Laurel Highlands teacher benefits from Penn State developmental program

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Dr. Kathleen M. Hill, at left, associate director of Penn State's Center for Science and the Schools, and Amanda J. Smith, and engagement liaison, explain the PIPELINE or “Promoting Innovative Practices for Educator Leaders with INDustry an Experiences” to STEM (science, technology, engineering and math) education at Tuesday’s Fayette Business Education at Penn State-Fayette, The Eberly Campus. (Photograph courtesy Gregory G. Evanina, Penn State-Fayette)
A Penn State University program providing a "pipeline" for teachers to professional development in science, technology, engineering and math or STEM education was a primary topic at Tuesday's Fayette Business Education Partnership meeting at Penn State-Fayette, The Eberly Campus, in Lemont Furnace.

PIPELINE, or "Promoting Innovative Practices for Educator Leaders with INdustry and academic Experiences," aims to work collaboratively with science, technology, engineering and math researchers and industries to develop professional development programs for teachers.

"We estimate that 12,380 students will be impacted across regional school districts (in southwestern Pennsylvania and northern West Virginia)," said Dr. Kathleen M. Hill, assistant professor in science education at the University Park campus and associate director of Penn State's Center for Science and the Schools.

PIPELINE offers i-STEAM workshops during the academic year, then during the summer both weeklong workshops and a seven-week research experience.

"It was a chance to immerse teachers into the corporate world in the area of research," said Daniel Arnold, STEM teacher in the four Laurel Highlands elementary schools, who had his experience at Westinghouse in Churchill.
Amanda J. Smith, CSATS outreach and engagement liaison, said Westinghouse was a partner along with Apogee Technology and BASF Corporation in Pittsburgh, the Central Pennsylvania Research and Teaching Laboratory for Biofuels at Penn State Harrisburg and Penn State's main campus in University Park.

One qualification for the seven-week program was a commitment to implement a classroom research project during the 2016-17 school year. Arnold, a high school technology teacher for 10 years before tackling the challenge of elementary schools in 2006, will work with fourth- and fifth-graders to build battery-powered toys.

"I'll provide the components, but they will have to build the toy," Arnold said. In turn, he said, the students will cross a bridge, "understanding nuclear energy as an alternative to the traditional use of fossil fuels."

Joseph E. Segilia, director of outreach and continuing education at Penn State-Fayette, said CSATS is an example of Penn State reaching out to communities around its campuses. Tuesday's program also was a homecoming of sorts for Smith, a Delmont native whose father Glenn Shirey is project manager at Progeny Systems in Bentleyville.

It was one of multiple programs getting the spotlight at the FBEP meeting in the Fayette campus Corporate Training Center. Another is a unique form of agriculture promoted by an agency in neighboring Greene County.

"Aquaponics is a system where you grow vegetables and fish, and the byproducts of each help the other," said Mimi Ritenour, solid waste and recycling coordinator in Greene's Department of Economic Development.

Ritenour said the McGuffey School District, in Washington County along the Pennsylvania-West Virginia border, has found 70 courses from kindergarten through senior high where aquaponics can be taught.
Ritenour and others in the partnership are planning a trip to another district that is heavily invested in aquaponics, Steelton-Highspire near Harrisburg. Fayette Chamber of Commerce executive director and FBEP co-chair Muriel J. Nuttall said a "school-to-table" concept has been developed there.

Cooperation between Fayette and Greene county entities is illustrated in another partnership, a Fayette-Greene Manufacturing Consortium that would seek to assess, enhance and accelerate local manufacturers' participation in advanced manufacturing and shale-related supply chains.

Nuttall said the chamber, Greene County's Department of Economic Development and Industrial Development Corp., Fay-Penn Economic Development Council and Catalyst Connection make up that consortium, which will seek out other interested parties at a reception and networking opportunity, Thursday, from 4 to 6:30 p.m. at Hranec Sheet Metal Inc., west of Uniontown on McClellandtown Road (Route 21).

Programs aimed at helping coal miners and others in affected businesses are among the topics scheduled, in a region still reeling over a recent decline in mining jobs. Ritenour said five jobs are affected for each coal mining job that is lost.

"In Greene a lot of children and their parents and everyone still think they're going to get out of school and go into the coal mines," Ritenour said.

In Fayette County, children in two districts are getting a boost from the Dolly Parton Imagination Library program, which promotes early childhood literacy and is conducted locally at the Uniontown Public Library.

"Nine or 10 volunteers from business and education raised almost $25,000 for Uniontown Area and Laurel Highlands," said Christy Fusco, head librarian and a member of the local Dolly Parton program board with Nuttall and Laurel Business Institute President Nancy Decker. "Our goal is to make it countywide."
Also at the Penn State gathering, Jesse Sprajcar, education program manager for the United Way of Southwestern Pennsylvania, said grants of $2,000 apiece went to all six Fayette County school districts, to help the transition process for incoming kindergarten students.

In other matters brought up Tuesday, Nuttall talked about being one of the first 19 participants in a Talent Pipeline Management Academy funded by the U.S. Chamber of Commerce Foundation in Washington, D.C.

"They know that the work we are doing in workforce development is far reaching," the Fayette chamber director told the partnership. Her role in that academy continues with two webinars and another session in Washington in January.

Chad Amond, president of the Westmoreland County Chamber of Commerce in Greensburg, is another participant in that academy.

Also in Washington recently was Janet Ward, another FBEP co-chair and youth programs manager for the Westmoreland-Fayette Workforce Investment Board, one of three Pennsylvania workforce development boards -- and 15 nationally -- to be honored among 80 entries in a recent White House competition.

"We went through a seven-week course to learn customer-centered design," Ward said. In her agency's case, it was a challenge of helping formerly incarcerated individuals obtain employment and education, develop healthy relationships and make positive decisions."

Vernon King, division manager for Advanced Fire Company's Greensburg office, said the General Services Administration awarded his company a statewide contract for fire extinguisher, alarm and sprinkler inspection, security upgrades and safety training.

"We will have to add to the workforce, especially on the security end," said King, whose company has 83 employees, including 50 in his division. "I have a very good workforce, but we are getting old."

A retired educator suggested that more businesses should get involved in the partnership.
"For this to be more successful, we need more input from businesses," said Ron Sheba, retired Laurel Highlands school superintendent. "If businesses have specific needs and they are not being resolved, they should come and let the people here know what their needs are."