

## QUESTIONS AND ANSWERS ABOUT THE DASD STEM ACADEMY

Updated April 13, 2010

Question	Answer
<b>How much will it cost to send my child to the STEM Academy</b>	There will be no tuition costs for DASD students. The STEM Academy will be funded through the same sources as the other District schools.
<b>How much is the district expending on the renovation of the DEC building?</b>	The District is planning to spend \$12.5 milion on renovating the Downingtown Education Center to transform it into the STEM Academy.
<b>Will parents have to provide transportation to and from the STEM Academy?</b>	No, parents will not have to provide transportation. In the Commonwealth of PA, it is not a requirement of school districts to provide any transportaiton for students, however, if the school district does provide the transportaiton to eligible students, then they must provide it to all students within the school idstrict attending publich school programs meeting the regulations set by the local school board. Bus service will be provided by DASD.
<b>Will the technology infrastructure be updated?</b>	Yes, the technology infrastructure will be updated; the students will be assigned laptop computers which will be supported by a wireless network.
<b>What are the major facility changes?</b>	<p>There will be a variety of facility changes, most of which will go unnoticed. The existing mechanical system will be replaced; the new system will heat and condition the entire facility. The existing electrical distribution system will also be replaced to accommodate modern electrical needs. All existing asbestos tile will be removed and the facility will receive all new ceiling tile. The building will also be fitted with a sprinkler system. There will be some roof repairs and structural resotration to existing brick and roof coping. Some concrete and asphalt will be replaced.</p> <p>A few of the more obvious renovations will include upgraded access to the facility to comply with the ADA standards; the elevator will also be replaced. At this point existing lab areas will be upgraded and expanded to allow for biology and chemistry programs; wet labs with hood systems will be constructed. The existing library will be upgraded to allow for more electronic information access and student collaboration rooms will surround the second story. The cafeteria will be modernized and also serve as a type of student union area for additional collaboration areas. The kitchen will receive updated hood systems and new food preparation equipment will be installed. Finally, the administration area will be renovated and incorporate a security vestibule to ensure student and staff safety.</p>

## QUESTIONS AND ANSWERS ABOUT THE DASD STEM ACADEMY

Updated March 17, 2010

Question	Answer
<b>Why was the International Baccalaureate Diploma Program selected as the curriculum framework for the Academy?</b>	<p>As we started the process of creating a STEM school, we wanted a curriculum that is:</p> <ul style="list-style-type: none"> <li>• different than the other DASD high school programs</li> <li>• integrated</li> <li>• rigorous for students at varying performance levels</li> <li>• based on a metacognitive approach to help students and teachers become lifelong learners.</li> </ul> <p>The IB Diploma Programme is all that and has a reputation (for decades) of providing students with a proven high quality education. More information is available at <a href="http://www.ibo.org">http://www.ibo.org</a></p>
<b>How do colleges and</b>	Colleges and universities view both the AP and IB as high quality

<b>universities view the IB Program compared to the AP Program?</b>	programs. As with the IB, each higher education institution has its own requirements for awarding credit or placement related to the student's test performance. See the IB website for more information about how specific universities view the IB. Students and parents can also refer to the websites of specific institutions of interest.
<b>What can you tell us about the pilot Introduction to Engineering course offered at the HS next year?</b>	The pilot <i>Introduction to Engineering</i> course that will be offered in the Fall of 2010 will be a 1 credit course, awarding Technology Education credit. The course will include the basic principles of engineering design, basic design tools, technical sketching and drawing, using technology and tools to solve problems, and systems thinking. The course will be project-based and incorporate the application of the basic principles of engineering. Students will use technology and tools to build prototypes and solve problems. In this course, students will use a design process and apply scientific and mathematical knowledge to solve real world problems. The STEM planning committees are currently researching engineering design curriculum, and once a program is selected, the course curriculum will be further developed this summer by the teachers who are going to teach it.
<b>Is the STEM Academy for honors students only?</b>	NO, a wide range of students will be admitted. Students who are interested in science, technology, engineering and/or mathematics are invited to complete the application and admissions process to enter the STEM Academy.
<b>When will the admissions process be determined for students?</b>	Within the next few months, the Program Committee will be announcing the admissions process and requirements for students. The Headmaster/mistress will oversee student recruitment and lead the admissions process.
<b>When will the principal be hired?</b>	The Headmaster/Headmistress position is currently posted on the district's HR Employment website. It is hoped that the successful candidate will begin serving in the position on or before July 1, 2010.
<b>To fill the Academy will students be told they have to attend it?</b>	No, the STEM Academy is a school of choice, a magnet third high school for the district.
<b>When will we select the staff for the STEM Academy? Will staff be involuntarily re-assigned to the Academy?</b>	Late spring we will begin to identify teachers who are interested in teaching at the Academy. There will be an application and interview process that will begin once the Headmaster/mistress has started in his/her role. It has not been determined what might happen if there are insufficient teacher applicants to fill the positions.
<b>Will the Academy students have to take state assessments?</b>	Yes, students enrolled in the Academy are required to meet all of the regulations included in Chapter 4 (proficiency on academic standards, graduation requirements, PSSA or Keystone Exams...)
<b>Will the graduation requirements be the same for the STEM Academy as they are for the current High School program?</b>	The Board has authorized the STEM Core Team to identify graduation requirements for the STEM Academy that are different from the current high school program. Why? The STEM Academy students will have a different focus, different schedule, and take different courses than the students in the two current high schools.
<b>Will the number of sections of elective courses in the two high schools decrease as a result of removing STEM Academy students from the buildings?</b>	The total high school population will eventually be distributed among three buildings instead of two. This re-distribution of 800 high school students will decrease the number of students at East and West Campuses. A decrease in student enrollment impacts many aspects of the school program such as scheduling and sectioning, as well as allocating staff.
<b>What PR is planned to inform teachers, students, and the public?</b>	<p><b>March 16</b> – LMS Home and School hosted an information evening for all district parents.</p> <p><b>May 19</b> – STEM Defined! is an evening being planned to provide information about STEM fields as well as the STEM Academy.</p> <p>The STEM Academy website is extensive, and includes minutes of meetings, information and links. This is the website that the committees are using for their work; everything is available to the public. The D-Link contains a STEM update in every edition. The Daily Local News has published several articles informing the public about the STEM Academy.</p>

	<p>A report on STEM Academy planning updates is presented at every monthly Board meeting.</p> <p>The Board Curriculum Committee discusses the STEM Academy at every meeting (first Wednesday of the month).</p> <p>WCHE, local radio station, broadcasted a STEM Academy panel discussion in which the latest information about the Academy was posted.</p>
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**QUESTIONS AND ANSWERS ABOUT  
THE DASD STEM ACADEMY  
Updated February 10, 2010**

Question	Answer
<b>Which grade levels of students are eligible to attend the STEM Academy?</b>	The STEM Academy will open in Fall 2011 for that year's ninth and tenth graders only. These students are currently in seventh and eighth grade. We will admit a maximum of 500 students the first year.  In 2012-13, and 2013-14 we will admit a maximum of 200 incoming ninth graders.
<b>Will the STEM Academy offer all the extra-curricular programs that the current high schools offer?</b>	No, the STEM Academy will not be offering athletic teams or large performing groups. Academy students may return to their attendance area high school campus (East or West) for athletic teams, musical performing groups or other after school activities. The Academy will have extra-curricular activities that students and staff of the Academy will identify, but not athletic teams or band/choir/orchestra groups.
<b>What is a magnet school?</b>	Downtown has decided that the STEM Academy will be a magnet school. Magnet schools have something special to offer which makes them an attractive choice to many students. Magnet schools are theme-based public schools with a distinctive curriculum or instructional approach. They attract students from outside an assigned neighborhood attendance zone.
<b>Will there be entrance requirements to attend the Academy?</b>	The Program committee is in the process of identifying entrance requirements. They will be made public in a few months.
<b>Who is involved in making the decisions about the STEM Academy?</b>	There are over 105 committee members comprised of students, parents, STEM professionals, teachers, administrators and board members. These volunteers serve on a sub-committee and/or the core team. Each sub-committee is working to answer key questions, agrees upon a recommendation, then forwards that recommendation to the core team. Once the core team agrees with the recommendation, it is sent to the appropriate Board Committee where public discussion occurs. If the Board Committee agrees with the recommendation, it is sent to the full Board for a vote at their monthly Board meeting (2 <sup>nd</sup> Wednesday of every month).
<b>My son is interested in becoming a Math teacher. Is this the type of curriculum that would benefit him in his endeavors?</b>	YES, YES, YES !! The STEM Academy will be appropriate for aspiring STEM teachers in addition to other STEM related careers. Although the program is focused on STEM, students will graduate with a well-rounded education in all subjects, including world language, communications, and social sciences.

# QUESTIONS AND ANSWERS ABOUT THE DASD STEM ACADEMY

Updated 11/4/09

Question	Answer
<b>What is a STEM school?</b>	STEM stands for the integration of Science, Technology, Engineering, and Mathematics disciplines into the overall curriculum. STEM Schools are designed with two key academic goals: all students will complete a rigorous college prep curriculum and the four year course of study will prepare students for academic and professional futures in these areas.
<b>What is a magnet school?</b>	Downingtown is considering whether to open a magnet school or a comprehensive high school. Magnet schools have something special to offer which makes them an attractive choice to many students. Magnet schools are theme-based public schools with a distinctive curriculum or instructional approach. They attract students from outside an assigned neighborhood attendance zone.
<b>What is a comprehensive high school?</b>	A comprehensive high school is a school that offers a full complement of athletics, performance groups, etc.
<b>When will the school open?</b>	The Downingtown STEM Academy will open at the beginning of 2011-2012.
<b>Can students from outside the district attend?</b>	At this time, there are no plans to offer enrollment to students residing outside the boundaries of the Downingtown Area School District.
<b>Which students will be eligible to enroll?</b>	The STEM Academy will be open to DASD high school students who wish to apply. The "Program Sub-Committee" is considering this question. Their discussions include: <ul style="list-style-type: none"> <li>• specific admissions requirements (lottery, qualifications...)</li> <li>• phasing in (which grade levels and how many students...)</li> </ul>
<b>Where will the STEM Academy be located?</b>	The STEM Academy will be located in the Downingtown Education Center (formerly known as the Ninth Grade Center, Downingtown Junior High, Downingtown Joint Junior-Senior High at 335 Manor Avenue).
<b>What is the difference between curriculum in a regular High School and in a STEM school?</b>	While all of our high schools offer a rigorous and relevant curriculum, the STEM curriculum is more project-based learning environment. Students will be exposed to the kinds of design and implementation practices that scientists and engineers use on a regular basis. We are considering implementing the International Baccalaureate Program at the Downingtown STEM Academy. All DASD schools provide programs that are anchored in the PA Academic Standards and meet the PA Chapter 4 requirements for graduation.
<b>Is this school exclusively for gifted students?</b>	No
<b>How does this program compare to the Voc. Tech. School- CAT Program offered by CCIU?</b>	The STEM Academy is not intended to replace this program offering for students. DASD students will have the opportunity to select one or the other based upon career interests and program offerings.
<b>How can I inquire about employment in the STEM Academy?</b>	Specific staff needs have not yet been identified. Once we determine the curriculum and program, specific staff needs and required certifications will be advertised by HR. Staff openings will be posted at <a href="http://www.dasd.org">www.dasd.org</a> - click on "employment."
<b>How will this new Academy opportunity be communicated?</b>	Our public relations sub-committee has identified the following PR strategies: <ul style="list-style-type: none"> <li>• use of Downingtown Delivers</li> <li>• visits to Home and School Assn.</li> <li>• visits to local organizations</li> <li>• WCHE radio program "Chalk Talk" 2 pm Thursdays</li> <li>• student assemblies</li> <li>• website</li> <li>• publications for parents, businesses, students</li> </ul>
<b>How can a local business get involved to support this initiative?</b>	We are looking for community partners to provide Internship opportunities in career fields for students. We are looking for financial partners to supplement resources necessary to deliver a 21 <sup>st</sup> century STEM program. Partnerships with the business and higher education community are critical to the success of STEM schools. The commitment of the community is part of the power of a STEM school as it is dedicated to preparing the next generation of innovators in Science, Technology, Engineering and Mathematics.
<b>Is this going to be a cyber school?</b>	This is not a cyber school. However, technology will be critical in the delivery of our 21 <sup>st</sup> century curriculum. Our goal is to assign each student a laptop as a critical tool for learning. Our curricular goal for technology is to integrate tools and strategies into daily instruction. Courses will likely contain online components to varying degrees.
<b>How many students will attend the STEM Academy?</b>	The capacity of the building is approximately 800 fully enrolled students. The "Program Sub-Committee" is in the process of determining how many and which grade levels will be phased into the Academy over the course of a few years.

