What Parents Should Know About STEM Afterschool Programs in Pennsylvania

A Solid Foundation in STEM Will Help

As early as 12 or 13, youth are faced with big choices about which subjects to take on to achieve certain skill sets. Choosing to study STEM (science, technology, engineering and math) subjects will ensure students keep their career options open. STEM learning is occurring in schools and afterschool programs across Pennsylvania and inspiring the next generation of scientists, mathematicians and engineers. But even if they don’t work in one of these fields, strong STEM skills are critical to well-rounded education.

STEM helps kids understand how the world works and careers in STEM are rewarding, challenging, well paid and varied. Jobs include everything from crime scene investigation and volcanos to medicine, weather and even video games!

PARENTS AND STEM
Parents encourage their children to participate in sports, even though those children won’t necessarily be professional athletes. In the same manner, you can support your children’s interest in math or science, which exposes them to a variety of learning opportunities.

To help your child get a STEM-rich education, add after-school and summer activities that focus on STEM learning. Look for programs that will teach your child something new – zoology, robotics, environmental fieldtrips, forensics – that she wouldn’t get in school, to branch out and learn new skills and have new experiences like building a robot or doing outdoor experiments.

STEM AFTER SCHOOL
Children spend less than a quarter of their waking hours in school; and in the U.S., elementary schools devote an average of 2.3 hours per week to science, a decline of 43 minutes since 1994. After school hours and summers are times for kids to get ahead.

Children often don’t realize how much STEM is a part of their lives. Time spent outside of school can be a valuable way for them to learn about STEM careers and how they can solve problems. Afterschool programs get youth excited about STEM: they offer fun, engaging activities that build knowledge and the opportunities to talk to people with STEM jobs, find mentors and experience hands-on learning with

Parents are the most influential persons helping their children decide which career to pursue.

Source: STEM Perceptions: Student & Parent Study By Harris Interactive; commissioned by Microsoft (2011)
STEM JOBS ARE IN DEMAND
During the next decade, the United States demand for scientists and engineers is expected to increase at 4x the rate for all other occupations. Due to gaps in skill, knowledge and interest in the sciences, currently 75,000 Pennsylvania jobs remain unfilled.
Source: Pennsylvania Department of Labor and Industry (2012)

Overall, unemployed Pennsylvanians outnumbered job postings by
3 to 1
Source: Pennsylvania Department of Labor and Industry

In the STEM occupations, Pennsylvania job postings outnumbered unemployed people by
2.4 to 1
Source: Change the Equation, Vital Signs

STEM CAREERS IN

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<th>Occupation</th>
<th>Annual Average Pay</th>
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Average annual salary in Pennsylvania is $45,750.
Source: Pennsylvania Department of Labor and Industry (May 2014)

In STEM careers, the individual can impact the whole world through invention and innovation.

STEM jobs do not all require graduate or even college degrees.
Less than half of entry-level STEM jobs require a bachelor’s degree.

Source: Pennsylvania Department of Labor and Industry

STEM jobs pay between 26% and 40% more than jobs in other fields. STEM jobs do not all require graduate or even college degrees. Less than half of entry-level STEM jobs require a bachelor’s degree.
Source: Pennsylvania Department of Labor and Industry

Project Accelerate, an initiative of Pennsylvania Statewide Afterschool/Youth Development Network (PSAYDN), helps to build high quality, innovative and informal STEM programs in afterschool and out-of-school-time (OST) programs.