

The Critical Role of INTERMEDIARY ORGANIZATIONS



in Expanding YOUTH
APPRENTICESHIP



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Introduction

In today's rapidly changing economy, companies require workers who are not only prepared to meet today's skill needs but are capable of adapting to meet tomorrow's as well. With unemployment at record lows and a growing economy, however, finding enough skilled workers for these positions is challenging. Employers cannot wait four years for a new talent pool to be trained and ready for hire, but neither can they find appropriately skilled workers fresh out of high school. In fact, while not all well-paying jobs require a bachelor's degree, nearly all of them require some level of postsecondary education and training.

Policymakers and educators understand this and are responding by working with employers to develop a range of career preparation pathways. Some of these pathways are designed to blur the boundary between school and work by pairing traditional academic and technical skills training with real-world work experiences. Registered apprenticeships are perhaps the most well-known and robust of these pathways, integrating long-term, paid on-the-job training with in-classroom learning. While apprenticeships are robust, their scope has traditionally been narrow—both in terms of participants and industry. Though the minimum eligible age to participate in a registered apprenticeship is 16, many programs require participants to be at least 18 years old—and the average age of a registered apprentice is much higher, at 28 years old.^{1,2} There are not specific legal requirements regarding participation under the age of 18, outside a narrow group of occupational tasks, yet most employers or program designers choose to put that restriction in place. These opportunities have also been concentrated in the skilled trades where worker demographics also skew heavily white and male.³

Across the country, students are getting similar exposure to careers even earlier in their education through opportunities like Career and Technical Education (CTE), which introduces students to in-demand, high-skill, high-wage careers beginning in middle and high school. Many of these programs also offer

work-based learning to complement classroom instruction. This work-based learning can take a variety of forms—from bringing industry professionals to the classroom as guest speakers and career fair participants to site-based capstone projects and internships. Though work-based learning activities vary widely in both duration and impact, the idea is the same: Each of these activities is designed to complement and support academic and technical instruction and grow students' professional skills.



Youth Apprenticeship

Among all types of work-based learning, youth apprenticeship⁴ is an emerging interest for policymakers, employers, and educators seeking to grow the population of skilled workers and keep pace with the demands of an advanced economy. Though there is currently no single definition of youth apprenticeship, programs generally adhere to the same principles of registered apprenticeship in that they offer:

- Paid, on-the-job learning that is supervised by skilled employees;
- Related in-class instruction;
- Regular assessment of performance against industry skill standards; and
- Opportunities to earn industry-recognized credentials and/or transferrable postsecondary credit.⁵

A recent initiative from New America, the Partnership to Advance Youth Apprenticeship (PAYA), has provided additional structure to identify high-quality youth apprenticeship through its defining principles (see text box).

As the name suggests, the biggest differentiating factor between youth apprenticeship and traditional apprenticeship programs is the age at which participants enter the program. Youth apprenticeship programs are typically designed for high school-aged youth and enroll students in their junior and senior years. Like traditional apprenticeships, students split their time between work and school, with classroom instruction taking place either at the high school or a community college—or sometimes both. Youth apprentices often continue working for their employer after high school graduation, and when high-quality, the programs culminate in early postsecondary credit—or even an associate's degree—and an industry-recognized credential.⁷

Youth apprenticeship is an extremely attractive model for those looking to smooth the transition between school and postsecondary and increase the talent pool for employers.

make youth apprenticeship an extremely attractive model for those looking to smooth the transition between school and postsecondary and increase the talent pool for employers; but the intensity of the model also requires greater commitment and capacity from employers and educators.

The Case for Intermediaries

Employers and educators must both be at the table for meaningful work-based learning of any kind—but especially youth apprenticeship—to occur. Unfortunately, these two sectors rarely have formal opportunities to connect and collaborate deeply with one another. Even when employer-educator relationships are established, it can be difficult for either to launch work-based learning programs alone.

PAYA's Defining Principles for High-Quality Youth Apprenticeship⁶

- **Career-oriented:** Learning is structured around knowledge, skills, and competencies that lead to careers with family-supporting wages.
- **Equitable:** Learning is accessible to every student, with targeted supports for those adversely impacted by long-standing inequities in our education system and labor market.
- **Portable:** Learning leads to postsecondary credentials and transferable college credit that expand options for students.
- **Adaptable:** Learning is designed collaboratively to be recognized and valued across an industry or sector.
- **Accountable:** Student, employer, and program outcomes are monitored using transparent metrics to support improvement.

For more information about PAYA, visit:
<https://www.newamerica.org/education-policy/partnership-advance-youth-apprenticeship/>

Youth apprenticeship is perhaps the most intensive form work-based learning can take: Its duration is longer than an internship or co-op, and it requires deeper, more rigorous work at the job site. It also encompasses a significant amount of early postsecondary credit and culminates in a portable, industry-recognized credential, which few internship opportunities offer. These factors

Neither the employers nor school systems may have the capacity needed to manage a work-based learning program in addition to covering their core services. Currently, opportunities may also be coordinated on a school-by-school—or even teacher-by-teacher—basis, making it difficult to scale programs over time without an overarching infrastructure for doing so.

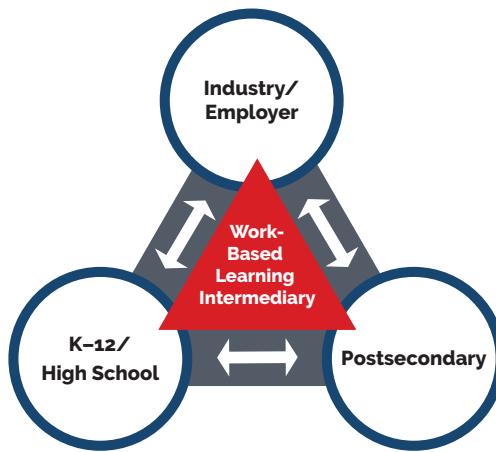
To fill this gap, many are looking to other organizations to launch, grow, and maintain work-based learning programs. These intermediaries serve as a “go-between” and common point of contact for all the parties involved in work-based learning. Just as there is no one definition for work-based learning, there is no one model for an intermediary. While intermediaries are often stand-alone third-party organizations, some are situated within community college systems, chambers of commerce, or other larger organizations. Some are tasked with running local programs, while others operate at regional, statewide, and multi-state scales. The programs they run span the work-based learning spectrum, and the level of ownership over program outcomes varies from intermediary to intermediary.

About This Brief

As interest grows in youth apprenticeship programs, intermediaries can play a key role in coordinating employers, high schools, community colleges, students and their families, and other partners. Because youth apprenticeship in the United States is still a nascent field of work-based learning, little is known about how intermediaries can best support and grow these programs. This brief seeks to address this gap.

Education Strategy Group (ESG) conducted interviews with nearly a dozen established intermediaries that varied in geographic scope, service scale, and type(s) of work-based learning to better understand how intermediaries can be best leveraged to promote youth apprenticeship. Specifically, this research seeks to identify:

- The types of roles and services that are common across work-based learning intermediaries;
- Common challenges in scaling work-based learning programs; and
- The unique needs and challenges faced when implementing youth apprenticeship.



Intermediaries Interviewed by ESG

INTERMEDIARY	SCALE
Adecco	National
Aerospace Joint Apprenticeship Commission (AJAC)	Statewide
Apprenticeship Carolina	Statewide
CareerWise Colorado	Statewide
German American Chamber of Commerce of the Midwest (GACC Midwest)	National
GPS Education Partners	Local/Regional
Horizon Education Alliance	Local/Regional
Indiana Chamber of Commerce	Statewide
Ivy Tech - Kokomo	Local/Regional
San Antonio Works	Local/Regional
Skills for Rhode Island's Future (SkillsRI)	Statewide
Trident Technical College	Local/Regional

Intermediary Roles and Services

Just as work-based learning does not adhere to one set model or definition, nor do any two intermediaries look exactly the same. Despite important differences in form and function, however, all intermediaries fulfill a common mission: to serve as conveners or connectors of traditionally disconnected stakeholders. As one interviewee described it, their intermediary served as the “messy black box of all the things happening in the middle of a bunch of stakeholders” and worked to absorb the complexity of work-based learning to create programs that were seamless and easily navigable for those stakeholders.

In service to this mission, there is a core set of functions that intermediaries perform across the work-based learning spectrum, though the level of engagement in each of these services varies depending on program type, intermediary scope, and the capacity of other partners within the community they serve. Frequently, intermediaries provide services to three key stakeholders: employers, education institutions (K-12 districts and postsecondary institutions), and students.

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Employers

Regardless of program type, intermediaries frequently engage with employers who host students in work-based learning experiences. Indeed, for higher-level intermediaries (such as those working at a national level or serving as an “intermediary for intermediaries”), employer engagement may be the predominant or sole focus for the organization.

Typically, work-based learning intermediaries provide employer partners with most or all of the following core services:

STUDENT RECRUITMENT AND MATCHING

For employers, the foremost role of an intermediary is as a connector to potential work-based learning participants. This can be a daunting role for employers to take on themselves, as there is rarely another single, obvious point of contact for engaging with schools and students. For instance, there are 17 independent school districts within the San Antonio, Texas area. Rather than attempting to navigate each of these districts and coordinate with, at minimum, 17 individual points of contact to recruit San Antonio students, area employers look to **San Antonio Works**—a local work-based learning intermediary—to coordinate with schools and identify potential candidates.

In lieu of adopting a district-by-district or school-by-school coordination strategy, other intermediaries—such as **CareerWise Colorado**, **Indiana INTERNnet**, and **Horizon Education Alliance**—fulfill this role by managing web-based portals where employers and potential participants can connect with each other. Employers may work with the intermediary to post youth-appropriate job descriptions and connect to pool of applicants in the portal.



In either of these scenarios, intermediaries may also assist employers in finding the right candidate for the experience. Several of the intermediaries interviewed participate, at some level, in the matching process. Some conduct initial applicant screenings but leave final decisions to the employers, while other organizations facilitate the entire matching process. The level of intermediary involvement in the matching process may depend on employer preference: Some employers may want to be involved in the screening and interviewing process themselves, while others may entrust the decision-making to the intermediary. It may also vary depending on the type of work-based learning experience offered: Most intermediaries managing youth apprenticeship programs require employers to either pre-identify apprentices from their own internal hiring pool or select apprentices through an application process.

RELATIONSHIP MANAGEMENT

Once employers sign on to host work-based learning experiences, intermediaries maintain employer relationships to ensure partner satisfaction and retention. Many intermediaries, such as **Apprenticeship Carolina** and the **Aerospace Joint Apprenticeship Commission (AJAC)**, have dedicated staff trained specifically to liaise with employer partners, troubleshoot challenges as they arise, and lead recruitment efforts.

Some intermediaries maintain and grow employer relationships through membership in a broader professional community, as well. Before **Skills for Rhode Island's Future (SkillsRI)** launched the PrepareRI summer internship program, it had already served as an employer-facing intermediary for other business engagement activities, and as such, was a trusted and recognized name for employers. Many intermediaries, like **Indiana INTERNnet** are housed in or were born from chambers of commerce, connecting them directly to a large community of employers.



EMPLOYER OF RECORD COVERAGE

Many fields—particularly those with strict safety guidelines, like advanced manufacturing and health services—are unable or unwilling to consider work-based learning opportunities for minors due to liability issues. Several of the intermediaries interviewed overcome this hurdle by assuming responsibility for participants' liability coverage by serving as the employer of record for those participants. Often, this role is considered one of the intermediaries' most critical and unique roles, without which youth-focused work-based learning programs could not exist or scale. As a representative from **Ivy Tech – Kokomo** noted, the absence of liability coverage “would be a deal-breaker. It was a very game-changing moment when we were able to get employers to see us as holders of liability; and it opened a lot of doors.”

Beyond holding liability, intermediaries may also conduct any necessary applicant background checks or drug screenings on behalf of employers. Several handle payroll for participants, though many youth apprenticeship programs require employers to pay wages directly—and offer wage increases as the apprentice advances through the program.

SUPERVISOR SELECTION AND TRAINING

When employers first agree to host work-based learning experiences, many are agreeing to host youth workers for the first time in their company's history. Navigating this experience can be challenging, particularly when it comes to identifying and preparing appropriate supervisors. Supervising youth—even those participating in professional experiences as intensive as a youth apprenticeship—requires an important set of additional skills beyond being able to manage others. From site visits to youth apprenticeship, work-based learning programs are fundamentally educational experiences—opportunities for youth to develop and test new skills, and potentially fail along the way.

Without this context and proper youth development training, adult employees—even if they have had management experience—may not be appropriate youth supervisors; and employers new to work-based learning may not be equipped to provide this training. As experts in both employer engagement and youth programming, intermediaries can help fill this gap by leading supervisor training and possibly even assisting partners in selecting appropriate supervisors. As the work-based learning experience becomes more intense, greater attention needs to be paid to this role. For instance, given that youth apprentices will spend a significant amount of time in the workplace, **CareerWise Colorado**, and many of the other youth apprenticeship intermediaries, devote considerable capacity to train employers on how to maximize time both for the student and employer.

PROGRAM PLANNING AND DEVELOPMENT

Much like supervisor selection and training, employers—particularly those new to work-based learning—may struggle to identify appropriate tasks and routines for the youth they host. Determining appropriate projects and responsibilities requires understanding the intensity and duration of the experience, as well as the individual needs of the youth themselves. A youth apprentice who has signed on for a multi-year experience that is bolstered by relevant classroom training may be able to independently conduct longer-term, highly-skilled projects, while a summer intern may be better suited to group-based or pair work that fosters learning and skill development. Individual youth maturity, learning styles, and interests are also likely to impact the scope of work appropriate during their experience.

Many intermediaries, including Adecco, the **German American Chamber of Commerce of the Midwest (GACC Midwest)**, and **SkillsRI**, assist employers in this manner. SkillsRI helps employers create job descriptions appropriate for high school internships. Adecco and the GACC Midwest, both of which oversee youth apprenticeship programs, work to create programming that is both tailored to the unique needs of the employer and aligned to the objectives and standards of their work-based learning model. At a more intensive level, some intermediaries, such as **GPS Education Partners**, bring employers together across an industry to actually map and connect the skills and competencies that students learn in the classroom with students' on-the-job training experiences. This often necessitates facilitating discussions between employers and education institutions.

Education Institutions

In addition to working with employers, nearly all intermediaries engage on some level with the school systems that serve work-based learning participants. While some programs offered by the intermediaries interviewed in this brief serve only college-age students, many work-based learning programs target high school students, often in their junior or senior year. Many youth apprenticeship programs begin here and extend through to some level of postsecondary education.

If programming is limited based on the school a student attends or the teacher a student has, which students really have access? Intermediaries can lift this responsibility from educators' plates, and in so doing, support programs that can more easily scale across industries, schools, and districts and provide access to more youth.

EMPLOYER RECRUITMENT AND PROGRAM SCALE

Just as employers find it difficult to identify appropriate points of contact within school systems, many school systems lack a comprehensive strategy to engage employers around work-based learning. While some state agencies, districts, and even individual schools may have work-based learning coordinators to recruit host employers and manage programs, many still rely on individual teachers and counselors to find opportunities through personal connections and

professional networks—a strategy that makes scaling work-based learning immensely difficult. Even when a work-based learning coordinator position exists, it may only exist in a part-time capacity. Many school-level coordinator positions are staffed by teachers, who must also balance their instructional responsibilities and may not have broad experience or knowledge of multiple fields. This has serious

implications for creating equitable opportunities: If programming is limited based on the school a student attends or the teacher a student has, which students really have access? Intermediaries can lift this responsibility from educators' plates, and in so doing, support programs that can more easily scale across industries, schools, and districts and provide access to more youth.

MAPPING OF OPPORTUNITIES TO CURRICULUM AND STANDARDS

Relevancy to a student's career goals and education is perhaps the determining factor that sets a work-based learning experience apart from a traditional after-school job. Beyond developing broadly applicable professional skills—like customer service, professional communication, and time management—these work-based learning experiences provide opportunities for students to test and deepen the career-specific technical skills they have gained in a classroom. In order to reinforce and extend in-classroom training, experiences must be aligned to the appropriate career pathways and related curriculum and standards.

Mapping work experiences to relevant curriculum and industry standards is especially important to get right for youth apprenticeship, which explicitly combines on-the-job training and in-classroom instruction. The **German American Chamber of Commerce of the Midwest** works closely with its community college partners to ensure that instruction covers the same industry standards regardless of where its manufacturing apprenticeship program is running. While most colleges have an advanced manufacturing program, course sequencing and content vary considerably from school to school. The Chamber works with each of its partners to ensure that in-classroom instruction covers the same minimum standards the right sequence of events and offers the program's standardized, competency-based midterm and final exams.

Several intermediaries, as experts that understand both the business and educational landscapes, lead efforts to make these connections. **AJAC** and **GPS Education Partners** help employer partners identify opportunities within their companies that are suitable for rigorous work-based learning experiences: specifically, career pathways and positions that the company is trying to grow. GPS Education Partners

then maps these opportunities to related student competencies and their own training curriculum. AJAC also develops in-house curriculum, with an instructional team that includes several current and former industry professionals, and works closely with postsecondary partners to broker credit agreements for these courses.

Youth

Unlike employer engagement—which all intermediaries interviewed engaged in—the level of engagement intermediaries have with the students varies considerably based on program type and intermediary scope. Often, intermediaries that operate statewide or across multiple geographies, like **Apprenticeship Carolina** and **Adecco**, focus almost exclusively on employer and school engagement, while local and regional intermediaries like **Ivy Tech – Kokomo**, **San Antonio Works**, and **GPS Education Partners** provide deeper assistance directly to youth. In some scenarios, state level intermediaries have direct partnerships with local partners to interface with students, creating a broader network of supports. And there are examples of statewide and multi-state intermediaries that also engage in direct services for youth. For instance, after students are placed with employers, **Adecco** engages with students to support job onboarding and coaching.



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INTERVIEW AND JOB READINESS PREPARATION

A work-based learning experience may be the first professional experience for many youth—particularly those still in high school. Before they can apply the academic and technical experience they have gained in the classroom, these youth must demonstrate the professional skills needed in any job: resumé and cover letter writing, interviewing, professional dress and communication, and other rules of office etiquette. Though more and more schools are beginning to embed employability skills curriculum into career pathways and other courses, many still rely on intermediaries to provide these services.

Many of the intermediaries interviewed—especially those overseeing high school internship programs—help students navigate the application and pre-work process. Those with a web-based portal for experiences teach students to navigate the portal to find and apply for jobs and communicate with students about the status of their applications. Many host mock interview opportunities and conduct initial applicant screenings. A number of these intermediaries, including **Ivy Tech – Kokomo**, **GPS Education Partners**, and **SkillsRI**, also lead orientations or employability skills “bootcamps” prior to the beginning of the internship to prepare students for the world of work. In addition to a pre-work orientation, **San Antonio Works** provides its students access to a professional dress closet to prepare for their first day on the job.

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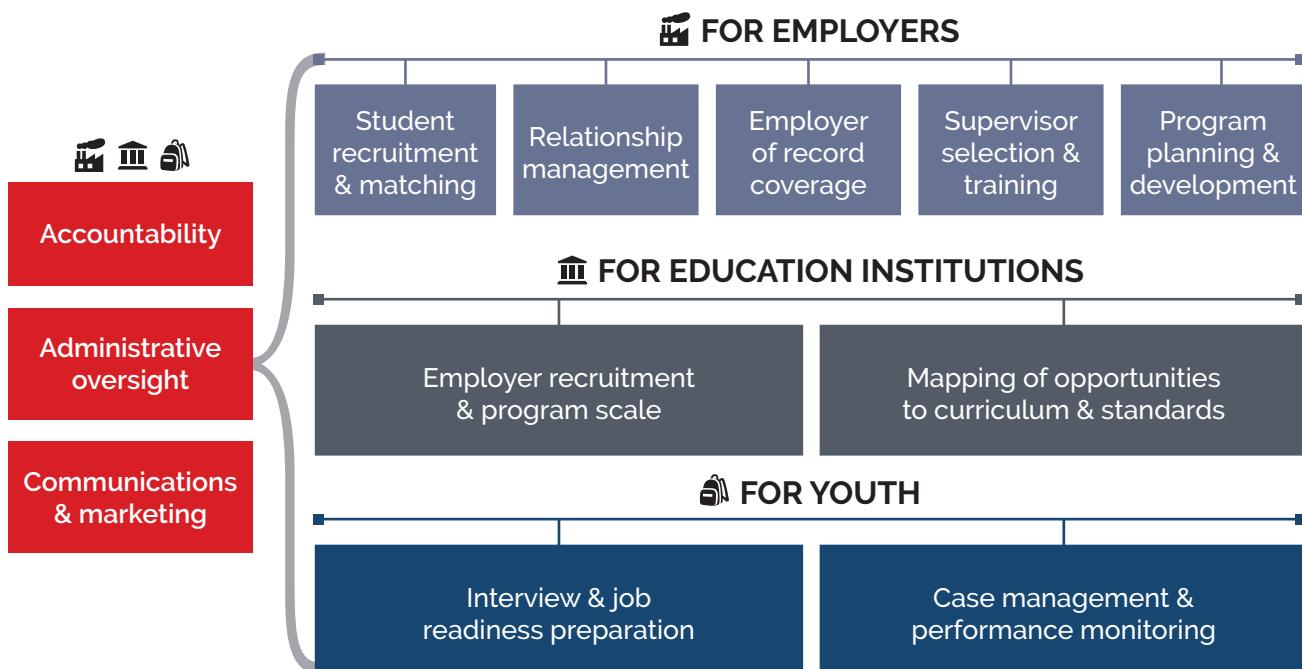
For youth apprenticeship programs, pre-requisites may be even more intensive, requiring applicants to not only have the employability skills listed above, but to also have fulfilled various academic or technical pre-requisites as well. The **GACC Midwest**’s apprenticeship program, for example, requires applicants to pass the relevant postsecondary partner’s college entrance exam in order to participate. Recognizing that these exams may be a hurdle for many to pass, the Chamber also works to provide opportunities for remediation to help those interested meet requirements.

CASE MANAGEMENT AND PERFORMANCE MONITORING

For several intermediaries, the work with youth does not stop once they have been matched with employers and placed into experiences. While some programs may rely on school-based instructors and work-based learning coordinators to oversee the daily activities and performance of youth, others provide in-house case management services and regularly conduct check-ins with students and their supervisors to track progress and assist with any challenges. This case management may include formal progress monitoring, such as **GPS Education Partners**’ standardized performance evaluations, or include related services, such as transportation assistance.

For youth apprenticeship programs, case management may be even more intensive and require the coordination of many partners. The **German American Chamber of Commerce of the Midwest**, for instance, brings together an apprentice’s on-the-job supervisor and postsecondary instructors to triage apprentice needs and identify strategies. If an apprentice is struggling with math concepts in a related postsecondary course, for example, the instructor can work with the supervisor and the Chamber to build a strategy for reinforcing academic concepts at work.

Intermediaries Provide Services Across the Work-Based Learning Spectrum



Cross-Cutting Roles and Services

Finally, in addition to a multitude of stakeholder-specific services, intermediaries also serve several important cross-cutting functions. The most prominent of these functions are accountability, administrative oversight, and communications.

ACCOUNTABILITY

While K-12 and higher education institutions often have their own accountability structures, intermediaries can play an important role in holding work-based learning partners accountable for their respective contributions and responsibilities. Many intermediaries set specific program requirements for the work-based learning experiences and are responsible for ensuring that partners adhere to those expectations. With students moving across K-12, higher education and work-based settings, the data on student participation and success can be difficult to track. The siloed nature of K-12, higher education, and workforce data systems and accountability mechanisms often means that there is no single entity responsible for monitoring progress. As a result, many youth apprentice intermediary organizations track outcomes for their own purposes, working with their partners to define what data to collect, establishing processes for sharing that information, and building dashboards to share progress.

ADMINISTRATIVE OVERSIGHT

In juggling several stakeholder groups, intermediaries frequently handle a lot of paperwork. This takes time-consuming work off the plates of employers and educators, but requires significant capacity—particularly as programs grow larger or more intensive. As this brief has already described, many intermediaries fulfill important “employer of record” functions on behalf of employers, assuming responsibility for youth payroll, background checks, liability insurance, and more. In addition to this, intermediaries may execute contracts or program plans with employers and memoranda of understanding (MOU) or data-sharing agreements with education institutions, and develop and process all student applications. This responsibility often only intensifies for youth apprenticeship intermediaries. As one youth

apprenticeship intermediary noted, much of their work could be described as “MOUs ad nauseam.” Not only do each of the previously listed documents grow more complex, but additional agreements—such as articulation agreements for postsecondary credit, credential exam licenses, and apprenticeship registration applications—must also be executed. For instance, AJAC and the GACC Midwest balance agreements with not just one, but several postsecondary institutions; Apprenticeship Carolina handles apprenticeship registration with the Department of Labor on behalf of any interested employer partner; Adecco manages the registration of occupations under their Federal Department of Labor apprenticeship standards; and Trident Technical College works with four school districts to ensure coursework articulates appropriately.

COMMUNICATIONS AND MARKETING

Simply put, intermediaries communicate with multiple stakeholders who may otherwise not connect with each other. In this capacity, they stand to more successfully communicate opportunities to the field, and often have a wider reach than any one institution. Indiana INTERNnet, for example, posts positions from employer partners that students across the entire state can view and submit an application. In rural areas, statewide and multi-state intermediaries may also fill capacity gaps and help connect students to opportunities within their region or within commuting distance.

As entities that speak the language of both employers and educators, intermediaries also have the unique ability to tailor messaging to appeal to distinct audiences. The aspects of work-based learning that appeal to employers may not be the same that incentivize students to apply or educators to embed opportunities within a program of study. Employers may be drawn to an internship program to fulfill corporate social responsibility goals, while students may desire an experience that aligns to their career goals better than a traditional summer job.

This framing becomes even more challenging for youth apprenticeship programs, which may have to overcome early comparisons to other forms of work-based learning. Youth apprenticeship may strike some employers as too intensive and time-consuming if the only benefit is to meet corporate social responsibility goals—particularly when there are similar, less demanding opportunities available. For this reason, youth apprenticeship intermediaries often frame their programs as a talent development strategy for employers, with a clear return on investment.

Multi-Industry Focus: CareerWise Colorado and Trident Technical College

CareerWise Colorado and Trident Technical College are two of the most well-known youth apprenticeship intermediaries. Given their history and scale, both focus their efforts on providing youth with opportunities across multiple industries. While this clearly provides students with more options aligned to their interests, it also presents some unique challenges. In particular, it means establishing and maintaining relationships with a greater number of employers, developing common competencies in a much broader range of occupations, and helping students understand the vast variety of pathways available to them across the industries. In general, that means a greater investment in capacity and longer time to launch youth apprenticeships for an intermediary.

In 2015, Governor John Hickenlooper created the Colorado Governor's Business and Experiential Learning Commission to develop an approach for better integrating work-based learning to meet the state's economic needs. Out of that Commission, **CareerWise Colorado** launched as an intermediary to support youth apprenticeship statewide. CareerWise Colorado currently supports youth apprenticeships in five fields: advanced manufacturing, information technology, financial services, business operations, healthcare. They are currently in the process of launching a pilot in the education field as well. The majority of their apprentices start in their junior year taking classes three days a week and working 12-16 hours. In their senior year, students take classes 2-3 days a week and work 20-24 hours. And the final year of the program has students working 32 or more hours a week. Throughout the whole program, students are encouraged and supported in taking college courses aligned with their pathways.

The organization serves as a statewide intermediary that provides technical assistance, tools, materials and coordinates regional collaborations to implement the work. It also works across sites to ensure implementation adheres to set standards, such as common career competencies, processes and platforms for hiring apprentices, optimized schedules for students and employers, and training plans. Focusing on consistency across multiple sites and industries creating significant capacity challenges for the organization when it first started.

A part of the larger Charleston Regional Youth Apprenticeship program, **Trident Technical College** (Trident Tech) offers youth apprenticeships in numerous fields, including: architecture, engineering, finance, healthcare, hospitality and tourism, information technology, and manufacturing. Across these industries, students are placed into over 100 employers.

Trident Tech had the benefit of already having pre-established relationships with many employers in the Charleston region prior to launch its youth apprenticeship programs. As a result, they were able to tailor programs to the particular industry needs of their local labor market. They relied on business advisory councils connected to their career technical education pathways to help define the classroom and on-the-job training competencies for the youth. This ensured each student is prepared to fully participate as an employee from day one across a variety of industries.

Beyond programming, Trident Tech is also responsible for employer outreach and helping spread the word in the broader community about the benefits of youth apprenticeship. They have helped secure contributions to support the program come from both local employers and the state. The Charleston Metro Chamber of Commerce provides scholarships of \$3,600 per student to cover tuition, fees, and books. South Carolina has a state tax benefit that provides a \$1,000 direct tax credit for each registered apprentice employed for at least 7 months during each year of apprenticeship — up to 4 years. This has allowed the program to scale rapidly; however, Trident Tech recognizes that growth may be limited in the future without additional investment to support students' participation in postsecondary coursework while enrolled in high school.

Challenges in Growing to Scale

As this brief has shown, intermediaries can help launch and scale work-based learning programs efficiently by coordinating several—often disconnected—stakeholders and assuming responsibility for critical pieces of the work, from employer and student recruitment to liability coverage and performance monitoring. Despite these efficiencies, even the most effective intermediaries face roadblocks in growing to scale.

Funding

Across all intermediary sizes and types of programming, funding is a common challenge identified when considering program growth. Of 12 the intermediaries interviewed, seven are funded at least in part through state budgets and state or federal grant funding. Several also rely on philanthropic dollars to cover costs. This funding is frequently used to cover intermediary staff and overhead, curriculum development, and often student wages. The PrepareRI internship program run out of SkillsRI, for instance, covers wages for the 326 interns it placed in the second year of the program (double the size from the inaugural summer in 2018) through funding from the Governor’s Workforce Board. As it works to scale to its goal of placing 500 interns at Rhode Island businesses, however, this funding strategy becomes more challenging. Growing the number of youth served may also require scaling an intermediary’s own staffing capacity. As Indiana INTERNnet noted, “As a team of four, a good part of the challenge is our own scale.”

Recruitment

Employer recruitment and investment is its own challenge to scaling, but it may also serve as a solution. Seven of the 12 intermediaries noted specific challenges in finding enough employer partners to effectively scale programs. As several of these intermediaries noted, it is only possible to serve as many youth as there are available positions—and frequently there are more interested and qualified candidates than there are opportunities. For many, the crux of the challenge is in framing the benefit employers receive by participating. While some employers may be motivated by corporate social responsibility principles to host youth, others want to see a positive return on investment for their bottom line, as well. Youth apprenticeships, as long-term and intensive commitments, are particularly suited for this framing; and indeed, many of the intermediaries interviewed market youth apprenticeship as a talent development strategy for companies, rather than as a volunteer or “good neighbor” opportunity. Several youth apprenticeship intermediaries, including Adecco, Apprenticeship Carolina, CareerWise Colorado, the GACC Midwest, and Horizon Education Alliance, bring this framing to life in requiring employers to cover the apprentice wages—and in so doing, relieve some of the funding burden they may otherwise have experienced.



Scope

Intermediaries also face unique challenges in growing and sustaining programs at scale based on their own geographic scope and program types. Intermediaries exist at a range of geographic levels: national or multi-state, statewide, regional, and local. While statewide and multi-state organizations are understandably capable of serving a broader audience, they may face challenges in maintaining relevancy while they scale. For example, as a statewide intermediary, AJAC, is able to provide a systemized apprenticeship program across a variety of urban and rural communities. This consistency in program and capacity support is especially critical in rural communities where other alternatives do not exist. The challenge, however, exists in recognizing that no two communities have the same needs and being nimble enough to tailor programming to reflect regional and local employment needs. Within an organization originally designed to provide consistency, supporting the internal capacity to respond to these diverse local needs may be an additional challenge.



Statewide and multi-state intermediaries may also find that communities have already begun tackling work-based learning independently. Both Indiana INTERNnet and SkillsRI found several local programs were already up and running when their internship programs launched. Determining how a statewide intermediary can support or enhance existing, locally-owned programs requires an extra layer of coordination and communication with community leaders to identify gaps and opportunities.

Programming

Intermediaries also face growing pains specific to the type of work-based learning program(s) they support.

Generally, as programming moves up the intensity scale (see graphic on page 1) toward apprenticeship, the more difficult it becomes to find and fill positions to serve the variety and intensity of roles. Youth apprenticeship is highly intensive and requires a significant time commitment: Employers must agree to much more demanding and longer-term supervision; and youth generally need to meet more rigorous academic, technical, and professional pre-requisites to participate. Building and sustaining high-quality programming of this degree requires significantly more effort than finding and filling a large number of site visit and job shadow opportunities, and even internships. Additionally, standing up a youth apprenticeship program in a particular field typically takes a year to 18 months. This includes time to build a coalition of champions and recruit employers, secure necessary funding, build the intermediary organization and hire staff, establish competency pathways and program maps, prepare school partners, recruit students, and launch the inaugural cohort.

For these reasons, many youth apprenticeship intermediaries may begin by focusing their efforts on fewer industries than organizations supporting other types of work-based learning. AJAC, for instance, supports youth apprenticeship in aerospace and advanced manufacturing; the **German American Chamber of Commerce** of the Midwest works solely in advanced manufacturing; **Horizon Education Alliance** is launching its CareerWise Elkhart County apprenticeship in three industries: manufacturing, IT, and project management. Expanding to cover a range of industries can be done, but it requires significant time and effort to develop industry-aligned curriculum and recruit employer champions from those networks.

Single-Industry Focus: Aerospace Joint Apprenticeship Committee and German American Chamber of Commerce of the Midwest

While some intermediaries work across multiple industries and sectors, many (and particularly those in the youth apprenticeship space) focus on providing deep, robust services within a single industry. The American Joint Apprenticeship Committee (AJAC) and German American Chamber of Commerce provide two examples of this specialization.

The **Aerospace Joint Apprenticeship Committee** (AJAC) was founded by Washington state in 2008 to provide statewide registered apprenticeships in aerospace and advanced manufacturing and create a pathway for skilled workers to access careers in one of the state's most significant industries. Currently, Washington is home to over 1300 aerospace companies and employs more than 130,000 aerospace workers. With technological advancements and an aging workforce, the state anticipates that it will need over 7,000 new workers to meet demand over the next five years.⁸ To expand its reach and meet workforce needs, AJAC established a youth apprenticeship program three years ago to connect with potential workers before they leave high school.

While most of the traditional registered apprenticeships AJAC offers require four years and 8,000 hours of training, youth apprenticeships last one and a half to two years and cover about 2,000 hours of training. Throughout the program, students are dually enrolled, earning credit for three of the 12 courses required in the full registered apprenticeship program. Upon successful completion of the youth apprenticeship program, students receive a journeyman's license to become either a production or automation technician and may even be eligible to continue training. With total fidelity of course and hours transfer between the youth apprenticeship and registered apprenticeship, students that are hired by one of AJAC's employer partners can apply their youth apprenticeship training to get a head start in the registered apprenticeship program.

The **German American Chamber of Commerce of the Midwest** (GACC Midwest) also operates apprenticeship programs in the advanced manufacturing industry. Unlike other chambers of commerce, GACC is a trade commission with a worldwide network of 140 offices in 92 countries, working to support German companies in foreign markets. GACC Midwest established the Industry Consortium for Advanced Technical Training (ICATT) in 2015 after several of its American-based member companies expressed a desire to apply the German workforce development model to addressing their skills gap and pipeline challenges. The model has quickly gained traction in the industry; and today, approximately two-thirds of the 66 participating companies are American companies.

While ICATT is active in five states (Illinois, Indiana, Missouri, Kansas, and Wisconsin), GACC ensures a degree of consistency in its programming through its strong alignment to worldwide industry standards. Unlike other intermediaries, this alignment to industry standards extends into the postsecondary component of the apprenticeship program, down to the midterm and final exams. Across each program market, GACC coordinates with partnering college to ensure that the same minimum required standards are implemented in every degree program. This includes course sequencing—while nearly every community college offers an advanced manufacturing program, the content varies from school to school—as well as GACC-developed comprehensive exams. These exams are based on industry standards and serve as a quality control for the ICATT program. All ICATT apprentices, regardless of company or location, are tested against program-wide standards in exams that include both theoretical (knowledge-based) and practical (skills-based) components.

So You Want to Build a Youth Apprenticeship Intermediary ...

The time is ripe for apprenticeship programs: College tuition costs and student loans are rising to unprecedented levels; and continued technological advancement is rapidly changing the nature of work in every industry. In this new landscape, students need a variety of high-quality options to prepare for the rigor and pace of professional work and connect to meaningful employment. American policymakers and employers alike are lauding the success of European apprenticeship models to connect youth to high-quality jobs and meet workforce demand, and are eager to reap similar benefits through modernized apprenticeship programs in the United States.



As evidenced from ESG's interviews with intermediaries across the work-based learning landscape, running a youth apprenticeship program requires the same key actors and many of the same services required for other forms of high-quality work-based learning. Despite this, however, it was uncommon to speak with an intermediary that had built out *both* youth apprenticeship and lighter-touch programming (internships, co-ops, site visits, etc.). More frequently, youth apprenticeship was found in intermediaries already running traditional registered apprenticeship programs, or in intermediaries solely dedicated to launching a youth apprenticeship model.

In part, this is likely because youth apprenticeship is still a nascent model within the work-based learning spectrum; but more than that, a high-quality apprenticeship model is uniquely different from other models of youth-centered work-based learning in the intensity of and depth of its program components. Running a youth apprenticeship requires much deeper content expertise than coordinating site visits or even running a summer internship program. This has important implications for intermediary staff, who must be able to communicate effectively with employers about industry-specific standards and the knowledge, skills, and abilities they seek in potential youth apprentices.

Youth apprenticeship also requires a much tighter and more purposeful connection to postsecondary education than other work-based learning models. In fact, few other work-based learning models have any direct engagement with higher education institutions or result in postsecondary credit earned while still in high school. Unlike other models—which are frequently discrete, point-in-time opportunities—youth apprenticeship is designed to carry a student through the transition from high school to postsecondary and the workforce. As defined by PAYA, a high-quality youth apprenticeship must be portable in that it includes postsecondary credentials and credit opportunities that help a student continue career advancement and training (see sidebar on page 3).

Building a youth apprenticeship intermediary requires significant capacity to ensure that both of these elements—industry-specific standards and skills alignment and a relevant, embedded postsecondary connection—are designed and implemented with fidelity. To achieve this, there are several best practices from the field, which leaders interested in launching a youth apprenticeship intermediary should consider:

- **Start small.** A program does not need to encompass several industries, or even several employers, in its first few years to be successful. Pilot the program on a small scale to test your model and build a proof point. Starting small allows for early detection of any shortcomings in the program model, and enables leaders to make any necessary adjustments *before* those kinks become ingrained in a scaled program. Demonstrating that the intermediary can develop deep content expertise in a field and implement a well-functioning program model for partners will be a much more effective marketing strategy in the long-run than starting with shallow expertise in many fields.
- **Be thoughtful about geographic scale.** Will your intermediary serve an entire state, or even many states? Where does it make the most sense to begin the work? Just as a new youth apprenticeship intermediary should think small about the number of industries and employers it initially serves, it should also think small about *where* it pilots its model. Ideally, a statewide intermediary would pilot its program in one location, or two if they are somewhat similar to each other. Extending beyond that, or piloting the program in significantly diverse locations, requires capacity and resources that a new intermediary is unlikely to have at the outset.
- **Establish partners and identify champions.** It's not possible to act as an intermediary between K-12 schools, higher education institutions and employers without strong partners in each. It often takes years to build the appropriate relationships and trust for organizations to establish themselves as a credible partner to create or support youth apprenticeship programs. Often, youth apprenticeship intermediaries emerge from businesses or industry groups, rather than as an outgrowth of K-12 or higher education partnerships. It is also critical that any new intermediary build external champions both for the role that the organization can play and the importance of youth apprenticeship programs as a high-quality option for students.
- **Identify sustainable funding.** Are there local, state, or national philanthropic dollars that your intermediary can secure to provide seed money? Particularly in the beginning, employer partners may be hesitant to contribute their own funding until they are able to see a clear return on investment for their participation. Philanthropic dollars and grant funding can provide this initial coverage, or supplement other funding streams, like funding from state or local budgets—but have a plan for when those grants have run its course. In youth apprenticeship, the most sustainable funding will come from employer sponsorship. Develop a communications strategy that clearly frames youth apprenticeship as a talent development strategy and demonstrates a return on investment to support this funding model; and be open with employers about long-term expectations.
- **Be flexible.** One of the clearest benefits to building an intermediary is consistency in programming at scale; but even though consistency is the goal, it is important to remember that no two employers and no two industries are alike. Determine the core principles of your program that cannot be compromised, and identify elements that can be tailored to specific employer or industry needs.
- **Consider industry limitations.** Many industries have strict safety standards and age restrictions. For instance, many healthcare employers do not allow employees under 18 to interact with patients or have access to patient information. Consider the quality of programming that can be implemented if such restrictions are in place. Is this a valuable opportunity for students? Are there some industries that would be open to taking young apprentices but for their liability? Does your intermediary have the ability to serve as employer of record and assume that liability coverage for minor apprentices?



- **Don't forget your own infrastructure.** Is your intermediary maintaining an online “marketplace” for employers and potential apprentices to connect? If so, what technologies (and technical expertise) do you need? How will the intermediary collect data to monitor program quality, and what metrics will be monitored? What tools are needed to support a reporting structure and marketing collateral? Having these resources and routines in place early on will enable your intermediary to scale in a faster, higher-quality way than waiting to build these internal components further down the road.
- **Build capacity for success.** Just because there is a match between student interest and employer need does not mean that a youth apprenticeship experience will be successful for either participant. It is critical that both participants have the preparation and capacity necessary for success. Intermediaries are advised to map out a training plan for both sides prior to launching any apprenticeship opportunities—and to update and expand upon that plan as new employers and school districts come on board. What training are you going to offer to supervisors of youth apprentices about identifying appropriate tasks and delivering relevant feedback? What advice can you offer to local school districts about the best way to arrange their master schedule to accommodate youth apprenticeships? What mentoring or training will be available for students entering the workforce for the first time about appropriate norms?



Conclusion

Work-based learning enables students to apply classroom training to solve real-world problems and develop professional skills before stepping foot into their first full-time position. In today's highly technical and ever-changing economy, these early experiences are invaluable for ensuring that employers have access to a sufficiently large and well-prepared workforce and that youth have access to competitive, well-paying careers. Youth apprenticeship offers a promising model for delivering intensive, industry-specific training and work experience beginning in high school. Unlike other models, a high-quality youth apprenticeship extends beyond career exposure into actual talent development, pairing progressive and intensive work experience with related classroom instruction that extends from secondary into postsecondary education.

Across the work-based learning spectrum, intermediaries provide needed capacity and services to manage and scale programs to encompass more opportunities that are accessible to more youth. Many of these services—such as employer recruitment and relationship management or program planning and oversight—are integral to any work-based learning model, though the specific parameters of these services may look very different depending on the type of program(s) the intermediary is implementing. Youth

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apprenticeship, for instance, requires a much deeper understanding of industry needs to successfully recruit employers than an internship model does. Other services, like aligning and articulating work experiences to secondary and postsecondary education, are wholly unique to youth apprenticeship. Both of these nuances require youth apprenticeship intermediaries to build additional, deeper content expertise and establish a more intentional (and potentially slower) scaling strategy—but the time is ripe for leaders to tackle this challenge.



Endnotes

- 1 <https://www.dol.gov/apprenticeship/toolkit/toolkitfaq.htm>
- 2 https://www.philadelphiafed.org/community-development/publications/cascade/90/01_apprenticeships
- 3 https://www.doleta.gov/oa/data_statistics.cfm
- 4 Youth apprenticeship, as a still-emerging subset of work-based learning in the United States, lacks a consistent definition and model across intermediaries. Though 8 of the 12 intermediaries ESG interviewed currently offer youth apprenticeship, each program varies in terms of program length, apprentice eligibility requirements (particularly age), and amount of embedded postsecondary credit.
- 5 <https://na-production.s3.amazonaws.com/documents/Youth-Apprenticeship-Today.pdf>
- 6 <https://www.newamerica.org/education-policy/edcentral/youth-apprenticeship-definition-and-guiding-principles/>
- 7 <https://na-production.s3.amazonaws.com/documents/Youth-Apprenticeship-Today.pdf>
- 8 <https://www.ajaxtraining.org/about/>



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The Partnership to Advance Youth Apprenticeship (PAYA) is a multi-year, collaborative initiative that will support the success of efforts in states and cities to expand access to high-quality apprenticeship opportunities for high school age youth. Expanding youth apprenticeship is a strategy for building a more inclusive economy by connecting the learning needs of students with the talent needs of industry. PAYA national partners include: New America, Advance CTE, Charleston Youth Apprenticeships at Trident Technical College, Education Strategy Group, JFF, the National Alliance for Partnerships in Equity, the National Fund for Workforce Solutions, and National Governors Association. For more information, visit: <https://www.newamerica.org/education-policy/partnership-advance-youth-apprenticeship/>.