# INNOVATING WORKFORCE EDUCATION:

Community Colleges at the Forefront of Registered Apprenticeship



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# **ACKNOWLEDGMENTS**

This publication, a comprehensive exploration of the evolving role of community colleges in apprenticeship programs, represents a collaborative effort supported by a number of individuals and organizations whose contributions have been invaluable.

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**Funding**: Funding for this project generously provided by Lumina Foundation. Lumina Foundation is an independent, private foundation in Indianapolis committed to making opportunities for learning beyond high school available to all. Lumina Foundation envisions higher learning that is easy to navigate, addresses racial injustice, and meets the nation's talent needs through a broad range of credentials. Lumina Foundation is working toward a system that prepares people for informed citizenship and success in a global economy.

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**Suggested Citation:** D'Antonio, N. (2024). Innovating Workforce Education: Community Colleges at the Forefront of Registered Apprenticeship. Association of Community College Trustees.

#### Funded by:



# **EXECUTIVE SUMMARY**

This publication explores Registered Apprenticeships in the United States, examining their increasing relevance to community colleges and the broader workforce development landscape. At its core, the apprenticeship model integrates paid employment with progressive learning, characterized by on-the-job training, classroom instruction, and mentorship, culminating in an industry-recognized credential. This blend of practical and academic learning is pivotal for skill acquisition and provides a pathway to gainful employment.

A notable trend is the extension of apprenticeships beyond traditional trades into non-traditional sectors like healthcare, IT, and business administration, closely aligning with community college expansion in these areas. These apprenticeships are occupation-specific, tailored to regional employment needs, and uniquely structured for each apprenticeship sponsor. This approach ensures student employment, strengthens employer relationships, and can boost student completion rates.

Critical components of apprenticeships include paid employment with clear wage progression, on-the-job training integrated with practical work, and Related Technical Instruction (RTI) provided by community colleges. The RTI complements on-the-job training, bridging theoretical knowledge and practical skills. Mentorship is another critical element, offering guidance and support to apprentices from experienced workers. Successful completion of an apprenticeship leads to a portable, industry-recognized credential.

The paper will emphasize the versatility of apprenticeships while clarifying misconceptions. Apprenticeships are not limited to pre-employment training or entry-level positions but encompass diverse career stages and occupational scopes. Additionally, apprenticeships are adaptable in instructional delivery and flexible learning, making them suitable for various learning styles and job roles. In exploring types of apprenticeships, the paper identifies time-based, competency-based, and hybrid models and explores efforts like pre-apprenticeship and youth apprenticeship.

The benefits of Registered Apprenticeships are many. To students, they offer employer-connected, competency-based learning, the potential for college credit, and economic mobility. For colleges, apprenticeships enhance student labor market outcomes, provide access to new funding sources, and increase enrollment and completion rates. Communities benefit from localized talent development efforts that positively impact economic development.

Community colleges play a pivotal role in apprenticeship programs, serving as sponsors, RTI providers, recruitment partners, preapprenticeship providers, and even as Registered Apprenticeship employers. This involvement enriches the educational landscape, aligning it closely with industry needs and workforce development.

Under the Biden-Harris administration, significant strides have been made in strengthening and expanding the U.S. apprenticeship system, with substantial funding, policy initiatives, and projects to modernize and diversify apprenticeships. The administration's efforts emphasize technology, healthcare, clean energy, and cybersecurity, integrating these programs into community colleges and educational frameworks.

The paper closes by proposing future research and practice areas for ACCT, focusing on evaluating apprenticeship models, examining policy impacts, exploring digital learning's role in related instruction, and analyzing the financial models linked to apprenticeship sustainability and expansion.

# INTRODUCTION

In today's education and job readiness world, Registered Apprenticeships are emerging as a crucial bridge, linking postsecondary education with the evolving needs of the job market more than ever before. This paper focuses on the critical role of community colleges in this shift, emphasizing how they can enhance student access and completion rates and secure strong labor market outcomes by leveraging apprenticeship programs.

The landscape of apprenticeships in the United States has shifted significantly since 2012, with a 64% surge in new Registered Apprenticeships, mirroring a job market increasingly inclined towards practical skills and training that resonates with industry demands. Furthermore, US Department of Labor data illustrates the increasing number of apprentices both overall and in occupations that are not traditionally pursued through apprenticeship pathways.

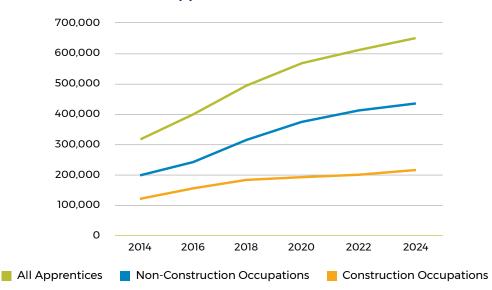
Community colleges are at the heart of the current apprenticeship model trends, well-positioned to guide students toward these life changing opportunities. Community colleges play a key role in merging academic credentials with the hands-on skills sought after in today's workforce. Community colleges not only make apprenticeships more accessible, especially for those seeking practical, cost-effective education routes, but also open doors to diverse student pipelines for industry.

Community colleges themselves gain numerous benefits from integrating apprenticeship programs into their offerings. These initiatives can unlock new funding sources and strengthen connections with local business sectors. Aligning educational offerings with industry needs is critical and apprenticeship programs involving industry experts in curriculum development and encouraging faculty to deepen their industry connections can strengthen this alignment.

For trustees and other community college stakeholders, including educators, administrators, and policymakers, expanding apprenticeship programs is a substantial task with lots of benefits. Trustees can be instrumental in shaping the strategic direction of these programs, educating administrators, brokering essential industry partnerships, and raising awareness and advocating for supportive policies at both the state and federal levels.

As the lines between higher education and workforce needs further blur, the influence of community college stakeholders, particularly trustees, becomes more crucial. There is currently a unique opportunity to mold the future of apprenticeships, transforming them into pathways that benefit students, industries, and the wider community. This paper serves as a guide for influential leaders to navigate and effectively influence this dynamic form of modern education.

#### **Number of Apprentices in the United States**



# EXPLORING THE CORE COMPONENTS OF APPRENTICESHIP IN THE UNITED STATES

Apprenticeships in the United States are built on a blending of employment and learning, structured under various legislative acts, including the National Apprenticeship Act (known as the Fitzgerald Act). These apprenticeship programs provide apprentices with paid employment, incremental wage increases, on-the-job training, classroom instruction, mentorship or coaching, and an industry-recognized credential. The principal value of apprenticeship lies in its dual focus as it simultaneously facilitates skill acquisition and gainful employment.

Apprenticeships are occupation-specific and are designed to create a career pathway for a particular job. As the development of new Registered Apprenticeship programs is considered, community colleges should seek to understand regional and employer-specific hiring needs for which an apprenticeship could enhance existing workforce development or degree programs. Overlaying existing community college occupational training with the apprenticeship framework and the partnership of local employers ensures student employment, enhances regional employer relationships, and supports the likelihood of improved student completion rates.

A growing trend that is particularly relevant to community colleges is the expansion of the apprenticeship model in non-traditional occupations. Historically, in the United States, apprenticeships have been primarily focused on trades and related occupations in construction industries.

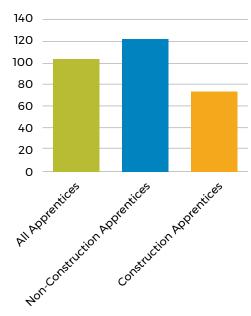
When thinking about apprenticeship, trades like plumbing, electrical work, welding, and HVAC (heating, ventilation, and air conditioning) installation often come to mind. In recent years, a deliberate effort has occurred to expand the apprenticeship framework, which has been implemented across various occupations in healthcare, information technology, advanced manufacturing, human services, and even business administration functions. Under the Biden-Harris Administration, clean and renewable energy, electric vehicle production, and semiconductor manufacturing have also come into focus. These non-traditional career-focused programs that direct individuals into the workforce are fields that align with most community colleges' workforce development endeavors that seek to bridge students with opportunities in these fields.

#### **The Apprenticeship Model**



- · Builds on existing curriculum
- Real-world applied learning
- · Strenghtens student/on-the-job trainer relationship
- · Apprentices:
  - "Earn while they learn!"
  - Make long-term commitments
  - Are permanent employees

# Percentage of Apprenticeship Growth Based on Number of Apprentices 2014-2024



# **Component 1: Paid Employment with Wage Progression**

First and foremost, apprenticeship is a form of employment. Registered Apprenticeship programs ensure that apprentices are compensated for their work, complying with at least the minimum wage requirements. A key feature of apprenticeship programs is a transparent and predetermined plan for wage progression. This structure compensates apprentices as they learn and lays out a clear trajectory for growth and career advancement within their chosen field. Additionally, apprenticeship programs must adhere to federal, state, and local laws dictating safety, supervision, and equal opportunity.

# **Component 2: On-the-Job Training**

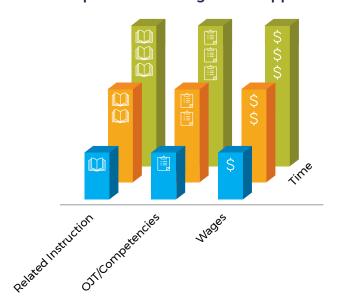
On-the-job training is a cornerstone of apprenticeship programs, where the training is deeply integrated with practical work. Apprentices are paid to learn in a hands-on environment, applying new skills and knowledge in real-work scenarios. The programs are designed to be responsive and adaptable, changing as necessary to keep pace with industry and technology shifts. Regular data reviews are a part of this adaptability, ensuring that the training stays relevant and effective in meeting the evolving needs of both apprentices and their occupations.

# **Component 3: Related Technical Instruction (RTI)**

Related Technical Instruction (RTI) is essential in complementing the On-the-Job Training (OJT) aspect of Registered Apprenticeships. This component involves relevant coursework that addresses potential knowledge gaps, ensuring a comprehensive learning experience beyond the practical training received on the job.

Community colleges can play an integral role in bridging the gap between theoretical knowledge and practical skills in apprenticeship programs. As related instruction providers, community colleges serve a vital function for apprentices to reach their proficiency goals and secure industry-recognized credentials or certifications. Community colleges ensure that the related instruction, regardless of modality, is aligned with the competencies and skills in specific industries, enhancing the apprentice's career prospects. The details of the instruction, such as course content, duration, and assessment methods, are defined upon the approval of an occupation-specific apprenticeship program. Community colleges often design their related instruction courses to be part of a broader career pathway, which may include awarding college credit for their learning and recognition of prior learning or credits for noncredit courses. As a component of a Registered Apprenticeship program, employers are ultimately responsible for the costs associated with all related instruction.

#### **Core Components of a Registered Apprenticeship**







# **Component 4: Mentorship or Coaching**

Mentorship in apprenticeship programs is a structured process where an experienced worker, also known as a mentor or coach, imparts knowledge and skillsets to an apprentice. In-company mentors are responsible for the oversight of apprentices during on-the-job training phases. They provide ongoing guidance and support to apprentices. Mentors often act as educators and role models and ensure that apprentices are well-acquainted with their industry's professional standards and expectations, preparing them for successful careers.

# **Component 5: Credential**

Apprenticeship programs culminate in awarding industry-recognized credentials, signifying the apprentice's mastery and readiness for professional practice. These credentials, which are portable across states and industries, validate the skills and knowledge acquired by the apprentice. Programs align with existing industry standards, allowing apprentices to obtain pre-established credentials or become eligible to take relevant certification exams. For added formal recognition, apprentices receive a completion certificate marking the official end of their apprenticeship journey.

# **Component 6: Assessment and Evaluation**

Throughout an apprenticeship, regular program assessment is critical and extends beyond traditional written assessments. Apprentices are often required to participate in practical demonstrations, where they replicate typical job duties, to ensure they meet the occupation's required standards. Additionally, regular evaluations of workplace performance are conducted to assess the quality of work and adherence to standards and to show the application of knowledge learned in related instruction. Checklists and competency evaluations where supervisors or mentors assess skills are expected. Apprentices may compile portfolios to demonstrate their work. Additionally, more informal feedback and evaluation sessions are regularly held with mentors and coaches. The diverse and regular assessment ensures the apprentices are well-prepared with the knowledge and practice skills for their job.

# DEMYSTIFYING APPRENTICESHIPS: CLARIFYING WHAT THEY ARE AND AREN'T

It is sometimes confusing for those who are not intricately involved in apprenticeships to understand what they are and what they are not. Apprenticeships have distinctions that set them apart from other forms of career and technical training and employment. The distinctions emphasize the employment-driven nature of apprenticeships, their inclusivity across various career stages, and their versatility in occupational scope. Furthermore, apprenticeships are underscored by their adaptability in instructional delivery and their role as a customizable framework for learning. These distinctions not only clarify common misconceptions about apprenticeships but also showcase their broad applicability and flexibility.

APPRENTICESHIP IS	APPRENTICESHIP ISN'T
Employment Driven: Apprentices are employees. Apprenticeship uniquely combines on-the-job training with the status of being a paid employee, emphasizing learning through direct work experience.	Pre-Employment Training: Unlike pre-apprenticeship or pre-employment training programs, proper apprenticeship necessitates concurrent employment, distinguishing it from other forms of jobreadiness efforts.
Inclusive of All Career Stages: Apprenticeship programs can be designed to serve early-career, midcareer, and late-career employees with tailored learning opportunities.	Limited to Entry-Level: Although commonly associated with new workforce entrants, apprenticeship extends beyond entry-level positions, offering valuable pathways for growth across various professional levels.
Both a Hiring Strategy and a Strategy for Upskilling Incumbent Employees: Apprenticeships are designed to facilitate the development of new hires and the ongoing learning of incumbent workers within a company.	Restricted to New Entrants: Apprenticeship is a versatile model that isn't limited to just acting as a pipeline for employees into a company but also serves as a tool for continuous employee development and building talent from within.
Diverse in Occupational Scope: Apprenticeships are applicable to a wide array of occupations, ranging from teachers, cybersecurity engineers, and electricians to cosmetologists, HR professionals, finance specialists, and many more. There are more than 1,000 apprenticeable occupations in the United States.	Exclusively for Trades: While apprenticeships are foundational in trades, their scope extends beyond, encompassing various professional fields and not limited to traditional construction and other skilled trades.
Inclusive of Employment Types: Apprenticeships are designed to benefit a wide range of employment scenarios, accommodating both unionized and non-unionized positions.	Confined to Union Membership: While unions have showcased the effectiveness of apprenticeships for decades, apprenticeships are not exclusive to union settings, offering opportunities in various non-union employment contexts.
Adaptable in Instructional Delivery: Apprenticeships offer a flexible range of learning modalities, including in-person, online, blended, asynchronous, and mobile learning, accommodating diverse learning styles and instructional needs.	Restricted to In-Person Learning: Apprenticeship programs transcend traditional classroom boundaries, embracing various delivery methods to suit different learning preferences and situations that consider the employer, educator, and the apprentice.
A Framework that Embraces Customized Learning: Apprenticeship programs are flexible, allowing up to 20% customization in learning and on-the-job training to align with the unique roles and responsibilities of each apprentice.	One-Size-Fits-All: Apprenticeship programs are designed to adapt to individual needs, moving beyond a rigid framework to provide tailored experiences that best fit the apprentice's job role and career path.

# **TYPES OF APPRENTICESHIPS**

The U.S. Department of Labor defines Registered Apprenticeship as "an industry-driven, high-quality career pathway where employers can develop and prepare their future workforce, and individuals can obtain paid work experience, receive progressive wage increases, classroom instruction, and a portable, nationally recognized credential. Registered Apprenticeships are industry-vetted and approved and validated by the U.S. Department of Labor or a State Apprenticeship Agency." In some contexts, Registered Apprenticeships are known by the acronym 'RAPs'. Three main classifications of apprenticeship programs are recognized including time-based, competency-based, and hybrid apprenticeships:

- 1. Time-Based Apprenticeships: This traditional model emphasizes the duration of on-the-job training (OJT). Apprentices must complete a specific number of OJT hours determined by the approved Registered Apprenticeship standards. These requirements can span from one to six years, varying by occupation. Additionally, for every 2,000 hours of OJT, apprentices are expected to undertake 144 hours of related technical instruction (RTI).
- 2. Competency-Based Apprenticeships: This model focuses on mastering specific competencies necessary for a particular occupation. While apprentices still engage in a required number of hours of related technical instruction, their advancement is measured not by time spent but by the competencies they acquire, as validated by their employer or program sponsor.
- **3. Hybrid Apprenticeships:** Combining elements of both time-based and competency-based models, hybrid apprenticeships set a range of OJT hours within which apprentices must demonstrate specific competencies. Like other models, hybrid apprenticeships also include the standard requirement of 144 hours of RTI for every 2,000 hours of OJT. Apprentices' progress in these programs is tracked based on their competency level and the hours spent in OJT.

Competency-based and hybrid apprenticeships are gaining traction as they cater to the diverse needs of various employers and apprentices.

# **Youth Apprenticeship**

There is a growing focus on youth apprenticeships within Registered Apprenticeship programs, targeting individuals between 16 and 24 years old. Although there's no formal definition from the U.S. Department of Labor for youth apprenticeships, the Partnership to Advance Youth Apprenticeship (PAYA) by New America outlines four key components: paid on-the-job training under expert mentorship, regular skill and competency assessments, job-related classroom instruction, and ideally, earning a portable, industry-recognized credential along with postsecondary credit. Geared towards providing young people with meaningful work experience while they advance academically, youth apprenticeships seek to offer youth a head start in their careers.





# **Pre-Apprenticeship**

Pre-apprenticeship programs, as defined by the U.S. Department of Labor, play a vital role in preparing individuals for Registered Apprenticeship programs. Pre-apprenticeship programs provide a structured framework to equip individuals with the essential skills and preparation needed for successful entry into Registered Apprenticeship programs. These programs aim to provide participants with the necessary skills, education, and workplace experience that will facilitate their transition into an apprenticeship. Often intersecting with community colleges, these programs offer industry-standard-based curriculum and training that are directly aligned to Registered Apprenticeship partners. They focus on long-term success by increasing apprenticeship opportunities for under-represented and disadvantaged individuals, including recruitment strategies and educational services like career workshops and job readiness courses. Pre-Apprenticeships also facilitate access to support services, promote the use of Registered Apprenticeships for workforce development, and provide meaningful hands-on training without displacing paid employees. A high-quality pre-apprenticeship program typically features formal agreements with apprenticeship sponsors, ensuring streamlined entry into Registered Apprenticeship programs or granting advanced credit for the skills and competencies gained upon completion of the pre-apprenticeship.

# BENEFITS OF REGISTERED APPRENTICESHIP

Registered Apprenticeships benefit a variety of stakeholders including students, community colleges (providers of related instruction), the community, and employers.

#### **To Students:**

# **Employer Connected, Relevant, Competency-Based Learning**

Registered Apprenticeships offer enhanced, employer-connected learning experiences, integrating employment-focused education with competency-based learning. Apprenticeship programs ensure that the skills acquired are aligned with job expectations and measured against key competencies. Steve Glaveski's Harvard Business Review article notes the importance of timely and relevant learning. Glaveski states, "People learn best when they have to learn. Applying what's learned to real-world situations strengthens one's focus and determination to learn." This principle is especially beneficial for adult learners in community colleges, who thrive on practical, application-oriented education. Reflecting on Edwin Locke's theory of motivation and the value of short feedback loops, this approach contrasts with traditional corporate training that often lacks immediate job relevance. Registered Apprenticeships provide learners with a more impactful and practical educational experience by focusing on real-world applications and competency assessments.

# **College Credit**

Apprenticeship programs can offer a unique blend of learning and working, in some instances allowing students to gain college credits while training on the job. Through collaborations between educational institutions and program sponsors, apprentices can convert their apprenticeship experiences into academic credits. This approach enables apprentices to acquire valuable hands-on experience while progressing towards post-secondary credentials, such as certificates or degrees. It's a practical way of learning that enriches students' educational journeys and smooths the transition into the workforce. The American Council for Education guides colleges interested in exploring this approach.

#### **Earned Credentials**

Apprentices graduating from Registered Apprenticeship Programs (RAPs) receive a nationally recognized credential from their State Apprenticeship Agency or the U.S. Department of Labor. These programs often also provide interim and industry-specific credentials, particularly in high-growth industries including advanced manufacturing, the care economy, technology, and transportation. These credentials are portable, help certify the apprentice's learning and skill acquisition, and strengthen their marketability. These credentials should be industry-recognized for employability, career advancement, transferability, standardization of skills, professional credibility, and future learning.

# **Economic Mobility and Personal Growth**

Registered Apprenticeships significantly impact economic mobility, mainly through boosting apprentices' earnings. A study by Abt Associates and partners for the U.S. Department of Labor's American Apprenticeship Initiative found that earnings for all apprentices across various sectors and demographics increased notably. In the year following the conclusion of their apprenticeship, apprentices saw a 49 percent increase in earnings compared to their pre-program wages. Interestingly, this earnings growth was even more pronounced among groups traditionally underrepresented in apprenticeships, including women apprentices, Hispanic apprentices, and those of races other than Black or white. While earnings for white, Black, and male apprentices also rose, their increase was comparatively lower. Additionally, apprentices' earnings significantly outpaced those of comparable workers, who only saw a 16 percent increase in earnings over a similar period, underlining the effectiveness of RAPs in enhancing economic prospects for participants.





#### To Colleges:

# **Improve Labor Market Outcomes of Students**

Registered Apprenticeships significantly benefit community colleges by directly enhancing student labor market outcomes. The Aspen Institute underscores the importance of these outcomes, noting that the primary reason students enroll in college is to secure employment and advance their careers. Community colleges can facilitate this by providing workforce credentials and programs for immediate job readiness which can be even further strengthened by leveraging the apprenticeship model. Notably, the U.S. Department of Labor reports that "93% of apprentices who complete a Registered Apprenticeship retain employment. This high retention rate demonstrates the effectiveness of apprenticeships in meeting students' career goals and aligns with the mission of community colleges to deliver education with tangible, positive labor market outcomes. By integrating apprenticeship programs, community colleges can significantly bolster their role in preparing students for successful employment and career advancement.

# **Access to Funding**

Registered Apprenticeships present a significant funding opportunity for community colleges, opening doors to substantial financial resources to support these programs. Community colleges are frequently the focus of federal U.S. Department of Labor and state funding initiatives designed specifically for apprenticeships. Prominent examples include programs like "Apprenticeship Building America," "Women in Apprenticeship & Non-Traditional Occupations (WANTO)," and "Apprenticeship Closing the Skills Gap" in recent years. These programs aim to advance and expand apprenticeships, providing the necessary financial backing. In recent years, hundreds of millions of dollars have been allocated to foster the growth of apprenticeship programs, with community colleges often primary beneficiaries of this funding.

# **Enrollment Predictability, Stability, and Growth**

By formalizing established relationships with employers through the apprenticeship framework, community colleges gain a level of commitment for programming that can be sporadic and unpredictable without the inherent commitment associated with Registered Apprenticeship. This commitment results in a dramatic increase in enrollment predictability that ultimately creates foundational stability for growth. Furthermore, by employers leveraging Registered Apprenticeship for both strategic hiring and upskilling incumbent employees, there is a resulting growth in enrollments.





#### **To Local Communities:**

### **Keep Talent Localized**

Registered Apprenticeships play a crucial role in fostering local talent, contributing to community growth and economic prosperity. As highlighted in a 2022 Brookings Article, these programs are key to strengthening connections between education and employment, especially in urban areas. They provide a pathway for local talent, often sidelined, to participate actively in the economy. By focusing on apprenticeships, communities can effectively address workforce needs, filling critical roles and driving inclusive regional growth. This strategy leverages the existing workforce, turning apprenticeships into a powerful tool for sustaining local talent and fostering economic development.

# **Strengthening the Community Economy**

Apprenticeship programs at community colleges significantly benefit the wider community, particularly by enhancing the local labor market skillset and responding effectively to economic development needs. These programs, tailored to align educational offerings with the practical demands of local industries, not only equip students with current, in-demand skills but also directly address regional employment gaps. This strategic approach in workforce development enhances the employability of graduates and provides local businesses with a skilled workforce, crucial for sustaining and driving their growth. Additionally, by demonstrating a commitment to developing a competent and adaptable labor pool, community colleges make the region more attractive to potential new businesses and industries.

# **COMMUNITY COLLEGE ROLES IN APPRENTICESHIPS**

To determine the best place to start, a community college should examine existing labor market data to understand the labor needs for service area or region. Additionally, the schools can work with faculty and staff who frequently interface with regional employers through advisory boards to gain more nuanced insights. Finding employers and sectors with the largest talent need and jobs that are apprenticeable illuminates a gap in talent with apprenticeship as a potential solution. With an understanding of the apprenticeship framework, business development staff at the college can explore the level of interest among employers to leverage the apprenticeship model as a hiring strategy or a mechanism for upskilling incumbent employees. Community colleges can use the apprenticeship model as one possible solution for employers' talent needs. Upon agreement to explore further, community colleges partner with specific employers to develop the apprenticeship related instruction curriculum, on-the-job training structure, incremental wage increase schedule, employment recruiting strategies, and an implementation plan.

The required documentation is submitted for approval upon completion of the program design. It becomes a Registered Apprenticeship with the approval of either the State Apprenticeship Agency or the U.S. Department of Labor, depending upon the governing body of a particular state. There are options for how the role of the community college is defined. Since each Registered Apprenticeship is occupation-specific, serving as the Registered Apprenticeship program sponsor may be the best strategic option for some occupations, while fulfilling the role of related instruction provider (and not the program sponsor) may be the most effective and valuable role for partnering with other employers. In many instances with this being job-specific, the community college may play one role in a program such as a sponsor and then in another program only be a related technical instruction provider. While these scenarios offer the most straightforward choice, the community college and employers can explore many arrangements for each Registered Apprenticeship program component.

#### As a Sponsor:

Community colleges may function as sponsors in apprenticeship programs. A sponsor in a Registered Apprenticeship program refers to the individual, organization, or entity that operates the apprenticeship program. The sponsor is responsible for overseeing the entire program, ensuring it meets all regulatory requirements and standards. When acting as a sponsor, the community college manages and administers each Registered Apprenticeship program for which they are the sponsor. This could include being responsible for program development, compliance with laws and regulations, recruitment and selection, program structures, and record keeping and reporting. The community college is responsible for overseeing each program component, the related administrative responsibilities, and working closely with employers. As a sponsor, a community college may be able to work with numerous employers for a single occupation.

#### As an RTI Provider:

Community colleges deliver industry-standard academic instruction as a Related Technical Instruction (RTI) provider for apprenticeship programs. This component is a crucial part of a comprehensive apprenticeship program. RTI provides the theoretical and technical knowledge that complements the hands-on, practical training apprentices receive through their on-the-job experience. An RTI provider's responsibilities include collaborating with local businesses to develop apprenticeship curricula, offering credentials based on competency assessments, and providing support services such as tutoring and counseling. In many cases, the RTI may be customized for specific occupations and employers. When providing RTI, community colleges may also explore offering academic credit for the RTI completed by apprentices. This increases the likelihood apprentices will get future credit for the knowledge and skills they obtained in the apprenticeship.

#### As a Recruiting Partner:

Community colleges may also serve as recruitment partners for employers managing their own Registered Apprenticeship programs. Community colleges offer a pool of potential candidates, including full-time students, individuals engaged in continuous education or workforce development, and alumni seeking employment. Additionally, with the increase in dual enrollment programs, apprenticeships create new employment pathways for high school graduates who have successfully completed college courses. Given the diverse population of students community colleges serve, employers may value access to help diversify their talent pipelines.

#### As a Pre-Apprenticeship Provider:

As pre-apprenticeship providers, community colleges prepare students for Registered Apprenticeship programs. These programs, aligning with industry standards and closely tied to Registered Apprenticeship partners, are designed to increase apprenticeship opportunities, especially for under-represented and disadvantaged groups. They provide comprehensive training and access to support services and often establish formal agreements with apprenticeship sponsors to facilitate direct entry into apprenticeship programs or to recognize previously acquired skills. For community colleges, even if the participant does not enter the specific apprenticeship program, they have likely developed skills that would increase their success in other programs and the workforce.

#### As a Registered Apprenticeship Employer:

Community colleges are well-positioned to host their own sponsored apprenticeship programs, utilizing roles within their institutions such as HR, Finance, and other administrative areas. By becoming sponsors for apprenticeships among their staff, community colleges demonstrate the effectiveness of these programs and 'practice what they preach.' This approach allows them to internally develop skilled professionals while showcasing the real-world applicability and benefits of apprenticeships to their students and the wider community. In addition to the traditional occupations that are apprenticeable, in the career and technical education space, it would be possible to create apprenticeship programs for instructors.

# APPRENTICESHIP DEVELOPMENTS IN THE BIDEN-HARRIS ADMINISTRATION ERA

The Biden-Harris administration has significantly invested in expanding the scope of apprenticeship programs in the United States. The milestones achieved under the Administration's leadership reflect a commitment to enhancing and strengthening the apprenticeship landscape. These efforts encompass substantial funding initiatives, innovative policies, and diverse projects to develop a more inclusive and modern apprenticeship system. Key focus areas include technology, healthcare, clean energy, and cybersecurity, emphasizing integrating these programs into the fabric of community colleges and the broader educational framework.

Highlights of the Biden-Harris Administration's efforts are sourced from the White House's Fact Sheet: Biden-Harris Administration Launches the Apprenticeship Ambassador Initiative to Create Equitable, Debt-Free Pathways to High-Paying Jobs

#### **Funding:**

- Department of Labor: Investment of over \$330 million in grants for expanding and diversifying Registered Apprenticeships, including \$50 million for nine hubs aiding employers in program development.
- Department of Commerce: Launch of the Good Jobs Challenge, a \$500 million program to develop "high-quality training systems" with importance placed on leveraging Registered Apprenticeships. Key projects include technology and healthcare apprenticeships in various sectors like cloud computing, wind power, and rural healthcare.
- Federal Budget Proposal FY24: Allocates \$335 million for Registered Apprenticeships targeting in-need industries (construction, clean energy, semiconductor manufacturing), and \$200 million for the Sectoral Employment through Career Training for Occupational Readiness (SECTOR) program. An additional \$100 million is proposed for training model development in community colleges.

#### **Initiatives:**

- Department of Labor: Aiming to serve 1 million apprentices annually in 5 years, launching technical assistance centers, and partnering in sector-based challenges (e.g., Trucking Challenge, Cybersecurity Apprenticeship Sprint).
- Department of Labor: The Advisory Committee on Apprenticeship (ACA) advises the Secretary of Labor on enhancing the apprenticeship model to provide equitable career paths and uphold work dignity, focusing on its expansion, modernization, and diversification into new sectors like cybersecurity and healthcare. It comprises about 30 diverse members from employers, labor, and the public, including representatives from various U.S. Departments.
- Department of Labor: Launch of the Apprenticeship Ambassador Initiative which aims to establish a national network comprising diverse stakeholders like employers, educators, and community organizations to champion the growth and diversification of Registered Apprenticeship. This initiative brings together labor groups, industry associations, program sponsors, and minority-serving institutions to advocate and enhance apprenticeship opportunities across various sectors.
- Department of Labor: Apprenticeship.gov redesign with focus on industry-specific resources and a more robust toolkit.

#### **Remarks on Perkins and Apprenticeship:**

In 2023, the Department of Education's Office of Career, Technical, and Adult Education released a memorandum regarding the intersection of the Carl D. Perkins Career and Technical Education Act (Perkins V) and Registered Apprenticeship (RA) programs. The document states that Perkins V funds "may be used to develop, improve, and support [Registered Apprenticeship] programs". These programs, including pre-apprenticeships, align with the Perkins V definition of Career and Technical Education (CTE), focusing on hands-on learning and achieving recognized postsecondary credentials. This allows states and educational agencies to utilize Perkins V resources effectively in fostering comprehensive apprenticeship opportunities that begin in high school and extend into postsecondary education, addressing local economic and educational needs. Community colleges, for example, are permitted to allocate Perkins V funds towards curriculum development and other costs linked to crafting the 'related instruction' aspect of Registered Apprenticeship programs. This includes its integration into either a "certificate or an associate degree program", enabling RA participants to obtain college credits upon completing their apprenticeship.

#### **Proposed Rule Changes:**

At the time of this publication, the U.S. Department of Labor had recently released a **notice of proposed rulemaking** that would significantly affect Registered Apprenticeships in the United States. The proposed rules would seek to modernize regulations for Registered Apprenticeships through enhancements that include strengthening labor standards, improving training portability, aligning apprenticeships further with postsecondary education, and providing better performance data. The proposal also aims to clarify roles for State Apprenticeship Agencies while codifying the Federal Office of Apprenticeship's national leadership role.

Additionally, the proposal emphasizes the development of apprenticeship pathways, including pre-apprenticeship and readiness programs, by expanding performance requirements to increase accountability and program outcomes. A significant aspect of the proposal is creating a student-centric model, the Registered Career and Technical Education Apprenticeship, designed to streamline the enrollment of high school and community college students in Registered Apprenticeships. Other considerations in the proposed rulemaking include the elimination of competency-based apprenticeships and a requirement for states to grant reciprocity to sponsors of approved national apprenticeship program standards.

At the time of this publication, the public comment period had not yet opened.

# CONSIDERATIONS FOR FUTURE RESEARCH AND PRACTICE

In the evolving landscape of education, where community colleges are increasingly incorporating Registered Apprenticeships into their programs, ACCT stands at the forefront of practical strategies that connect apprenticeships with higher education. This effort encompasses a range of research and practice areas, each offering valuable insights into integrating apprenticeships within the community college offering. The focus is not limited to students whose education ends at the community college level but extends to those seeking to transfer for continued education.

Central to this initiative is the need to develop comprehensive resources, tools, frameworks, and process guidance to aid community colleges in establishing and enhancing Registered Apprenticeship programs. ACCT intends to play a role in facilitating the successful implementation and growth of community college Registered Apprenticeship programs through technical assistance and strategic institutional support.

Additional research is necessary to support the ongoing expansion of community college-based apprenticeships. For example, an in-depth evaluation of various apprenticeship models, including time-based, competency-based, and hybrid approaches, is essential. This evaluation should assess their effectiveness within community college curricula across diverse industries. Additionally, the policy landscape affecting community colleges requires examination to identify and promote legislative reforms to broaden and enhance the effectiveness of and access to apprenticeship programs. This may include a comprehensive analysis of the financial considerations of apprenticeships for all stakeholders. This exploration may involve comparing apprentices' career outcomes and earnings potential against traditional community college graduates. It may also include understanding the financial dimensions of apprenticeships in the context of community colleges, particularly regarding funding models and avenues for financial aid.

In today's digital age, exploring the role and impact of remote and online learning modalities within apprenticeship education will be crucial. And lastly, the importance of data collection and access to labor market data cannot be overstated. Better tracking and understanding of labor market outcomes are vital to demonstrating the efficacy of Registered Apprenticeship programs.

These areas represent just a snapshot of the potential fields of interest for those engaged in research and practice in the apprenticeship sector. These proposed explorations are poised to inform and guide ACCT's future initiatives in this area, ensuring that apprenticeships remain a relevant and effective component of community college education.

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