

QUESTIONS AND ANSWERS ABOUT THE DASD STEM ACADEMY

Updated June 3, 2010

Question	Answer
When may students begin to apply?	Once the Headmaster joins DASD, we will announce an application timeline, shortly thereafter it will be well publicized
Does the application process begin when the student is ready to go into 9th grade?	For the incoming 9 th graders, the process begins in 8 th grade. For the incoming 2011-12 10 th graders, the process will begin in their 9 th grade year.
Will the application process be a lottery?	The proposed process is not a lottery, however, be aware that the process and forms may change over time. The process will be voted on at the June Board meeting.
Recommendations – can you specify?	The following will be voted on at the June Board meeting: The recommendation form will be in rubric-type format. Two recommendations will be required; one must be from a teacher in a STEM discipline.
Will every applicant be interviewed?	The following will be voted on at the June Board meeting: The selection committee may schedule interviews if they determine they need additional information about an applicant. The process does not require that every student be interviewed for admission.
Will students with higher grades be given preference in admissions?	The following will be voted on at the June Board meeting: Grades are not going to be the determining factor for admission; multiple criteria will be considered. For incoming 9 th graders, the admission guidelines state “final grade of C or better in core courses in grades 6, 7, and 8. For incoming 10 th graders for 2011-12 only, the admission guidelines state “final grade of C or better in core courses in grades 6, 7, 8, and 9.”
Do students still have to take the PSSAs?	Students must take all required state assessments whether they are PSSA or Keystone Exams.
Will some higher level science and math AP courses be offered at STEM as in the traditional high school?	IB Math and Sciences will be offered at the Standard and Higher levels. Specific courses will be announced soon.
Are all classes AP?	No. 11 th and 12 th grade courses will be IB.
Will the AP and Honors courses still be available at the other high schools?	Yes.
Can a STEM student take AP exams?	In some subjects this may be possible. Once we compare the actual IB curriculum with AP, we will know with more certainty.
Will STEM students be able to take Studio Art?	No
Will you offer Latin?	We do not know which languages will be offered. This will be announced prior to applications being taken.
Will there be any effort to address learning differences between girls and boys, specifically as it pertains to math and science?	Learning differences will be addressed not only by gender but by learning preferences and other diversity factors.
What will be the difference to an admissions decision at a college or university between our high schools and the STEM Academy?	There are so many variables – individual student performance, course load and specific university preferences that we cannot begin to predict. Each student’s transcript application will be a primary factor. We aim to ensure all three high schools are highly regarded by higher education admission officers.
What initiated the idea for the STEM Academy in the DASD?	STEM careers will be in high demand in the future. With the impending retirement of the “baby boomers”, the declining attainment of STEM degrees and an increased need for national defense and security, a severe shortage of prepared STEM employees is predicted for our nation. The Chester County Workforce Investment Board (CCWIB) reports a 25% increase in scientific research and development services since 2000 and touts a 229% increased in persons employed. Computer systems design and related services has boasted a 59% increase in volume of employees

	<p>since 2000. In projecting growth by 2014, the CCWIB predicts occupations with high growth will be computer and mathematic occupations and computer specialists; also high growth is projected in health care fields. (Chester County Workforce Investment Board, 2008). Companies, including those that specialize in health products and services, bio-devices, bio-pharma and bio-tech applications, constitute the largest single industry in Chester County (Chester County Economic Development Council, 2008).</p> <p>There exists a need in the United States to educate high quality engineering graduates; there is also a need in the technology and medical field for professionals who can integrate the STEM disciplines. Furthermore, there also exists a need to teach STEM in innovative ways. In response to both of those needs, the DASD proposes to open a STEM Magnet School as a third high school of choice for high school students in the Downingtown Education Center, 335 Manor Avenue, in Fall 2011. The mission and strategies in the DASD Strategic Plan call for flexible 21st century learning opportunities for our students so that they may be prepared to enter into a global society. In that the current high schools are large and over-crowded high schools, this third school will relieve the enrollment at both current sites.</p> <p>We have a vision that the DASD STEM Academy High School offers a state-of-the-art integrated, project-based approach toward learning and apply science, technology, engineering and mathematics education to real-world situations.</p>
<p>Is this STEM Academy model in place somewhere?</p>	<p>Not exactly as we are designing it.</p>
<p>How is Downingtown’s “unique sink or swim but we can handle it” program different than those STEM programs currently in other schools?</p>	<p>We are unique in that we are opening a STEM Academy in combination with the IB curriculum. We have not been able to find this combination in any other school. In reference to sink or swim, we are no different than other magnet/private/charter schools. If we do not have enough Downingtown students interested, we will have to develop an alternative plan; however, we believe there will be sufficient student interest.</p>
<p>Is or will the high school STEM program be a pseudo segue to like programs in higher education, i.e., STEM at DCCC?</p>	<p>We are trying to design a program that enables students to be prepared to enter a range of STEM or other higher education programs. We are currently engaged in dialog with DCCC regarding a potential partnership.</p>
<p>Where can I learn more about the International Baccalaureate?</p>	<p>http://www.ibo.org http://www.ibo.org/faq/ http://www.ibo.org/informationfor/students/ http://www.ibo.org/informationfor/parents/ IB is also on Facebook! Go to the “information for parents” and “information for students” pages linked above.</p>
<p>What are the goals of the IB Program?</p>	<p>IB learners strive to be: inquirers, knowledgeable, thinkers, communicators, principled, open-minded, caring, risk-takers, balanced, and reflective.</p>
<p>What are the requirements to earn the IB Diploma?</p>	<p>Students take 3 subjects at the higher level and 3 subjects at the standard level. Students also take the Theory of Knowledge course, complete the extended essay investigation, and the CAS (creativity, action and service). Theory of Knowledge is an interdisciplinary course in which students explore the nature of knowledge across disciplines; this course</p>
<p>How do colleges recognize IB vs. AP?</p>	<p>Both programs are viewed as rigorous and highly regarded. IB is recognized around the world. Each higher education institution determines how it credits or values each course along with the individual student’s transcript.</p> <p>http://www.ibo.org/diploma/recognition/ http://www.ibo.org/diploma/recognition/directory/index.cfm</p>
<p>What if you want a STEM experience for your child but</p>	<p>All 11th and 12th grade STEM Academy students will enroll in IB courses for their core education. If a parent/student is not interested in the IB</p>

are cold toward the IB concept?	program, attending East/West campus would be the proper choice.
Does the IB Program include students with special needs / IEP?	The IB Program is meant to be an inclusive program. Please see the special needs portion of the IB website. http://www.ibo.org/programmes/pd/special/
What are George Fiore's qualifications? Does he have experience in IB and/or STEM?	Mr. Fiore has experience as a successful building principal and instructional technology director. His success in transforming a school community toward high academic performance is a testimony to his ability to lead. Mr. Fiore is a student-centered, collaborative administrator who is extremely enthusiastic about his new assignment. Mr. Fiore is conducting research, visiting STEM schools and will be participating in IB training in July 2010.
Will there be a Meet & Greet with George for interested parents?	Yes. This will be planned after Mr. Fiore arrives.
How much will it cost to send my child to the STEM Academy	There will be no tuition costs for DASD students. The STEM Academy will be funded through the same sources as the other District schools.
How much is the district expending on the renovation of the DEC building?	The District is planning to spend \$12.5 million on renovating the Downingtown Education Center to transform it into the STEM Academy.
Will parents have to provide transportation to and from the STEM Academy?	No, parents will not have to provide transportation. In the Commonwealth of PA, it is not a requirement of school districts to provide any transportation for students, however, if the school district does provide the transportation to eligible students, then they must provide it to all students within the school district attending public school programs meeting the regulations set by the local school board. Bus service will be provided by DASD.
Will the technology infrastructure be updated?	Yes, the technology infrastructure will be updated; the students will be assigned laptop computers which will be supported by a wireless network.
What are the major facility changes?	<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 restoration 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>