

# How Can Postsecondary Education and Training Programs Help Working Students Persist? Findings from Career Pathways Studies

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## Overview

Millions of adults lack the postsecondary credentials needed to obtain many jobs in the current economy. Challenges to credential attainment include limited information about education and training options and their outcomes, expenses related to enrollment and persistence, and, for many students, the need to balance school with work responsibilities. This brief summarizes efforts to help students overcome challenges to enrolling and persisting in college and earning a credential. It uses data from three Administration for Children and Families-funded studies of programs adopting a career pathways framework. Examples of challenges and potential facilitators are:

- Work schedules can reduce enrollment and persistence in school; shortening the length of the program and providing flexibility in when and where courses are offered can help.
- Participant challenges can affect persistence in school; program advisors can link students to an array of supports.
- Even when students are working, their earnings might not cover costs associated with school, unexpected emergencies, and day-to-day living, with implications for persistence; programs can offer a range of financial supports.
- Some participants might need to begin working after enrolling in school; programs can help connect students to jobs.

## Introduction

Most occupations projected to grow the fastest in the coming years will require postsecondary education and training. Of the 30 occupations with the most job growth projected between 2019 and 2029, 20 require at least some postsecondary education, including degrees and nondegree credentials. Overall, two-thirds of jobs today require at least some postsecondary education or training, compared to one-fourth in 1970 (Carnevale and Smith 2018).

Yet for a variety of reasons, millions of adults lack the postsecondary credentials needed to obtain many jobs in the current economy. Challenges to enrollment in college or other postsecondary education and

training, and completion of credentials include limited information about education and training options and their outcomes, and expenses related to enrollment and persistence.

Nontraditional students—those who are older, not relying on parents financially, balancing school with family responsibilities and/or work, attending part time—may face additional challenges including limited basic academic skills, negative previous experiences with school, a lack of college role models, and insufficient support mechanisms (Fein 2012; Carnevale and Smith 2018).

<sup>1</sup> <https://www.bls.gov/ooh/occupation-finder.htm?pay=&education=Postsecondary+nondegree+award&training=None&newjobs=&growth=&submit=GO>

Career pathways, a framework to improve the education and earnings outcomes of nontraditional students, is the focus of several evaluations. This framework suggests that postsecondary education and training should be organized as a series of courses – or steps – leading to successively higher credentials and employment opportunities in growing occupations. Programs adopting this framework generally include a range of components designed to help students enroll in, persist, and earn their credentials, including assessments, innovative approaches to teaching occupational and basic skills, advising, and connections to employment. Programs vary in their target populations, occupational focus, and number of steps on their pathways, as well as the relative emphasis they place on each component.

Evaluation findings of programs adopting a career pathways framework show that they can significantly increase employment and earnings (e.g., Year Up and Project QUEST), and increase credentials (Project QUEST and a related program, Valley Initiative for Development and Advancement, or VIDA) (Fein and Hamadyk 2018; Elliott and Roder 2017; Rolston et al. 2017). These programs, however, require full-time attendance for at least one year.

Many students cannot commit to full-time school due to work and other obligations. In 2018, 81 percent of part-time postsecondary students worked, and 47 percent of them worked full time; the corresponding figures for full-time students were 43 percent and 10 percent (Hussar et al. 2020). Low-income working students are more likely than higher-income students to be nontraditional; that is, older and financially independent from their parents (Carnevale and Smith 2018). Many working nontraditional students need a variety of supports to successfully persist in and complete postsecondary education. Career pathways interventions can help working students by making school affordable and helping them navigate challenges to persistence.

This brief first summarizes the career pathways framework and associated evaluations. Then, using findings from these evaluations, it describes how programs that incorporate key features of the career pathways framework help their students persist and complete. Although not specific to working students, the strategies described below can help students balance school and work.

## Overview of Career Pathways Framework & Associated ACF-Funded Evaluations

Career pathways is an integrative framework for promoting postsecondary education and training among nontraditional students. Participants enter the pathway at a step associated with their skill level. Following each step, they can continue their education or seek employment. Those who exit for work can return and enroll in the next step on the pathway.

To effectively engage, retain, and facilitate learning of nontraditional students, the framework incorporates four components: academic and nonacademic assessment, innovative basic and occupational skills training, academic and nonacademic supports, and connections to employment (Box 1).

<sup>2</sup> Low-income is defined as students with family income less than 200 percent of the federal poverty line. Higher-income is defined as students with family income at or above 200 percent of the federal poverty line.

## Career Pathways Components

- **Academic and nonacademic assessment** to ensure that students start at the correct step on the pathway (including basic skills remediation if needed) and to identify barriers to program enrollment and completion.
- **Innovative basic skills and occupational skills instruction** to help students persist, such as contextualization of basic skills in occupational areas, active learning techniques (e.g., group work), accelerated courses, and flexible scheduling of classes.
- **Academic and nonacademic supports** to help students persist in and complete their programs. Academic supports include career counseling, tutoring, study groups, financial support for tuition; nonacademic supports include referrals to services, and financial assistance for nonacademic needs such as transportation or childcare.
- **Strategies to connect participants and employers** that are either in-program (e.g., internships, clinical placements, referrals to paid jobs) or post-program (e.g., job search assistance).

Source: Fein 2012

The Office of Planning, Research, and Evaluation (OPRE) in the U.S. Department of Health and Human Services' Administration for Children and Families seeks to build the body of knowledge about the design, implementation, and impacts on education, employment, and earnings of programs aligned with the career pathways framework, particularly those that target low-income nontraditional

students. OPRE funded multiple rigorous evaluations of career pathways interventions, including the **Pathways for Advancing Careers and Education (PACE)** Project, and evaluations of two rounds of the **Health Profession Opportunity Grants Program (HPOG 1.0 and HPOG 2.0)**. (Box 2 provides a brief overview of each study.)

## OPRE-Funded Career Pathways Studies

**Health Profession Opportunity Grants Program (HPOG).** Local HPOG programs provide education and training to Temporary Assistance for Needy Families (TANF) recipients and other low-income individuals for occupations in the healthcare field that pay well and are expected to either experience labor shortages or be in high demand. In 2010, the Administration for Children and Families (ACF) Office of Family Assistance (OFA) awarded a first round of five-year HPOG grants (HPOG 1.0) to 32 organizations located across 23 states. In 2015, OFA awarded a second round of HPOG grants (HPOG 2.0) to 32 organizations located across 21 states for a new five-year period. Most grantees in both rounds participated in implementation and impact studies. The studies pooled across grantees and their programs to capture the different iterations of the HPOG model regardless of the size of the program, and report on the success of the HPOG funding stream. Thus, findings are described in the aggregate.

**Pathways for Advancing Careers and Education (PACE) Project:** Evaluations of nine career-pathways oriented programs, three of which were HPOG 1.0 grantees (\*) and one of which was an HPOG 1.0 subgrantee (^). Each evaluation included implementation and short-term (18 months) impact studies. The nine programs focus on a range of occupational areas including healthcare, welding, advanced manufacturing, and IT. The programs are: Bridge to Employment in the Healthcare Industry\* (CA), Carreras en Salud^ (IL), Health Careers for All\* (WA), Washington State Integrated Basic Education and Skills Training

Program (I-BEST), Pathways to Healthcare\* (AZ), Patient Care Pathway Program (WI), Valley Initiative for Development and Advancement (VIDA) (TX), Workforce Training Academy Connect (IA), and Year Up (multiple locations).

For more information on the HPOG 1.0 and HPOG 2.0 evaluations and the PACE project go to <https://www.acf.hhs.gov/opre/project/career-pathways-research-portfolio>

*Notes: (1) HPOG was authorized by the Affordable Care Act (ACA), Public Law 111-148, 124 Stat. 119, March 23, 2010, sect. 5507(a), "Demonstration Projects to Provide Low-Income Individuals with Opportunities for Education, Training, and Career Advancement to Address Health Professions Workforce Needs," adding sect. 2008(a) to the Social Security Act, 42 U.S.C. 1397g(a).*

*(2) The second round of HPOG grant awards was extended until September 29, 2021.*

*(3) The HPOG 1.0 and PACE implementation studies collected a wealth of information about program components, operations, and partnerships; however, neither focused explicitly on programmatic efforts to help working students persist and complete their training.*

*(4) All data referenced in this brief was collected prior to the COVID-19 pandemic. Thus, it is possible that program modifications resulting from the pandemic, such as moving all classes online, will further facilitate student efforts to balance work and school. More research on this topic is needed.*

## Data

This brief uses data from the PACE and HPOG 1.0 implementation studies, and in-depth interviews with a sample of 153 HPOG 2.0 study participants. The PACE and HPOG 1.0 implementation studies documented components of the programs included in the studies,

while HPOG 2.0 study participants described in their own words their reasons for working while in school and the programmatic components that help them persevere. Most applicants to programs in these studies were nontraditional students.

### HPOG and PACE Participants are Generally Nontraditional Students



**Older students:** More than two thirds of HPOG 1.0 study participants were age 25 or older, as were over three-quarters of HPOG 2.0 interviewees. The proportion over 25 among programs in PACE ranged from none (one program targeted young adults 18 to 24) to more than 75 percent.



**Parents:** Almost two-thirds of HPOG 1.0 participants had dependent children (63 percent) at the time of program enrollment, while 71 percent of HPOG 2.0 interviewees had children in the household. For PACE programs, the proportion of participants who are living with children ranged from 9 percent to 56 percent.



**Low-income:** HPOG 1.0 study participants earned on average \$9,268 in the 12 months prior to study entry; the corresponding figure for PACE was

\$21,172. Over half (57 percent) of HPOG 2.0 in-depth interview participants earned less than \$10,000.



**Working:** Similar proportions of HPOG 1.0 and PACE participants worked at the time of study entry (more than 40 percent). Three-quarters of HPOG 2.0 in-depth interviewees worked at the time of their interview.

Sources: Peck et al. 2018; Gardiner and Juras 2019; Thomas et al. forthcoming

Note: Data on HPOG 1.0 and PACE participant characteristics collected at the time of participant study enrollment; data on HPOG 2.0 in-depth interview participant characteristics collected at the time of the in-depth interview.

Program staff and participants alike described the difficulties faced by students who are working while in school. HPOG 1.0 program staff reported the second most frequent challenge to recruitment was potential participants' need to work. Three quarters of program staff reported that applicants' need to work was at least "somewhat" of a recruitment challenge, and nearly half considered it a "moderate" or "serious" one (Werner et al. 2016).

In their interviews, HPOG 2.0 participants described why they needed to work while in school:

*I don't get any other services, I'm not getting food stamps and [housing assistance.] I still have to pay for rent, for food, for lunches and all of that stuff for [my family]. Your bills don't stop, they don't go away. You have to take care of yourself and maintain your livelihood. I had to work full-time to keep a roof over me and my kids' heads.*  
— Student in Licensed Practical Nurse program

Most working participants did so part time, with some reducing their hours from full time to attend school, which created hardships for some.

*It's harder working and doing school than it is just going to school. But it's hard not to have your own money and accomplish something at the same time.*  
— Student in Phlebotomy program

*I was cutting a lot of money, I needed to go to school and appointments they wanted me to go to. It cut back my income. I started to suffer a lot of consequences because of going to school...my paycheck was coming \$100 to \$200 a week; I was cutting my hours.* — Student in Pharmacy Technician program

3 The lower earnings of HPOG 1.0 participants reflects, in part, the grant program goal to recruit TANF recipients and other low-income individuals. Most of the PACE programs targeted low-income participants, though some targeted enrollment based on students' assessment scores or other criteria.

## Challenges to enrolling and persisting in school and potential facilitators

Programs that incorporate elements of the career pathways framework used various approaches to help working students enroll and persist in school. For example, programs used flexible training delivery to help students manage work and school schedules, as well as accelerated programs to reduce the time students needed to combine work and school. Tuition assistance and other school-related financial support helped students pay for school, while nonacademic financial supports helped students persist by paying for or subsidizing expenses such as transportation and childcare. Finally, some programs helped enrolled students find jobs if they needed money while in training. Below are examples of challenges working students experience and programs' efforts to address them.

There is an important caveat regarding these findings. Although the HPOG 1.0 and PACE implementation studies documented program components, the impact studies assessed the effectiveness of programs, not specific program components. Thus, the available data does not indicate whether the approaches described below resulted in improved student persistence and completion. Assessing the effectiveness of specific components on nontraditional student retention and completion is an area for further study.

### Work schedules can reduce enrollment and persistence in school; shortening the length of the program and providing flexibility in course offerings and can help.

Community colleges and other occupational training providers often schedule classes during the day, making it difficult for workers with daytime shifts to participate. Students with low basic skills have the added challenge of needing to attend remediation classes before even qualifying for occupational skills programs. Thus, in addition to fitting in basic skills training with work schedules, starting with remedial education lengthens the time students need to combine work and school before obtaining a credential.

Training providers addressed scheduling conflicts by **accelerating courses** so that content was compressed into a shorter time. The Pathways to Healthcare program, for example, implemented two basic skills remediation options, depending on the student's preference: a 10-week course that met close to full-time four days a week, or a self-paced lab with instructor support (Gardiner

et al. 2017). Similarly, Workforce Training Academy Connect implemented self-paced basic skills remediation, which enabled students to complete coursework during non-work hours (Hamadyk and Zeidenberg 2018).

VIDA partnered with a local community college to design and implement a short, 16-week College Prep Academy for basic skills remediation (Rolston et al. 2017). Carreras en Salud designed its college preparation classes, starting at the fourth grade skill level, to raise skills at least two levels in 16 weeks. This format accelerates students' entry into the Certified Nursing Assistant (CNA) program, the first occupational training step on its pathway, which requires at least an eighth grade skill level.

Students described the benefits of short programs.

*"It's more like, how much they fit in, in less than a year. I learned so much in less than a year. It's amazing. I don't know how to explain it. I learned so many different skills and tactics, and how to treat people. It's pretty – I'm trying to find the word – amazing that it's that little time." – Student in Licensed Practical Nurse program*

*"Six to eight weeks to get your certification and classes. You should be finished and certified for all three [phlebotomist, EKGs, nursing assistant] within eight weeks... I felt it was a better choice." – Student who considered two different courses for a Patient Care Technician program, the other meeting twice a week for 10 months*

*"Phlebotomy was an accelerated, three-month program. It was best for me, it was quick. It gave me the skills I need if something happened. I would be done in May, and I could jump into a job, hopefully." – Phlebotomy student who needed to update her Practical Nurse license following a divorce, to start working immediately so enrolled in a shorter course*

Some programs offered **flexible delivery strategies**, such as evening scheduling, self-paced instruction, convenient training locations, and technology-supported distance learning (even prior to the COVID-19 pandemic). Most HPOG 1.0 programs incorporated flexible learning strategies into their education and training (Werner et al. 2016). Some 90 percent provided at least one training that was available in the evening or on the weekend. About one third included at least one training course that was offered online. Among programs in PACE, Pathways to Healthcare and Workforce Training Academy Connect incorporate flexible delivery, as noted above. Carreras en Salud provided its onsite college preparation courses from 6:00 to 10:00 pm on weekdays to accommodate students' work schedules (Martinson et al. 2018).

<sup>4</sup> In a subset of HPOG programs, the study analyzed the separate impact of each of three program enhancements, initially chosen for their potential for improving key outcomes: emergency assistance, non-cash incentives, and facilitated peer support groups. Adding any of the three enhancements to an HPOG program's standard offerings did not improve its impacts. (See Peck et al. 2018.)

Another approach to acceleration is **integrating basic and occupational skills**. Washington State’s Integrated Basic Education and Skills Training (I-BEST) program uses this approach, which incorporates basic skills instruction directly into occupational training (Glosser et al. 2018). I-BEST’s “team teaching” model required the basic skills instructor to be present and engaged in the classroom at least 50 percent of occupational class time. In this model, students remediated their skills concurrently with earning occupational training credits.

Additionally, Carreras en Salud **contextualizes** its college preparation courses. Each course provides instruction in the context of healthcare occupations and vocabulary, so that participants learn occupational content while improving their skills to the level required to enroll in the next training course.

Finally, some programs allowed participants to **select any accredited training provider** of their choice. Bridge to Employment in the Healthcare Industry (Farrell and Martinson 2017) and Health Careers for All (Glosser et al. 2017) offered this flexibility. Participants selected providers with courses that fit their schedule. Generally, students in these programs selected private, for-profit schools. According to staff in both programs, students liked the flexible schedules and accelerated nature of such programs.

## Participant challenges can affect persistence in school; program advisors can link students to an array of supports.

Programs in the HPOG 1.0 and PACE studies offered a range of supports, such as transportation, childcare, and referrals to other services, as well as helped participants plan their academic schedules around their work needs. Most often, advisors (also referred to as coordinators, counselors, and advisors) coordinate supports.

*Having a counselor there for you that you have every month has been a big help as far as planning classes, deciding where I’m at, where I wanna be. Providing advice. That connection is also something that’s really critical. – Student in Registered Nurse program*

*And [HPOG] made sure we had our [subway cards] and once they gave us our weekly [subway cards], we would use it to go to work and come back and come to the school. And then leave... I think if they hadn’t done that, I think a lot of people would’ve not made it to school, like, every day. – Certified Nursing Assistant completer*

All programs in PACE incorporated **advising**. Most specified a number of advising sessions but did not mandate attendance. The exceptions were VIDA and Year Up, in which failure to participate could result in dismissal from the program. Programs varied in whether staff advised on both academic and nonacademic issues (Patient Care Pathway Program, Workforce Training Academy Connect, VIDA, I-BEST, Bridges to Employment in Healthcare, and Health Careers for All) or whether separate staff specialized in one or the other (Pathways to Healthcare, Year Up, Carreras en Salud). Pathways to Healthcare participants, for example, had three advisors: two at Pima Community College who shared academic advising, with one advisor working with the participant prior to the start of occupational training and the other advising after enrollment in an occupational course, and one nonacademic advisor based at a local workforce agency. The nonacademic advisor documented students’ barriers to program participation and service needs and made referrals for other programs, such as Supplemental Nutrition Assistance Program (SNAP) and health insurance navigators (Gardiner et al. 2017).

Advisors in most programs helped students access **transportation and childcare**. Almost all HPOG 1.0 programs aided with transportation and childcare, either directly (e.g., transportation vouchers or onsite childcare) or through referrals to program partners. Some programs also earmarked funds to pay for needed supports, such as eyeglasses (Pathways to Healthcare, Health Careers for All, Bridge to Employment in the Healthcare Industry).

Programs in PACE provided gas cards and public transit passes (Carreras en Salud, VIDA, Workforce Training Academy Connect). Carreras en Salud provided onsite childcare during evening classes.

## Even when students are working, their earnings might not cover costs associated with school, unexpected emergencies, and day-to-day living, with implications for persistence; programs can offer a range of financial supports.

Programs in the HPOG and PACE studies offered varying levels of financial support to participants. All programs provided some **assistance with school-related costs**, such as direct support for tuition or assistance filling out financial aid forms. Some PACE programs also provided stipends and funds to address emergencies.

HPOG 2.0 interviewees described how financial support for academic costs allowed them to participate in their programs...

<sup>5</sup> Most programs required participants to attend a specific college, either because the college operated the program, or the program had agreements with particular colleges.

*They pay for my books and uniforms. It doesn't sound like a lot, but I get financial aid, so if I didn't have that, there is no way I could go. I can't come up with \$400 or \$500 every level to pay for books and uniforms. Stethoscopes and all of that stuff. They pay for my CPR class, which again, was \$50. At the time, every little bit helped. I'm very appreciative. – Student in Licensed Practical Nurse program*

...as well as how other financial supports helped them persist.

*They definitely have come and taken [care of] a nice chunk out of my bill and I'm very appreciative. She [HPOG staff person] actually paid the rest of my second quarter off. I was at a standstill and I had rent, lights, gas. Right now my rent's still due, but I had to pay for school... But she covered the last of the second quarter for me so that I could catch up on my bills to make it to the third quarter. – Student in Licensed Practical Nurse program*

*You know if I didn't have my car, I couldn't go to the class. So, by her fixing my car, I continued my class. If I didn't go to class, I wouldn't be having the [job] interviews I have. – Student in Phlebotomy, EMT, and EKG programs*

Programs' assistance with tuition and other costs can reduce the financial stress that might otherwise delay enrollment or interrupt courses once enrolled. All programs in the HPOG 1.0 and PACE studies provided some type of financial support to cover tuition. Programs that did so covered the cost of tuition, by providing the program at no cost to the participant (e.g., Workforce Training Academy Connect), giving scholarships to cover most or all tuition (e.g., Pathways to Healthcare), or supplying Individual Training Accounts that participants used for tuition at any accredited school of their choice (e.g., Health Careers for All).

Many programs **helped students access other sources of financial assistance** such as Pell Grants (e.g., Patient Care Pathway Program) (Cook et al 2018); some provided "fill the gap" funds for tuition not covered by Pell grants (e.g., I-BEST, VIDA).

Finally, some programs provided **financial assistance not related to tuition**. More than half of HPOG programs helped address short-term and emergency needs, including utility shutoffs, car insurance, and car repairs, as did some PACE programs (Patient Care Pathway Program, VIDA). Most HPOG programs also offered students one or more housing services (such as temporary housing or cash assistance with rent). VIDA helped participants apply for state-funded childcare assistance. If the student's application was approved, VIDA paid any co-pay; if not, VIDA assisted with the cost of another provider.

Finally, one program, Year Up, provided direct financial support to participants, in the form of a weekly stipend, thus enabling them to attend the program full time and not

work. The 12-month program is divided into a six-month learning and development phase, with a stipend of \$150 per week on average, and a six-month internship at a partner employer, with a stipend of \$220 per week on average.

## Some participants might need to begin working after enrolling in school; programs can help connect students to jobs.

Some students determined they needed to get a job while they were enrolled in training. Some programs helped students obtain work after they enrolled in the program.

*"The first time [I applied], they didn't accept me. When [caseworker] talked to her friend there, they accept me." – Student who needed to obtain a job while in training*

HPOG programs helped participants find jobs while they were still active in the program. Some of these jobs were related to healthcare and provided an opportunity for gaining relevant experience and additional skill-building. In other cases, the jobs may have simply generated income, providing the resources that participants needed to continue in training, as well as general work experience. Forty-four percent of participants began employment while enrolled in HPOG. More than one-third (35 percent) of all participants began a job in a healthcare occupation or with a healthcare employer while enrolled in HPOG (Werner et al. 2016).

Some programs in PACE had staff to help enrolled participants find paid work. For example, Carreras en Salud employment specialists drew on their relationships with hospitals and other healthcare providers to identify paid job openings that also provide exposure to a healthcare workplace.

## Conclusion

Components that can help working students persist in school include supports (e.g., advisors who link participants to needed academic and nonacademic services, as well as provide guidance); flexible and/or accelerated course schedules; and financial assistance for school-related costs. Future research could systematically explore if and how programs assess participant employment status at intake and, for those working, the need for supports. Research could also document the prevalence of supports to help participants combine work and school, and the effectiveness of supports from the perspectives of students and program staff.

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