with the School of Pharmacy yielded a partnership in the National Workforce Development Grant that provided access for 8th grade students to mentor programs and summer enrichment opportunities. The partnership with the School of Education provided student teachers and interns in a variety of subject areas. The partnership with the School of Engineering provided inclusion in the National Society of Black Engineers programs, meetings, conferences and all other benefits of NSBE membership. The partnership with the School of Chemistry and Cornell University provided hands on experiments to our students on various subjects including making ice cream using liquid nitrogen. In SY2016-2017, the partnership with Howard University will expand to include the School of Social Work, and the College of Liberal Arts.

## Parental Involvement

During the 2015-2016 Academic Year we continued to work to encourage parent participation at all levels by sending out regular communication, hosting monthly Parent Principal Partnership (P3) meetings, and providing the infrastructure for monthly Parent Teacher Association meetings and other events. Meetings were held in the evening of every month. Parents were invited to come meet with the Head of School, parent liaison and other (MS)² administrators to ask questions, provide feedback, or simply mingle with other (MS)² community members. In addition, our parent association, the PTA, held its meetings at 6:30 pm on the third Wednesday of every month. As the host school, we ensured that a staff representative was at each meeting to provide updates to the parents on behalf of the teachers and staff, and to report back to the administration and school staff on the various parent concerns and recommendations. We maintained our commitment to work with our parents as partners in the interest of school-wide success. The parents, and the PTA in particular, served as the school's greatest advocates and helped us to set the agenda for the types of changes we needed to make over the summer in order to grow as a school community.

# School Performance





## Performance and Progress

The following describes the extent to which the Howard University Middle School of Mathematics and Science has been successful in achieving it goals and academic achievement expectations as detailed in our charter"

| Goal | Met/Not Met | Evidence |
|---|---|---|
| Goal #1: Students will demonstrate annual improvements in reading. | Met | 56.8% of all students were approaching readiness, an increase of 15.1% as measured by the PARCC exam. 35% of all students demonstrated growth from winter to spring as measured by the NWEA measures of academic progress (MAP) |
| Goal #2: Students will demonstrate annual improvements in mathematics. | Partially Met | 48% of all students were approaching readiness, a decrease of 6.8% as measured by the PARCC exam. 45% of all students demonstrated growth from winter to spring as measured by the NWEA measures of academic progress (MAP) |
| Goal #3: Students will demonstrate annual improvements in science. | Met | 8th Grade Students took the PARRC EOY exam in science however the data has not yet been received |

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| Goal #4: Students will demonstrate science mastery through the presentation of a science project | Met | 99% of students in all grade levels completed and presented a STEM project. |
| Goal #5: Evidence of attainment of the objectives contained in students' individual educational plans | Met | 100% of students with IEPs met their goals for the school year. 67% of students with IEPs demonstrated growth in ELA and mathematics as measured by NWEA Measures of Academic Progress |
| Goal #6: Students will participate in extracurricular activities related to mathematics, science, and technology. | Met | 100% of students actively participated in extended learning activities. Students demonstrated their learning at a culminating program. |
| Goal #7: Full-time academic faculty will participate in professional development training based on the Howard University School of Education teacher needs assessment, classroom observations, academic data, and best practices. | Met | Academic faculty participated in a variety of professional development sessions including Google for Education, Implementing Technology in your classroom, The Responsive Classroom – Understanding Adolescents, Implementing the 4 Square Method of Writing across Curriculum. Discovery education training was provided to ELA and mathematics teachers; teachers participated in |
| Goal #8: (The school) will recruit and retain a highly qualified professional staff of key administrators, teachers, and support personnel. | Partially Met | To be rated as highly-qualified, faculty at DC secondary schools, including (MS)², must have a bachelor's degree, as have all (MS)² faculty members. In addition, DC regulations require that highly-qualified teachers have at least one of the following:<br>• Pass the Praxis II test |

| | | |
|---|---|---|
| | | in their content area;<br>• Have an undergraduate college degree in their specific content area;<br>• Have an advanced degree in the content area;<br>• Have 30 semester hours (undergraduate and graduate combined) in their content area;<br>• Have National Board Certification in the content area; or<br>For the school year, 95% of the faculty and staff at (MS)2 were highly qualified.<br>This goal was not met because the retention rate of faculty and staff was 55% |
| Goal #9: Parents will express satisfaction with the Howard University Middle School of Mathematics and Science programs | Met | Parent satisfaction surveys and responses from parents were favorable. Parents expressed their satisfaction with the culture shift in the school. |
| Goal #10: Students will maintain a minimum of 90 percent attendance rate. | Met | Student attendance rate for the school year was 91.3% which was above the target |
| Goal #11: To exercise fiscal responsibility with regard to all budgetary matters in ways that ensure the Middle School has adequate funds to support the school and implement all of its programs and services. | Met | The audit conducted for budgeted school year successfully demonstrated that the school budget was balanced and the school had more than adequate funds to support the programs and services that the school provides |

## Lessons Learned and Actions Taken

What issues, if any, were encountered in collecting and reporting data for applicable performance management framework(s)? In light of the new frameworks, what changes or improvements will be made in order to remedy these data collection issues?

As in past years, the implementation of the Northwest Evaluation Association (NWEA) assessment tool and the level of performance of the (MS)$^2$ students. The NWEA tool provided the school with the basis for monitoring student growth and provided us with a basis for comparing our students' performance with a set of NWEA-generated national norms. These norms are periodically revised (last revision was 2012) and were published at that time. (MS)$^2$ regularly administers the NWEA battery of tests (5 in total) three times each school year. The test includes reading, language arts, mathematics.
These tests should have been administered to the students at the beginning of the school year, mid-way through the school year in the winter, and in the spring (shortly before the end of the school year.) Due to facility issues at the beginning of the school year, the exams we were only able to administer the exams twice, once in February and again in May. While we did receive good data on student growth, the best scenario will be to administer the exam three times during the coming school year.

Discovery education was not used to prepare students for the PARCC exam. Discovery exams provide a level of rigor and preparation that students need. Discovery will be used in the coming school year.

What student-related issues were identified as a result of the evaluation of the school's performance framework? What program changes or continuances will be implemented as a result of the evaluation of the school's performance?

Mathematics Instruction

The number of mathematics teachers will be increased from four to five. All six grade students will have mathematics twice a day for a total of 120 minutes. 7$^{th}$ and 8$^{th}$ grade students will have mathematics every day. Students who are struggling in mathematics based on NWEA and PARCC scores will have an additional mathematics lab class to provide extra support. Teachers will use a data to adjust instruction so that it address all student needs. Data talks will be focused so that teachers understand how to make the appropriate adjustments to their lessons to address student needs.

Saturday Academy

Saturday Academy will be required for all students whose reading and/or mathematics performance is assessed below grade level and it will be offered to students who are excelling in reading and mathematics as an enrichment program.

Extended Day Activities

Students who perform below grade level in either reading or mathematics will have additional Academic Resource. Most of the STEM classes, however, will continue as a vital activity and an important part of the school day.

What program changes or improvements will be undertaken or are under consideration as a result of the most recent program development or self-study review findings?

Curriculum Review

(MS)² will utilize the Eureka Mathematics Curriculum from Great Minds. ELA Curriculum will use Window and Mirrors, supplemented by Whit and Wisdom both of which are common core aligned. For our struggling readers we supplement the curriculum with Wilson Reading -Just Word.

Data Analysis

(MS)² will utilize the data analysis protocol outlined by Uncommon Schools. Teachers will administer interim exams in all classes, Discovery Education will be used in mathematics and ELA classes. Data will be reviewed and re-teaching will occur in each class. Students will receive their individual data and they will analyze and monitor their own progress. Parents will participate in data talks where they are informed of their students' data and provided with strategies to assist their students at home.

Attendance

(MS)² has implemented a more robust attendance monitoring process that will track students who are truant, students who are habitually late and provide supports to ensure that students are in school each day. Truancy contracts and home visits will be conducted to help students maintain good attendance. Student attendance celebrations will encourage students to attend school each day.

Special Education

(MS)² will implement a focused plan for special education that will be spearheaded by our new special education coordinator. Weekly meetings to discuss student progress and ensure that interventions are being appropriately administered will include teachers and all stake holders. Consistent monitoring of IEP goals as well as making sure that all documentation is update appropriately will occur. Professional development will regularly be provided to all stakeholders to ensure that we are providing the appropriate educational supports to student with disabilities. A special education teacher is assigned to each grade level supervised by our special education coordinator.

Parent Involvement

The (MS)² has implemented the PTA (Parent Teacher Association) in association with the national organization. The benefits of the national affiliation are that the PTA addresses issues that are important to all stakeholders. The (MS)$^{2\ PTA}$ is autonomous however it is supported by the national structure. The (MS)² PTA' s purpose is to make every child's potential a reality by engaging and empowering families and communities to advocate for all the children at (MS)².

Teacher Recruitment and Retention

(MS)² has partnered with OSSE to utilize survey data provided by the New Teacher Project (TNTP). This data will be used analyze satisfaction and guide professional development

needs and supports. (MS)² will continue to celebrate teacher achievements throughout the school year. Teacher retention and recruitment will begin in January after teachers receive their midyear reviews. Teachers will receive continued professional development designed to help them improve in their craft.

## Unique Accomplishments

- Students participated Congressional Black Caucus event
- Students won the DC STEM Fair – first Place
- NFTE Startup Tech Expo App Development Challenge in partnership with Verizon where 3 students won monetary prizes for the apps that they developed
- National Junior Honor Society inducted 31 members in its first year
- 11 students won the National Junior Honor Society Outstanding Achievement Award scholarship of $500 each towards college
- DC Association of Chartered Schools DC STARS recognized an (MS)² 8th grader as "Outstanding Student Scientist".
- Two 8th grade students presented at the Ford Theater Youth Fellowship. They were selected as nation youth fellows, 2 of 30 in the country
- An 8th grade student hosted Stand Up and Speak at the Ford Theater
- Student won 2nd prize in the Links Young Writers Contest
- Our 8th Grade counselor was selected as the School Counselor of the Year for Washington DC by the American School Counselors Association
- NFTE Biz Camp Competition yielded a first and second place winner from our 7th and 8th grade classes
- Partnership with UC Davis provided an Augmented Reality Sandbox in our 6th grade science classroom; the only one in the country.
- Students participated in the Washington Bach Consortium that included filming their participation in the creation of classical music
- School participation in the Howard University Food to Feed drive through the donation of 680 cans goods

## List of Donors*

Wendy Lewis Pace: $500 (12/16/2015)

Frank Ross: $250 (4/28/2015)

Federal Grants: $179,567

Schools Technology Fund: $14, 273.75

Northrop Grumman: $1,000 for STEM Community Science Fest (12/2/2015)

In kind Donations: $10,000

## SY 2015-16 Annual Report Campus Data Report

| Source | Data Point |
|---|---|
| PCSB | LEA Name: Howard University Middle School of Mathematics and Science PCS |
| PCSB | Campus Name: Howard University Math & Science PCS |
| PCSB | Grades served: 6-8 |
| PCSB | Overall Audited Enrollment: 266 |

**Enrollment by grade level according to OSSE's Audited Enrollment Report**

| Grade | PK3 | PK4 | KG | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|
| Student Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
| Grade | 7 | 8 | 9 | 10 | 11 | 12 | Alternative | Adult | SPED* |
| Student Count | 82 | 84 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

*

| STUDENT DATA POINTS | |
|---|---|
| School | **Total number of instructional days: 181**<br>Number of instructional days, not including holidays or professional development days, for the majority of the school.<br>If your school has certain grades with different calendars, please note it. |
| PCSB | **Suspension Rate:** 12.8% |
| PCSB | **Expulsion Rate:** 0.0% |
| PCSB | **Instructional Time Lost to Out-of-School Suspension Rate:** 0.3% |
| PCSB | **Average Daily Attendance:**<br>The SRA requires annual reports to include a school's average daily membership.<br>To meet this requirement, PCSB will provide following verified data points: (1) audited enrollment;<br>(2) mid-year withdrawals; and (3) mid-year entries. **(No action necessary.)** |
| PCSB | **Midyear Withdrawals:** *Validated in mid-August* |
| PCSB | **Midyear Entries:** *Validated in mid-August* |
| PCSB | **Promotion Rate:** 91.9% |
| PCSB (SY1 | **College Acceptance Rates:** *Not applicable* |

| | |
|---|---|
| 4-15) | |
| PCSB (SY14-15) | **College Admission Test Scores:** *Not applicable* |
| PCSB (SY14-15) | **Graduation Rates:** *Not applicable* |
| | **FACULTY AND STAFF DATA POINTS** |
| School | **Teacher Attrition Rate: 38.10%** |
| School | **Number of Teachers:22**<br>"Teacher" is defined as any adult responsible for the instruction of students at least 50% of the time,<br>including, but not limited to, lead teachers, teacher residents, special education teachers, and teacher fellows. |
| School | **Teacher Salary**<br>1. Average: $71, 015<br>2. Range -- Minimum: $51,000 Maximum: $102,000 |

## Appendix A. Staff Roster

| | Last Name | First Name | M.I. | Ethnicity | Race | Gender | Employee Job Title |
|---|---|---|---|---|---|---|---|
| 1 | Agbo-Ola | Adijat | J. | Not Hispanic | Black | F | English Language Arts Teacher |
| 2 | Al-Amin | Hakim | | Not Hispanic | Black | M | Mathematics Teacher |
| 3 | Allen | Robert | Lee | Not Hispanic | Black | M | Associate Dean |
| 4 | Arguleta | Maria | C. | Hispanic | White | F | House Keeping |
| 5 | Bernstein | Kenneth | J. | Not Hispanic | White | M | Social Studies Teacher |
| 6 | Bing-Cotton | Larsharne | D. | Not Hispanic | Black | F | Science Teacher |
| 7 | Boler | Leslie | T. | Not Hispanic | Black | F | Human Resources/ Asst. Business Mgr. |
| 8 | Brammer | Kenneth | J. | Not Hispanic | Black | M | Spanish Teacher |
| 9 | Brown | Michael | O. | Not Hispanic | Black | M | English Language Arts Teacher |
| 10 | Campos | Blanca | | Hispanic | White | F | House Keeping |
| 11 | Christian | Rebecca | | Not Hispanic | Black | F | STEM Literacy Teacher |
| 12 | Clarkson | Giani | V. | Not Hispanic | Black | M | Social Studies Teacher |
| 13 | Cobb | Zalika | J. | Not Hispanic | Black | F | RTI/ Special Education Teacher |
| 14 | Dji | Valery | | Not Hispanic | Black | M | Network Engineer |
| 15 | Edmonds | Tiffany | K. | Not Hispanic | Black | F | Administratie Assistant |
| 16 | Egbuson | Teyedo | V. | Not Hispanic | Black | M | Mathematics Teacher |
| 17 | Ellis | Jazzmine | | Not Hispanic | Black | F | Social Studies Teacher |
| 18 | Fairclough | Jacqueline | M. | Not Hispanic | Black | F | Cafeteria Manager |
| 19 | Falls | Robyn | | Not Hispanic | Black | F | Computer Technology Teacher |
| 20 | Finley | Leslie | P. | Not Hispanic | Black | F | Special Education Director |
| 21 | Hardeen-Persaud | Nilwattie | | Not Hispanic | Black | F | Science Teacher |
| 22 | Harden | Jocelyn | B. | Not Hispanic | Black | F | English Language Arts Teacher |
| 23 | Hines | Claudia | C. | Not Hispanic | Black | F | Business Manager |
| 24 | Hurt | Carletta | S. | Not Hispanic | Black | F | Counselor |
| 25 | Jackson | Beryl | W. | Not Hispanic | Black | F | Mathematics Teacher |

95 percent of the faculty of (MS)2 were determined by OSSE to be highly qualified in SY 2015/2016

## Appendix B. Board Roster

### Mr. Wendell L. Johns
(Chair - Finance Committee)
EVP/CFO, The NHP Foundation (Retired)
wendell.johns@comcast.net
(202) 806-7725

### Dr. Cynthia Winston
(Co-Chair - Academic Affair Committee)
Associate Professor of Psychology  Howard University  Department of Psychology
Howard University
525 Bryant Street, NW
Room N-179, CB Powell Building
Washington DC 20059, USA
202.806.6805
cewinston@howard.edu

### Mr. Frank K. Ross
(Treasurer - Finance Committee, Chair)
Managing Partner, KPMG LLP (Retired)
Distinguished Visiting Professor of
Accounting and Director of the
Center for Accounting Education
202.806.1637
fross10130@earthlink.net

### Dr. Wayne Frederick, M.D., MBA
President
Howard University
202.865.6237 wfrederick@howard.edu

Assistant  Ms. LaRue Barkwell
202.806.2545 (direct)
202.437.4497 (cell)
202.806.2550 (main office)
lbarkwell@Howard.edu

### Ms. Wendy Pace Lewis

(Finance Committee)
Partner KPMG LLP  1021 East Cary Street  Richmond, VA 23219
804.782-4200
wpace@kpmg.com

## Ms. Stenise Sanders, Esq.

**Secretary**
4600 13th Street, NW , Unit 2
Washington, DC 20011
850.264.1139
attyrolle@gmail.com

## Teacher Representative

Ms. Jocelyn Harden
Instructor-ELA
Jocelyn@hu-ms2.org

## Parent Representatives

Ms. Chivonne Battle

# Appendix C. Unaudited Year-end 2015-2016 Financial Statements

**Howard University Public Charter**
**Middle School Of Mathematics and Science**
**2016 Fiscal Year (Unaudited)Profit and Loss Statement**
**as of June 30, 2016**

| | 2016 (Unaudited) |
|---|---|
| **REVENUES** | |
| DC Per capita | $3,539,496.60 |
| Facilities Per Pupil Allocation | $830,965.66 |
| Federal Entitlements | $179,000.00 |
| School Lunch Revenue | $72,575.20 |
| Other Revenue* | $2,035,761.58 |
| **TOTAL REVENUE** | **$6,657,799.04** |
| | |
| **EXPENSES** | |
| Personnel | |
| Salaries | $3,122,941.00 |
| Benefits | $414,444.75 |
| Payroll tax | $269,192.26 |
| Professional Development | $58,719.34 |
| **subtotal: Personnel** | **$3,865,297.35** |
| | |
| **Direct Student Costs** | |
| Supplies/materials/textbooks | $24,120.65 |
| Library & Media Center materials | $9,533.57 |
| Computer and related (student) | $58,702.78 |
| Assessment materials | $12,057.70 |
| Contracted student services | $146,897.85 |
| Student Celebration/Ceremonies | $6,987.62 |
| Summer Program | $15,000.00 |
| Food Service | $80,461.70 |
| Miscellaneous Student Costs | $41,363.97 |
| Student Awards/Gifts/Premiums | $3,643.02 |
| **subtotal: Direct Student Costs** | **$398,768.86** |
| | |
| **Office Expenses** | |
| Office supplies | $25,637.43 |
| Computer hardware & software | $32,715.90 |
| Office equipment rental/maintenance | $8,291.80 |
| Telecommunications | $25,904.42 |
| Printing and Copying | $20,610.89 |
| Postage and Shipping | $2,388.29 |
| Advertising, Marketing | $18,124.80 |
| Membership and Subscriptions | $6,044.55 |

## Appendix D. Approved 2016-17 Budget

Howard University P.C. Middle School
Fiscal Year 2017 Approve Budget
As of April 15, 2016

| | Approved Budget |
|---|---|
| REVENUES | |
| DC Per capita | 3,868,561.00 |
| Facilities Per Pupil Aollocation | $968,440.00 |
| Federal Entitlements | $240,000.00 |
| School Lunch Revenue | $60,000.00 |
| Other Revenue* | $2,410,000.00 |
| TOTAL REVENUE | $7,547,001.00 |
| | |
| EXPENSES | |
| Personnel | |
| Salaries | $3,968,066.00 |
| Benefits | $615,050.23 |
| Payroll tax | $340,000.00 |
| Professional Development | $140,000.00 |
| subtotal: Personnel | $5,063,116.23 |
| | |
| Direct Student Costs | |
| Supplies/materials/textbooks | $100,000.00 |
| Library & Media Center materials | $35,000.00 |
| Computer and related (student) | $100,000.00 |
| Assessment materials | $35,000.00 |
| Contracted student services | $215,000.00 |
| Student Celebration/Ceremonies | $20,000.00 |
| Summer Program | $15,000.00 |
| Food Service | $85,000.00 |
| Miscellaneous Student Costs | $0.00 |
| Student Awards/Gifts/Premiums | $10,000.00 |
| subtotal: Direct Student Costs | $615,000.00 |
| | |
| Office Expenses | |
| Office supplies | $17,000.00 |
| Computer hardware & software | $8,000.00 |
| Office equipment rental/maintenance | $8,500.00 |
| Telecommunications | $30,000.00 |
| Printing and Copying | $26,000.00 |

| | |
|---|---|
| Postage and Shipping | $5,000.00 |
| Advertising , Marketing | $6,500.00 |
| Membership and Subscriptions | $0.00 |
| Temporary Staff | $0.00 |
| **subtotal: Office Expenses** | **$101,000.00** |
| | |
| **Occupancy Expense** | |
| Rent (donated) | $0.00 |
| Utilities (Internet connections) | $42,000.00 |
| Equipment rental/maintenance | $5,000.00 |
| Janitorial supplies | $22,000.00 |
| Contracted building services | $10,000.00 |
| Building Main/Repairs | $56,000.00 |
| Misc. building expense | $0.00 |
| **subtotal: Occupancy Expense** | **$135,000.00** |
| | |
| General Expenses | |
| Professional Services | $120,000.00 |
| Insurance | $45,500.00 |
| Payroll Service | $0.00 |
| Legal | $0.00 |
| Accounting | $30,000.00 |
| Depreciation | $0.00 |
| Administration Fee | $44,000.00 |
| Transportation | $40,000.00 |
| **subtotal: General Expenses** | **$279,500.00** |
| | |
| **TOTAL EXPENSE** | **6,193,616.23** |
| | |
| **SURPLUS/DEFICIT** | **1,353,384.77** |