

U.S. Department of Education
2018 National Blue Ribbon Schools Program

[X] Public or [] Non-public

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

Name of Principal Dr. Winifred Little Green

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name Dearborn STEM Middle School

(As it should appear in the official records)

School Mailing Address 22586 Ann Arbor Trail

(If address is P.O. Box, also include street address.)

Dearborn Heights MI 48127-2508
City State Zip Code+4 (9 digits total)

County Wayne

Telephone (313) 827-4804

Fax (313) 827-4805

Web site/URL https://stem.dearbornschools.org

E-mail GreenW@dearbornschools.org

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.

Date _____

(Principal's Signature)

Name of Superintendent*Dr. Glenn Maleyko

(Specify: Ms., Miss, Mrs., Dr., Mr., Other) E-mail maleykg@dearbornschools.org

District Name Dearborn City School District Tel. (313) 827-3020

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.

Date _____

(Superintendent's Signature)

Name of School Board

President/Chairperson Dr. Michael Meade

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

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.

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. 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.)
2. 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 and all subgroups, including having participation rates of at least 95 percent using the most recent accountability results available for nomination.
3. To meet final eligibility, all nominated public schools must be certified by states prior to September 2018 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.
4. If the school includes grades 7 or higher, the school must have foreign language as a part of its curriculum.
5. The school has been in existence for five full years, that is, from at least September 2012 and each tested grade must have been part of the school for the past three years.
6. The nominated school has not received the National Blue Ribbon Schools award in the past five years: 2013, 2014, 2015, 2016, or 2017.
7. The nominated school has no history of testing irregularities, nor have charges of irregularities been brought against the school at the time of nomination. The U.S. Department of Education reserves the right to disqualify a school’s application and/or rescind a school’s award if irregularities are later discovered and proven by the state.
8. The nominated school has not been identified by the state as “persistently dangerous” within the last two years.
9. 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.
10. 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.
11. 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.
12. 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 (2017-2018) unless otherwise stated.

DISTRICT

1. Number of schools in the district (per district designation):
- 21 Elementary schools (includes K-8)
 - 8 Middle/Junior high schools
 - 4 High schools
 - 0 K-12 schools
- 33 TOTAL

SCHOOL (To be completed by all schools)

2. Category that best describes the area where the school is located:
- Urban or large central city
 - Suburban
 - Rural or small city/town
3. Number of students as of October 1, 2017 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	30	23	53
7	30	26	56
8	26	22	48
9	0	0	0
10	0	0	0
11	0	0	0
12 or higher	0	0	0
Total Students	86	71	157

4. Racial/ethnic composition of the school:
- 0 % American Indian or Alaska Native
 - 2 % Asian
 - 4 % Black or African American
 - 1 % Hispanic or Latino
 - 0 % Native Hawaiian or Other Pacific Islander
 - 93 % White
 - 0 % 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 2016 – 2017 school year: <01%

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 <i>to</i> the school after October 1, 2016 until the end of the 2016-2017 school year	0
(2) Number of students who transferred <i>from</i> the school after October 1, 2016 until the end of the 2016-2017 school year	1
(3) Total of all transferred students [sum of rows (1) and (2)]	1
(4) Total number of students in the school as of October 1, 2016	162
(5) Total transferred students in row (3) divided by total students in row (4)	<.01
(6) Amount in row (5) multiplied by 100	<01

6. English Language Learners (ELL) in the school: 1%
2 Total number ELL

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

Arabic

7. Students eligible for free/reduced-priced meals: 40%
Total number students who qualify: 63

8. Students receiving special education services: 1 %
2 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.

- | | |
|----------------------------------|--|
| <u>1</u> Autism | <u>0</u> Multiple Disabilities |
| <u>0</u> Deafness | <u>0</u> Orthopedic Impairment |
| <u>0</u> Deaf-Blindness | <u>0</u> Other Health Impaired |
| <u>0</u> Developmentally Delayed | <u>0</u> Specific Learning Disability |
| <u>0</u> Emotional Disturbance | <u>0</u> Speech or Language Impairment |
| <u>1</u> Hearing Impairment | <u>0</u> Traumatic Brain Injury |
| <u>0</u> Intellectual Disability | <u>0</u> Visual Impairment Including Blindness |

9. Number of years the principal has been in her/his position at this school: 1
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.	7
Resource teachers/specialists/coaches e.g., reading specialist, science coach, special education teacher, technology specialist, art teacher, etc.	3
Paraprofessionals under the supervision of a professional supporting single, group, or classroom students.	0
Student support personnel e.g., guidance counselors, behavior interventionists, mental/physical health service providers, psychologists, family engagement liaisons, career/college attainment coaches, etc.	2

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 18:1

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

Required Information	2016-2017	2015-2016	2014-2015	2013-2014	2012-2013
Daily student attendance	98%	98%	95%	0%	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 2017.

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

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.

To create a problem based, technology rich environment that empowers students to engage in 21st Century Thinking Skills that will prepare them for the challenges of the future.

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

STEM Middle School is a middle school option within Dearborn Public Schools. It is an option that does not depend upon boundary lines, but upon test scores and interest in science and technology. In previous years, potential students applied in February for the upcoming year. The top 60 students from the applications were invited to STEM Middle School based upon their NWEA MAP (NWEA) reading and math scores and their M-STEP scores. This upcoming year, in order to be considered for STEM Middle School, students must meet the established cut scores for that year on the reading (222) and math (235) NWEA, as well as pass the reading and math Michigan Student Test of Educational Progress (M-STEP) with a 3 or a 4. Our assessment office pulls 100 of the top 5th graders from all around our district and we then invite those 100 students to apply for the 60 spots that we have available. After the application process closes, the top 60 students of those that apply are invited to attend. Current 6th and 7th grade students are also able to apply for seats that will be empty for the upcoming school year. Both grades must be reading above grade level and their math NWEA score must be above grade level. 7th graders wanting to be accepted in to the 8th grade class must also have had advanced math in 7th grade. In an effort to bring students back into the district from private schools, students attending private or charter schools as a 5th, 6th, or 7th grader may apply online and be considered for admittance as long as their scores meet the requirements. If a private and/or charter school does not take the NWEA and/or M-STEP, we will invite the student in to take the NWEA test with us after school in a testing session.

PART III – SUMMARY

Our Community:

Dearborn Public Schools is located on the border of Detroit and is the third largest district in the state. The district consists of over 19,500 students and 2,500 plus employees. Of all the school districts in Michigan, we are currently the only district that experiences continuous growth on an annual basis. This is partly due to our large influx of immigrants from Syria and Yemen. The Dearborn/Detroit area is home to the largest Arabic population outside the Middle East. As a result, we draw many immigrants and our English Language Learner population is over 50% with Arabic being the primary language spoken at home.

The district is made up of thirty-four buildings and consists of over thirty-six educational programs. Our buildings have a variety of configurations to meet the needs of our population and to offer parents and students choices. In addition to traditional elementary, middle, and high school buildings and curriculum, we also offer several alternative educational settings. The STEM Middle School is one of those alternatives.

Dearborn Public Schools is not without its challenges. In 2007, we had seventeen Title I buildings and we are now at thirty-two Title I buildings. Based on our free and reduced lunch population in the district, our district-wide poverty rate is 74%. In addition to a high poverty percentage, our district also is challenged with a high transiency rate. Many schools experience students transferring in and out of the same building numerous times during the same school year. This constant movement is due to economic factors, housing struggles, and students returning overseas for extended periods of time. Despite the challenges of language, economics, and transiency Dearborn Public Schools is annually recognized as one of the top districts in the state as seen by the Michigan Department of Education "Beating the Odds" Reward School recognition that several schools in our District have received, Bridge Magazine's recognition as a top value-added district, and the Academic Champion's award in 2012 and 2013 from the Mackinac Center.

Our School:

Dearborn Public Schools prides itself on offering numerous educational opportunities and options for its students. The STEM Middle School was created based on teacher, student, and community feedback to have an option for high performing students to participate in learning that focused on a problem-based, technology rich curriculum that would enable and empower students and faculty to engage in professional innovation and independent problem solving.

Since the population of our school is capped at 60 students per grade (6th-8th), our school is small at a total of 180 students. Since the school population is so small, we do not reside in our own building, but are housed in the old Henry Ford College side of the Michael Berry Career Center located on our Dearborn Heights Campus. We share this campus with eight other Dearborn Public schools and programs ranging from preschool – adult education. Students attending the school must provide their own transportation to and from school every day. Our limited student population and room at the building also means that we are not able to offer all the traditional sports and extra-curricular activities that the other middle schools provide. Our students are able to join these activities at their home middle schools as long as their parents are willing to transport them. Despite these challenges, STEM Middle School remains a sought after choice for parents and students.

Since its conception as a school in 2013, STEM Middle School has been acknowledged in many different ways. In 2017, we were ranked 12th in the state for academic achievement and this year we have moved to 5th in the state according to the Mackinac Center report. We have been rated a "green" school since day one of opening our doors. We have participated and received numerous awards for our robotics team and for our Future City designs.

Key Strategies:

At STEM Middle School we strive to implement Science, Technology, Engineering, and Math (STEM)

application classes; interdisciplinary lessons; a focus on 21st Century Thinking Skills; creative and innovative thinking; the delivery of science, mathematics, engineering and technology education curriculum; and innovative teaching and learning techniques that challenge the students and focus on their strengths. To accomplish this, our key instructional strategy is the use of project (inquiry) based learning across all of the curriculum. This approach allows students to collaborate on challenging real-world problems using knowledge that they have and knowledge that they must research on their own. In addition, all of our students are required to take a STEM Applications class all three years as part of their core curriculum. This class further focuses on 21st Century Thinking Skills and teaches students programming (coding), Computer Aided Design (CAD), 3D design, and many other technological skills needed to compete in today and tomorrow's job market.

PART IV – CURRICULUM AND INSTRUCTION

1. Core Curriculum:

STEM Middle School uses the same curriculum all Dearborn Schools use. The Secondary Curriculum for Dearborn Public Schools is based on the Common Core State Standards (CCSS) for English Language Arts and Mathematics. Dearborn still uses the Michigan Grade Level Content Expectations (GLCEs) for Science and Social Studies, Music Education, Arts Education, Technology, and Physical Education with all these subjects also using the CCSS for reading and writing outside those core content areas. We are currently in the process of transitioning into using the Next Generation Science Standards for our science curriculum. As a school, we try to teach and nurture the whole child. As such, we provide curriculum support for character education using the Core Values of honesty, integrity, responsibility, courtesy, respect for self and others, and citizenship. The district's Response to Bullying Behavior program components are part of secondary curriculum and are taught repeatedly throughout the year. These lessons are specifically a focus during the students Advisory time each day. All classroom teachers have a curricular support system in place; the Dearborn Education Curriculum (DEC) is a web based pacing guide available across the district. These pacing guides plot the standards for content areas from September to June.

At STEM Middle School, teachers are using project based learning (PBL) to engage students in hands-on learning across all content areas as well as focusing on 21st Century Thinking Skills. The focus of our school is to develop 21st Century Skills through the implementation of project based learning. This school-wide strategy was chosen because as a STEM school, we are committed to offering a curriculum that promotes creative and innovative thinking, collaboration and communication between students and adults, critical thinking that encourages more than one way to solve a problem, and the development of problem solving skills for real-world experiences.

To ensure that our students are college and career ready, we feel that the PBL approach to instruction and our focus on encouraging the development of 21st Century Thinking Skills across all the curriculum will prepare our students for future job and educational undertakings. To demonstrate our commitment to these skills and educational approach, each student is required to take a fifth core class called "STEM Applications". This class incorporates all four core curricular areas as well as engineering principles and higher order technological components. This class has engaged in activities such as programming (coding), CAD, 3D design, green architecture, cardboard boat engineering, game design for special needs children, etc.

2. Other Curriculum Areas:

STEM Middle School offers all students physical education (PE), art, and music (band and orchestra) as elective classes. Students take two electives every year with PE taken by all students. We run off of an "A Day/B Day" master schedule. This means that if students take PE on "A Day", then they take art or music on "B Day". As mentioned earlier, all students also take a STEM Applications class every day for the three years that they attend our school; this class also counts as their technology class for high school credit.

Each of these classes support our school's mission to offer a rigorous curriculum that focuses on PBL and 21st Century Thinking Skills. Each of these classes supplements the curriculum outlined in the Michigan Grade Level Content Expectations (GLCEs) with not only reading and writing, but with a commitment to encouraging collaboration, communication, and creativity among the students. It is a common practice for our encore teachers to work with and collaborate closely with our core teachers to bring learning full circle. Examples of this can be seen with our art teacher working with our STEM Application and science teachers on models and design; our music teacher assisting students with composing musical compositions to act as background music to social studies skits and PowerPoints; our PE teacher assisting in our engineering cardboard box boat regatta; and our STEM Application teachers bringing science, math, reading, writing, and speaking skills into their projects and presentations.

At STEM Middle School we recognize the importance of offering foreign/world languages to our students.

This is a class that we have worked hard to offer since we opened our doors. Unfortunately, due to several factors outside of our control, this class is currently not available to our students. That being said, we as a school and as a district have taken steps to hopefully make this class a possibility in the near future.

In the meantime, many of our students either currently speak and write Arabic fluently or currently attend Arabic school on Saturdays where part of the instruction is learning to read and write Arabic. As such, starting in 6th grade, students in our district have the option to take the “test out” exam for world languages. This means if a student passes the “test out” exam s/he receives high school credit for as many semesters as s/he can pass. We currently have some 6th grade students that could enter high school today with a full year’s credit for world language. Dearborn Public Schools also offers an opportunity called “The Seal of Biliteracy”. This honor recognizes students who have attained proficiency in two or more languages (one being English) by high school graduation. There are several requirements that a student must meet in order to earn the seal that results in the receiving of a medallion during senior year honors convocation and the medallion being worn at graduation. Some of the rigorous requirements for this honor include: scoring proficient on the 8th grade state ELA test, oral presentations in both languages, written essays in both languages, passing the world language advanced placement test with a score of three or higher, and a portfolio.

Dearborn Public Schools, and specifically STEM Middle School, are committed to affirm the value of a multicultural and a bilingual education for our students. While our current approach is not conventional, we do feel that it creatively values world languages while working within our structural constraints.

3. Instructional Methods, Interventions, and Assessments:

In Dearborn Public Schools, we use the NWEA assessment in grades k-8. Specifically, we focus on a student’s RIT score. RIT stands for RASCH UnIT, which is a measurement scale developed to simplify the interpretation of test scores. In the district, students are assessed three times a year. At STEM Middle School, we assess students two times a year for students performing at or above grade level expectations and three times a year for students falling behind grade level expectations. We assess all students in the fall and winter on math, reading, science, and language. If on the winter test a student is found to not be at or beyond the expected level for a student testing in June, that student is retested in the spring - only on the test(s) s/he was found to be struggling on in the winter. STEM Middle School moved to this approach to testing to ease the stress students put on themselves and to alleviate the numerous tests students are required to take in the spring. Also, so that we could pinpoint students who needed extra attention in a school full of high achieving students. These students, just like low performing students, often get lost or overlooked because they may be quite, shy, compliant, and/or hard-working.

All of our students also take the Michigan Student of Educational Progress (MSTEP) test in the spring. The results of this test provides us with a comprehensive view of a student’s progress and achievement and the 8th grade scores are used to make educational decisions such as placement in honor’s classes in high school and acceptance into one of Dearborn’s many high school magnet school options.

Our 8th grade students also take the 8/9 PSAT and our districts Algebra I mid-term and final exam. The 8/9 PSAT is being used to assess a student’s likely success moving forward and to assess their current career and college readiness. Like the MSTEP, it is also used to make educational decisions such as placement in honor’s classes in high school and acceptance into one of Dearborn’s many high school magnet school options. The Algebra I mid-term and final are used to give 8th graders high school math credit and to assist in the placement of students in high school math. For the past three years, over 95% of our students receive full high school credit for Algebra I.

Since we are a magnet school that is made up of high performing students, our instructional approaches and interventions are directly tied into maintaining our school’s high level of achievement. As mentioned before, our main instructional practices focus on the use of project (inquiry) based learning and encouraging 21st Century Thinking Skills. In addition to these, we also use, school wide and across the curriculum, the question answering/writing strategy of CER (Claim, Evidence, Reasoning). We also teach and encourage the use of various Thinking Maps when reading, writing, and problem solving.

When students are found to be falling behind, they are discussed and evaluated through our Multi-tiered System of Supports (MTSS) meetings. This includes all teachers, the assistant principal, and possibly a social worker and/or school psychologist. During one of these meetings we discuss other best practices and interventions to be used to support the student's learning. These could include targeted use of our technology-based support program IXL, to assigned after school help in our teacher staffed "Learning Center". Students are constantly followed up on during Professional Learning Community (PLCs) and team meetings to discuss success or the need for further interventions.

PART V – SCHOOL SUPPORTS

1. School Climate/Culture:

STEM Middle School is a small school with a small teaching staff. As a result, teachers, students, and parents are more of a family. Every teacher knows every student and many teachers and parents are on a first name basis. Parents know that staff members care about their children and trust that their educational decisions will engage, motivate, and lead their students to success.

In the classroom, teachers are energetic and encourage students to take the lead in their learning. The learning environment in classrooms is interactive and mutually respectful as opposed to teacher controlled and structured. Students are given questions, tasks, and challenges to solve and explore in teams at their own pace and in the direction they want to go. Teachers act more as guides and less as all-knowing authoritative powers. This empowers students and allows for them to be engaged and excited during the learning process. It also allows teachers to work with more small groups.

Students that are empowered and allowed multiple approaches to learning are more engaged in the classroom. Our students also develop their own learning plans as a part of our district's "My Learning Plan" initiative. Students identify their own academic and personal goals along with a plan on how to reach those goals. They meet regularly with their Advisory teachers to discuss their progress and adjust their plans. Students feel that a caring adult is rooting for their success.

We have a small, but active Parent Teacher Association (PTA) that works closely with our teachers and student council to bring our school community together for many activities. We start each year with a Back to School Picnic where students are engaged with hands on STEM activities, we hold a couple of Family Nights each year with games and karaoke, we have several special food opportunities throughout the year such as bagels in the morning, pizza at lunch, and hot chocolate and cookies on cold days. Each event is intended to celebrate our students, teachers, parents, and overall our family.

As a staff, we are constantly supporting each other's efforts to try new things and we feel supported by our administrators and parents to try new things because they value our desire to always do what is best for students. Our parents are constantly stopping us at traffic duty to thank us for our efforts, sending thankful emails, and providing breakfast, lunches, and little treats to keep us motivated. Parents and administrators constantly have our backs and are found throughout the district singing our praises.

2. Engaging Families and Community:

As students become middle school students, it is even more important to keep families engaged in their students school life. Dearborn Public Schools prides itself on not only putting "Student First!", but also in its customer service model that works diligently to keep parents involved and informed. On the communication front, teachers have their own blogs that they update daily to keep parents informed on what is being done daily in the classrooms. This allows parents to follow along in our curriculum and discuss with their students after school about specific learning going on in the classroom. We also maintain a school blog that is constantly updated with happenings in our school - from after school opportunities, upcoming events, to successes that our clubs and teams have earned. We also support parents coming in to be visitors to our classrooms and also being audiences for student presentations. We have a very high conference turn out rate as we use the "student led conference" model where students are the leaders of the conversation about their learning. Very often this is the first time parents have heard their students be the voice behind their success and struggles and it is a popular school feature.

Our music and art department also holds several concerts and art exhibits throughout the year with our culminating event being outside under the stars in the spring. This event is music, art, and poetry combined and is well attended each year. Our students also engage in the community themselves by participating in many of the elementary STEM nights as student ambassadors. We have also raised money for several different community projects through snowman building competitions, pajama days, penny collections, and

family nights. Our active PTA and music Boosters Club have also engaged local businesses to help support our programs including our Robotics Team and Future City Competition Teams.

Community members and local businesses such as Ford Motor Company and BOSCH have come to our classrooms to help support our engineering endeavors. We have also partnered with Community - Advocate. Support. Inspire. Service. Teach (C-ASIST) which is a non-profit community outreach organization, centered in Dearborn. The organization operates under the sponsorship of the Islamic Institute of Knowledge and helps to educate students on physical and mental health issues. We have also partnered with the Attorney General's Office to help educate our students on real life issues such as bullying, smoking, suicide, drinking, mental health, etc. With a large immigrant population in Dearborn, we also work closely with ACCESS (Arab Community Center for Economic and Social Services) which is a community resource that is used to support our families.

All of the above are used to ensure that parents and community members feel welcome in our school. When students see that they are surrounded by caring and interested adults, it motivates them to want to work hard and succeed.

3. Professional Development:

Our professional development (PD) is ongoing and delivered by teacher leaders and through the teacher train teacher method. Once again, since we are such a small school, we are able to send our teachers to professional development that focuses on key areas of instruction that we promote at STEM Middle School. For example, our two STEM application teachers have received training from Project Lead the Way. They then have come back to the team and delivered professional development and support for the other teachers to implement elements of the training into their lessons. Our team leader has received training on project based learning from the Buck Institute and will continue her training this summer in order to further the staff's understanding and implementation of PBL in our classrooms. One last example is that five of our seven teachers have attended a five day Next Generation Science Standards (NGSS) PD in order to understand not only the new standards, but the new approach to science instruction. This included our language arts, math, and social studies teachers receiving the training to see how they can support and aid the science instructional approach in their own curriculum and instruction.

Our staff also participates in Professional Learning Communities (PLCs) that are cross curricular and include book talks. Our school's focus is to not isolate subject matter in that one classroom, but to incorporate as much interdisciplinary studies as we can. For example, you will see reading and writing across the curriculum with the Article of the Week strategy, Claim Evidence Reasoning (CER) writing, and speaking skills being practiced in all classrooms. One specific example is the cross curricular work between language arts and STEM Applications with the Future City Project. The language arts teachers worked with students on research reading, science exploration, engineering solutions, research writing, and presenting on this year's national Future City challenge. Afterwards, the STEM Applications teacher worked with students to bring their concepts to life with the actual construction of their Future Cities. We then sent two teams to compete at the local level.

Everything mentioned above is done through a committed plan to professional development and PLCs. This time is available every Monday, on late start Wednesdays once a month, and through some forms of common planning preps during the school day. The above mentioned examples are also aligned with our district and school's goals of improving reading, writing, and 21st Century Thinking Skills in all of our students. They are also designed to challenge our students to continue to excel in the areas of engineering and technology.

4. School Leadership:

Our school's leadership is comprised of a principal, assistant principal, and a teacher team leader. The philosophy of our school, however, is that we all work together for the success of the students and the school. Our principal and assistant principal are actually the head of six different schools (all of the schools on campus except for the elementary and adult education schools) all within the same campus. So, the

assistant principal and team leader meet daily to discuss happenings or issues in the school that need to be dealt with by them or as a team. Then the team works together to look at data and to discuss student success and struggles weekly. When a student is struggling or there is situation that needs to be discussed and dealt with, the team leader brings it to the team's attention and then we discuss it as a staff.

Administrative leadership at STEM Middle School trusts their staff to do what is right for students and empowers them to be leaders and do what needs to be done. Our assistant principal meets with the whole staff once a week to check in with us to see what support he can offer us; and both administrators are always available for support and advice. They always have our backs, but also do not hesitate to pull a teacher aside and discuss something that may need to be worked on or adjusted. They also recognize when a teacher may need support and are right there to get that teacher whatever support s/he may need. The team leader is also available daily to problem solve and offer support. Since she is also a classroom teacher on the team, she is in the trenches every day, knows the students, and is uniquely capable of problem solving before a problem actually develops.

Part VI – STRATEGIES FOR ACADEMIC SUCCESS

Our most successful academic strategy to push students to go beyond their current levels of academic success has been the application of project (inquiry) based learning across our core curriculum. The practice of students having to think creatively and collaboratively, while also being in control of the route that they take to get to the solution of a real world problem has been both challenging for all parties at STEM Middle School (student, teachers, parents) as it has also been exciting and rewarding. The practice of using PBL started our first year as a school, but it was seen only in our STEM Applications class. This class was designed to be like no class students had ever had before as well as it highlighting the STEM "way" and curriculum for our students. After our first year, we have been working to bring the instructional philosophy of PBL into all classrooms.

This strategy starts with teachers unpacking their standards to group relevant ones together. Unlike past practices, we do not approach each standard individually, but work to show students how learning standards are interrelated - in individual content areas and between the content areas. Next, teachers then provide a driving question that cannot be answered by a Google search. To get students excited and interested in the question, an entry event is used. These events could be as simple as a reading or a video all the way to a field trip or a guest speaker. Students then, while in small groups, build the knowledge and skills needed to answer the driving question. This step is student driven, but teacher guided. Next, students develop products and/or answers to the driving question. Peers then critique those products/answers so that teams have a chance to edit/revise their products/answers. Lastly, students present their answers to the driving question. During this stage we try and make it as authentic as possible by inviting in audiences from the real world.

As one can see, this instructional approach to learning is intense for students - they need to be willing to take control of their own learning and accept that there may be more than one pathway and more than one "right" answer. Teachers have to be comfortable giving up control and guide students, not just quickly answer their questions. Some struggle on a student's part is good. Parents have to come to accept a lot more group work, more rigorous expectations, and that memorizing information long enough to get the "A" is not going to be a successful strategy at STEM Middle School.