# *U.S. Department of Education*
# *2019 National Blue Ribbon Schools Program*

[X] Public or [ ] Non-public

For Public Schools only: (Check all that apply) [ ] Title I    [ ] Charter    [ ] Magnet    [X] Choice

Name of Principal <u>Mr.  Michael Andrew Demster</u>
<div align="center">(Specify: Ms., Miss, Mrs., Dr., Mr., etc.)  (As it should appear in the official records)</div>

Official School Name <u>Maxine Smith STEAM Academy</u>
<div align="center">(As it should appear in the official records)</div>

School Mailing Address <u>750 E Parkway South</u>
<div align="center">(If address is P.O. Box, also include street address.)</div>

<u>Memphis</u>           <u>TN</u>           <u>38104-5556</u>
City           State           Zip Code+4 (9 digits total)

County <u>Shelby</u>

Telephone <u>(901) 416-4536</u>    Fax

Web site/URL <u>https://www.memphissteamacademy.org/</u>    E-mail    <u>Demsterma@scsk12.org</u>

I have reviewed the information in this application, including the eligibility requirements on page 2 (Part I-Eligibility Certification), and certify, to the best of my knowledge, that it is accurate.

<br>

                                  Date_____
(Principal's Signature)

Name of Superintendent*<u>Mr.  Joris Ray</u>
<div align="center">(Specify: Ms., Miss, Mrs., Dr., Mr., Other)    E-mail <u>rayj@scsk12.org</u></div>

District Name <u>Shelby School District</u>    Tel.  <u>(901) 416-5300</u>
I have reviewed the information in this application, including the eligibility requirements on page 2 (Part I-Eligibility Certification), and certify, to the best of my knowledge, that it is accurate.

<br>

                                  Date_____
(Superintendent's Signature)

Name of School Board
President/Chairperson <u>Mrs.  Joyce Coleman</u>
<div align="center">(Specify: Ms., Miss, Mrs., Dr., Mr., Other)</div>

I have reviewed the information in this application, including the eligibility requirements on page 2 (Part I-Eligibility Certification), and certify, to the best of my knowledge, that it is accurate.

<br>

                                  Date_____
(School Board President's/Chairperson's Signature)

The original signed cover sheet only should be converted to a PDF file and uploaded via the online portal.

*Non-public Schools: If the information requested is not applicable, write N/A in the space.*

# Part I – Eligibility Certification

The signatures on the first page of this application (cover page) certify that each of the statements below, concerning the school's eligibility and compliance with U.S. Department of Education and National Blue Ribbon Schools requirements, are true and correct.

1. All nominated public schools must meet the state's performance targets in reading (or English language arts) and mathematics and other academic indicators (i.e., attendance rate and graduation rate), for the all students group, including having participation rates of at least 95 percent using the most recent accountability results available for nomination.

2. To meet final eligibility, all nominated public schools must be certified by states prior to September 2019 in order to meet all eligibility requirements. Any status appeals must be resolved at least two weeks before the awards ceremony for the school to receive the award.

3. The school configuration includes one or more of grades K-12. Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.

4. The school has been in existence for five full years, that is, from at least September 2013 and each tested grade must have been part of the school for the past three years.

5. The nominated school has not received the National Blue Ribbon Schools award in the past five years: 2014, 2015, 2016, 2017, or 2018.

6. The nominated school has no history of testing irregularities, nor have charges of irregularities been brought against the school at the time of nomination. If irregularities are later discovered and proven by the state, the U.S. Department of Education reserves the right to disqualify a school's application and/or rescind a school's award.

7. The nominated school has not been identified by the state as "persistently dangerous" within the last two years.

8. The nominated school or district is not refusing Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district-wide compliance review.

9. The OCR has not issued a violation letter of findings to the school district concluding that the nominated school or the district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan from the district to remedy the violation.

10. The U.S. Department of Justice does not have a pending suit alleging that the nominated school or the school district, as a whole, has violated one or more of the civil rights statutes or the Constitution's equal protection clause.

11. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the school or school district in question; or if there are such findings, the state or district has corrected, or agreed to correct, the findings.

# PART II - DEMOGRAPHIC DATA

**Data should be provided for the most recent school year (2018-2019) unless otherwise stated.**

**DISTRICT**

1. Number of schools in the district     146 Elementary schools (includes K-8)
   (per district designation):            49 Middle/Junior high schools
                                          53 High schools
                                          0 K-12 schools

                                          248 TOTAL

**SCHOOL** (To be completed by all schools)

2. Category that best describes the area where the school is located:

   [X] Urban or large central city
   [ ] Suburban
   [ ] Rural or small city/town

3. Number of students as of October 1, 2018 enrolled at each grade level or its equivalent in applying school:

| Grade | # of Males | # of Females | Grade Total |
|-------|-----------|--------------|-------------|
| PreK | 0 | 0 | 0 |
| K | 0 | 0 | 0 |
| 1 | 0 | 0 | 0 |
| 2 | 0 | 0 | 0 |
| 3 | 0 | 0 | 0 |
| 4 | 0 | 0 | 0 |
| 5 | 0 | 0 | 0 |
| 6 | 63 | 63 | 126 |
| 7 | 75 | 50 | 125 |
| 8 | 53 | 50 | 103 |
| 9 | 0 | 0 | 0 |
| 10 | 0 | 0 | 0 |
| 11 | 0 | 0 | 0 |
| 12 or higher | 0 | 0 | 0 |
| Total Students | 191 | 163 | 354 |

*Schools that house PreK programs should count preschool students **only** if the school administration is responsible for the program.

4. Racial/ethnic composition of       1 % American Indian or Alaska Native
   the school (if unknown, estimate):  3 % Asian
                                      38 % Black or African American
                                       3 % Hispanic or Latino
                                       0 % Native Hawaiian or Other Pacific Islander
                                      48 % White
                                       7 % Two or more races
                                     **100 % Total**

(Only these seven standard categories should be used to report the racial/ethnic composition of your school. The Final Guidance on Maintaining, Collecting, and Reporting Racial and Ethnic Data to the U.S. Department of Education published in the October 19, 2007 *Federal Register* provides definitions for each of the seven categories.)

5.  Student turnover, or mobility rate, during the 2017 – 2018 school year: 2%

If the mobility rate is above 15%, please explain.

This rate should be calculated using the grid below.  The answer to (6) is the mobility rate.

| Steps For Determining Mobility Rate | Answer |
|---|---|
| (1) Number of students who transferred *to* the school after October 1, 2017 until the end of the 2017-2018 school year | 1 |
| (2) Number of students who transferred *from* the school after October 1, 2017 until the end of the 2017-2018 school year | 6 |
| (3) Total of all transferred students [sum of rows (1) and (2)] | 7 |
| (4) Total number of students in the school as of October 1, 2017 | 337 |
| (5) Total transferred students in row (3) divided by total students in row (4) | 0.02 |
| (6) Amount in row (5) multiplied by 100 | 2 |

6.  English Language Learners (ELL) in the school:    0 %
                                                      0 Total number ELL

Specify each non-English language represented in the school (separate languages by commas):

7.  Students eligible for free/reduced-priced meals:    29 %
    Total number students who qualify:                  101

8.  Students receiving special education services:  3 %

    9 Total number of students served

    Indicate below the number of students with disabilities according to conditions designated in the Individuals with Disabilities Education Act. Do not add additional conditions. It is possible that students may be classified in more than one condition.

    | | |
    |---|---|
    | 1 Autism | 0 Multiple Disabilities |
    | 0 Deafness | 0 Orthopedic Impairment |
    | 0 Deaf-Blindness | 6 Other Health Impaired |
    | 0 Developmental Delay | 0 Specific Learning Disability |
    | 0 Emotional Disturbance | 2 Speech or Language Impairment |
    | 0 Hearing Impairment | 0 Traumatic Brain Injury |
    | 0 Intellectual Disability | 0 Visual Impairment Including Blindness |

9.  Number of years the principal has been in her/his position at this school: 2

10. Use Full-Time Equivalents (FTEs), rounded to nearest whole numeral, to indicate the number of school staff in each of the categories below:

    | | Number of Staff |
    |---|---|
    | Administrators | 2 |
    | Classroom teachers including those teaching high school specialty subjects, e.g., third grade teacher, history teacher, algebra teacher. | 16 |
    | Resource teachers/specialists/coaches e.g., reading specialist, science coach, special education teacher, technology specialist, art teacher, etc. | 6 |
    | Paraprofessionals under the supervision of a professional supporting single, group, or classroom students. | 0 |
    | Student support personnel e.g., school counselors, behavior interventionists, mental/physical health service providers, psychologists, family engagement liaisons, career/college attainment coaches, etc. | 1 |

11. Average student-classroom teacher ratio, that is, the number of students in the school divided by the FTE of classroom teachers, e.g., 22:1   22:1

12. Show daily student attendance rates. Only high schools need to supply yearly graduation rates.

| Required Information | 2017-2018 | 2016-2017 | 2015-2016 | 2014-2015 | 2013-2014 |
|---|---|---|---|---|---|
| Daily student attendance | 98% | 99% | 99% | 99% | 0% |
| High school graduation rate | 0% | 0% | 0% | 0% | 0% |

13. **For high schools only, that is, schools ending in grade 12 or higher.**
    Show percentages to indicate the post-secondary status of students who graduated in Spring 2018.

| Post-Secondary Status | |
|---|---|
| Graduating class size | 0 |
| Enrolled in a 4-year college or university | 0% |
| Enrolled in a community college | 0% |
| Enrolled in career/technical training program | 0% |
| Found employment | 0% |
| Joined the military or other public service | 0% |
| Other | 0% |

14. Indicate whether your school has previously received a National Blue Ribbon Schools award.
    Yes _        No X

    If yes, select the year in which your school received the award.

15. In a couple of sentences, provide the school's mission or vision statement.

Preparing students for college and career, we utilize Science, Technology, Engineering, Arts, and Mathematics to develop creativity, teamwork, communication, and problem-solving skills.

16. **For public schools only**, if the school is a magnet, charter, or choice school, explain how students are chosen to attend.

Every student attending Maxine Smith STEAM Academy (Science Technology Engineering Arts and Math) must apply and interview with a team of student leaders prior to enrollment. In Shelby County Schools, parents/legal guardians may choose from 46 theme-based programs tailored to their children's special talents and interests. Parents must submit achievement test scores and a current comprehensive report card after submitting the online application. Applications are processed on a first-come, first-served basis, within priority categories given to the neighborhood and siblings. Twenty percent of applicants are chosen by lottery when there are more applicants than spaces available. Our students and parents must commit to participate in a rigorous STEAM academic program that include targeted interventions, advanced coursework, and an extended school day for labs, experiments, and industry field trips.

# PART III – SUMMARY

Maxine Smith STEAM Academy, a public middle school, in Memphis, TN, serves students from all over the Shelby County Schools District. Maxine Smith STEAM Academy (MSSA) was founded as a Science, Technology, Engineering, Arts, and Mathematics -focused school five years ago, through a partnership between the Department of Education at Christian Brothers University (CBU) and Shelby County Schools. Our unique approach to teaching and learning fosters creativity and innovative thinking in all students. Emphasizing character development and collaborative learning in a safe and nurturing environment with an unrivaled school culture, our students are reaching high levels of personal success and excellence.

Since our founding year, 2014, we have been consistently recognized as a leader in achievement and growth, as well as in STEAM related competitions. We have rapidly become one of the top-performing schools in our city and state because of our innovative teaching strategies, project-based learning approach, high standards, and strong sense of community. In 2017, we were named a Tennessee Reward School for achievement (Top 5% in the state of Tennessee), and are currently the top-performing school in our district on our state assessment in English Language Arts, Math, and Science.

All of our students take a STEM class as part of their core classes. The skills and knowledge built throughout students' core curriculum are applied daily in their STEM classes. These classes shape critical and analytical skills as well as build perseverance and a growth mindset so students can become lifelong learners. Our three-year curriculum allows student to develop from 6th grade technician, to 7th grade engineer, and finally as an 8th grade inventor, through our focused project-based program.

In addition, our students commit to participate in a rigorous STEAM academic program that includes targeted interventions, advanced coursework, and an extended school day. Every day we instill a culture of KnightsCARE (Collaboration, Attitude, Responsibility, and Effort). We believe that instilling these values lead to students becoming independent, productive leaders.

Our school population includes a wide variety of socio-economic, ethnic, religious, social, and cultural diversity. Our racial breakdown is 47% non-white and 53% white, which is a fair representation of Memphis and the surrounding suburbs. This diversity is welcomed and celebrated, and is at the core of our KnightsCARE culture and charter development curriculum. All students learn to respect and honor diverse views and differences as they build trusting and long-lasting relationships.

Much of our students' success is credited to the dedicated educators who instruct our students each day. The cornerstone of our program is our data-driven instruction and action planning cycle. Each Professional Learning Community (PLC) meets weekly to collaboratively plan lessons and assessments. All students are monitored closely on cycles of common formative assessments across the curricula, and supported respectively to strengthen or enrich specific student needs. Action plans to improve instruction are developed after each assessment cycle by the PLC team. Students keep track of their own data analysis and work accordingly to meet the high demands and expectations of each teacher. Our teachers implement innovative, research-based instructional best practices that align to the TN State Standards.

Students experience interactive lessons through several digital and project-based means. All students receive devices and interact with technology in order to complete research, projects, and learning tasks. These include skills such as coding, digital and web design, audio visual productions, and presentations. Students also engage in numerous computer/web-based programs to support individual learner needs through continued remediation and enrichment. Through these innovative practices, our students excel academically and are recognized for their achievements.

Student leadership is another part of our whole child approach. We have several leadership pathways for students: Student council, Student Mentors, STEAM-bassadors, and our athletic programs all develop student leadership skills and support our KnightsCARE culture and community service. Serving on our Student Council provides opportunities for leadership learning to influence policy, systems, and processes, as well as, special projects for the school. Our Mentor program is designed to provide encouragement and

support to our incoming sixth graders as they transition to middle school. As a Mentor, students serve as a trusted friend with similar school experiences and assist with emotional support, organization, and academic tutoring. The STEAM-bassador program is designed to provide leadership experiences for our eighth grade students. As a STEAM-bassador, students serve as a liaison to our community. They are dedicated to building the school's academic, social, and emotional culture by leading school tours, organizing school events, and leading community service projects. All of our student leaders learn to be responsible, enthusiastic, positive, open to diverse views and have a strong work ethic.

Our parental and community support and engagement makes all of this possible. Our staff works tirelessly to communicate with our parents and community partners. Maxine Smith STEAM Academy parents and community adopters are active and committed partners in the educational experience of our students and staff. Our parent-teacher organization provides much support to the school, including fundraising, teacher and student incentives, and hosting informal workshops for parents and the community. Our sponsors provide STEAM-related speakers for our "Lunchbox Wednesdays" and Extended Lab guest lecturers, and assist our teachers in providing STEAM-related field trip opportunities. Parents and community leaders are an essential part of MSSA, and continue to push our school and students to unprecedented success.

# PART IV – CURRICULUM AND INSTRUCTION

1. **Core Curriculum:**

**1a. Reading/English language arts:**

Our school utilizes the Expeditionary Learning Curriculum, which focuses on student excellence in three core areas: mastery of knowledge and skills, character, and high-quality student work. Students are expected to demonstrate proficiency and a deep understanding by applying or transferring their knowledge and skills to meaningful tasks. We work diligently to align our instruction, text, and tasks to the instructional shifts; regular practice with complex text and its academic language, reading, writing, and speaking grounded in evidence from informational and literary text, and building knowledge through content rich non-fiction. Not only are our students thinking critically by analyzing, evaluating and synthesizing complex ideas and considering multiple perspectives, they are learning to communicate clearly, whether in writing, speaking, or presenting- using a variety of complex text and media.

Teachers meet weekly to discuss text, tasks, and unpack standards in order to ensure student access to complex text and rigorous tasks to grade level standards. By continuous evaluation of student work and performance in PLCs, teachers identify gaps in student learning by name and need, and differentiate instruction based on the student work or performance data using our data cycle and students work protocols.

Our common formative assessment cycle drives our professional learning communities. Our data cycles begin by building rigorous standards-aligned assessments and tasks followed by robust lesson planning and curriculum execution. After assessments are delivered to students, an analysis is done to identify misconceptions and gaps in learning to support in the development of intervention and action planning. This collaborative cycle allows teachers to continuously reflect on instructional practices and stay focused on learning objectives.

**1b. Mathematics:**

We know today's world has many challenges and problems that need to be solved. To address this new challenge, we must prepare our students to be thinkers and problem-solvers and really understand math. Our state math standards and assessments require students to solve much more complex problems. To solve complex problems, student must understand the math concepts and have numerous strategies for solving difficult problems. Our school has chosen Eureka Math as our curriculum, which deeply addresses the instructional shifts needed for students to attack real world math problems. Eureka Math builds students' conceptual understanding, fluency, and ability to apply math from kindergarten to 12th grade. The instructional shifts for mathematics demand curriculum to have Focus, Coherence, and Rigor.

Our math team uses the same data driven approach and cycle to plan, reflect, and provide intervention and enrichment as our entire school does. What makes our math department unique is our strategic standards-driven approach to rigor. We meet weekly to unpack standards, identify the appropriate aspects of rigor called for by the standards, and create aligned instructional tasks and strategies. Students' fluency, conceptual understanding and application skills are continually analyzed through looking at student work samples and addressed according to standards mastery. Our goal as a school is to move beyond the "facts and formulas" and develop real world conceptual thinkers and problem solvers.

**1c. Science:**

Our science curriculum continues to expand every year. This is our school's first year to implement the Next Generation Science Standards, a new, more rigorous approach to the science pathway. In our building, students apply the Engineering Design Process in their research, lab experience, projects, and classroom tasks. All students follow the Engineering Design Process of researching, planning, creating, experimenting, evaluating, and improving solutions, in order to increase their capacities to become curious thinkers, mistake makers, and champions of their own learning. The end goal is for students to develop the capacity to

observe, analyze, and measure phenomena, using various tools such as data, personal interest, scientific knowledge, and scientific inquiry.

The science department uses the same data driven approach and cycle to plan, reflect, and provide intervention and enrichment as our entire school does. In science and STEM classes, we utilize student projects, research, presentations, and products to identify learning targets and gaps. Similar to math, our science teams follow the Next Generation Science Standards' definition of rigor; science knowledge and fluency, conceptual understanding, and application skills. These are continually analyzed and addressed according to standards mastery through weekly analysis of student work and assessments.

**1d. Social studies/history/civic learning and engagement**

Our social studies curriculum begins with Early Civilizations in sixth grade, extends to World History in seventh, and ends with U.S. History in the eighth grade. Social Studies is an opportunity to further students' literacy skills by engaging with complex historical texts that meet the demands of the college and career shifts. In sixth and seventh grades, students explore and come to understand historical societies, religions, and events which helps develop a more globally aware citizen.

Students are asked to not only understand concepts, but be able to defend their thinking about their learning using evidence from their sources. Social studies promotes civic-competence by introducing students to material that allows them to make judgments and have attitudes that positively add to our society. Students encounter many disciplines in the social studies classroom from geography, to political science, to sociology all of which create students who can think critically about a wide variety of social issues.

Many of our social and civic responsibilities are embedded through our social studies curriculum. Given our diverse population and views, students are taught skills to articulate their values and beliefs while learning to respect different views and opinions all based in research using textual evidence and valid sources.

Our data driven cycle lives in social studies as well where students work and assessment data is continuously analyzed and evaluated. Teachers use this data to plan lesson and tasks in order to deepen our curriculum standards and social concepts.

**1e. For secondary schools:**

Preparing students for college and career must start in middle school. Our approach to STEAM education is to teach real-world, problem solving strategies to prepare students for the jobs of the future. Each quarter, students engage in themed projects and inquiry-based learning, to develop their ability to solve real-world problems. These school experiences are connected by industry partners via tours, presentations, and field trip experiences we call "extended lab." Our partnership with CBU and other partners allow students to connect their learning to college, industry, and the real world. Another aspect of our STEAM education is for students to receive STEM and industry certification in particular fields of study (MOS, Adobe, and Coding). We are one of only a few middle schools seeking industry certification in our area.

**1f. For schools that offer preschool for three- and four-year old students:**

**2. Other Curriculum Areas:**

Our program is built on the belief that the whole child must be supported in order to develop healthy and productive students. Prioritizing access to the arts, healthy living, STEM, foreign languages and social-emotional programs are what make our school different. In all three years students enroll in a STEM class as part of their core set of classes, along with two elective arts classes. Our STEM curriculum and the Engineering Design Process drives our school. Our STEM courses are project-based learning experiences that focus on quarterly themes such as Green Energy, Structural Engineering, Agricultural Bio-technology and Mechanical Engineering. These quarterly projects are supported by an extended lab experience where

students travel to university partners and community partners to see how their projects connect to the real world and the community. These partners also come to our campus to engage students in labs, demonstrations, and lectures on career connections and real-world application.

As a STEAM school, our arts program is a critical component supporting the development of the entire child as well. We believe that allowing students to express themselves in the arts give them confidence and self-esteem. The arts are essential to help students develop as independent and creative thinkers. All students have opportunities to express themselves and to learn about visual and performing arts, health and PE, career and study skills, and world languages. Our focus on the arts include all students having access to several arts electives. These courses include visual arts, strings orchestra, band, choir, theater, dance, audio visual production, Russian, French, Spanish, Physical education, AVID(Advancement Via Individual Determination), and robotics. Students can take these courses for a year or semester as an exploratory class. Certain courses offered such as our world languages and audio visual production can lead students to earning high school credit and industry certification. Access to these courses give students an opportunity to explore their interests, engage in arts and career pathways, as well as be introduced to new experiences and world knowledge.

Finally our social emotional programs have the largest impact on our culture and mindset. Our motto at Maxine Smith STEAM Academy is KnightsCARE(Collaboration, Attitude, Responsibility, Effort). Our social, emotional support is built on the idea that students must learn how to CARE for each other and our community. We Collaborate in order to solve problems and improve our world. We have a positive Attitude and bring joy into the world intentionally even when we are frustrated. We are Responsible for words, actions, and ourselves, and we put Effort in everything we do. Our social-emotional curriculum lives in our classrooms daily, we have training and focus meetings surrounding how students handle conflict, cope with stress and anxiety, as well as build habits of highly effective people.

3.  **Special Populations:**

We have two major systems to identify student learning gaps and progress monitor. Our data driven instructional model and professional learning communities continuously are looking at student performance data and student work to identify gaps in learning or misconceptions in learning. Teachers provide differentiated standards-driven support and corrective instruction to close named gaps identified in weekly analysis meetings. We also run math and literacy response to intervention (RTI) courses which address students performing below the 25th percentile according to our norm referenced formative assessments. Throughout the intervention process students receive 30 to 45 minutes of small group or individualized skill based intervention and support. Students are reassessed biweekly to calibrate grade level performance and skill development ans assess current mastery.

We have worked hard to close many of our subgroup performance gaps. Our White and Hispanic subgroups are within three percent points in reading while our Hispanic subgroup is out performing all other subgroups in math according to last year's state assessment. We have also decreased the gap of our economically disadvantaged students in reading to four percentage points.

Our efforts to close our African-American achievement gap has shown some progress but we still have a 20 percentage point gap in math and reading. Our action plan includes providing increased opportunities for students to take honors and other rigorous course work, participate in teacher- led tutoring and progress monitoring, as well as participation in our RTI (response-to-intervention) program.

# PART V – SCHOOL SUPPORTS

## 1. School Climate/Culture:

When you walk into Maxine Smith STEAM Academy, it doesn't take long to feel the culture of the school all around you.  KnightsCARE!  You sense it in the halls when you hear students and faculty talk to one another, and you feel it in classrooms when students are working together through the Engineering Design Process. The halls are filled with KnightsCARE posters and artwork make our values visible.  Students in this building are taught to lend each other a helping hand, treat each other with kindness, and work hard in the face of challenges through our guidance and teacher leadership. Through Collaboration, Attitude, Responsibility, and Effort, students at MSSA are successful.  Every morning we start our day by reciting our school pledge:

We are Maxine Smith STEAM Academy.
We are Technicians. Engineers. Inventors.
We take care of our school.
We make our community better.
The world is a better place, because we were born.
We encourage one another and we work together.
We are creative. We solve problems. We are makers.
If we can imagine it, we can make it.
We try once, twice, one hundred times, but we never give up.
We take what we learn and we make something with it.
We are Maxine Smith STEAM Academy.

Students live this out by their willingness to volunteer for school and community events, their excitement to work together for the greater good of the school, and their relentless attitudes in the face of possible failure. Students who exhibit our KnightsCARE values are recognized daily in classrooms as well as weekly, monthly, and quarterly using our student recognition boards, announcements, and school programs. The students of MSSA work hard to make their school a better place every day.  MSSA is a place of growth and is emotionally safe so students and adults can make mistakes, get feedback, and then try again.

However, the culture doesn't stop there. Our faculty and staff exude the same CARE-ing attitudes as students.  Whether it is leaving one another a note of gratitude, covering a class, or just stepping in to help when needed, everyone at MSSA is supported. Faculty spend time together weekly analyzing student work and data, creating common assessments, adjusting goals, and planning to ensure students are supported at all levels. Teachers receive individualized support through goal setting, coaching, and feedback that highlights their individual needs and successes. Through frequent team meetings and reflections, we are able to recognize and celebrate each others'  efforts informally and formally.

## 2. Engaging Families and Community:

Our community works together to promote the health, well-being, and learning of all students. Maxine Smith STEAM Academy parents and community adopters are active and committed partners in the educational experience of our stakeholders.

Currently, our Parent Teacher Organization (PTO) raises funds to assist us in installing up-to-date classroom equipment, facilities upgrades, and teacher and student supplies. Students and parents are at the core of our decision making processes. The PTO board, student council, and our administration meet frequently to analyze data, reflect on events, and plan academic and operational next steps. Monthly, our teachers receive a gratitude luncheon provided by our parents, which acts as a community and culture builder for our school.

Communication and feedback is a priority of our administration and community. The PTO serves on the

site-based decision making team to ensure equity in voice within the school community. Continuous improvement is our goal; therefore, we seek feedback from our parents and community through surveys and committee meetings. Involving parents and students in the decision making process is a priority and is necessary for student growth. All students and community have access to our board meetings.

In addition, social media is a key medium used to promote and celebrate student learning, success, and achievement. Our parents receive frequent communication via text, email, voice, paper, and website. Our community supports our school in many ways. As mentioned above, financial support and decision making are two very important components, but the time, energy, and physical presence our parents give has the most impact. Our parents and industry partners are on our campus daily. These parents and partners use their time as speakers and presenters for our AVID classes, Extended Lab workshops, honors programs, and Thoughtful Thursdays (meaningful lunch discussion days). Additionally, Maxine Smith STEAM Academy has a supportive family unit. Throughout the year, the PTO organizes many opportunities for our families to engage in the school community through programs, donation drives, Grandparent's Day, community carnivals, family dinners,and ongoing community builders.

Students engage in monthly Extended Lab workshops which provide them an opportunity to extend their learning beyond the school. Based on our quarterly themes, students participate in lab experiences with community partners. The labs are hands-on, interactive, and allow students to make real-world connections.

Maxine Smith STEAM Academy's community partners include Christian Brothers University, the Greater Memphis IT Council, Memphis Light Gas and Water, T-STEM, The University of Memphis, Tennessee STEM innovation network and more.

3. **Professional Development:**

As we live the values found in our school pledge, KnightCARE culture, and the foundation of the Engineering Design Process, we are on a path of continuous questioning, reflection, and journey for excellence. Status quo is always in question. Professional development, continuous learning, and constant self-reflection techniques are used to support our growth mindset and culture. As we believe that all students can learn at high levels, our adults also must be on a path of growth and continuous improvement.

Professional Development is no longer a "one stop shop" at our school or district. Professional Development is ongoing, individualized, collaborative, and founded in research. We utilize our leadership structure, Instructional Leadership Team (ILT) to develop instructional leaders in the building who create learning experiences, lead PLCs, and coach and mentor individual teachers. We address professional development as ongoing in three specific tiers: school wide, team level, and individual.

Our leadership team is provided with several resources and learning experiences in order to identify needs of our school, departments or teams, and individuals. Our observations paired with student, parent, and teacher survey and achievement data gives us a precise lens to identify gaps and needs of the school.  We then collaborate as a leadership team to create professional development which we use to train, practice, and monitor instructional strategies. Our objective driven lesson protocol, lesson plan design and rubric, as well as our data driven instructional cycle are all examples of school wide professional development practices.

Our department and team level professional development is differentiated according to content and grade level. Team leaders continuously drive professional learning through grade level content standard analysis utilizing the "See it, Name it, Do it" strategy, our data driven instructional cycle, and  shared best practices. Quarterly plans or Cycles of Professional Learning, are created to plan, implement and monitor nine weeks of professional development, practice, and observation and feedback.

The third component of our professional development is our individual observation and feedback cycles. All teachers receive informal and formal observations using our teacher effectiveness rubric and our instructional practice guides. Coaching sessions include reflection and opportunities for safe practice after identifying gaps in instruction or student learning. These coaching sessions lead to bite sized actionable and

measurable feedback that is then monitored for effectiveness and impact on student learning.

Along with our school level professional learning processes listed above, teachers at MSSA also receive professional development training from our partners Facing History and Ourselves, Christian Brothers University, our district professional learning department on curriculum, equity, culture, instruction, and classroom management.

4. **School Leadership:**

The philosophy of Maxine Smith STEAM Academy and our principal is very simple. "Those doing the work must lead the work". The key focus of MSSA is to increase the capacity of all stakeholders in our community. Our administrators create learning opportunities that all teachers and staff have access to, in order develop the leadership capacity of anyone wanting grow and lead. Our student, teacher, and parent-filled committees drive the work of our school. Our PBIS team and guidance department lead the student and adult culture of the school while our Instructional Leadership Team leads the curriculum and professional development tiers. Our content and grade level teams meet weekly to analyze student work, student performance data, plan, conduct peer observations, and meet with community members. Our goal is for every adult in the building including administrators to have a coach and/or reflective partner.

Our ILT is made up of teachers, administrators, and staff leaders that continually strive for excellence. This team develops the vision of the work and models the culture and mindset we are striving for daily. These teacher leaders are team leaders, facilitators, coaches, and are highly effective instructional practitioners. They are tasked with creating quarterly cycles of professional learning as well as facilitating weekly content and grade level meetings. Our ILT meets weekly to reflect, collect and analyze data, observe instruction, bring ideas to the table, and give critical feedback to each other as leaders of the school.

Collecting reliable and valid student performance data and stakeholder perception data is a priority of our leadership team in order to monitor and adjust in real time. MSSA's PTO Advisory Board and Student Council are as strong as they have ever been and they provide feedback to administration on community stakeholder perspectives and areas to improve. We complete a comprehensive analysis of behavior and school culture data to measure the effectiveness of approaches.

Along with our PTO, PBIS, and ILT we utilize other leadership committees and teams that impact student achievement. Our response to intervention team, grade level teams, PTO subcommittees, and student leadership groups all play a huge part in making sure student success is our focus.

Student leadership is also a huge component of our school. Our student council, Mentors and STEAMbassadors provide pathways for student leadership and voice to the school. These students are included in the decision making process because their feedback matters.

# Part VI – STRATEGIES FOR ACADEMIC SUCCESS

What makes our school unique is that everyone in the building is learning and striving for excellence. The culture of our building is to celebrate risk, failure, and perseverance. These elements live in the Engineering Design Processes, our growth mindset, and our KnightsCARE culture.

Our adult understanding of the Engineering Design Process has been most instrumental to our school's success, and is what makes our school unique. Adults are able to receive feedback and opportunities to practice, take risks, and reflect in a safe space. This culture of growth paired a safe environment to take risks allows adults the opportunity to learn and grow.

The Engineering Design Process (EDP) is the process our students utilize to tackle a problem or project. They begin with researching the problem, then move to brainstorming solutions, sketching the design, building, and then testing the design. Most of our students will tell you that during the first test, the design fails. They must go back to the design and figure out where the mistakes were made. The students then correct the mistakes in their design and re-test. The understanding that a mistake is not failure is a critical life skill. Our students are able to transfer this understanding to other aspects of their school and personal life.