

PENNSYLVANIA YOUTH APPRENTICESHIP PROGRAM

Over 20 Years of On-the-Job Training

By Gary Scarpello

For more than two decades, students at North Montco Technical Career Center (NMTCC) in Lansdale, Pennsylvania, have been working on the job in the Pennsylvania Youth Apprenticeship Program (PYAP), a program created and supported by the Pennsylvania Departments of Commerce, Education, and Labor and Industry; the Pennsylvania Apprenticeship and Training Council; the U.S. Department of Labor, Bureau of Apprenticeship and Training; the Heinz Endowment; and the Alfred P. Sloan Foundation.

PYAP is built on two models. First, the program was developed around the German dual-system apprenticeship model. As in America, the aim of vocational training in Germany is twofold: to enable the individual to acquire the skills and knowledge necessary for employment and to ease the person's entry into the labor market.

In the German system, youth apprentices are socialized into the workforce. They are taught the rules and values of the workplace—punctuality, discipline and the acceptance of hierarchies. An apprenticeship, followed by full-time professional education, is a recognized route to management in many industries and a logical way for youths to obtain experience in a trade or business in Germany.

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“For more than two decades, students at North Montco Technical Career Center in Lansdale, Pennsylvania, have been working on the job in the Pennsylvania Youth Apprenticeship Program.”

Second, PYAP is built on traditional apprenticeship models for adults, but designed specifically for high school students. In the early '90s, federal grants were made available to career and technical education (CTE) schools in Pennsylvania that adopted PYAP, and local employers provided job placements for participants. Then and now, curriculum and workplace training are coordinated and integrated. The student and employer are committed to a two-year program. The contract between the school, student and employer explicitly details the responsibilities of each party to ensure the student receives a viable learning experience.¹ Upon completion of the program, the student is awarded academic and occupational credentials.^{2,3}

Recognizing the Need for a Qualified Workforce: A Brief History

In the late 1980s and early 1990s, industry lobbied the federal government, looking for help to train skilled machinists. Their need was dire: Those in industry were unable to find qualified machinists to keep U.S. machine shops and factories open. Many shops closed and work was sent overseas.

Out of this need for machinists, the federal government, industry and unions worked together to develop

a training program to supply skilled machinists. Federal dollars poured into apprenticeship programs like PYAP in the early 1990s to train workers in the machining trades, and in subsequent years, in other trades.

Assessing the Need on the National, State and Local Levels

During the early '90s, national, state and local assessments were carried out to determine the needs and desired outcomes for apprenticeship programs like PYAP. On the national level, federal agencies conducted industry surveys and created a structure to guide high schools across the country in creating apprenticeship programs that were in line with local business and industry needs.^{4,5}

On the state level, Pennsylvania's Department of Labor and Industry devised a seven-step process to help schools build an apprenticeship program across the state, which required schools to:

- Develop a written program.
- Establish a rate of pay.
- Submit the plan for council approval.
- Identify a pool of potential apprentice participants.
- Adopt a selection procedure.
- Enroll eligible applicants.
- Begin the program.⁶

And locally, in 1993 NMTCC assessed potential stakeholders' needs and interests and found that local businesses wanted quality workers, parents wanted their children to be prepared to enter the job market upon graduation or enter post-secondary schools, and students wanted to have the opportunity to work in their chosen career while still in high school.

From Concept to Reality

With the national, state and local assessment data in his arsenal, later that year, then-NMTCC Director Michael Erwin began PYAP at the school with five machining trade students.

A year later in 1994, the program went through some adjustments, the biggest being in the schedule. PYAP students switched from a half-day program to a comprehensive program. In the half-day program students received their academics at the sending school for half the day and the remainder of the day they received their CTE curriculum at NMTCC. As a comprehensive program, however, both academic and CTE classes would be taken at NMTCC.

Also that year, the program grew from five machining trade students to 20 students in manufacturing, machining, engineering, power and transportation, visual communications and culinary labs.

Fast-forward to 1995 and the number of students participating in PYAP had almost tripled (to 58), and additional CTE labs were added to the program: industrial electricity, cosmetology, computer information technology and health occupations. Since 1998, yearly student enrollment has been 100–160 students—roughly 10 percent of the entire school population.

From the beginning the program has sought to integrate academic and CTE classes and labs, combined with work-based learning via a trade in a paid, supervised apprenticeship training program. This approach helps the students to see the link between academics and their trade, and the CTE curriculum enhances and supports the trade skills and knowledge they acquire on the job.

As students progress through the program, their instruction becomes more

intensive and work-based. Sophomores attend NMTCC the entire school week, taking their academic and CTE classes all day. Exceptional sophomores have the opportunity to enter a work-based apprenticeship on Fridays in Term 4. Juniors take their academic and CTE classes Wednesday through Friday and work Monday and Tuesday. Seniors take their academic and CTE classes all day on Mondays and Tuesdays at NMTCC, with a work-based experience in their field Wednesday through Friday.

After graduation, some students opt to pursue postsecondary education in their apprenticeship field. Others continue to be employed by the company they did their apprenticeship with, or they find related work in their field.

And some graduates are “giving back” to the program that helped them so much. Many of the graduates who stayed in their field have moved up to management and now offer current PYAP students field placements at their place of work. At NMTCC’s October 2014 Occupational Advisory Committee meetings, 11 former PYAP students were members of committees from six different trade areas: electrical trades, auto technology, outdoor power equipment, drafting, graphic arts, and internet technologies.

What Teachers Had to Say ...

In 2012, academic and CTE teachers were surveyed to determine if PYAP was achieving its goals: enabling students to acquire the skills and knowledge necessary for employment and easing their entry into the labor market.

The CTE teachers had a number of positive things to say about the program. The overall feeling among CTE and academic teachers alike was that the program is a resounding success. In the first place, PYAP gives these students an advantage in today’s competitive job market. Second, a number of the participants found jobs in their chosen field upon graduation, leading to career satisfaction. Of course, the fact that students get real-world experience while still

in high school could not be overlooked either. One respondent said, “They get to see the constraints workers are under—deadlines, rules, regulations, safety and professionalism, that real-world perspective that is so highly coveted and is a contributing factor to their maturation.”

What makes the program successful is due to a number of factors, according to the CTE teachers. For many, the program’s success comes down to its alignment of academic curriculum with technical curriculum, coupled with student career goals. This alignment helps students relate to academic projects within their field.

Additionally, they found that the more the academics are related to the subject matter, the more the students are interested in it, a sentiment shared by the school’s academic teachers.

Another factor that fosters success: proximity. The CTE teachers felt having their academic counterparts in the same

building was a tremendous resource, enabling them to present higher-level academically integrated lessons.

Academic teachers also weighed in on the program’s success. One teacher stated, “PYAP provides students an alternative way to complete their high school education, while [affording] them the opportunity to earn a certification, gain job experience or attend college. In other words, they don’t just end up with a diploma upon graduation.”

... And the Graduates Said

Many graduates attribute their career success to PYAP. For example, Josh Greaser, a 1999 graduate of the program, credits PYAP with giving him a great start in his career. After forming a partnership in 2009, he started his own business in 2011.

Class of 2007 graduate Mike Hoffman earned more than \$10,000 in scholar-

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ships while a PYAP student, which he then used to further his education at the Universal Technical Institute with NASCAR in North Carolina. He is a fabricator for Tommy Baldwin Racing and works with well-known drivers in the NASCAR Nextel Cup series.

Brittnay Gehman from the class of 2006 opened her own salon after studying cosmetology. She credits PYAP with allowing her to explore all aspects of cosmetology.

Carmen Marzocco, class of 2001, stayed in the culinary field after graduating and is now regional executive chef for the Delaware Valley and mid-Atlantic regions of Eures Dining. His territory covers five states and over 300 facilities, and he has more than 500 chefs/managers reporting to him. He believes PYAP prepared him to understand the real-world setting of the culinary arts field while still in high school.

Mark Randazzo, class of 2000, entered the Culinary Institute of America

and worked in several elite establishments in New York City after completing the program. In 2007, he started his own cake business. He has also appeared several times on the Food Network and in *Modern Bride* magazine.

Employers Weigh In

Employers also have high praise for PYAP. Mark Mintzer, owner of L.I.P. Collision, said, "Partnering with North Montco was one of the best decisions I have ever made, [especially] since five out of seven people running my business graduated from North Montco!"

Kim MacLachlin of Gillespie Electric, Inc., had this to say about PYAP: "We have found that the PYAP program benefits us, as well as the students, for many different reasons. We feel that the PYAP program is a great way to see how well our schools are preparing our industry's future workforce. We also believe that it gives the students the opportunity to put

their skills to the test under the guidance of a mentor, while at the same time experiencing the reality of daily work in their chosen trade. We consider ourselves to be a business that values our community; as such, the PYAP program gives us the chance to utilize local, skilled, part-time workers, with the added benefit of observing the potential of what we hope could be a future full-time employee."

Allen Butler of E.C. Bones, Inc. applauds PYAP for the quality of the students sent to him. "Because of the shortage of skilled workers in the construction trades, we at E.C. Bones Construction always look forward to participating in the North Montco PYAP. By recruiting and training tomorrow's workforce, we are helping to ensure today's students will become tomorrow's leaders."

Conclusion

PYAP, a program that is unique within the Pennsylvania school system, clearly provides a viable alternative educational experience to the standard CTE program. The real-world work experience the students receive from the apprenticeship program is invaluable. The students who apprentice in their trade have a head start in their career, giving them a competitive advantage over other job applicants. And, really, that's what it's all about. **Tech**

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ENDNOTES

1. Kachelries, S. M. (1994). *What is the Pennsylvania Youth Apprenticeship Program?* PowerPoint presentation given to local businesses.
2. The National Alliance of Business/Education Commission of the States. (1992). *Real jobs for real people: An employer's guide to youth apprenticeship*. Denver, CO: Author.
3. Ibid.
4. Kachelries, S. M. (1994). *What is the Pennsylvania Youth Apprenticeship Program?*
5. Ibid.
6. Commonwealth of Pennsylvania Department of Labor and Industry. (n.d.). *7 steps to establishing a youth apprenticeship program*. Harrisburg, PA: Author.

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