ADVANCE ▶▶ CTE
State Leaders Connecting Learning to Work

IMPROVING YOUTH APPRENTICESHIP DATA QUALITY:
Challenges and Opportunities

Youth apprenticeship is gaining widespread support and momentum, with growing interest from learners and employers and increasing investment of public and philanthropic dollars. As the United States experiences one of the worst economic crises in modern history, youth apprenticeship is a critical strategy to help young people — who have been disproportionately affected by unemployment and underemployment during the COVID-19 (coronavirus) pandemic — gain meaningful work experiences, earn valuable postsecondary credentials, and access pathways to careers that pay a family-sustaining wage.[1]

Youth apprenticeship is an emerging strategy to bridge the world of education and work by pairing high school-aged youth with employers and aligning learning in the classroom and on the job. High-quality youth apprenticeship experiences require partnerships across K-12 education, postsecondary education and employers and build on the framework for Registered Apprenticeship programs: They offer paid, on-the-job learning with mentorship from industry experts; are aligned with related classroom-based learning; include ongoing assessments against skills standards; and culminate in a portable, industry-recognized credential.

Early research on youth apprenticeships is limited but promising. According to the Brookings Institution, work-based learning experiences in high school that incorporate positive relationships with adults — such as internships and apprenticeships — are related to better wages, benefits, weekly hours and job satisfaction as much as a decade later.[2] What's more, the workforce is ripe for the expansion

of youth apprenticeships, particularly in fields such as health care, information technology or public administration that have not traditionally offered such opportunities. **Burning Glass estimates that the number of occupations commonly filled through apprenticeships could be tripled — from 27 to 74 — which would allow for roughly 3.3 million apprenticeship opportunities in the United States.**[3] Expanding youth apprenticeship not only gives learners a leg up on their future careers but also helps employers close critical skills gaps and build a stronger talent pool.

Opportunity to Expand Apprenticeship to New Occupations

● Occupations **currently** filled through apprenticeship

● Occupations that **could** be filled through apprenticeship

74

27

The youth apprenticeship field, however, is still nascent, and many states and local intermediaries — the organizations and associations responsible for coordinating youth apprenticeship opportunities at the local level — are just building the infrastructure to deliver high-quality, equitable experiences at scale. One of the biggest challenges that states and local intermediaries face in setting up and scaling high-quality youth apprenticeships is gathering relevant, accurate and actionable data. High-quality data is an essential ingredient for a strong youth apprenticeship program because it equips state and local leaders to evaluate impact, monitor equity, identify best practices, and make the case for youth apprenticeships to employers and learners.

In 2020, the Partnership to Advance Youth Apprenticeship (PAYA) — a coalition of national, state and philanthropic partners working to expand high-quality youth apprenticeship — convened a workgroup, led and facilitated by Advance CTE, to explore common data challenges and opportunities for the youth apprenticeship field. The workgroup included representatives from state apprenticeship agencies and local intermediaries, each at different levels of implementation.

This report summarizes the workgroup's discussions and outlines the challenges and opportunities the workgroup identified. It addresses the most urgent youth apprenticeship data quality challenges and describes the roles that state leaders, local intermediaries, and education and employer partners can play in improving the quality and use of data. It also identifies high-impact strategies for using youth apprenticeship data to advance quality and equity and provides next steps for the field.

ACCORDING TO THE BROOKINGS INSTITUTION:

Work-based learning experiences in high school that incorporate positive relationships with adults — such as internships and apprenticeships — are related to better wages, benefits, weekly hours and job satisfaction as much as a decade later.[2]

PAYA Principles FOR YOUTH APPRENTICESHIP

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 affected by long-standing inequities in our education system and labor market.
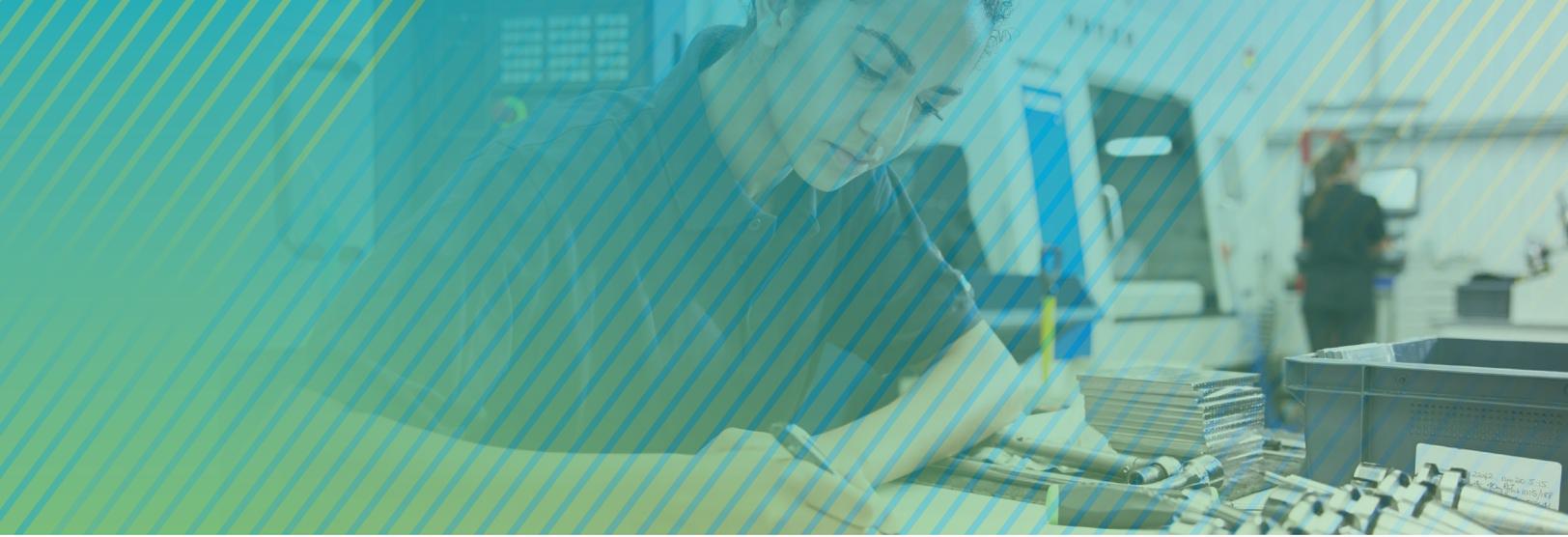
PORTABLE
Learning leads to postsecondary credentials and transferable college credit that expand options for students.

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.

PAYA
PARTNERSHIP TO ADVANCE YOUTH APPRENTICESHIP

YOUTH APPRENTICESHIP Data Quality Challenges

Developing a plan for capturing, analyzing and leveraging data should be one of the first steps when setting up a new youth apprenticeship program. Creating a data plan may not seem like the most important priority at first, but getting the infrastructure right at the beginning is foundational for state and local leaders to be able to continuously improve and effectively scale programs in the future.

Each stage of program development and implementation, from launching early piloting efforts to achieving sustainability and scale, presents different needs, expectations and challenges for youth apprenticeship data. Figure 1 below outlines the most common challenges identified by the PAYA data workgroup. All partners have an important role to play in addressing each of these challenges and establishing effective data processes.

Figure 1: Common Youth Apprenticeship Data Quality Challenges

Determining What to Measure → Clarifying Roles and Responsibilities → Building the Infrastructure → Accessing Data → Scaling and Sustaining

Determining What to Measure

The first challenge is determining what to measure. Workgroup participants — those starting new programs in particular — expressed an intention to build thoughtful data processes in the early design stage but found themselves confused about what data to collect. Much of this confusion stems from a lack of clarity about who is responsible for establishing definitions and protocols for collecting youth apprenticeship data. Some states have taken the guesswork out of the process by establishing statewide definitions and business rules for collecting this data, but oftentimes intermediaries and locally developed programs are left to their own devices, leading to inconsistencies in how youth apprenticeship data is collected across and even within states. In fact, as of 2018, just 20 states reported that they had established a statewide definition of youth apprenticeship.[4]

Establishing definitions and business rules for collecting youth apprenticeship data ensures that state leaders can access consistent, comprehensive and comparable data across all youth apprenticeship programs, allowing them to understand the scale, reach and impact of youth apprenticeship and make targeted investments of taxpayer dollars. Definitions should be consistent enough to allow for comparability across programs but still provide the flexibility needed to account for different models of youth apprenticeship, including differences in structure, delivery, hours and assessments.

While many states already have the infrastructure and processes in place to collect Registered Apprenticeship program data, states should be cautious about defaulting to this system for collecting youth apprenticeship data. The federal Registered Apprenticeship Partners Information Data System (RAPIDS) pulls together learner-level data from 25 federally administered and nine state-administered Registered Apprenticeship systems.[5] This information is reported directly from sponsors, including employers, meaning that state agencies often cannot retrieve learner-

Considerations for Local
DATA COLLECTION AND REPORTING

- **What data are you required to report (for accountability or funder reports)?**

- **Does the state have an existing youth apprenticeship definition and/or business rules?**

- **What do your key stakeholders most want or need to know?**

- **What information do you need so that you know whether the program has been successful?**

- **How will you know if you are recruiting and supporting learners equitably?**

level data on apprenticeship participation. While some — though not all — youth apprenticeship programs are registered, and thus included in the RAPIDS database, there is no mechanism to differentiate information about registered youth apprenticeship participants from traditional Registered Apprenticeship participants.

At the local level, intermediaries should build data collection processes that help them access the information they need not only for state or federal accountability but also for their own program monitoring and evaluation. Data collection should attend to the needs of various stakeholders, including learners, families, employers and instructors. Information such as participant satisfaction, credential attainment, outcomes of skills assessments, etc. can help improve program quality and better support learners and employer partners.
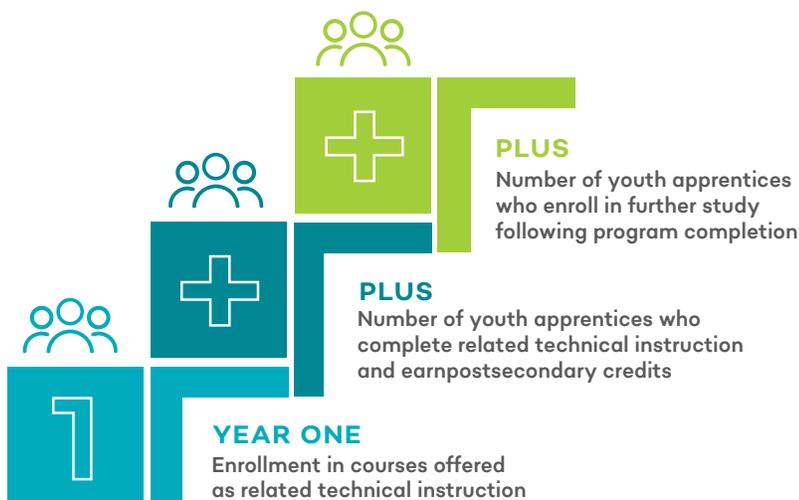
Determining What to Measure

At the local level, intermediaries should build data collection processes that help them access the information they need not only for state or federal accountability but also for their own program monitoring and evaluation. Data collection should attend to the needs of various stakeholders, including learners, families, employers and instructors. Information such as participant satisfaction, credential attainment, outcomes of skills assessments, etc. can help improve program quality and better support learners and employer partners.

For example, **CareerWise New York**, a youth apprenticeship program based in New York City, collects information through year-end surveys to get a better understanding of how it can improve the quality of its services. It administers these surveys to learners, school staff and employers to monitor changes in perceptions and attitudes toward youth apprenticeships. This information helps CareerWise New York evaluate its impact in the community and identify areas in which greater stakeholder engagement may be necessary.

However, there is a give and take between the utility of the data and the burden of data collection. Newly established youth apprenticeship intermediaries should prioritize the most important indicators that are needed for accountability and reporting purposes and build a plan to expand data collection in the future. A scaffolded approach — one that lays a foundation with high-priority, easy-to-collect indicators and builds in complexity over years — can give intermediaries a foothold on a robust data collection strategy *(see Figure 2)*. Over time, intermediaries can increase the sophistication of their indicators and expand their data collection to include new, relevant indicators that might be harder to measure at the outset.

Figure 2: A Scaffolded Approach to Youth Apprenticeship Data Collection

PLUS
Number of youth apprentices who enroll in further study following program completion

PLUS
Number of youth apprentices who complete related technical instruction and earnpostsecondary credits

YEAR ONE
Enrollment in courses offered as related technical instruction

EXAMPLE: Measuring progress toward a recognized postsecondary credential.

Clarifying Roles and Responsibilities

Another significant challenge with collecting youth apprenticeship data is clarifying who is collecting what data. Because youth apprenticeship involves partnerships across the K-12, postsecondary and workforce systems — with state agencies, intermediary organizations and employers in the mix — clarifying roles and responsibilities for collecting and sharing data early on is important.

Often, individual partners have only one piece of the puzzle; these discrete puzzle pieces must be brought together to illuminate the full picture of youth apprenticeship participation and success.

For local-level partnerships, roles and responsibilities for data collection should be outlined in the initial partnership agreement. These details will help clarify what information is available, how it will be collected and who is accountable for collecting it, as well as chart out a roadmap for future data collection. Intermediaries can serve as the quarterback in this process, identifying the data needs and delegating responsibilities to partners. From there, partners will need to establish a data sharing agreement to formally outline the processes for data sharing and set parameters for how the data will be used.

This same process should be replicated for data sharing between local and state entities to minimize duplication of effort. Is information on demographics, educational attainment or workforce outcomes already available through the state longitudinal data system or other databases?

Is this information accessible to local intermediaries? If so, local intermediaries can try to partner with state offices to get access to the information they need to evaluate learner success and the impact of their programs. Likewise, state agencies can rely on local intermediaries to gather and report data on youth apprenticeship participation to ensure that the information is accurately counted for state accountability.

Many of the workgroup participants emphasized the importance of prioritizing requests for partners, particularly employers. High-capacity employers with well-established youth apprenticeship models may have more time and resources to offer ongoing skills assessments and report updates to intermediaries and education partners. However, smaller employers or newer partners may be reluctant to take on the extra burden of data collection. Intermediaries should be prepared to scaffold asks for employer partners and prioritize the most critical data elements (e.g., daily attendance).

Throughout this process, establishing the purpose behind the data collection and communicating to all partners why the data is important and how it will be used are critical steps. Is the data being collected for accountability purposes? To evaluate program impact? To make recruitment more equitable? Communicating the "why" will help build buy-in from partners and provide leverage when it comes time for data collection.

Sample Roles FOR DATA COLLECTION

SCHOOL DISTRICT:
Student demographics, course enrollment, academic performance

EMPLOYER:
Hours of on-the-job training completed, skills assessments, work product portfolio

COMMUNITY COLLEGE:
Transcripted postsecondary credits

INTERMEDIARY:
Youth apprenticeship enrollment and completion, satisfaction surveys

STATE AGENCY:
Post-program employment outcomes

PARTNERSHIP AGREEMENT:
Describes the roles and responsibilities of each partner. Should include specific data collection responsibilities.

DATA SHARING AGREEMENT:
Establishes processes for collecting and transferring records and sets protocols to ensure data security and learner privacy.

CHALLENGE 3: Building the Infrastructure

Workgroup participants also described challenges related to building out the infrastructure for collecting youth apprenticeship data — including the processes for data collection as well as the platforms and technology for capturing and warehousing data. While building out an entire data system before launching a new youth apprenticeship program might not be feasible, state and local leaders should establish systems and processes that can be scaled easily.

One approach is to use existing data systems — such as district and college student information systems — to track youth apprenticeship participant data. Using designated course codes for internships and youth apprenticeships can make this integration even more seamless. At the state level, state leaders should adopt new fields for youth apprenticeship participation and success into their existing longitudinal data systems. These fields should be separate from any existing data collection for Registered Apprenticeships to allow analysts to differentiate between them.

A number of customer relationship management platforms also are available that can easily support collecting and warehousing data as well as managing relationships with employers and monitoring applications from learners. The **Aerospace Joint Apprenticeship Committee** in Washington State, for example, uses Salesforce to manage information for applicants and to support recruitment. Many of these platforms offer non-profit or education discounts.

Intermediaries can also take advantage of technology to minimize the data collection burden on partners. In South Carolina, **Trident Technical College** partnered with Stingray Branding to develop an app called My Apprentice.[8] The app uses geofencing to automatically monitor on-the-job training hours for youth apprenticeship participants. The data is still validated by employers and supervisors, but the program reduces all of the up-front data entry, making it easier for learners and employers to focus on the training

YOUTH APPRENTICESHIP in State and Federal Accountability

Many states have already established routines for collecting youth apprenticeship data for the purposes of state and federal accountability. As of 2019, 12 states were counting work-based learning participation in their high school report cards.[6] And 27 states are counting work-based learning as at least one of their secondary Career Technical Education (CTE) program quality indicators through the Strengthening Career and Technical Education for the 21st Century Act (Perkins V).[7] **Kentucky** is even counting learners who earn a youth apprenticeship completion certification in its credential attainment goal.

Intermediaries should consider whether a system for collecting and reporting youth apprenticeship data already exists in their state to make sure that they are not duplicating efforts and that their program participants are counted in statewide reporting and goal setting.

itself. In addition to monitoring hours completed on the job, the app can track job-related education and tasks required to be completed on the job for the apprenticeship. It even includes a final competency assessment tool to make collecting and monitoring data about apprenticeship participants as easy as possible for employers.

Whatever the approach, intermediaries should be sure to collect youth apprenticeship data in a way that is comparable and manageable by formatting data elements consistently and using machine-readable documents such as Excel spreadsheets instead of PDF or Word files.

Having access to contextual information about learners — such as their academic history or post-program outcomes — can help intermediaries evaluate the impact of their programs, provide more targeted services, and generally strengthen the quality of their programs. Yet federal and state student privacy laws, while designed to protect learners' personal information, can make getting learner-level information about program participants difficult for intermediaries.

Additionally, some employers report youth apprenticeship data through the national RAPIDS database, which makes accessing this information challenging for intermediaries once it has been reported. States that use RAPIDS for youth apprenticeship reporting need a mechanism to capture information before it is reported to make sure it is accessible to the state and to intermediaries.

To ensure that all relevant partners can access the data they need, intermediary organizations should establish data sharing agreements with all partners at the design stage.

Data sharing agreements specify what information will be shared and in what format. Such agreements also outline the process and frequency for sharing this information, ensuring that intermediaries know when to expect the data.

State leaders can facilitate this process by clarifying legal rules for learner privacy and data sharing and by providing templates for data sharing agreements. **The Colorado Department of Education**, for example, has a clear and user-friendly web page dedicated to explaining state and federal data privacy legislation for stakeholders.[9] Demystifying legal requirements is particularly important in states with strict privacy laws. Additionally, the state itself will likely have access to certain data elements that are not available locally. For example, the state might be able to measure post-program placement outcomes such as postsecondary credential attainment, employment, wages and other outcomes using a longitudinal data system. Intermediary organizations should work with state leaders to clarify when and how this information will be made available to youth apprenticeship partners.

FOR EXAMPLE:

The Colorado Department of Education has a clear and user-friendly web page dedicated to explaining state and federal data privacy legislation for stakeholders.[9]
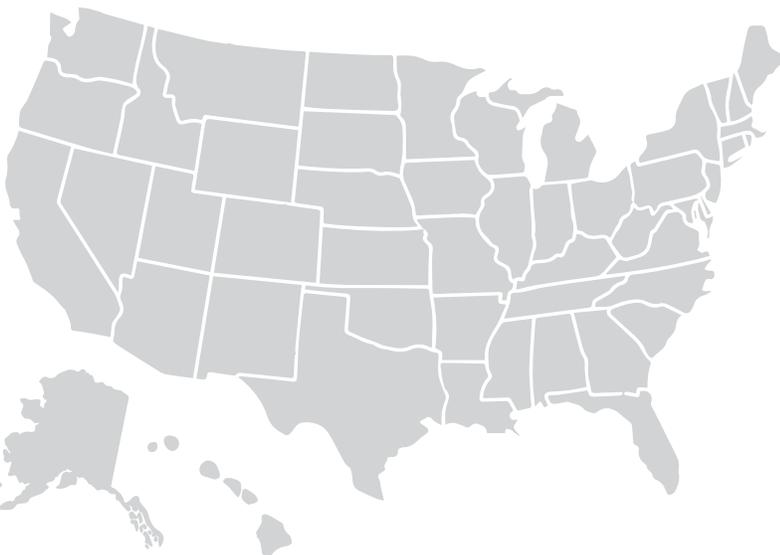
Scaling and Sustaining

Finally, the workgroup elevated challenges with bringing data collection processes to scale as youth apprenticeship programs expand statewide. The data systems and processes established locally when programs have 10 or even 100 participants may not hold up under the pressure of statewide reach.

State leaders play an important role in supporting the sustainability and scale of youth apprenticeship programs. They can help build the infrastructure for collecting and warehousing data by streamlining data collection processes, integrating youth apprenticeship data elements into existing state education databases, and providing a sustainable funding stream to support the collection and maintenance of youth apprenticeship data. This support can help minimize duplication of effort and reduce fixed costs for new programs, helping achieve economies of scale for youth apprenticeship.

Further, states can provide training and professional development for frontline actors — including school-based practitioners, employers and intermediary staff — to understand best practices for collecting and maintaining youth apprenticeship data. As youth apprenticeship expands, this training can help ensure consistency and sustainability across multiple providers and through personnel transitions.

Building scalable processes and infrastructure for collecting and reporting youth apprenticeship data can also bring about systems alignment, ensuring that youth apprenticeship is effectively integrated into traditional K-12 and postsecondary education.

STATE LEADERS

play an important role in supporting the sustainability and scale of youth apprenticeship programs.

LESSONS FROM THE FIELD:
High-Impact Strategies for Using Youth Apprenticeship Data

In addition to discussing common challenges, the PAYA workgroup examined high-impact strategies for using youth apprenticeship data. To avoid the paradox of being "data rich but information poor," states and local intermediaries should use their data thoughtfully and proactively to spur action. After all, data is useful only if it is used. The following section includes examples and lessons learned from some of the PAYA data workgroup participants.

EVALUATING PROGRAM IMPACT

High-quality youth apprenticeship data can help states and intermediaries evaluate the impact of youth apprenticeship programs, in terms of both learner outcomes and return on investment for employers. Program administrators can partner with researchers, some of whom may be located in nearby universities, to build a rigorous evaluation design, gather relevant data, and discern any measurable outcomes for participating learners. If a rigorous research design is out of reach, intermediaries can still look at descriptive data for program participants to see how their employment and postsecondary outcomes compare to peer learners.

To build a case for continued employer engagement, states and intermediary organizations can also conduct a return on investment analysis to quantify the impact of every dollar of taxpayer or employer investment. In South Carolina, for example, **Apprenticeship Carolina**, which coordinates youth apprenticeship opportunities across the state, partnered with the University of South Carolina and found that for every $1 contributed to support apprenticeship opportunities, employers see a gain of $1.26 over five years and $2.15 over seven years.[10] While the study was focused on Registered Apprenticeships, another return on investment study specific to youth apprenticeships is forthcoming.

Figure 3: Return on Investment for South Carolina Apprenticeship Programs

$1.26
YEAR FIVE ROI

$2.15
YEAR SEVEN ROI

NET BENEFIT INCREASES IN SUBSEQUENT YEARS

In South Carolina, for example, Apprenticeship Carolina, which coordinates youth apprenticeship opportunities across the state, partnered with the University of South Carolina and found that for every $1 contributed to support apprenticeship opportunities, employers see a gain of $1.26 over five years and $2.15 over seven years.

MONITORING EQUITY

Another important use of youth apprenticeship data is disaggregating data by population to identify discrepancies in access to and success in high-quality youth apprenticeship programs. State and local education agencies are already required to disaggregate educational data by major racial and ethnic subgroups, gender, socioeconomic status, disability and other populations through the Every Student Succeeds Act (ESSA) and Perkins V. By extension, states that are counting work-based learning activities as one of their accountability indicators for either ESSA or Perkins will need to disaggregate their data by the same subgroups (although states are not required to differentiate youth apprenticeship from other forms of work-based learning). Even those states that are not including youth apprenticeship in their accountability system should still look at subgroup data to identify and address inequities.

Examining disaggregated data can help intermediaries target services and supports to under-represented populations. In Seattle, WA, the **King County Regional Youth Apprenticeship Consortium** disaggregates data by race, education level and geography to identify gaps in the recruitment of youth apprentices. It then uses this data to target outreach to under-represented learner populations. While this information is primarily used for internal planning, the consortium aims to release a public-facing dashboard in the future.

National Alliance for Partnerships in Equity's Program Improvement Process for Equity (PIPE)

STEP 1: ORGANIZE
Who can best help uncover the circumstances leading to under-representation in our youth apprenticeship program?

STEP 2: EXPLORE
What data is presently available about our youth apprenticeship program? Does the data carry multiple layers of identity (e.g., gender, race/ethnicity, ability, income, etc.)? Does it include information about the participation, retention and completion of individuals in youth apprenticeship programs?

STEP 3: DISCOVER
What research is available that identifies the barriers students face in youth apprenticeship programs and in education in general? How can the key stakeholders being negatively affected by our program be interviewed to gather their experiences?

STEP 4: SELECT
How would our current local reality influence the feasibility of any strategies being proposed as part of this process? Where can we identify evidence- and research-based strategies aligned with the root causes that our action research has uncovered?

STEP 5: ACT
How will we know if our actions led to the outcome data we collected? How can we use PIPE as an iterative process for continuous improvement?

INFORMING EXPANSION EFFORTS

At the state level, youth apprenticeship data can help state leaders and employers identify targeted strategies for youth apprenticeship expansion. Looking at participation patterns across industries and regions can illuminate areas that are ripe for youth apprenticeship partnerships.

In South Carolina, **Apprenticeship Carolina** gathers data across multiple sources to see the number of companies that have active youth apprentices, where those apprentices are, and what sectors they are in. This data is fed into a dashboard on youth apprenticeship, which is updated once a week. Reports are sent every quarter to apprenticeship peer group members (including one person from every college) to consider expansion into new areas or sectors.

> Apprenticeship Carolina gathers data across multiple sources to see the number of companies that have active youth apprentices, where those apprentices are, and what sectors they are in.

TELLING THE YOUTH APPRENTICESHIP STORY

Another important use of youth apprenticeship data is building a narrative around the program impact. States and intermediaries can draw on their data — including any information they have previously gathered through program impact and return on investment evaluations — to reinforce their messaging about youth apprenticeship and recruit new employers and learners. These efforts should be coordinated with any other ongoing communications efforts in the state related to apprenticeship, career readiness or CTE.

To craft an impactful message, it is important to consider different target audiences and what they might want or need to know. Then states and/or intermediaries can identify different tools and vehicles for communicating the data — such as reports, infographics, social media advertisements or radio interviews — to get information to key audiences.

Figure 4: Key Youth Apprenticeship Audiences

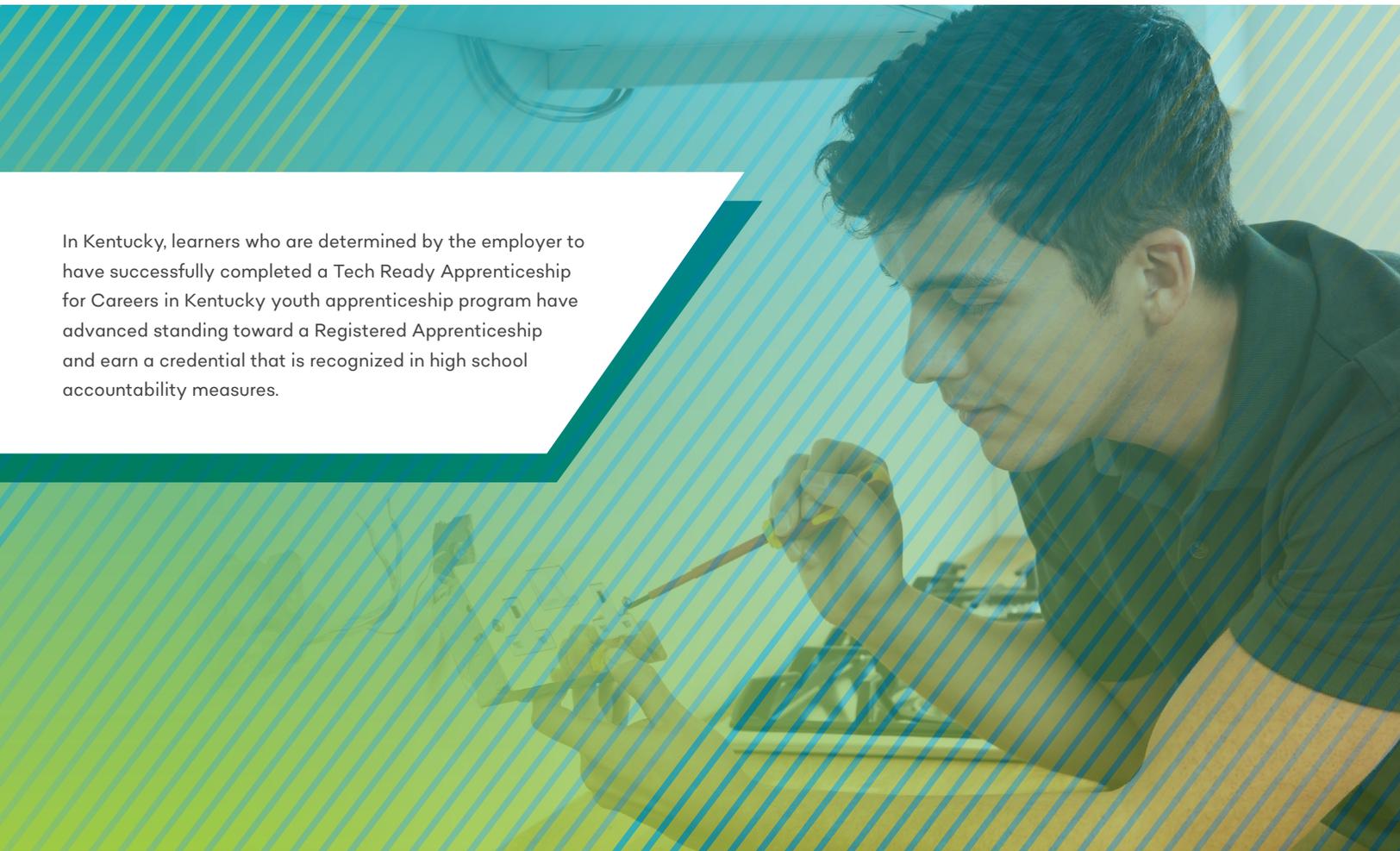| AUDIENCE	RELEVANT INFORMATION
EMPLOYERS	• Participation in youth apprenticeships by sector • Employer return on investment
LEARNERS AND FAMILIES/CAREGIVERS	• Outcomes for similar learners (postsecondary credits earned, postsecondary credential attainment, employment) • Expected wages and job prospects for related occupations
SCHOOL PRACTITIONERS	• How youth apprenticeship can support learners' academic and career goals
POLICYMAKERS	• The impact of youth apprenticeship on learner outcomes • Return on investment for taxpayers • What is or is not working with program design

RECOGNIZING LEARNER COMPETENCIES

Finally, states and intermediaries can leverage youth apprenticeship data to recognize learner competencies and facilitate transitions in and out of postsecondary education. The promise of youth apprenticeship is that it integrates classroom-based and work-based learning to expand pathways to careers and postsecondary education. But systems should be in place to recognize competencies developed on the job and allow learners to articulate credit toward a postsecondary credential.

As youth apprenticeship becomes a more widely accepted pathway, states and institutions are adopting policies to recognize prior learning through on-the-job training. In

Kentucky, learners who are determined by the employer to have successfully completed a Tech Ready Apprenticeship for Careers in Kentucky youth apprenticeship program have advanced standing toward a Registered Apprenticeship and earn a credential that is recognized in high school accountability measures.[11]

States can help facilitate this transfer by enacting a statewide credit for prior learning policy. They can also work to integrate youth apprenticeship data into student information systems to ensure that learners' experiences are recognized on their transcripts and that they can easily articulate credit toward a postsecondary credential.

In Kentucky, learners who are determined by the employer to have successfully completed a Tech Ready Apprenticeship for Careers in Kentucky youth apprenticeship program have advanced standing toward a Registered Apprenticeship and earn a credential that is recognized in high school accountability measures.

RECOMMENDATIONS FOR IMPROVING
Youth Apprenticeship Data Collection

The youth apprenticeship field is quite nascent, and states and local intermediaries are just beginning to build effective practices and policies for collecting accurate and reliable youth apprenticeship data. While there is still much work to do, the PAYA data workgroup offers the following recommendations for local intermediaries and state leaders:

CHALLENGE 1:

Determining What to Measure

LOCAL ACTIONS

- Inventory the metrics required for accountability, grant reports, etc.
- Prioritize collecting demographic information to disaggregate data.
- Survey stakeholders to understand what metrics are relevant or most important to them.
- Revisit the theory of change and identify metrics that monitor progress and evaluate success.
- Create a scaffolded data collection plan that builds on a foundation of high-priority, easy-to-measure indicators and grows in complexity over time.

STATE ACTIONS

- Establish consistent, statewide business rules and definitions and ensure that they are aligned across Perkins, ESSA and the Workforce Innovation and Opportunity Act (WIOA).

CHALLENGE 2:

Clarifying Roles and Responsibilities

LOCAL ACTIONS

- Set the expectation for data sharing when new partnerships are established.
- Identify clear (and scalable) roles and responsibilities for collecting and sharing data and delegate ownership. Make sure these roles and responsibilities are documented in the partnership agreement.
- Communicate to all partners why the data is being collected and how it will be used.

STATE ACTIONS

- Establish data sharing agreements or templates that allow local intermediaries to access education and outcomes data.

Building the Infrastructure

LOCAL ACTIONS

- Identify and, if possible, adapt existing data collection systems such as student information systems to capture youth apprenticeship data.

- Ensure that data is collected in a consistent and comparable format. In the absence of a database, use file formats that allow for the easy transfer of data. If data is collected through hand-written surveys or forms, immediately enter the data into a spreadsheet or database.

STATE ACTIONS

- Establish a minimum standard for the exchange of data between local intermediary databases, local student information systems and statewide databases.

Accessing Data

LOCAL ACTIONS

- Execute data sharing agreements across educational and employer partners to allow for the transfer of learner-level data.

STATE ACTIONS

- Adapt RAPIDS data entry processes to be more compatible with youth apprenticeship.
- Clarify legal requirements for accessing protected learner-level data.
- Establish processes for sharing longitudinal data on outcomes for youth apprenticeship completers.

Scaling and Sustaining

LOCAL ACTIONS

- Recognize the importance of data in monitoring and evaluating program impact and invest in data systems and collection at the outset.

STATE ACTIONS

- Integrate youth apprenticeship data elements into state data systems.
- Provide a sustainable funding stream to support the collection and maintenance of youth apprenticeship data.
- Offer professional development and training to help practitioners understand best practices for collecting and maintaining youth apprenticeship data.

NEXT STEPS for PAYA

The workgroup also offered the following recommendations for the PAYA network to support the collection and use of high-quality youth apprenticeship data:

- **REFINE AND TEST**
  the PAYA data framework, incorporating a scaffolded data collection plan for youth apprenticeships at varying stages of implementation.

- **IDENTIFY SAMPLE DATA SHARING**
  agreements or templates that can be used to facilitate data sharing locally.

- **PROTOTYPE TOOLS AND TEMPLATES**
  to support the collection and use of youth apprenticeship data.

- **IDENTIFY AND ELEVATE BEST PRACTICES**
  and document proven tools, applications and platforms that are effective for collecting and using youth apprenticeship data.

- **EXPLORE HOW YOUTH APPRENTICESHIP DATA IS ALIGNED**
  with and can support ESSA, Perkins V, WIOA and/or statewide credential attainment goals.

- **EXPLORE COMMUNICATIONS STRATEGIES**
  and channels for telling the story behind youth apprenticeship data.

- **PROVIDE A RETURN ON INVESTMENT CALCULATION**
  to help quantify the value and impact of youth apprenticeship.

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IMPROVING YOUTH APPRENTICESHIP DATA QUALITY:
Challenges and Opportunities

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