



CHEPP


The Center for
Higher Education Policy
and Practice

**ONLINE BY DESIGN:
IMPROVING CAREER CONNECTION
FOR TODAY'S LEARNERS**

JULY 2025

Executive Summary

- **Postsecondary education must strengthen direct connections and pathways to careers to meet the needs of today's learners and help improve their socio-economic mobility—and deliver on the public's investment.**
 - Most learners attend college to improve their economic circumstances. Ninety percent of prospective college students say they are pursuing college to increase their earnings and 89% would like to secure a better job (Fishman, 2015).
 - Yet access to impactful, career-connected experiences—like internships, apprenticeships, and career advising—remains limited. Only a portion of learners participate in work-based learning; for instance, just 25% of seniors at four-year institutions reported completing a paid internship (Strada Education Foundation, 2024).
 - Adult, working, and online students face even greater challenges in accessing quality opportunities, which are typically not designed in ways that align with their circumstances.
- **Today's learners require redesigned models that integrate career connection strategies across all programs and modalities.**
 - Today, one-third of students are adults, two-thirds work while in school, and more than half are enrolled in online courses (TSC, n.d.; NCES, 2023). These learners face structural barriers to traditional in-person career services and experiences.
 - In one survey, only 16% of undergraduate students found career services to be helpful and only 1 in 5 students at four-year institutions and less than 1 in 4 students at two-year institutions currently receive quality education-to-career guidance (Strada Education Foundation, 2024).
 - Flexible, workforce-aligned, and embedded strategies can help today's learners access efficient pathways and good jobs.
- **Work-based learning improves learner outcomes, but remains inequitably distributed and underutilized; other strategies need a deeper research base.**
 - Learners who participate in work-based learning courses are four-percentage points more likely to be employed one year after college, and those with paid internships earn nearly \$5,000 more that first year (Zhou, 2023; Torpey-Saboe et al., 2022).
 - Yet, paid, flexible work-based learning options are often least accessible to the learners who need them most. Seventy percent of learners said conflicts with outside employment posed a barrier to them participating in an internship (Wolfgram et al., 2021).
 - Other career connection strategies do not have as robust an evidence base and require further evaluation to understand how they contribute to learner outcomes.

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- **As policymakers and institutions seek to improve career outcomes for learners, this paper offers insights into the supports, partnerships, and resources needed to scale high-quality, career-connected learning.**
 - Drawing from the research and profiles of a number of innovative models, this paper outlines a continuum of career connection strategies that can support workforce connectivity: Workforce-Aligned Curriculum, Skills Assessment & Mapping, Career Exploration, Career Exposure, Career Services, Career Advising, and Work-Based Learning.
 - It then details the key elements that should be embedded in those strategies to support today's learners in connecting their education to work and pursuing well-paying careers.
 - Creating seamless pathways between education and the workforce also requires better transfer practices, competency-based education (CBE), credit for prior learning (CPL), and prior learning assessment (PLA), and strengthened data systems to inform and improve career pathway outcomes.

Introduction

Today's learners are a diverse mix of people at different stages of their careers, with some just starting their careers, while others may be seeking to make a career change or aiming to advance in their field. Yet almost universally, learners say they attend college to prepare for the workforce, and ultimately to improve their economic circumstances. In a survey by New America, 90% of prospective college students said they were pursuing college to increase earnings and 89% hoped to secure a better job (Fishman, 2015). In another survey, 80% of high schoolers cited job security as a reason to obtain a college degree (HCM & Edge Research, 2024).

Research shows that quality work-based learning and related career support can help deliver this goal for learners. Opportunities like paid internships, apprenticeships, and co-ops have been found to improve performance in college, employment opportunities, salaries, and career satisfaction (Torpey-Saboe et al., 2022). While learners recognize the value of these opportunities, they may lack access to them. At four-year institutions, while 70% of first-year learners expressed interest in a paid internship, only 25% of seniors reported completing one (Strada Education Foundation, 2024). At community colleges, over two-thirds of learners said they wished to participate in work-based learning (D'Amico et al., 2019), while only 14% of learners actually participated in work experience as part of their education program (Cronen et al., 2018).

Flexible, career-aligned pathways have become increasingly essential as more adult, returning, and working learners are now pursuing postsecondary education and seeking to advance their careers. The population of adults with some college but no credential has grown steadily year over year, reaching 43.1 million today—a key group to re-engage to meet institutional enrollment goals and national attainment goals (NSCRC, 2025). To support re-enrollment, pathways must also be designed to serve learners across all modalities, especially as online enrollment continues to rise.

However, career pathways and workforce connection strategies are largely designed for traditional learners. The higher education sector needs more models that can address the objectives and contexts of the “new traditional” learners. These learners typically need to balance competing demands on their time and finances. Among today's learners: 64% work, 49% are financially independent, 24% are parents, 3 out of 5 experience housing or food insecurity, 19% have a disability, 6% are veterans or active-duty military, and 35% are first-generation college students (O'Sullivan, 2023). In addition, one-third of students are adult learners (aged 25 and over) and over half are enrolled in at least one online course (TSC, n.d.; NCES, 2023).

All of these circumstances can make traditional, in-person career connection strategies difficult to access. With over one-third of today's students identifying themselves as “a worker that goes to school” rather than as a student with a job (Fletcher et al., 2025), more career-connected programming should be designed with this perspective in mind. New traditional learners bring valuable experiences and skills to the classroom and workplace, but need better designed workforce opportunities to showcase and improve upon those skills.

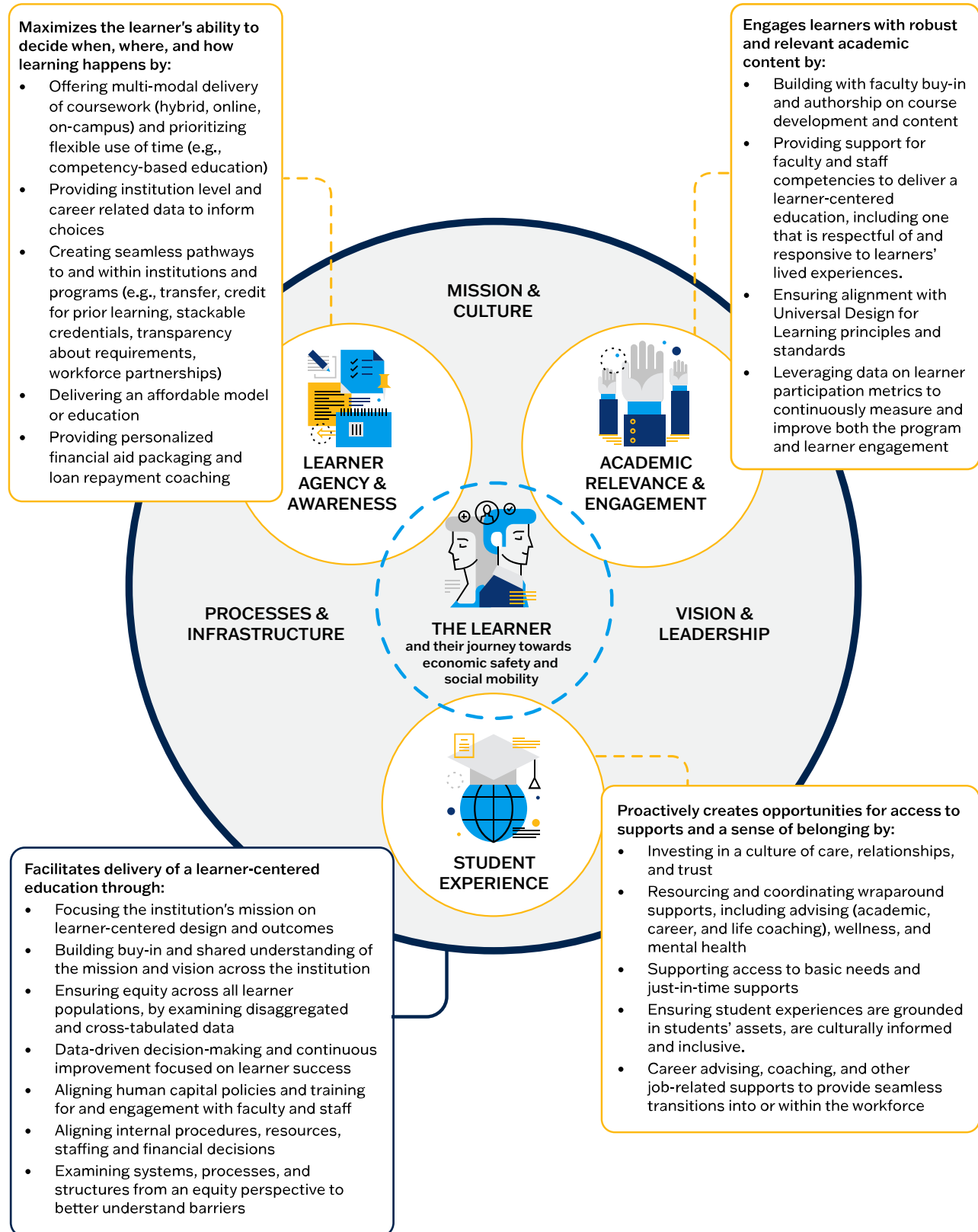
Sometimes workforce-aligned short-term credentials are held up as a flexible option for new traditional learners to get in-demand skills. However, the labor market outcomes of these programs are inconsistent—wages often plateau and some leave students worse off (Bitar et al., 2024). A study in California found that earnings from short-term certificates tend to level off within seven years of program completion, while gains from long-term certificates begin to decline over the same period. In contrast, the labor-market value of an associate degree remains strong over time (Bahr, 2016). Further, employment rates among certificate-holders is 77%, while the rates for associate and bachelor's degree holders are 84% and 87%, respectively (Ositelu et al., 2021). When done intentionally and with quality, credentials that serve as building blocks towards degrees or additional professional opportunities, can help overcome these challenges. Such credentials can be stackable, provide credit to a degree, and may be transferable to new degrees or professions. They may also be paired with credit for prior learning (CPL) to provide learners with flexibility and credit based on their knowledge and skills. For example, graduates from the College of Health Care Professions' (CHCP) stackable credential programs may experience salary increases of \$31,675, on average (Thurston & Reese, 2025). Still, given that a bachelor's degree will increasingly offer a route to the majority share of good jobs through 2031 (Strohl et al., 2024), learners need all types of education providers (including two- and four-year institutions) and credentials (including bachelor's degrees) to provide career connectivity in a flexible and high-quality format.

Career connectivity should be integrated into all learning degree types and modalities in higher education, including on-campus, hybrid, and online. Career connected programming should also be tailored to the variety of learner needs and circumstances to assist all learners, whether they are attending full-time or part-time, starting a career, changing careers, or advancing in their current career path.

This paper is the fifth paper in a series about the importance of learner-centered design in higher education. The first paper presented a framework for learner-centered design ([see Figure 1 on page 6](#)). The second, third, and fourth papers addressed specific elements of the framework, specifically the importance of accessibility for learners with disabilities across modalities, the value in creating a culture of care and belonging, and the importance of robust and relevant academics. This fifth paper addresses another key element: providing opportunities for career connection. The paper explores the existing landscape of career connection opportunities. Through a review of the literature and profiles of some promising models that have already been developed, the paper distills the key elements of delivering these valuable career connection opportunities in a flexible and meaningful way that can meet the needs of today's learners.

Figure 1.A Learner-Centered Framework

A Learner-Centered Design Framework



Career Connection Strategies

“Career connection strategies” is a term meant to capture the full range of activities, services, and experiences that help learners select, prepare for, and pursue their career path. They vary widely in intensity, ranging from highly interactive on-the-job training to one-time activities, like informational interviews and career exploration events. Career connectivity is both a pathway and a continuum. As a pathway, learners should begin exploring and charting their career path from the earliest days of their education, through career advising and exploration activities. Further along, learners can identify the necessary skills in their chosen fields and engage in work-based learning to develop those skills. The career connectivity continuum reflects the intensity of the experience; typically, the more authentic the experience in a workplace, the more valuable the strategy. Some other organizations have developed frameworks for work-based learning and related strategies. [Advance CTE](#) illustrates the continuum as falling into the following categories: career awareness, exploration, preparation, and participation (Advance CTE, 2021). [Jobs for the Future \(JFF\)](#) developed a work-based learning framework that illustrates the pathways and reinforcing relationships between Career Exploration, Engagement, Exposure, and Experience (JFF, 2018). Based on our research and interviews with a range of practitioners and experts, we have developed a taxonomy to categorize career connection strategies that can be integrated into higher education programs to better meet the needs of new traditional learners. This taxonomy is outlined below.

Career Connection Strategy Taxonomy

Workforce-Aligned Curriculum: A curriculum delivered in a higher education program that aligns with the skills and knowledge necessary to succeed in a specific career or the workforce. Learning outcomes are typically mapped to the competencies that are mastered throughout the curriculum.

Skills Assessment & Mapping: Assesses the skills and experiences that learners have and maps them to their career interests to help design the right program and course of study to meet their needs and aims.

Career Exploration: Encourages learners or job seekers to explore their career options and understand what industries or careers they can pursue with their degree/credential.

Career Exposure: Raises awareness about careers and specific jobs, helping job seekers gain an understanding about a career or industry of interest.

Career Services: Traditional career services found at most higher education institutions, including but not limited to resume development, interview preparation, and workshops on professional development topics.

Career Advising: Personalized coaching that tailors advice to the learner’s desired career, aimed at helping job seekers navigate career options, the job market, and land a career in their desired field.

Work-Based Learning: Real-world applications of learning, where learners can build practical skills through workplace training or experiential learning, including through apprenticeships, internships, project-based learning, co-ops, and job simulations.

Sidebox 1. Workforce Partnerships in Higher Education

Colleges and universities are creating different types of [workforce partnerships](#) to create opportunities for implementing career connection strategies. These partnership types include custom employer training programs, direct partnerships, intermediaries, career pathways, and regional sector partnerships [Center for Higher Education Policy and Practice (CHEPP), 2024a]. Workforce partnerships can create opportunities to deliver career connections in new ways, such as using intermediaries' relationships with employers to help place learners on their desired career pathways.

Career Connection Strategies and How They Can Better Serve Learners

For each of the career connection strategies, research, case studies, and interviews illustrate practices that can promote successful delivery and enhance the connection between education and the workforce for learners. While career connection strategies often serve traditional students and career starters well, many models are difficult to access for career changers and those seeking to advance in their field. Notably, existing research has mostly focused on work-based learning models, but less so on the other practices in the taxonomy. Below is an overview of some identified practices that can support success, identified gaps in the research and literature, and ways in which practices can be improved to better serve new traditional learners.

Workforce-Aligned Curriculum

Programs and courses that are intentionally designed to connect learning outcomes to workforce needs and the competencies necessary for career advancement have been proven to be the most valuable for learners. Ensuring relevance to today's workforce is a [key element](#) in quality assurance and delivering a robust and relevant education (CHEPP, 2025). With clear connection to career-required skills, a workforce-aligned curriculum strengthens learners' job prospects and improves their employment outcomes (Ewance, n.d.). Further, a workforce-aligned curriculum can improve the learner experience. Industry-aligned programs promote student engagement and support the development of practical skills. Particularly for adult learners and working learners, embedding skill-focused content in academic programs helps keep them engaged and keeps them from having to choose between pursuing a degree or work-relevant training (EMSI, n.d.). Ensuring a clear connection between the educational content and its real-world applications contributes to students' perception of the value of their education (Shimano & Klein-Collins, 2024).

The ability to articulate the skills that will be acquired during a learner's program can help prepare the learner to identify well-suited job prospects, and for interviewing and securing a job after completing their credential. Aligning the curriculum to workforce needs by incorporating employer input will create academic programs that are especially valuable to learners and will help employers see the value as well.

Strategy in Practice:

Through labor-market analysis and the use of other data, institutions can intentionally design a workforce-aligned curriculum. For example, Southern New Hampshire University (SNHU) uses labor-market data to inform their program offerings. They start their program design process by backwards mapping from the competencies they want their learners to take into the workforce (SNHU, n.d.). Curriculum designers, deans, industry stakeholders, and faculty collaborate to translate industry needs into specific competencies and learning outcomes. Using workforce data, and reviewing the professional standards and requirements for each discipline allows curriculum developers to stay up to date on what is needed in the workforce and how to best prepare their learners.

The College of Health Care Professions (CHCP) is the largest provider of allied health graduates across Texas (CHCP, n.d.). The CHCP started as an internal training school for the Texas Medical Center and now provides clinical experience at over 2,300 sites in Texas. Its roots and continued focus are to ensure their curricula produce graduates who are career ready. To keep their curricula up to date and career relevant, CHCP has an employer advisory committee for each program and assesses the skills learners will actually use in their externships. There is a continual feedback loop with the employers through the advisory committees as well as the ongoing clinical externships at the employers.

Calbright College is California's free, online, public community college (Calbright, n.d.). Their self-paced, competency-based model attracts a large population of adult learners, student parents, and caregivers. Calbright has emphasized durable skill development in building its curricula to align with employer and workforce needs. Drawing on research from America Succeeds, Calbright identified ten durable skills and developed dedicated modules for each. All their academic programs incorporate at least two of these modules in their curriculum. Learners earn badges for the modules they complete, allowing them to provide evidence of their learning and skills to potential employers.

In addition to the modules, Calbright offers career-readiness content and workshops. These opportunities hone learners' durable and "soft skills" that are also sought by employers. The faculty and instructional model also supports students in identifying their pre-existing skills and knowledge from prior experience and helps translate them for job applications and interviews. The goal is to connect the course content to job opportunities and relevant workforce demands.

Career Exploration, Exposure, and Skills Assessment

Learners are bringing more skills and experience to college with them than ever before in the form of dual credit, military and work experience, and certifications (SOVA, 2023). Institutions can support learners in taking more efficient pathways to their career goals by thoroughly assessing their prior skills and experiences. These assessments can help institutions understand the skills that learners bring and how they can align with different program options, career paths, and work-based learning opportunities. In particular, those seeking to advance in their chosen field may bring relevant skills into their higher education program. For example, 30% of community college students work in jobs related to their field of study (Beer & Bray, 2023). Career advisors are integral to supporting the mapping of learners' skills and experiences to potential careers. Advisors work with learners early in the career exploration stage to assess their skills and help learners understand how they can not only apply these to their degree pathway, but also how their skills might be leveraged to secure employment and progress their career.

There is little research on the effectiveness of career exploration and exposure practices like career fairs, mock interviews, or job shadowing. Perhaps they are unlikely to have a significant impact on learner outcomes as distinct interventions, but can be an important component of a learner's career connection pathway. As learners navigate potential career paths, exploration and exposure to different industries can help learners find the path most aligned with their interests, existing skills and experience, and field of study.

Career exploration can be particularly helpful for returning learners who are looking to change their careers, but there are two important dynamics that should be accounted for. First, adult and online learners' responsibilities and locations can make it difficult to take advantage of in-person opportunities, like job shadowing and informational interviews. Institutions can address this by creating flexible options, such as by partnering with employers to offer virtual opportunities. For example, virtual job shadowing allows students to observe, learn, and immerse themselves in professional settings without being physically present (Li, 2023). These types of career connections not only offer career exposure and first-hand experience with employers, they also provide opportunities for new traditional learners to build their networks, despite the challenges of being a working or online learner.



DAMARA'S STORY

Damara Parks-Omolade earned her BA in Management from SNHU with Duet in October 2024. As she approached graduation, Damara began working with a Duet career coach. She wanted to find a role in a field where she could feel like she was making a difference. Her career coach helped identify roles that were a good fit, find ways to leverage her degree to align with her interests, and build on the transferable skills she had developed in previous roles in childcare and food services. Damara soon landed a role at the public health nonprofit Health Resources in Action (HRIA). As she shares,

“When it was time to think about next steps, we approached it making sure the organization was a place where I could grow and find fulfillment. That’s exactly what I found at HRIA. It all seemed to happen so naturally.”

based on their transferable skills, previous work experience, life goals, and current areas of growth in the job market. Unlike traditional career services, Duet advisors offer ongoing, personalized support to students actively seeking a new job. They go beyond resume reviews by helping students identify roles that could be a good fit, interpret job descriptions, and navigate interviews. For students experiencing challenges at work, advisors provide timely, context-specific coaching—offering a uniquely holistic and responsive model of career coaching. Advisors also offer students access to career exposure events that might be of interest and help them find opportunities to build a network that will support their desired career path.

The second dynamic is timing. Career advancers and career switchers would benefit from career exploration as early as possible, just as career starters often benefit from these experiences. With limited time and resources, it is critical for these learners to take a direct and efficient path towards their desired degree and career. One way institutions can support this is by providing information to prospective students about the career outcomes of different credentials, such as the University of Texas System’s SeekUT [data dashboard](#) (SEEKUT, 2025).

Strategy in Practice:

At SNHU, career advisors challenge learners to explore their career options and goals throughout their program. In interviews, advisors noted that learners often wait until their last year to discuss these topics. The advisors stated it is their job to help learners explore options while keeping an end goal in mind, understanding that the lack of a clear career plan can lead to stop outs in college. Critical to the exploration stage is the skills assessment that comes prior to this stage. During initial conversations with learners, SNHU’s career advisors use reflective questions and other tools to assess the experiences and skills that learners have already acquired. Advisors ensure that these skills are not only counted towards their degree program where possible, but also that learners are able to translate and leverage these skills in potential career paths. SNHU’s Employer Relations and Career Engagement Partnership team provides learners with career exposure through various events, such as employer relations events. They find that when employers are as engaged in a learner’s success as the institution is, this results in a highly impactful, transformational experience for the learner.

At Duet (a community-based organization that provides wraparound support alongside SNHU online CBE programs), students receive one-on-one career coaching from an advisor (Duet, n.d.). Advisors help students figure out their career goals

Career Services

Almost all colleges offer some form of career services, from resume development to professional development workshops. However, as with career exploration and exposure, there is no robust evidence base about the impact or ideal design of these services. Survey data revealed that as many undergraduate students found career services unhelpful as those who found it helpful, with 16% reporting they were “not at all helpful” and another 16% saying they were “very helpful” (Francis & Auter, 2017). Institutions can enhance the impact of these services through developing robust employer partnerships and providing pertinent labor-market information, for instance, and by collaborating with companies to increase access to work-based learning programs and making data on program-level outcomes available to learners (Francis & Auter, 2017).

Resume reviews, guidance to help identify professional successes and skills, and professional development services can be particularly helpful for working learners who are aiming to advance or transition in their careers (Shafenberg, 2023). However, many learners do not take advantage of these services. In a student survey of two- and four-year students, approximately 30% of learners reported that they had not engaged with career services during their undergraduate careers (Flaherty, 2023). Considering adult learners typically have even less time to seek out resources, nontraditional aged learners’ engagement could be expected to be lower than that of their traditional aged peers. A National Association of Colleges and Employers (NACE) survey found that 51% of students younger than 25 years old had visited their campus career center, while only 38% of students aged 25 years old or older had visited, either in-person or online (Gatta, 2024).

Strategy in Practice:

To improve access to career services, many institutions have started to embed career development content and resources into their curricula. SNHU’s team of career engagement partners ensure NACE career-readiness competencies are built into their academic programs, such as communication and professionalism. SNHU also offers Professional Communication and Career Planning courses that focus on career development (LeBoeuf Blanchette, 2024). Institutions also try to proactively engage learners, especially adult and working learners. For instance, the SNHU career services team surveys learners as they approach graduation to determine if students would like to take advantage of career services to help them with their career goals. This proactive model helps SNHU engage with learners who may not have reached out otherwise.

Calbright College integrates its career services and career advising into its student success efforts. Every student is assigned a student success counselor who supports them with academic success strategies, basic needs, career readiness, and exploration. Further, the career services team supplements this one-on-one support by offering a suite of workshops and events aimed at interview preparation, job search strategies, resume and cover letter support, building durable skills, and connecting with employers. One innovative approach is a job search module, where learners go through a mock job search process, then get feedback from a career-readiness faculty member. Calbright learners have found greatest satisfaction and value from events that bring in industry experts and employers who can share insights on job market trends and strategies to help them stand out to hiring managers.

Calbright’s competency-based model is based on both technical and durable skills, and maps in-demand workforce skills to assessments. Finding that learners needed help expressing their skills on resumes, Calbright integrated Lightcast data to map job skills to the competencies delivered in the curricula. This ensures that learners have a better vocabulary for demonstrating their qualifications and a clearer picture of the connection between their coursework and their desired careers.

Career Advising

Career coaching or advising helps learners align their education with their career goals, navigate the job market, and prepare for the job search and application process. High-quality coaching and career guidance are associated with higher completion rates. Over two-thirds of learners who received these services had a college-level job right out of college (Strada Education Foundation, 2024). Strada has identified five quality career coaching principles to ensure learners receive suitable guidance that can lead to them having quality careers. Specifically, quality coaching is centered on education-to-career outcomes, driven by student agency, foundational and universal, rooted in relationships, and informed by data and evidence (Strada Education Foundation, 2025). This resource can be especially beneficial for career changers and returning students who are navigating a new career path and could use extra support and guidance.

Despite the proven benefits of career coaching, data suggest that quality coaching is still failing to reach enough learners, and only 1 in 5 students at four-year institutions and less than 1 in 4 students at two-year institutions currently receive quality education-to-career guidance (Strada Education Foundation, 2024). Adult learners in particular face barriers that can limit their engagement with career guidance. Half of adult learners surveyed reported they did not have conversations about careers during their advising sessions and noted career guidance was often only available to students who asked for it, rather than a routine offering for all students (Freeman et al., 2024). This barrier can be particularly challenging for adult or online learners who are balancing work, education, and family responsibilities, and whose only engagement with their institution may be their classes. For the new traditional learners, early, targeted outreach and proactivity are especially important as their time and capacity may be limited.

Strategy in Practice:

At SNHU, a team of career advisors offers guidance on job searches, the negotiation process, and helps learners conceptualize their career journeys. These services are available to all learners, though many choose to access them near the end of their degree program. The career advisors share an important holistic approach that focuses on the whole learner and aims to meet each learner where they are on their journey. The career advisors at SNHU provide more than just resume and interview advice, they also place emphasis on coaching, in an effort to guide learners through the process to help them achieve their goals, rather than just providing information on how to navigate an industry. Specifically for career changers, career advisors emphasize their transferable skills. For returning learners, it can be challenging to translate lived experience to the skills considered valuable in the labor market. SNHU career advisors coach learners on how to translate and articulate these skills on resumes and during interviews. Sometimes, it is just a mindset shift that can help a learner to convey their skills. For example, for a learner who has experience as a welder, a career coach could help the learner to shift from thinking of themselves as a welder who would like to pursue a career in accounting to an accountant who happens to have specific skills from their welding background. Oftentimes, coaching learners towards a more positive mindset and promoting confidence in their background and skills is the push learners need to continue their job search and reach their career goals.

Work-Based Learning

Work-based learning helps learners gain first-hand, practical skills and experience, which will not only prepare them for future employment but also align their skills with employers' needs. Work-based learning delivers both financial and non-financial benefits. One evaluation found that taking a work-based learning course was associated with a four-percentage point increase in having a job one year after completion (Zhou, 2023). Learners who participate in work-based learning, particularly paid internships, also tend to earn more than those who do not. A Strada analysis suggests that bachelor's degree recipients that participate in a paid internship increase their annual earnings by \$3,096 in the first year out of college (Torpey-Saboe et al., 2022). Registered apprenticeships, the most intensive form of work-based learning, can earn completers \$300,000 more over the course of their career than employees who did not complete an apprenticeship (DOL, n.d.). Participation in work-based learning is also associated with greater career satisfaction and learners having higher confidence in the value of their education (Torpey-Saboe et al., 2022). Among recent bachelor's degree graduates, a survey suggested that work-based learning increased the helpfulness of education in achieving learners' goals by 39% among recent bachelor's degree graduates (Torpey-Saboe et al., 2022). Among students with paid internships, 61% found their college education worth the cost, compared to 49% of those with unpaid internships (Torpey-Saboe et al., 2022).

Through practice and research, a number of organizations have identified key factors that can impact the quality of a work-based learning experience. These elements include the duration and intensity of the experience, the relevance to the students' career interests, compensation, the location, and the rigor and focus of the assigned tasks (Fried, 2025; Amechi, 2022). JFF developed [seven principles for effective work-based learning](#). Our conversations with experts in work-based learning echoed many of these principles, and in particular highlighted the following best practices:

- **Compensation:** In addition to having a positive impact on future earnings, compensation is crucial to provide equitable access to work-based learning opportunities, especially for adult and working learners who cannot forgo wages.
- **Relevant and meaningful tasks:** Learners should perform sustained, complex tasks that develop industry-specific skills that are aligned with their career and academic goals. A clear agreement between the employer, the learner, and the institution about the objectives of the work-based learning experience can help support this practice.
- **Authentic work experience:** In addition to career-specific skills, learners that are embedded in the organization as an employee can gain valuable, general workplace skills. These experiences can provide the durable, transferable skills that employers are demanding, such as communication, critical thinking, and complex problem-solving (Finley, 2023; Russell, 2024). Further, they can develop the social capital and cultural competency that can help them thrive in future workplaces or career search, which may especially benefit learners whose prior experiences have not been in such settings.
- **Comprehensive support:** An assigned mentor at the organization can help learners navigate their experience (Amechi, 2022). Career advisors at the institution can help learners plan out their career path, identify the right work-based learning opportunities, and translate that experience into job opportunities.

Sidebox 2. Making Work-Based Learning Work for the New Traditional Learner

Although work-based learning has proven benefits, there is unequal access to these opportunities. Many institutions do not offer work-based learning consistently or across most academic fields, and access to opportunities like internships tends to be concentrated among more traditional and wealthier students (Wiley, 2023; Amechi, 2022; interviews). For working and adult learners, access to work-based learning is more limited due to their competing priorities and responsibilities (Amechi, 2022; Gatta, 2024). A study at one community college found that over 70% of learners had conflicts with outside employment that posed a barrier to them participating in an internship (Wolfgram et al., 2021). Additionally, minoritized student groups are less likely to participate in work-based learning opportunities, especially paid opportunities (Torpey-Saboe et al., 2022; Amechi, 2022). Adult learners say they struggle to even learn about opportunities advertised through traditional email channels, and that bringing resources (career services staff, employers) into the classroom would be a promising strategy (Love & Palmer, 2024). The field needs more flexible options for work-based learning, like offering virtual or hybrid models, to help address these gaps and expand access to new traditional learners.

Strategy in Practice:

Apprenticeship and Pre-Apprenticeship Programs

Two efforts to expand the teacher pipeline illustrate how career advancement opportunities can be designed to accommodate working learners, Tennessee's Grow Your Own and the Teacher Apprenticeship Network at Gateway U.

In 2022, Tennessee became the first state to receive approval for a permanent Grow Your Own model, establishing the first registered apprenticeship program (RAP) for teaching in the country (TDOE, n.d.). Tennessee's Grow Your Own works to end teacher shortages in the state and expand the teacher pipeline by using a registered apprenticeship model to provide low-cost teacher licensure (UT System, n.d.). The program primarily serves classroom paraprofessionals, helping them advance their careers while continuing to work. The apprenticeship embeds job competencies and eliminates the extra work for learners to understand those competencies and the requirements to complete the RAP, creating a clear alignment between learning and work. The program is also designed to support credit for prior learning (CPL), although it is at the discretion of each institution. This feature recognizes that the skills paraprofessionals and school support staff have gained over their years in the classroom are often aligned with the core competencies required in teaching.

Tennessee's Grow Your Own launched an online competency-based version in 2024 to address various access barriers for learners in certain parts of the state. It offers flexible pathways that allow learners to fill in missing competencies, while the virtual environment enables working learners to progress while balancing life's responsibilities. Learners receive wraparound supports, including mentor guides that act as liaisons between learners and faculty and help learners navigate the apprenticeship experience. The program incorporates virtual assessment centers and virtual job simulations. In these simulations, learners perform real job tasks (e.g., having difficult conversations with a parent) that build the durable skills that are essential to being a successful teacher.

Gateway U's Teacher Apprenticeship Network is another model focused on helping aspiring teachers who are already working in the school system earn the skills and credentials needed to become certified in New Jersey (Gateway U, n.d.). Learners earn their degree from SNHU while receiving wraparound supports from Gateway U. The program was started to create pathways for returning learners who already have experience in a school setting. SNHU's competency-based degree program is self-paced and offers a fast and affordable pathway to a teaching certification. The comprehensive supports provided by Gateway U are what makes this program stand out in helping learners reach their career goals. Learners are paired with an academic advisor based on their unique needs, interests, and career paths. They receive career support and one-on-one coaching, and are connected with community resources for further support. Once learners earn their degree, they are connected with the Teacher Apprenticeship Network, which plays a crucial intermediary role, helping learners navigate their licensure exams, the certification process, and job placement.

Internships and Other Work-Based Learning Opportunities

Two innovative models—Education at Work (EAW) and Riipen—demonstrate how work-based learning opportunities and internships can be structured to meet the needs of today's learners by prioritizing flexibility, skill development, and alignment with curriculum.

Education at Work offers a unique work-based learning model, working as an intermediary between degree-granting institutions and employers to create flexible paid work opportunities for students (EAW, n.d.). EAW takes full-time roles and divides them into part-time roles that are easier to manage for learners. In fact, 93% of learners say EAW does a good job working around their schedules. Opportunities are offered across modalities and ensure an authentic work experience with an emphasis on building marketable and durable skills. EAW serves a significant number of lower-income students and all roles provide both a competitive wage and tuition assistance as part of the program. The program also offers career coaching and upskilling, and works with employers to ensure continuous improvement and enhance the experience for learners.

Similarly, Riipen connects institutions and students with employers through a virtual work-based learning platform that offers experiential and project-based learning opportunities (Riipen, n.d.). Educators and employers collaborate to integrate projects into course curriculum, providing learners an opportunity to apply their education and skills to real-world projects. Although unpaid and not providing an authentic workplace environment, the experience is often embedded into coursework, which means learners do not have to sacrifice additional time for the learning experience.

Practicum

Career-focused fields also offer valuable opportunities to build work-based learning into curricula. In New England College's (NEC) three-year nursing bachelor's program, learners can earn 36 of the credits they need through completing three paid clinical experiences, working as licensed nursing assistants in a hospital setting, while earning their degree (NEC, n.d.).

Key Elements of Workforce Connectivity for New Traditional Learners

Delivering work-based learning and other career connection strategies to the new traditional learner requires innovation and reimagining of current common practices. The career connection strategies described above are more often designed with the recent high school graduate, traditional, non-working learner in mind. They are not always well suited to the unique needs of new traditional learners. Those who are already working a job may have limited time to engage in career exploration and exposure activities. Those getting their education online may not be able to access in-person career service events or experiential learning activities. Many practitioners we spoke with also indicated that some learners, especially first-generation learners and those who have not worked in traditional professional settings, doubt their readiness and qualifications. This doubt arises from facing the unfamiliar expectations and norms of interviews, resumes, and internships in a system not designed with their experience in mind.



JEFF'S STORY

Jeff Mendez is a flight attendant who studied with SNHU all over the world. He has been with the company for 20 years, servicing flights throughout Central and South America, as well as the Caribbean. Assignment inspiration often struck at 30,000 feet, prompting Jeff to jot down ideas on napkins as he made his way back to the galley after serving his passengers, knowing he could incorporate them into his assignments once he landed. During some particularly long layovers – 36 hours – he worked on the beaches of Rio and Puerto Rico with his crew members. Surviving a tough upbringing in the Bronx, Jeff dropped out of school in the eighth grade and only ever participated

in his flight school graduation. This year's Spring Commencement was Jeff's first time in a cap and gown. He earned his associate degree in liberal arts and hopes to return to the SNHU Commencement stage for his bachelor's degree, supporting his ultimate goal of working in upper management at his employer. He lives in Rex, GA.

Career connection strategies, especially those within the work-based learning category, generally fall on a spectrum, with more intensive experiences being the most beneficial to the learner. However, the more intensive experiences – ones that embed learners with employers and can deliver sustained, complex, career-relevant tasks – can require the greatest investment of time and resources. Apprenticeships, where learners are paid well while earning a credential, are the exception, but they are relatively uncommon. New traditional, working learners who are enrolled in hybrid or online programs typically do not have the time or bandwidth to pursue work-based learning experiences that require time outside of the classroom and do not pay the wages they receive from their existing jobs.

The practices and models highlighted in each career connection strategy exemplify efforts to deliver career connection strategies more effectively to new traditional learners. These models, literature on career-connection strategies, and interviews have informed a set of key elements in delivering career connection to new traditional learners. These elements can span across the strategies identified above, but do not necessarily fit all or apply the same across all of the strategies.

- **Authentic Workforce Opportunities:** Learners without prior experience in professional work settings can benefit greatly from opportunities that convey the norms and experiences of being an employee. While an on-site, full-time job may not be feasible, experiences could be designed to include things like having an assigned supervisor, participating in team meetings, etc.
- **Technical and Durable Skill Development:** Strategies should emphasize both skill sets, as employers are seeking the technical skills to do the job on day one, and the durable skills¹ to manage the change and challenges over the course of the job.
- **Respect and Validation of Learners' Existing Skills:** Adult learners bring with them transferable skills from prior employment and life experiences into higher education. Sometimes they need support translating those skills into their desired career path. Credit for prior learning (CPL) can also convert those skills into credits to accelerate their path to a degree.
- **Pathways through Career Connection Strategies:** Institutions and employers should partner to facilitate increasingly deeper career engagement for students, allowing them to convert career exploration and project-based learning activities into an informational interview, a shadowing opportunity, or a paid internship.
- **Paid Opportunities:** For learners to undertake more time-consuming experiences, the pay must be sufficient for them to forgo their earnings from work.
- **Paired with Comprehensive Supports:** Advisors are crucial advocates and guides for learners navigating the career connection strategies, helping them understand their options, develop a plan, stay on track, and tap into their skills. Other supports can include cohorts, financial benefits, and accommodation services.

Sidebox 3. Accessibility and Universal Design for Learning

Creating learning environments that are accessible to all is a [key element](#) for delivering robust and relevant education. Alignment with Universal Design for Learning (UDL) and access to robust accommodations can ensure that educational settings are accessible and inclusive for every learner (CHEPP, 2024b). Accessibility must be prioritized in delivering traditional higher education programming, as well as throughout career connection strategies and workforce opportunities that happen outside of the classroom. Accessibility services teams should work with career partners to ensure that applicable supports are integrated across experiential learning and career connection opportunities.

¹ Also referred to as “soft skills” or “human skills,” durable skills are described as “how you use what you know – skills like critical thinking, communication, collaboration, and creativity – as well as character skills, like fortitude, growth mindset, and leadership” ([America Succeeds](#)).

- **Embedded into Existing Commitments:** Strategies should minimize the amount of additional time learners need to spend to acquire experience. Learners can try out the skills they learned in their coursework at their current job, or they can get experiential learning in the classroom through project-based learning or clinical experiences for credit.
- **Clear Goals:** Strategies should have established expectations and outcomes for the experience. For example, they could specify details such as the type of work to be performed, performance evaluation, and the skills to be developed—details that should be understood and agreed upon by the learner, their institution, and the employer. Institutions should seek to standardize outcomes with recurring employer partners and align the outcomes of the experience with those of the academic program.
- **Good Data Practices:** Continuous improvement efforts should be informed by employer and learner satisfaction surveys as well as employment outcome data. Institutions should examine what career strategies are most effective for different types of learners.

Table 1. How Are New Workforce Pathway Models Addressing These Elements and Strategies?

Program	Tennessee Grow Your Own (TNGYO)	The College of Health Care Professions (CHCP)	New England College of Nursing	Education at Work (EAW)
Workforce Strategy	<ul style="list-style-type: none"> Apprenticeship 	<ul style="list-style-type: none"> Workforce-Aligned Curriculum 	<ul style="list-style-type: none"> Practicum 	<ul style="list-style-type: none"> Work-Based Learning Opportunities
Description	<p>Registered Apprenticeship Program (RAP) for teachers. Provides initial teacher licensure at low to no cost for aspiring educators. Apprentices work in a paid role under the direction of a mentor teacher before becoming responsible for their own classroom. Online pilot program launched in 2024.</p>	<p>CHCP offers credentials, associates, and bachelors degrees in health care through flexible yet highly structured program models. Many programs are offered online and require students to come to campus only 1-2 days a week. Labs and other hands-on lessons that require an instructor's close supervision are held on campus, while lectures and coursework are delivered asynchronously online. Programs are designed to stack easily, creating clear paths for higher degree attainment.</p>	<p>New England College's three-year nursing bachelor's program provides real-world experience as learners work as licensed nursing assistants in a hospital setting while earning their degree, combining traditional classroom experience with a paid immersive clinical experience.</p>	<p>Intermediary for four-year colleges and employers to create employment opportunities for students while in school. Part-time roles with flexibility designed to accommodate schedules - appeals to employers looking for weekend and weeknight workers. In addition to salary, EAW provides tuition assistance, enrollment services, and career services (coaching, guidance). EAW also supports to employers improve the experience for students.</p>
Service(s) Provided	<ul style="list-style-type: none"> Apprenticeship model Wraparound supports Mentorship 	<ul style="list-style-type: none"> Flexible, highly structured program models Externships Career services Wraparound supports Stackable credentials 	<ul style="list-style-type: none"> Immersive paid clinical experiences Online modality offered 	<ul style="list-style-type: none"> Flexible work-based learning opportunities Career services Wraparound supports
Target Population	<ul style="list-style-type: none"> Aspiring teachers, primarily paraprofessionals 	<ul style="list-style-type: none"> Adult learners, starting a new career in health care 	<ul style="list-style-type: none"> Bachelor's degree nursing students 	<ul style="list-style-type: none"> 4-year sector
Approach to Addressing Barriers	<ul style="list-style-type: none"> Flexible, competency-based program Online offerings 	<ul style="list-style-type: none"> Flexibility for working learners Asynchronous online coursework 	<ul style="list-style-type: none"> Flexible, time-saving pathway Online offerings 	<ul style="list-style-type: none"> Flexible work-based learning opportunities Online opportunities Tuition assistance
Applicable Key Elements	<ul style="list-style-type: none"> Authentic workforce opportunity Technical & durable skill development Paid opportunities Comprehensive supports Flexibility/ embedded into commitments Career-connected pathways Clear goals and standardized outcomes Good data practices 	<ul style="list-style-type: none"> Flexibility/ embedded into commitments Authentic workforce opportunity Technical & durable skill development Career-connected pathways Good data practices 	<ul style="list-style-type: none"> Authentic workforce opportunity Technical & durable skill development Paid opportunities Flexibility/ embedded into commitments Career-connected pathways 	<ul style="list-style-type: none"> Authentic workforce opportunity Flexibility/embedded into commitments Technical & durable skill development Good data practices
Examples of Outcome and Impact Data	<ul style="list-style-type: none"> As of 2023, 645 people were enrolled in the TNGYO apprenticeship. Of those apprentices enrolled, 524 are still currently enrolled and 61 have completed the program. 77% of apprentices expressed satisfaction with their coursework and how it supported them as a working learner. 83.3% indicated that the TNGYO was impactful to their ability to become a teacher. 	<ul style="list-style-type: none"> A cohort of 2023-2024 graduates in CHCP's stackable certificate programs saw their median annual earnings rise from \$2,645 to \$34,320. 		<ul style="list-style-type: none"> 217 students transitioned into full-time roles with EAW's major employer partner, Fidelity Investments. 90% of students hired remain on staff one year later.

Table 1 (Continued). How Are New Workforce Pathway Models Addressing These Elements and Strategies?

Program	Riipen	Gateway U	Southern New Hampshire University Career Services	CalBright College
Workforce Strategy	<ul style="list-style-type: none"> Work-Based Learning Opportunities 	<ul style="list-style-type: none"> Career Services Pre-Apprenticeship 	<ul style="list-style-type: none"> Career Services Career Advising 	<ul style="list-style-type: none"> Career Services Career Advising Workforce-Aligned Curriculum Pre-Apprenticeship
Description	<p>Riipen connects institutions and students with employers through a virtual work-based learning platform that offers experiential and project-based learning opportunities. Educators and employers collaborate to integrate projects into course curriculum, providing learners an opportunity to apply their education and skills to real-world projects.</p>	<p>Gateway U's teacher pathway program helps aspiring teachers who are already working in a school system earn the skills and credentials needed to be certified in New Jersey. Learners receive wraparound supports as they pursue their degree at SNHU. Once learners earn their degree, they are connected with the Teacher Apprenticeship Network.</p>	<p>The Career Services team at SNHU works with learners to identify prior skills and experiences, explore career options, and provide career coaching to help learners translate their skills and prepare for the job search, the application process, and careers. Career Services takes a holistic approach and provides comprehensive supports.</p>	<p>Offers experiential learning opportunities, such as peer tutoring, department internships in project management, research and technology.</p>
Service(s) Provided	<ul style="list-style-type: none"> Flexible, remote internships Career services Wraparound supports" 	<ul style="list-style-type: none"> Career services Career advising Wraparound supports 	<ul style="list-style-type: none"> Career services Career advising Wraparound supports 	<ul style="list-style-type: none"> Career advising Career readiness program Career services Wraparound supports Paid microinternships Pre-apprenticeship program
Target Population	<ul style="list-style-type: none"> 2- and 4-year sector 	<ul style="list-style-type: none"> Aspiring teachers Para-professionals, school support staff 	<ul style="list-style-type: none"> Learners of any age group, but especially adult working learners 	<ul style="list-style-type: none"> Adult working learners
Approach to Addressing Barriers	<ul style="list-style-type: none"> Flexible project-based learning experiences and microinternships Online opportunities Course credit 	<ul style="list-style-type: none"> Career and wraparound supports Career advising Mentorship Guided pathways 	<ul style="list-style-type: none"> Career coaching Holistic approach Online, flexible services 	<ul style="list-style-type: none"> Holistic, personalized supports Career advising Virtual supports and events
Applicable Key Elements	<ul style="list-style-type: none"> Technical & durable skill development Flexibility/ embedded into commitments Career-connected pathways 	<ul style="list-style-type: none"> Respect learners' existing skills Comprehensive supports Career-connected pathways Good data practices 	<ul style="list-style-type: none"> Flexibility/ embedded into commitments Respect learners' existing skills Comprehensive supports Career-connected pathways Good data practices 	<ul style="list-style-type: none"> Technical & durable skill development Paid opportunities Comprehensive supports Career-connected pathways
Examples of Outcome and Impact Data	<p>82% of students reported that their experiences with Riipen helped them grow their professional network and employer connections.</p> <p>89% of learners feel prepared to find a fulfilling career after completing a Riipen experience.</p>	<p>80-85 teacher apprentices in the pipeline to enter school districts within the next 18 months.</p>	<p>Among SNHU alumni (surveyed 6 months post graduation) who were seeking to advance their careers by attending college, 73% said they had either met their career goals or were part of the way to meeting their goals; 46% of those seeking to change careers had met their goals or were part of the way to doing so; 42% of those seeking a career for the first time had met their goals or were part of the way there.</p>	<p>69% of surveyed alumni reported being employed after completing their program; 24% said they had experienced a positive impact on their employment within just three months of program completion; 54% reported that Calbright's curriculum had a positive impact on their employment by the time they responded to the survey.</p>

Sidebox 4. Lessons for Scaling

Scaling effective career connection strategies will require a system-level approach, not only individual colleges and employers. Partnerships and collaboration are integral to the successful implementation and delivery of workforce connectivity strategies. For some of these strategies, the benefits to institutions and learners may outweigh employer incentives or vice versa. It is not uncommon for individual employers to report misunderstandings of the incentives or simply not have enough capacity to seek out and execute these opportunities (Cahill, 2016). Intermediaries play an important role in facilitating this work, supporting the administrative components of workforce connection and navigating the relationships between institutions and employers (Interviews, Cahill and Love). State policy can also help align the incentives; some states have invested in such activity through tax credits or by providing direct funding to institutions to expand access to work-based learning (Love & Rush-Marlowe, 2024).

Complementary Efforts that Help Connect Education to Work

Other reforms to institutional practice and higher education policy can create conditions that will support new traditional learners by recognizing the skills they bring from past or current work and connecting those to their desired career path. It is not uncommon for adult and working learners to have non-linear educational paths. However, the current higher education system does not support a seamless transfer between programs and institutions, nor does it often meet learners where they are in their journeys as they navigate nontraditional paths. The innovative models laid out below can help learners connect the dots and lead to credentials and skills that are aligned with workforce needs and fulfilling careers.

Microcredentials

Microcredentials can provide quick, skills-focused training aligned with jobs. The popularity of this format is surging, with a 10% annual enrollment increase in 2023 in short-term credentials (Higher Education Today, 2023) and 32 states investing over \$5.6 billion (Hultquist & Murphy, 2025). Microcredentials may enhance the career connectivity opportunities for today's learners in a few ways. When embedded in a degree program, they can deliver an immediate recognition of learner skills. When they are portable between degree programs able to validate and apply the credential toward credit, they can serve as an on-ramp to a degree and work-based learning opportunities. Ivy Tech's [Smart Manufacturing Digital Integration micro-pathway](#) provides three credentials, an internship, and six transferable credits for those who go on to a degree (Education Design Lab, 2025). Microcredentials can be well suited to today's learners' circumstances and help them complete their degree faster and build confidence that they are college material when intentionally designed. Microcredentials can also be a useful tool for employers to provide and subsidize skills training opportunities to their existing workforce.

[Recent changes to federal law](#) expanded access to the Pell Grant for short-term credential programs that are between 8 weeks and 15 weeks, 150-600 clock hours, or the equivalent in credit hours (119th Congress, 2025). As the new law is implemented, the U.S. Department of Education should ensure that Pell-eligible microcredentials are designed to meet the needs of learner's short-term economic success, as well as act as on-ramps for future degree completion and long-term career opportunities through stackability or transferability.

Competency-Based Education (CBE)

[CBE](#) uses the skills and knowledge learned and demonstrated to define progress toward completion, rather than on a time basis (CHEPP & AIR, 2023). This allows greater flexibility for students to learn and advance at their own pace while also ensuring skill development in areas that align with their desired career fields. Designed with industry input and focusing on real-world application, high-quality CBE builds intentional connections between education and the workforce by aligning the competencies delivered in the program to industry skills and competencies (Abouchacra, 2021; Lankford, 2024). CBE is particularly effective when competencies are co-created with employers and when there are clear demonstrations of performance and outcomes. For example, delivering work products at the completion of an assessment or competency milestone demonstrates mastery of skills and value to the employer. CBE stands out as a career connectivity tool because of its ability to assess how all competencies come together: skills, knowledge, and career-relevant behaviors.

Flexible teacher pathways, like Gateway U's Teacher Apprenticeship Network, use CBE to help paraprofessionals and other support staff build and demonstrate the skills needed to become teachers without a traditional teacher certification program. Through SNHU's competency-based curriculum, learners earn a degree on their schedule that provides the 60 liberal arts credits required to earn a K-6 teaching certification in New Jersey. Other examples of CBE serving new traditional learners include Illinois and Alabama, states that have mapped employability skills and the competencies that intersect between education and jobs (Fain & Ashburn, 2023). For example, Illinois is leading an effort to standardize the competencies and credentials for early childhood educators across institutions (Johnson, 2021). Alabama is addressing the challenges of career switching with its unique talent marketplace. Alabama's [Talent Triad](#) helps connect knowledge and skills with jobs and workforce needs (AL Talent Triad, n.d.). For working and adult learners, this marketplace helps narrow down the list of possible careers and identifies necessary competencies and pathways to get there. This competency-based framework has become a part of Alabama's culture and overall approach to workforce development.

Credit for Prior Learning (CPL)

Adult learners often return to school after completing years in the workforce. CPL helps link the skills and experiences they have previously gained to their education, ensuring their experiences count towards their credential. CPL helps learners, especially adult learners, save time and money, improve confidence in their abilities, and increase their chances of graduating (CAEL, n.d.). CPL and what schools accept can vary widely across institutions. To successfully deliver CPL, institutions should ensure communication is clear and adequate, both internally between staff administering CPL, and externally to students, while forming partnerships to help expand CPL opportunities. For example, the University of Memphis has partnered with FedEx to provide credit for employees' work experience (University of Memphis Global, n.d.). As stated above, partnerships with employers are integral to ensuring the success of workforce connection strategies.

Learner and Employment Records (LERs)

As skills-based hiring becomes more common, learners can use LERs to validate and showcase their skills and experiences (Munip & Klein-Collins, 2024). LERs are digital credentials that record the skills, knowledge, and education and work experiences of individuals. Documented learning experiences can come from diverse settings, including educational settings, the workplace, community activities, and the military. Many states are promoting the use of LERs to address workforce shortages and underemployment, with an emphasis on skills-based hiring. LERs are a unique way to keep records of the skills and knowledge that learners have gained across their experiences in a way that is easily accessible to employers.

LERs have also been integral in the development of Alabama's unique skills marketplace and are utilized in two different ways. First, with the state's own credential registry, education institutions and providers are able to register the credentials they issue, describing the competencies learners will gain from each of their credentials.

Second, their college and career exploration tool encourages job seekers to collect and manage their skills and experiences through a digital wallet (Fain, 2023). Alabama has made the most progress with LERs and can serve as an example to other states of how to use LERs to promote a skills-based ecosystem that aims to make career pathways more accessible. However, scaling this model can prove to be challenging as it requires intensive collaboration across multiple stakeholders, including employers, training providers, higher education institutions, and states. Sustainability and the scale of LERs will require buy-in and cooperation from these stakeholders.

Need for Better Data

In addition to needing more career connection strategies that better serve new traditional learners, the field needs better data to maximize their impact. Institutions and policymakers need access to data that provides a more complete picture of students' career and workforce outcomes. Linking that data to student information systems, including participation in career connection strategies, can help identify the strategies and designs that are most effective.

The report “[Talent Disrupted](#)” by Strada and Burning Glass illustrates the depth of analysis of employment outcomes that can drive system and program improvement (Burning Glass & Strada, 2024). Using non-public data, the report analyzed unemployment and underemployment rates and how they correlate with factors like field of study, student characteristics, and participation in internships. Half of bachelor's degree graduates are underemployed a year after graduation, but those who start out in a college-level job are much more likely to avoid underemployment ten years later. Students with internships, across fields of study, were far more likely to avoid underemployment.

Institutions equipped with this information about their learners and programs could consider:

- Which career connection strategies are linked to better placement in college-level jobs, in positions in their field of study, and in high-wage jobs?
- Does the impact of career connection strategies vary across student characteristics?
- Which students are accessing our career connection opportunities? How do we design our opportunities to better reach those not benefiting from them now?
- How can we improve the design of our programs to improve placement in good jobs immediately after graduation?



GASTEN AND MANDY'S STORY

Gasten Gabriel and Mandy Gabriel are a husband-and-wife duo who graduated together with their respective MBAs. After playing college football and exploring free agency with the Miami Dolphins and the New York Jets, Gasten decided to pursue a career change and enroll with SNHU. In the last week of his final term, he shared that he secured a new project management role, where he can flex the skills he developed through his project management concentration. Gasten pursued his master's degree at the advice of his wife, Mandy. Now a two-time SNHU alumna, Mandy crossed the stage in 2023 for her bachelor's degree. A year and a half later, she took her second lap in celebration of her master's degree. Mandy owns her own marketing agency, serves as a communications director for a nonprofit, and volunteers at a children's hospital. She plans to keep the momentum going by taking on her PhD next. Mandy and Gasten are from Baton Rouge, LA.

Robust data can also enhance employer partnerships. Data illustrating the success of career connection strategies (e.g., employer satisfaction surveys, job placement and retention data) can crystallize the benefit to employers of participating in these opportunities. As noted above, delivering and scaling quality opportunities will require greater investment from employers. Alongside their institution partners, employers may also identify trends about how they approach and support learners, such as the staffing, assignments, and scheduling that generate the best results.

The depth of data needed for these analyses and conversations is not widely available, though. National data on the number of students who receive career connection opportunities is currently limited to [survey](#) data, which are useful but could be strengthened as longitudinal systems rather than serving as one-time efforts (Strada Education Foundation, 2024). Many institutions rely on self-reported surveys to collect job placement information from their graduates, which are beset by low response rates. Federal and state data that connects education and employment outcomes has improved dramatically in recent years, but still faces notable gaps. The College Scorecard offers median earnings data by institution and degree program, up to 10 years after entry for institutional data and 5 years for field of study. However, these data only capture federal financial aid recipients, leaving out nearly one-third of students (Leon et al., 2023). Also, state data systems may not capture learners who leave the state, military and federal employees, or those who attended private institutions (Leon et al., 2023).

Sidebox 5. Opportunities and Efforts to Improve Data

- **State enhanced wage records:** Alaska, South Carolina, West Virginia, and Washington are key states that are already collecting more detailed information from employers, including occupation, pay rate, location, and worker type (regular employee, intern, apprentice). Connecting this data with education records can uncover what jobs certain degrees typically lead to and the advancement trajectories of certain jobs (Hanson, 2025).
- **Dashboards linking education and employment:** [SeekUT](#) is an interactive resource to explore the employment outcomes of various degree paths (SEEK UT, 2025). Using data from the University of Texas system, the Texas Workforce Commission, and the U.S. Census Bureau, learners can explore typical earnings, employers, and occupations across different degrees and every UT institution.
- **[Post-Secondary Employment Outcomes \(PSEO\)](#):** Institutions can partner with the U.S. Census Bureau to connect their graduates with national data on earnings and employment (U.S. Census Bureau, n.d.). PSEO allows institutions to see outcome data by degree level, field of study, and institution, while also capturing data on graduates who move out of state.
- **[College Transparency Act \(CTA\)](#):** This federal legislation would significantly enhance the information institutions and policymakers have about students' pathways through college and into employment (118th Congress, 2023). Data would cover all learners, not just aid recipients, and allow for far greater disaggregation than what is available currently. The CTA is a bicameral and bipartisan bill, with over half of the House and one-third of the Senate signed on as co-sponsors in the 116th Congress (Leon et al., 2023).

Conclusion

With changing demographics, increasing numbers of online learners, and more than 40 million adults with some credit and no credential, the “nontraditional learners” are now the “new traditional learners.” Today’s learners associate the value of their education with its ability to prepare them for and help them find a career. For these learners, offering more of the same career connection strategies is not enough. Work-based learning and career connection strategies must be better integrated into the lives and schedules of adult, working, and online learners. Many do not have the time or financial capacity to fit these opportunities into their lives, and it is up to institutions to find ways to alleviate barriers, provide greater access, and help close the gaps outlined above.

This is not an easy task. There are substantial trade-offs within the key elements this paper identified, such as fitting into existing schedules and providing deep, meaningful workforce experiences. Institutions should approach the design and delivery of career connection strategies from a learner-centered mindset, prioritizing flexibility, career-relevance, and promoting clear pathways. Institutions should also strive to provide comprehensive career connection strategies, creating a system where each strategy connects to, and amplifies, the next. Colleges that prioritize work-based learning are also more likely to implement career navigation and mentorship in students’ fields of interest (Love & Rush-Marlowe, 2024). Making the full range of opportunities more accessible allows new traditional learners to find their career path, gain relevant skills, and enter quality jobs and careers, ultimately strengthening the nation’s workforce.

Contributors

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