



STEM Innovation Academy

Pentucket Regional School District
Middle-High School Plan

February 2015

INNOVATION SCHOOL PLAN

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INNOVATION SCHOOL INFORMATION FORM

Proposed Innovation School Name:	STEM Innovation Academy at Pentucket Regional Middle-High School
New/Conversion/Academy within a school:	Conversion
Proposed School Address (if known):	694 Main Street, West Newbury, MA
Lead Applicant Name:	Jeff Mulqueen
Lead Applicant Phone Number(s) :	978-363-2280
Lead Applicant Fax Number(s) :	
Lead Applicant Email Address:	jmulqueen@prsd.org

If conversion:

Existing School Name:	Pentucket Regional Middle -High School
Existing School Address:	Same as Above

Proposed Innovation Academy opening school year: 2015-2016

Proposed duration of innovation plan (up to five years): 3 years 4 years 5 years

School Year	Grade Levels	Total Student Enrollment	Total number of Staff (including para-professionals and all support)
First Year	7-12	100	2
Second Year	7-12	100	2
Third Year	7-12	125	3
At Full Enrollment	7-12	150	4

INNOVATION PLAN CERTIFICATION STATEMENT

Proposed Innovation School Name:	STEM Innovation Academy at Pentucket Regional Middle-High School
Proposed City/Town Location:	West Newbury, Massachusetts

Names of innovation plan committee members (no more than 11 individuals) selected in accordance with state law:

Affiliation	Name	Vote (yes or no)
Lead applicant: Superintendent	Jeff Mulqueen	
Member: Teacher	Shawn MacDonald	
Member: Teacher	Kaitlyn Fonseca	
School committee member or designee:	Joanna Blanchard	
Parent who has one or more children enrolled in the school:	Anna Marie Beech	
Teacher employed by district (selected from among volunteers)	John Siegfried	
Teacher employed by district:	Dianne Kelly	
Member: Parent	Cyd Wong	
Member: Parent	Kevin Tierney	
Member: Staff	Kelly Chory	
Member: Principal	Jonathan Seymour	

I hereby certify that the information submitted in this innovation plan is true to the best of my knowledge and belief and has been approved by a majority vote of the innovation plan committee.

Signature of Lead Applicant

Member _____ **Date** _____

I. Executive Summary

The Pentucket Regional School District serves students in grades K-12 in the communities of Groveland, Merrimac, and West Newbury. Our mission is to become the school district of choice for students, families, and educators seeking a World Class teaching and learning environment. Pentucket's future depends upon creating and implementing effective and engaging learning opportunities for teachers and students, as well as providing the resources, challenges, and independence for personal academic and social development. With Innovation Schools and Academies currently in operation throughout each of the district's schools, it is of the essence to continue their growth as one of the strategic initiatives that will help us achieve our World Class future.

As education in the United States advances and competes on a global scale, the progressive model requires high levels of collaboration, communication, and innovation. Our intent is to vertically align the Pentucket Middle-High School STEM Innovation Academy with the existing Elementary Design & Engineering Academies, so students can follow a systematic route of Science, Technology, Engineering, Math, and Design coursework over their entire K-12 academic career. This will provide long term content focus, aimed at graduating students with special recognition and distinction in STEM and Design, who are ready for post-secondary and the workforce.

The Pentucket Middle-High School STEM Innovation Academy's mission is to provide a rigorous, relevant, and personalized academic pathway where all students can thrive. Through project based learning, students will think critically about authentic problems and devise solutions by applying mathematical and scientific concepts. Students will take intellectual risks and engage in open-ended instruction. Adaptive leadership skills, such as collaboration and strategic thinking, will be integrated throughout the pathway.

These objectives will be available throughout the Middle- High School Program of Studies, with specific courses earmarked as STEM certified. Students will be able to choose their pathway and earn the rigorous credits towards the Certificate of Recognition in completing the STEM Academy. Staff and students will share a unique opportunity to pursue their passion as they accelerate their learning. Offering early high school as well as early college credit will set a rigorous standard for students to develop ownership of their learning. Collaborating with STEM-centric businesses will foster real-world connections and effective networking opportunities. Collaboration among students, teachers, parents, administration, and the local community will

strengthen our capacity to accelerate learning and ready our students for the competitive global economy. In keeping with the Next Generation Science Standards, Massachusetts Science and Technology Frameworks, and Writing across the Curriculum, we will also include the District Determined Measures along with creative assessments to engage students in proper tracking through the program.

II. Strategic Change Chart:

Current School or District Practice	Proposed Change(s)	Expected Impact on Student Learning and Achievement
1. No recognition exists for graduating seniors who have completed multiple coursework in STEM subject areas.	1. Certify all STEM-related subjects across the HS curriculum so students can earn credits towards Certificate of Recognition.	1. Pentucket STEM Academy will earn Certificate of Recognition for completing 35 Credits of STEM-certified coursework.
2. Schedule limits/eliminates common prep time for teachers to collaborate.	2. Collaborative time will allow STEM Academy teachers to assess and refine high powered units of instruction.	2. Learning through multiple means of instruction improve student achievement.
3. Schedule and Program of Studies limits course offerings.	3. Students will have the opportunity to elect STEM Academy courses for a diverse and scaffold pathway toward HS graduation.	3. Expanded program of studies will provide accelerated learning opportunities for middle and high school students to explore STEM college and career pathways.
4. Limited or no partnerships to support early-high school, early-college, and career pathways.	4. Develop, strengthen and expand partnerships on the local, national, and global level. HS Guidance department will promote the use of Naviance to explore career and higher education opportunities.	4. Increased student engagement through partnerships and provide access to early-high school, early-college, and early-career opportunities.
5. Lack of core content integration.	5. Integration of core content in the curriculum.	5. Integrated core curriculum gives every student access to personalized, rigorous, and relevant learning in Science, Technology, Engineering, Math, and Design.
6 Current educational models do not emphasize personal meaning.	6. The foundation of the Academy rests on a structure of passionate and talented educators who give students voice and choice.	6. Increased personal meaning and ownership over learning improves student achievement and attendance.
7. Decision making structure limits influence of educators to impact learning.	7. Implement a structure for shared decision-making.	7. Autonomy over the program of studies, budget allocation, professional development, and schedule/calendar will allow educators to address student needs.

II. PUBLIC STATEMENT

The Middle-High School STEM Academy Plan will support Pentucket's World Class vision. The academy will be housed between the Middle and High school buildings, located in West Newbury. The academy will serve a total of approximately 150 middle and high school students. Enrollment will be open to all students in grades 7-12. The proposed STEM Academy aims to strengthen student learning in four areas: student achievement, critical thinking, personal meaning, and authentic problem solving. Student growth will be achieved through the integration of STEM principles across the curriculum.

III. Mission, Vision, Statement of Need, and Proposed Partnerships

A. Mission Statement

The Pentucket Regional Middle-High School STEM Academy's mission is to provide a rigorous and personalized academic program where all students can thrive. Through project based learning, students will think critically about authentic problems and devise solutions by applying mathematical and scientific concepts. Students will take intellectual risks and engage in open-ended instruction. Adaptive leadership skills, such as collaboration and strategic thinking, will be integrated throughout the curriculum. Staff and students will share a unique opportunity to pursue their passion for learning and demonstrate leadership skills.

B. Vision

The Pentucket Middle-High School STEM Academy is committed to accelerating students in the STEM content areas, with a focus on real-world problem solving, math application and innovative design. The curriculum will engage students in project based learning opportunities, creative assessments, and state and national frameworks. The Academy will foster a passionate and creative culture, which will motivate students and staff. We envision an environment where administrators, teachers, and community members collaborate, take risks, and reflect on their current practices to prepare the next generation of qualified and competitive high school graduates. The Academy will lay the foundation for all students to reach their full potential.

Shared values:

- Personal meaning for all students
- Risk taking for all stakeholders
- Accelerated learning for all students
- Social and Environmental Responsibility

C. Statement of Need

The Pentucket Middle-High School STEM Academy applicant group is committed to providing middle and high school students with the 21st Century skills necessary to be successful, contributing adults. The Academy addresses Standards in the Massachusetts Curriculum Frameworks, integrating engineering and design concepts into all curriculum areas. Through activity-, problem-, and project-based challenges, students will work both independently and collaboratively to apply their knowledge of science and mathematics, use inquiry and reasoning skills, and tap their creativity as they design, create, test, reflect, and

refine possible solutions. Collaboration and outreach with local businesses and universities will also provide professional, real-world experience.

Currently, 8th grade students have the opportunity to take a STEM class, a semester-long engineering foundations course. At the high school level, students can elect to take Engineering and Technology Education classes, which bolster the principal foundations of Engineering and Design, however, class size and scheduling often limit the number of participants. The Academy applicant group recognizes the need for autonomy to engage more students, and offer early high school/early college credit, as well as collaborative work/study opportunities with professional business partners. To develop these goals, we will use research based practices to deliver instruction that engages students to rigorously apply the concepts of science, design, engineering, and mathematics. Students who are proficient in design and engineering skills are able to answer complex questions, investigate global issues, and develop solutions for real-world problems. These are essential skills that can help solve the education and workforce development challenges facing our nation.

D. Primary Proposed Partnerships

The applicants are working to develop and strengthen partnerships including, but not limited to the following:

- University of Massachusetts at Lowell
- Massachusetts Institute for Technology
- Middlesex Community College
- Worcester Polytechnic Institute
- Museum of Science
- Area businesses
- Community Members

III. How will autonomy and flexibility be used to improve school performance and student achievement?

A. Curriculum, Instruction, and Assessment

The proposal seeks autonomy in curriculum, instruction, and assessment in order to add rigor and relevance to student learning as well as to improve student achievement. The Middle-High School Design & Engineering Academy’s instructional philosophy allows students to become independent, active learners who possess strong content-knowledge. Current and new curriculum will be developed, composed of high-powered units of instruction. These units of instruction will focus on high-impact outcomes that integrate District Determined Measures, adaptive leadership skills, and personal meaning.

The STEM Academy Program of Studies*:

Course	Sequence	Prerequisite
STEM 1	Grade 7	None

STEM 2	Grade 8	STEM 1 or application to STEM teacher
Computer Lab	Grade 7 and 8	None
CAD 1	HS	None
CAD 2	HS	CAD1
CAD 3	HS	CAD 2
CAD4	HS	CAD 3
Robotics 1	HS	None
Robotics 2	HS	Robotics 1
Engineering 1	HS	None
Engineering 2	HS	Engineering 1
Problem Solving in Technology	HS	
Algebra 1	HS	
Algebra 2	HS	
Trigonometry/Geometry	HS	
Pre-Calculus	HS	
Calculus	HS	
AP Calculus	HS	
Biology	HS	
Chemistry	HS	
Physics	HS	
AP Biology	HS	
AP Chemistry	HS	
AP Physics	HS	
Contemporary Global Affairs	HS	
Topics in Literature	HS	
Service Learning	HS	

TBD	HS	
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*Subject to change after final review of Middle-High School Program of Studies has been updated for 2015-2016

B. Schedule and Calendar

The applicant group seeks autonomy for the schedule and calendar. Flexibility in these areas will allow students to engage in high-powered units of instruction to include outside, real-world experiences in the areas of business, such as internships, job shadowing, and field work. Student learning is nurtured and valued by providing individualized instruction that integrates challenging standards, adaptive leadership skills, and high levels of personal meaning. With an expanded day and school calendar, increased opportunities for learning and teacher collaboration will be realized. Additional credit-bearing, learning opportunities include, but are not limited to, virtual courses, blended learning, dual enrollment, and summer/vacation and after-school course work. Professional development opportunities throughout the year will support the STEM Academy staff to provide a high-powered and progressive education to Pentucket students.

C. Staffing

The applicant team seeks to participate in the hiring process to ensure high quality teaching and learning. Industry professionals and other instructors with specialized experience and knowledge will be integral as instructors. Our staff is committed to being flexible in curriculum design and scheduling, with the focus on student achievement.

D. Professional Development

The applicant team seeks autonomy for professional development planning and delivery due to the highly specialized content needs of the instructors, which can be significantly different than the needs of comprehensive high school staff. Professional development needs to support the mission and vision of PRSD and the STEM Academy.

Professional development opportunities include:

- Science, Technology, Engineering, Mathematics, and Design consultants
- Site visits to established STEM and Design and Engineering schools
- Attendance to relevant conferences
- Investigations of:
 - Engineering curriculum
 - Digital curriculum
 - Google Drive
 - Partnerships with local engineers
 - Partnerships with high profile corporations that employ engineers

E. District Policies and Procedures

The STEM Academy will operate within the district's established policies and procedures. Autonomies are sought in the areas of budget, scheduling, staffing, and professional development.

F. Budget

The STEM Academy must be budget neutral. We seek autonomy for use of per-pupil allocations.

IV. CAPACITY OF APPLICANT GROUP

The STEM Academy Planning Committee consists of 11 members. The Committee includes administrators, school faculty, community members, and parents with engineering expertise. The Committee has met in small groups to create Innovation Plan drafts. The large group gave feedback and edited the final Innovation Plan.

Planning Committee members:

Dr. Jeff Mulqueen	Superintendent
Shawn MacDonald	Teacher
Kaitlyn Fonseca	Teacher
Joanna Blanchard	Parent
Anna Marie Beech	Parent and PEF Member
John Siegfried	Teacher
Dianne Kelly	Teacher
Cyd Wong	Parent
Kevin Tierney	Parent
Kelly Chory	Teacher
Jonathan Seymour	Teacher

The applicant group recognizes that students who are proficient in design and engineering skills are able to answer complex questions, independently investigate global issues, and develop solutions for real world problems. Our faculty has pledged dedication to improving our students' academic achievement and embrace the design of a quality education for all students. The Design & Engineering Academy staff will make the needed research based changes AND work towards a collaborative school plan.

The Pentucket Regional School District, led by Superintendent Dr. Jeffrey Mulqueen, developed the innovation school strategic initiative. Input was collectively compiled from students, staff, and community members during the 2012 – 13 school year as part of the district's branding initiative to improve the delivery of high quality academics, arts, and athletics. The result of this year-long data collection effort with stakeholders resulted in the identification of STEM Academy as a viable step in meeting expectations of students, staff, and the broader Pentucket community. Now that the Design & Engineering Elementary Academy has been granted, the next logical step is to create the Middle-High School STEM Academy, where students will follow a 6-year, distinguished path through the Science,

Technology, Engineering, Mathematics, and Design content, earning early high school and college credits, and creating career opportunities for life after high school.

The applicant group was organized in response to Dr. Mulqueen's innovation school strategic initiative. Dr. Mulqueen has two years of experience in successfully creating and guiding eight Innovation Schools in the Worcester Public School System. Worcester Technical High School, one of his last efforts supporting the innovation school initiative in Worcester, continues to be a beacon for other high schools. This applicant group was established to provide the autonomies needed for students' achievement in the Design & Engineering Academy.

This proposal is the combination of staff interest in improving teaching and learning for ALL students, a drive to meet the strategic objectives of the district, and a central office administration plan to bring "world class" educational opportunities to all students, including under-performing student groups.

There is strong support from the school staff and community to pursue the development and implementation of the next phase towards a K-12 Engineering and Design program here at Pentucket. The applicant group consists of the superintendent and teachers from the Middle and High School, as well as parent and school committee representatives. This group is dedicated to making the changes outlined in this proposal. This is an exciting opportunity to establish a program which supports the district's vision to reach its world class potential.

V. Timetable for Development and Establishment

The STEM Academy prospectus was submitted for review by the Prospectus Screening Committee on November 15, 2014, and was approved to for the planning phase. Since January 2015, the applicant group has met with members of the Pentucket District Office to collect information about writing the Innovation Plan.

The process for the Innovation Plan is modeled after the year-long process used to arrive at the prospectus. Specifically, the applicant group has engaged students, staff, parents, higher education, and community members to develop necessary details prior to implementation in September 2015. A high level of engagement with the schools' staff members have ensured that the new Innovation Academy will be welcomed and supported. High frequency, two-way communication has occurred during the Innovation School Plan period with all constituent groups.

VI. Measureable Annual Goals

We will be held to the same standards as the Pentucket Regional School District. Students will still take part in MCAS or PARCC standardized testing. Individual and team Massachusetts Educator Evaluation goals as well as District Determined Measures will be aligned with The STEM Academy goals. Student growth will be tracked through our SMART goals.

VII. TIMETABLE FOR DEVELOPMENT AND ESTABLISHMENT

The STEM Academy prospectus was submitted for review by the district on November 25, 2013. The District approved the Innovation School prospectus at a Pentucket Regional School

Committee meeting and the prospectus was submitted to the state in December 2014. Since receiving approval by the district, the STEM Innovation Academy team began the process for establishing the Innovation Plan. The composition of the group followed the guidelines provided by the state.

The multi-year process is outlined below:

2014-2015

- Establish the Middle-High School STEM Innovation Academy Plan
- Present Innovation School Plan to staff for feedback
- Leadership Team is created

2015-2016

- Document a plan for evaluating the effective implementation of new learning
- Initiate the implementation of structures and resources to address priorities supporting the implementation of STEM within the Middle-High School Program of Studies
- Implement training to support differentiated instruction
- Collect data regarding the implementation of professional development and make adjustments as needed

2016-2017

- Use performance data and results of feedback mechanisms to monitor progress and improve teaching and learning
- Refinement of instructional units leading to demonstrated student learning
- Use data to refine instructional practices

2017-2018

- Refinement of instructional units to ensure accelerated student learning
- Refinement of instructional units leading to demonstrated student learning
- Implement continuous improvement

VII. MEASURABLE ANNUAL GOALS

Autonomy: Curriculum, Instruction, Assessment

Goal # 1

All teachers will collaboratively design, assess, and refine units of study that integrate challenging content standards, adaptive leadership skills, and high levels of personal meaning.

Connection to School Improvement/Capacity-Building Plan:

Strategic Objective # 1: Develop powerful units of instruction by integrating challenging standards, adaptive leadership skills, and high levels of personal meaning to ensure the success of each student

Strategic Objective #2: Implement 3-Tiered Instruction to accelerate the learning of every student

Dates	Action	Measure
2015-2016	<ul style="list-style-type: none"> • Offer Introduction to STEM for 7th Grade • Offer Intermediate STEM for 8th grade • High School Program of Studies to indicate STEM Academy recognized courses • Establish Professional and Academic partnerships with businesses and higher education both locally and abroad 	<ul style="list-style-type: none"> • Traditional course to be integrated into Program of Studies • Highlight Pathway for Students seeking Certificate of Recognition in STEM Academy • Provide Middle School Students with early HS credit • Provide HS Students with early college credit
2016-2017	<ul style="list-style-type: none"> • One - three additional units designed and taught by STEM Academy course teachers • Student learning measured using performance based assessment • Academic alignment to STEM content, adaptive leadership skills, and District Determined Measures 	<ul style="list-style-type: none"> • Improved achievement and growth of students toward intended outcomes • Teacher development of High Powered Units of Instruction and relevant DDM assessments
2017-2018	<ul style="list-style-type: none"> • Refinement of instructional units to ensure accelerated student learning • Sustain relationships and partnerships with STEM businesses and higher education 	<ul style="list-style-type: none"> • Student performances on assessments (standardized; performance-based; DDM) continues to evidence growth.

Autonomy: School Schedule

Goal # 1

Provide bi-monthly meeting time for all teachers in the STEM Academy to plan, evaluate, and collaborate on courses, content, and Academy goals.

Connection to School Improvement/Capacity-Building Plan:

Strategic Objective #4: Implement systematic educator evaluation that results in the continuous improvement of adults and increases the collective capacity of the system to deliver World Class results.

Dates	Action	Measure
2015-	<ul style="list-style-type: none"> • Schedule designed by Leadership 	<ul style="list-style-type: none"> • Greater student learning

2016	Team	resulting from teachers collaboratively designing learning, and examining student work. High needs learners will show growth in particular.
2016-2017	<ul style="list-style-type: none"> Schedule designed by Leadership Team 	<ul style="list-style-type: none"> Maintenance of high level student learning resulting from teachers collaboratively designing learning, and examining student work.
2017-2018	<ul style="list-style-type: none"> Schedule designed by Leadership Team 	<ul style="list-style-type: none"> Maintenance of high level student learning resulting from teachers collaboratively designing learning, and examining student work.

Goal # 2

Reallocate teacher release time to facilitate student learning and improvement of STEAM related curriculum design and pedagogy.

Connection to School Improvement/Capacity-Building Plan:

Strategic Objective #4: Implement systematic educator evaluation that results in the continuous improvement of adults and increases the collective capacity of the system to deliver World Class results.

Dates	Action	Measure
2014-2015	<ul style="list-style-type: none"> Schedule designed by Leadership Team Half-day prior to school beginning allocated to STEM Academy program introduction and unit development 1-2 Early Release days during year dedicated to on-going unit development and assessment and STEM Academy development 	<ul style="list-style-type: none"> Greater student learning resulting from teachers increasing understanding and competency of STEM curriculum
2015-2016	<ul style="list-style-type: none"> Schedule designed by Leadership Team Half-day prior to school beginning allocated to STEM Academy program introduction and unit development 1-2 Early Release days during year dedicated to on-going unit development and STEM training 	<ul style="list-style-type: none"> Greater student learning resulting from teachers increasing understanding and competency STEAM curriculum
2017-	<ul style="list-style-type: none"> Schedule designed by Leadership 	<ul style="list-style-type: none"> Greater student learning

2018	<p>Team</p> <ul style="list-style-type: none"> • Half-day prior to school beginning allocated to STEM Academy program introduction and unit development • 1-2 Early Release days during year dedicated to on-going unit development and STEM curriculum 	<p>resulting from teachers increasing understanding and competency of STEAM curriculum</p>
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Goal # 3
Teachers provide students with opportunities for learning beyond the school day.

Connection to School Improvement/Capacity-Building Plan:
Strategic Objective # 5: Strengthen systems of support for the instructional core.

Dates	Action	Measure
2015-2016	<ul style="list-style-type: none"> • Teachers use Google Drive to differentiate student learning and to provide learning outside of class • Teachers use digital technologies to connect students to curriculum beyond the school day 	<ul style="list-style-type: none"> • Student-teacher communication improves
2016-2017	<ul style="list-style-type: none"> • Teachers use Google Drive and explore Google Classroom when developing units and facilitating class • Teachers use digital technologies to connect students to curriculum beyond the school day 	<ul style="list-style-type: none"> • Student learning of content knowledge and communication skills improves • Student engagement increases
2017-2018	<ul style="list-style-type: none"> • Teachers use Google Drive and explore Google Classroom when developing units and facilitating class • Teachers use digital technologies to connect students to curriculum beyond the school day 	<ul style="list-style-type: none"> • Student engagement increases

Autonomy: Staffing

Goal # 1
Members of the STEM Academy will collaborate on new hire process for vacancies as needed.

Connection to School Improvement/Capacity-Building Plan:
Strategic Objective # 4: Implement systematic educator evaluation that results in the continuous improvement of adults and increases the collective capacity of the system

<i>to deliver World Class results.</i>		
Dates	Action	Measure
2014-2015	<ul style="list-style-type: none"> • Leadership Team formed • Request hiring of STEM Academy Coordinator 	<ul style="list-style-type: none"> • Students engage in quality project-based learning
2015-2016	<ul style="list-style-type: none"> • STEM Academy course teachers collaborate on aligning curriculum • Evaluate quality criteria for new staff hires and adjust as needed 	<ul style="list-style-type: none"> • Students continue to engage in high quality learning due to consistency of work by staff regardless when hired
2016-2017	<ul style="list-style-type: none"> • Request hiring of second STEM teacher for Middle School • Evaluate quality criteria for new staff hires and adjust as needed 	<ul style="list-style-type: none"> • Middle School STEM foundations are bolstered
2017-2018	<ul style="list-style-type: none"> • Evaluate quality criteria for new staff hires and adjust as needed 	

Autonomy: Professional Development

Goal # 1

All teachers learn to design interdisciplinary STEAM units of and assess complex learning in reliable and valid ways.

Connection to School Improvement/Capacity-Building Plan:

Strategic Objective # 1: Develop powerful units of instruction by integrating challenging standards, adaptive leadership skills, and high levels of personal meaning to ensure the success of each student

Strategic Objective # 4: Implement systematic educator evaluation that results in the continuous improvement of adults and increases the collective capacity of the system to deliver World Class results.

Dates	Action	Measure
2015-2016	<ul style="list-style-type: none"> • Teachers participate in half-day STEM Academy workshop prior to start of school year • Teachers attend relevant Professional Development trainings, workshops, and site visits to STEM schools 	<ul style="list-style-type: none"> • HS students begin pathway for STEM Academy accreditation
2016-2017	<ul style="list-style-type: none"> • Teachers design professional development based on self-assessment of needs. • Teachers participate in ongoing training 	<ul style="list-style-type: none"> • Student learning through inquiry improves as staff increases knowledge and competency in planning, teaching, and assessing

2017-2018	<ul style="list-style-type: none"> Teachers participate in ongoing STEM training and consultant site visits 	<p>project-based teaching</p> <ul style="list-style-type: none"> Student learning through inquiry improves as staff increases knowledge and competency in planning, teaching, and assessing project-based teaching and learning.
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IX. REQUIRED ATTACHMENTS

- Current School Improvement Plan
- High School Program of Study with STEM Academy course listing