

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):
- 5 Elementary schools (includes K-8)
 - 4 Middle/Junior high schools
 - 2 High schools
 - 1 K-12 schools
- 12 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	0	0	0
7	0	0	0
8	0	0	0
9	40	52	92
10	18	43	61
11	33	56	89
12 or higher	25	49	74
Total Students	116	200	316

4. Racial/ethnic composition of the school:
- 0 % American Indian or Alaska Native
 - 9 % Asian
 - 68 % Black or African American
 - 18 % Hispanic or Latino
 - 0 % Native Hawaiian or Other Pacific Islander
 - 5 % 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: 6%

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	11
(2) Number of students who transferred <i>from</i> the school after October 1, 2016 until the end of the 2016-2017 school year	6
(3) Total of all transferred students [sum of rows (1) and (2)]	17
(4) Total number of students in the school as of October 1, 2016	295
(5) Total transferred students in row (3) divided by total students in row (4)	0.06
(6) Amount in row (5) multiplied by 100	6

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

Specify each non-English language represented in the school (separate languages by commas):
Spanish, Nepali, Chinese, French, Vietnamese, Arabic

7. Students eligible for free/reduced-priced meals: 64 %
Total number students who qualify: 201

8. Students receiving special education services: 3 %
10 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>1</u> Multiple Disabilities |
| <u>0</u> Deafness | <u>0</u> Orthopedic Impairment |
| <u>0</u> Deaf-Blindness | <u>1</u> Other Health Impaired |
| <u>0</u> Developmentally Delayed | <u>6</u> Specific Learning Disability |
| <u>0</u> Emotional Disturbance | <u>2</u> Speech or Language Impairment |
| <u>0</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: 5
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.	27
Resource teachers/specialists/coaches e.g., reading specialist, science coach, special education teacher, technology specialist, art teacher, etc.	5
Paraprofessionals under the supervision of a professional supporting single, group, or classroom students.	3
Student support personnel e.g., guidance counselors, behavior interventionists, mental/physical health service providers, psychologists, family engagement liaisons, career/college attainment coaches, etc.	3

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 11:1

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	93%	93%	93%	96%	96%
High school graduation rate	98%	100%	100%	97%	100%

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	87
Enrolled in a 4-year college or university	65%
Enrolled in a community college	23%
Enrolled in career/technical training program	1%
Found employment	1%
Joined the military or other public service	2%
Other	7%

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.

SciTech High personalizes instruction and support services to provide the experiences and opportunities that each student needs to make good decisions in a wide variety of contexts. We seek to challenge, fill the gaps, and inspire the dreams that will lead our students to succeed in college and make significant contributions to their community. We envision SciTech as a school with permeable walls and endless possibilities, a school that integrates content knowledge, organizations, people, and ideas.

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

Admission to Harrisburg High School SciTech Campus is by application. If minimum requirements (2.5 core GPA minimum, including grades from the first and second marking periods in Math, Science, English, and Social Studies) are met and a complete application has been submitted, an interview is scheduled. Final admissions determinations are based upon teacher recommendations, grades, placement scores, attendance, discipline, a writing sample, and an interview. Students who are accepted are required to attend the mandatory new student and parent meeting.

PART III – SUMMARY

When our school was conceived, the Harrisburg School District dealt with many of the problems that plague urban areas: the number of graduates had dwindled to under 200 (from a 9th grade cohort of 900+), less than ten percent of those 200 moved on to higher education, and the district itself was on the brink of financial insolvency. Something had to be done, even if only in a localized way, to provide educational opportunities for the youth of Harrisburg, and the idea for a new type of public high school was born.

Originally housed in the basement floor of an existing middle school, this new model would have small class sizes, public and private funding, teaching that extended beyond the classroom using the resources of the community, mentorship for each student, a science and mathematics based focus, project-focused learning, and teachers recruited from diverse backgrounds and life experiences. At the time, the Gates Foundation gave the blueprint for the creation of a type of model STEM school which served as an early ideal. Initially, our school was composed of a small group of students housed in a wing of what remains our sister campus, a comprehensive high school. Known then as PolyPrep, our school learned to crawl and was soon ready to stand on its own, in its own building as the Harrisburg Polytechnic University High School which soon became known simply as SciTech.

The first twenty-one students graduated from the program in 2005, having completed two years of the burgeoning SciTech curriculum. The Class of 2007 was the first four-year class to have completed all of their high school education at SciTech. Those students endured numerous scheduling changes as we sought to maximize the learning potential for our students. Our AP curriculum grew from 1 course taught at our sister campus to as many as 10 offered in house. We now offer dual enrollment in science and humanities as well as a unique arrangement with a local private university to provide free or low cost collegiate education to students in need. All incoming students since 2005 have attended a summer program to prepare them for the rigors of our school. Since 2004, summer programming and camps have been offered to students to continue their educational progress. This includes affiliations with Johns Hopkins University, Penn State University, and the State System of Higher Education in Pennsylvania.

Early adopters of technology, we have been a 1:1 school since 2004-2005. We have also had a competitive robotics program every year since then. Our faculty and students have presented at statewide and national conferences regarding implementation of technology in the classroom, in civic engagement, and through science learning and success in Urban Education since 2006. We have received the National HighTech School of the Future Award from the National Superintendents Roundtable (2009) and numerous statewide academic achievement awards for statewide testing results. We have been recognized in the US News and World Report rankings and through Niche.com as one of the best schools in Pennsylvania.

Our growth over the years has resulted in a multifaceted program that encourages up to 400 students to develop their full potential through a myriad of strategies beginning with the academic. We have adopted the rigorous SpringBoard Curriculum, but we do not follow it blindly; instead, we supplement and tailor instruction so that it remains original and relevant. This curriculum allows us to offer a vertically aligned program that prepares students for college coursework, some of which begins in high school. Our EXPLORE program allows students who are struggling to find the academic help they need after school along with a meal to nourish their physical needs. We have also implemented what we call Our Future Success Days on which we provide students with focused instruction and preparation for their high-stakes tests including the Advanced Placement Exams. We begin each day with thirty minutes of mentoring in which each student's progress is monitored by a teacher, and each student is encouraged to find the help he or she needs. For further assistance, struggling underclassmen are paired with members of the National Honor Society who keep in constant contact not only for tutoring, but also for mentoring in the capacity of an older sibling.

Because we believe in teaching the whole child, we implement a plurality of strategies. The Brotherhood mentors our young men while My Sister's Keeper meets the needs of our young women. Our POPS (Pain of Prison System) program supports students who know someone who is or has been incarcerated. The Three Star Basketball League is an after school mentoring program that uses basketball to promote leadership in

young men. Lunch and Learn provides our students with the opportunity to have a meal with a professional in a career area of interest. Our Community Partnership Day provides the entire student body with service learning beyond our walls one day each month.

Leadership development in our young people is also an integral aspect of our strategy. The Youth Community Development Team enables students from three area high schools to create, award, and oversee grants for local service organizations. In addition, the Youth Commission of the City of Harrisburg enables SciTech students to have a non-voting role in city government proceedings and to offer input regarding all matters affecting the city's youth. The STEM Mentoring Program pairs SciTech juniors with elementary students for weekly meetings that continue for a two-year period in an effort to inspire and groom young scholars.

PART IV – CURRICULUM AND INSTRUCTION

1. Core Curriculum:

“Students will not learn everything they need to know in your classroom.” These are the words of our founding director, who advocated strongly for learning “beyond our walls,” learning that promoted community and civic engagement for all students enrolled at SciTech High School. Community and civic engagement is not only found within the school’s myriad of clubs and extracurricular activities; it is also embedded throughout the core curriculum. The core curriculum at SciTech is augmented with community-based experiences, academic competitions, and field trips that are connected to course learnings and academic standards. In all core content courses, there is emphasis on creating learning experiences as opposed to teaching stand-alone lessons. The school’s core curriculum is guided by the school’s vision, the Pennsylvania Academic Standards, and the Common Core State Standards. Standards are addressed through an interdisciplinary, project-based curriculum that requires teachers to collaborate with one another and to include the community in the creation of learning experiences.

In English language arts (ELA), students acquire foundational skills through the study and analysis of literature that is aligned with the social studies content. This interdisciplinary approach in the core ELA courses allows for students to understand the historical context out of which enduring literature has emerged. In addition to the study of literature, students participate in essay contests offered by the Rotary Club, The American Legion, the World Affairs Council, and other local community organizations. The English curriculum is enhanced through the use of the SpringBoard curriculum to provide a rigorous college preparatory experience for all students in all core ELA courses.

In ninth grade, specifically, students lay the foundation for their study with a focus on various genres while developing analytical and writing skills. Students begin to see the correlation between form and content in representative works as they embark on ever more challenging selections in preparation for their senior year. The tenth grade course of study pulls from literature all over the globe, thereby providing students with the diversity of the human experience and condition. In eleventh and twelfth grade selections are mixed between British and American authors while the prevailing focus is the depth of analysis required. Seniors have the option of taking the Advanced Placement course as the culmination of their English studies.

In Mathematics students also are taught through the rigorous SpringBoard curriculum to provide students with the college preparatory and Advanced Placement experience. Coursework is designed to develop conceptual understanding of topics along with procedural knowledge of their application. Since the majority of our students enter our high school with a deficit in math skills and background, we offer math for 90 minutes each day all year long in order to meet students at their needs and bring them up. Our mathematics students learn through project based learning, group activities, and current technologies such as graphing calculators and MathXL. Our math courses incorporate the following skills: communication, social interactions, problem solving, technology, complex and critical thinking.

In ninth grade, students have a choice of Algebra I or Geometry based on their Keystone Exam scores. In tenth grade students have the option of Geometry or Algebra II. Upon entering eleventh grade, Algebra II and Pre-calculus are the offerings. In twelfth grade, students may select from a variety of math offerings including College in the High School Algebra in partnership with Harrisburg Area Community College. In Science students’ inquiry skills are developed in ninth grade through routine lab investigations and a semester long independent research project. The independent research projects were developed to compete in the EPI challenge, created by Penn State’s Early Preparation and Inspiration for Careers in the Biomedical Sciences (EPIC) program. Students are able to continue their research projects or pursue a new focus while honing their skills during their successive years at SciTech. All science core and elective courses incorporate inquiry based investigations, analysis of the findings, and implications of current research.

Integrated Science provides a strong foundation in both the skills and content of science in ninth grade. In tenth grade Biology, students are led to a discovery of biological concepts and principles, and the course emphasizes research and scientific inquiry methods to motivate students to build higher level thinking skills.

Chemistry, Environmental Studies, and Physics are options for our eleventh graders. For these courses the students are expected to have a working knowledge of algebra, mathematical skills, laboratory skills, and current scholarly research. Twelfth grade students have the opportunity to select from a variety of elective courses including AP Chemistry, Physics, Robotics, AP Environmental Science, and Biology 101 and 102 through Harrisburg Area Community College.

In Social Studies starting in ninth grade, a civic consciousness is fostered in all students. In all core social studies courses, civics concepts are taught within the context of United States history and global issues. Students are afforded the opportunity to participate in mock elections, voter registration drives, and meetings with local legislators and policy-makers. Students are also encouraged to discuss issues that are of importance to their parents and peers. Additionally, in the core social studies courses, field trips to the United States Holocaust Memorial Museum, The National Museum of African American History and Culture, The National Constitution Center, and the United States Civil War Museum are standard occurrences. Students also have the opportunity to join the school's Civic Engagement Club. The mission of the Civic Engagement Club is to provide students with opportunities for interactions and dialogue with local and state policy makers. The foundational skills developed in all core content courses are put to good use in social studies as students are provided with opportunities to apply their knowledge in various community settings that move beyond the walls of the school building.

In ninth grade social studies, the history of the United States from the Civil War through the 1920s is the focus. In addition to the history of this time period, civics and government concepts are infused. The study of United States history continues in tenth grade with start of the Great Depression and ends with contemporary history and issues. Upon entering eleventh grade, students take a course entitled Your Government, Your World. This course is a fusion between a contemporary world history course and a global issues course. The goal of this last required course in the social studies scope and sequence is to equip students with the skills necessary to participate in a global society. Twelfth grade electives allow students to study psychology, sociology, United States history, economics, and African American history. For an added challenge, students may take Advanced Placement courses in psychology, United States history, and world history. Our partnership with Harrisburg Area Community College provides even more offerings: United States History I and II, History of the Vietnam War, and Twentieth Century History.

In order to prepare students for college, starting in ninth grade, students begin to explore career options through our school's Career Pathways course. After ninth grade, students continue to explore various career paths through internship programs with local businesses, banking institutions, and healthcare providers. In order to prepare students for college, faculty members discuss college as soon as students enter in ninth grade. Faculty post their alma mater outside of their classroom along with a QR code for further information. In addition to the core curriculum, SciTech offers SAT prep courses, college application assistance, and a FAFSA night for parents. Our Community Partnership Days each month allow students to volunteer and experience a range of careers.

2. Other Curriculum Areas:

Our school offers students the opportunity for four years of foreign language instruction, beginning in ninth grade. Additionally, we offer electives in Spanish culture and Spanish Literature. We differentiate our Spanish program for students that speak Spanish in their homes, by offering a course for native speakers. Students that demonstrate Spanish language proficiency are encouraged to take the AP Spanish course.

In order to ensure that academically talented students have the opportunity for advancement, our school offers two programs for students to engage in college level curricula and to earn credits towards a college degree prior to high school graduation. Students are able to enroll in courses through Harrisburg University, which is within walking distance of our campus. Students are able to choose from several courses in English, math, science, technology, and business. The wide variety of course offerings ensures that there is a course to pique almost every student's interest. In addition to our dual enrollment program, we also offer six college level courses within our building. Accepted students are able to earn credits in history and biology courses that are transferable to all of the state universities and to many private universities as well. Approximately 35-40 juniors and seniors are enrolled in college courses each school year.

Our school has a strong STEM focus. Our robotics program teaches students to script, program, and execute basic tasks using LEGO Mindstorms robots. Students learn programming languages currently used in industrial and commercial avenues. Students showcase their skills through robotics competitions that lead to scholarship monies and college acceptance offers. For our students that prefer a life science focus, we have a state of the art aquaponics lab, that was designed and built during the summer of 2015. The aquaponics system is housed on the first floor of our building and is viewable to all passersby on Market Street. From its inception, the purpose of the lab has been to provide students an opportunity to develop real business and agricultural skills. The lab is approximately 750 gallons and is able to house 250 plants and 50 fish. Students are responsible, through both an extracurricular club and an internship program, for the daily running of the lab. Students also contribute to the long term planning via decision making, ordering, sowing, harvesting, and coordinating monthly farm stand sales of crops. Students have had the opportunity to gain valuable skills that lead to research studies, summer employment, and recruitment by a local university to develop an aquaponics program on their campus.

In addition to academic curricula, our school has developed and implemented a Community Partnership Program that requires all students to engage in community service projects. Once per month, all students are able to choose a community service project that appeals to their own talents and interests. On our monthly, Community Partnership Days (CPD), all students and faculty spend 3+ hours sharing their time and talents with the community. We believe that regular community service not only builds career skills, but it also develops character and self-esteem.

We address wellness through Lifelong Fitness which allows students to use the facilities at a health club across the street from our campus. Students develop individualized fitness and wellness plans under the direction of our physical education teacher. In addition, health education is taught formally in a classroom setting. Though music and art are not part of our course catalogue, their love and appreciation are infused throughout the core curriculum as vehicles for learning. In addition, several student-centered clubs allow students an artistic and musical outlet, and all students are encouraged to enter the Afro-Academic, Cultural Technological and Scientific Olympics (ACT-SO) competition sponsored nationally by the National Association for the Advancement of Colored People.

3. Instructional Methods, Interventions, and Assessments:

As already noted, our building-wide curriculum relies heavily on project-based learning. While project learning is routinely utilized in individual classrooms and even collaboratively in a specific grade level or with two or more teachers, we also make an effort for a building-wide project each year through which all students may work collaboratively across grade levels. This interaction promotes a sense of shared purpose and allows older students to model and encourage scholarly behavior. A recent building-wide project occurred just before the 2016 national election. Students worked in teams to learn about the candidates and their positions on issues prior to holding a mock election.

As noted later in this application, many of our faculty members are well-versed in the research-based models of the Penn Literacy Network from the University of Pennsylvania. The common language provided by our PLN training allows us offer consistent instruction and expectations. PLN philosophy is also infused into our lesson planning as teachers reflect on how each lesson addresses critical lenses and experiences that are requisite to learning. For example, we strive to tailor each lesson to make learning social, to ensure that every student has an opportunity for success, and to empower students to construct meaning for themselves through language-based activities. The language-based component requires students to choose and share texts, to investigate word meanings, and to compose and transact with texts. Actual lessons that incorporate these experiences would include the typical before, during, and after (BDA) format which becomes standard across all classrooms. Lessons begin with a Do Now or activating activity and end with some type of summation often referred to by students as a ticket out the door.

We plan effective lessons to address students' skill and knowledge gaps; schools need to be flexible and strategically use student data. We do so by structuring specific days, known as Our Future Success Days

(OFSD), to allow for school-wide remediation and enrichment. The premise behind our planning is that every child, from our most advanced to those with the greatest deficits, can improve. We utilize school benchmarking data, course specific data, and state testing data, to group all students into two sessions that will meet their individual needs. All students participate in school-wide benchmark exams, created through USA Test Prep, in the areas of literature and math. Students that have successfully passed the state exams in literature, algebra, and biology, are assessed on their SAT readiness by the school-wide benchmarks.

Our program began three years ago, and has evolved based upon student and faculty feedback. Our current program is run once a week in the morning with regular classes resuming in the afternoon. Students are scheduled into four categories based upon data. Students that have not yet taken statewide tests and are not yet enrolled in tested courses receive instruction in foundational skills and academic vocabulary. Students scheduled in tested courses receive additional content knowledge and test-taking strategies. Students needing remediation due to unsatisfactory scores on state tests focus on specific subjects and eligible content. Lastly, students that no longer need remediation receive SAT preparation, college essay writing support, or Advanced Placement course support. Data are analyzed semi-annually, allowing for students to transition to different sessions, based upon achievement and need. A benefit to implementing a building-wide program is that all faculty are utilized according to their individual strengths. Scheduling morning sessions while maintaining regular classes in the afternoon minimizes the loss to instructional time. By front-loading our students scheduled to take either state tests or AP tests, they gain instructional time when they need it most.

Overall, the success of the program can be seen in our school's achievement data. Since the implementation of OFSD, we have seen an increase in the number of our students scoring proficient on their second attempt taking the state exams. We have seen an increase in our average SAT scores and an increase in the number of students scoring a 3 or higher on AP Exams. Specifically, in 2017 our average SAT mathematics score rose 45 points over the 2016 score, and our average SAT reading score improved 56 points over 2016. In addition, in 2016 only two seniors scored a 3 or higher on an AP Exam while in 2017 eleven students achieved that distinction.

1. School Climate/Culture:

When speaking with the students and faculty of SciTech High, you will often hear the expression, “my SciTech family.” Our founder envisioned a school with a family atmosphere that would alter the landscape of secondary education in Harrisburg. She wanted to create a safe place where a community of learners could thrive not because they were better than other students in the city but because they believed in her dream as well and because they trusted a small group of educators to lead them. To this day, our demographic has not changed. True, our students are selected after an interview process so they need a bit of initiative to start with us, but they persevere despite poverty, despite setbacks and systemic racism, despite the gnawing tooth of quiet desperation that makes so many city youth stop short because they can see no way to make it to the finish line. Our teachers and administrators, then, realize that we are coaches who bring hope where there is little. Officially, we have programs to foster achievement; we offer rewards for succeeding on state exams; we recognize students individually for demonstrating leadership and for achieving academically. But our greatest asset is not the summation of our programs that look good on paper. It is the atmosphere of love and family that we foster with students. A current student wrote this unsolicited assessment in an essay for his English class: “I’m struggling with a lot of things, but coming school is one of the best things I ever did. SciTech makes me feel like I’m at home, and I love it.”

We believe that meeting the instructional needs of students begins by meeting the professional needs of teachers. Our training undergirds our instruction, and we use it to challenge each other. We go on learning walks to glean techniques that we can put into action, and we encourage each other with written feedback. We dialogue both as grade level teams and as vertically aligned departments to create continuity and consistency for students. We use a common academic language to hold ourselves and our students accountable. We believe that instruction is practical for the real world, that it goes beyond our walls; therefore, we seek to expose our students to a variety of experiences that usually pass them over—from a small group that joins one of our teachers for a ski-trip to Vermont over President’s Day weekend to most of the student body going to a movie theatre to watch *Hidden Figures*. We take advantage of our location in the heart of Harrisburg to broaden student horizons. We can walk to a live theatrical performance across the street or to a service opportunity with senior citizens living two blocks away. But location is not our greatest asset. Size is. Our students cannot get lost in the shuffle even when they try to. It’s not that we have no hideaway places for students to find, but with one email, we come together to direct the wayward back to class. On some level then, students come to realize they are in a home with a network of parents whose high standards are for the greater good. To further cultivate that goodness, each month each teacher is given three cards that are to be given to students who demonstrate academic achievement, school pride, or responsibility. These spontaneous commendations enter students in a chance to win prizes, but the real prize is the look on a student’s face who never thought anyone noticed her contribution.

2. Engaging Families and Community:

SciTech values meaningful engagement of parents and the community. It is imperative for SciTech to provide parents and community members access to information supportive of a transparent academic and social environment. Parents are invited to work with the school staff to promote student achievement, to close the achievement gap and to reduce dropout rates. Therefore, parents must be involved in the decision making process of our educational programs. In order to support the endeavors of parent involvement, SciTech has a family engagement specialist (FES) who is funded by Title I federal programs. Our family engagement specialist serves as the liaison between the school and the community in working with families to establish family partnership agreements. In partnership with the administration, the parent engagement specialist assists in the preparation of parent involvement activities. Together with the building leaders and family input, the FES develops activities for staff and conducts training for parents to improve family involvement in key areas. These include district programs, community health initiatives, and parent-involvement workshops. Our parent engagement specialist cultivates and maintains positive relationships between SciTech and community agencies and the public. She connects parents with educational activities and programs based on individual needs. Our specialist also collaborates with teachers, office personnel,

support agencies, and the administrative team to locate and allocate the necessary resources and solutions for parents. Several examples that correlate directly with our educational environment include working with local colleges and state social workers in identifying community resources in the area of housing, health, public assistance, hunger, and parenting. The ultimate goal here at SciTech, is to increase parental and community involvement through education, engagement, and empowerment.

Overall, SciTech has found utilizing the Family Engagement Specialist to be the most effective strategy to promote parent and community engagement. For example, in preparation for events, a parent interest survey is utilized to determine programs offered to drive student achievement. Additional examples of engagement activities and resources include Title I informational night, FAFSA overview presentations, academic and assignment communication through e-school, educational support programs such as resume classes, integration of arts and math in parent and child activities, college fairs, community guest speakers, admissions events, open houses, a parent resources center, and the Parent Teacher Association (PTA). The PTA promotes systems of engagement to enhance the school's climate through many events to support the academic endeavors of students such as fundraisers for cultural arts events to, literacy presentations, field trip experiences, and Black History Month events. In short, our Family Engagement Specialist provides an additional layer to support our academic programs and promote student success.

3. Professional Development:

At SciTech we have a robust professional development program for teachers. It begins, of course, with the nine contractually scheduled in-service days. While these days are mostly planned by the district's central administration, individual buildings can often advocate for the professional development they need. We make such requests frequently at SciTech so that our professional development remains organic and directly applicable to the students we currently serve.

Additionally, one day each month our students have a half day in which they do not attend their regular classes. Instead, they participate in a Community Partnership Day (CPD) which provides service or career learning in the community. CPD afternoons, then, are reserved for professional development for our faculty. These afternoons allow us to analyze a book on pedagogy and to work with each other in departments or by grade level teams to help each other perfect our craft. Our leader for these activities is a full-time instructional coach who can follow up on a daily basis with classroom visits, individualized guidance, or other resources that facilitate our instruction. Our instructional coach has an open-door office in the heart of the school and uses his position to differentiate instructional guidance for teachers in much the same way teachers differentiate for the needs of their students. Our coach also facilitates monthly learning walks. On the day of a walk, teachers with a common prep period gather for a portion of it to visit the classrooms of at least two colleagues. The purpose of a visit is only so that the visiting teacher can glean ideas for implementation in her own classroom. Nonetheless, the process also encourages visitors to write brief notes of commendation for the host teacher and to submit to the building principal reflections on the what the visitor learned.

Part of our professional development stems from the frequent visits our principals make to classrooms. These visits are followed up electronically with a summary of the visit and a question to begin a discussion designed to encourage growth. While responding to a question is at discretion of the teacher, doing so often provides a rich dialogue.

As already noted, in the early days of SciTech, almost every faculty member participated in training sponsored by the Penn Literacy Network from the University of Pennsylvania. This research-based model for delivering instruction provided us with a common educational language, a consistency of expectations from classroom to classroom, and a profusion of literacy in our student body. While the funding has long since dried up, when we mentor our new teachers, we attempt to share with them the core components of the PLN program so as to maintain its advantages.

In addition to attending district-wide professional development, building-based professional development is provided monthly and is informed by current student data. For example, in order to continually calibrate our instruction, we use a computer-based program, USA TestPrep. Benchmark testing data from these

assessments recently revealed that students needed help understanding integers in math and academic vocabulary in language arts. In response, professional development sessions were provided by the building's instructional coach. Then in our professional learning communities (PLCs), teachers worked together to develop strategies to help students grow in these areas.

Department-based professional development is really our most valuable and effective growth tool. In departments (PLCs), we review student work with the goal of helping each other help individual students. Sometimes we even combine departments to achieve deeper and more consistent results. Social studies and English teachers recently graded student work according to a rubric we decided to use for most writing assignments building-wide.

4. School Leadership:

SciTech was founded on the framework of shared leadership and building leadership capacity in administrators, teachers, and students. And so our philosophy taps the leadership potential of all stakeholders according to the abilities each of us has. One teacher may serve as a department leader while a member of the same department may provide the faculty with professional development on diversity and inclusion. A student or a group of students may initiate a discussion on school climate. The principals defer to teachers and students when appropriate because they know doing so does not diminish their authority; it only makes our family stronger.

SciTech has a Building Leadership Team (BLT) comprised of administrators and teachers who work collaboratively to make decisions affecting the school. Our building administrators take into account the input offered by all stakeholders and rarely move forward on an issue before a consensus is reached by the team. This constructivist approach to governing allows for buy-in related to all decisions in the school. Principals diligently work to be transformational leaders through upholding the school's vision and focusing on our singular goal of student achievement.

Building administrators use data to inform all building decisions. Data collected during classroom observations are used to inform professional development in order to address immediate instructional needs. The practice of using classroom observation data to inform professional development has led to increases in student achievement on state assessments. Additionally, all teachers at SciTech participate in Professional Learning Communities (PLCs). Within the PLCs, student data, student artifacts, and student performances are reviewed in order to provide the supports necessary for success. Building administrators attend PLC meetings and offer feedback regarding issues and items discussed. Many PLCs also hold mini professional development sessions within the context of the meeting, further differentiating building-wide professional development.

Building administrators encourage students to have a voice within the school and in the broader community. Administrators regularly hold meetings with students to assess the pulse of the student body and to proactively address issues. By allowing students to be engaged and to have a voice, students are more apt to make meaningful contributions to the school and community.

Part VI – STRATEGIES FOR ACADEMIC SUCCESS

The Field of Dreams mantra applies to our school: “If you build it, they will come.” We built a school—renovated an old YWCA, actually. Students came—for 15 years and counting. Our building is relatively small, holding a maximum of 400 students. And while building size is not a “practice,” it provides for our greatest strength: if you love them, they will learn.

This practice is not easily quantified or assessed by data, but it is tangible. It is a perennial harvest that was nurtured by some who are no longer with us—our first leader, a former instructional coach, an English teacher. From our earliest days, SciTech was a place of acceptance and love. People were always hugging each other even as a daily greeting, as though a colleague or a student had just returned from an extended voyage. One teacher was in the habit of telling everyone she loved him or her. Sounded a little awkward at first, sure, but she truly meant it; every one of her students knew it. The love and acceptance was invasive. It spread to students so that even the awkward ones—those differently-abled or socially limited—were not bullied; on the contrary, they often found a kindred spirit with whom to identify. Students who would blister and wither under the intimidation of a large, comprehensive high school soaked in the atmosphere and flourished.

Some doubt the authenticity of the love. A few years back a cohort of teachers from our sister campus visited for a full day of learning walks. They sat in our classrooms for extended periods and observed student-teacher interactions. After reading *The Scarlet Letter*, an AP English class was discussing how Hester Prynne used the strength of her character to redefine the original meaning of her letter so that those who once ridiculed her as an adulteress could only see her as able. As part of the discussion, each student wore a letter of the alphabet and took turns explaining how it represented some negative trait that defined him or her in the past or that remained a struggle to eradicate. Each student also shared what the letter had come to signify as a result of self-improvement. Several students became emotional after sharing; one in particular broke down. Each, however, was supported by the group. In a follow-up session for the visiting teachers, one of them confessed that he had always thought the shows of affection were a façade, a self-serving attempt to somehow claim superiority for our school. But after witnessing organic student emotions, he told us, “It’s real. Now I know it’s real.”