



EQUITY IN YOUTH APPRENTICESHIP PROGRAMS



NAPE
National Alliance for
Partnerships in Equity

Realize every student's potential access ♦ equity ♦ diversity



N A P E
National Alliance for
Partnerships in Equity
Education Foundation

The National Alliance for Partnerships in Equity offers research-based, strategy-driven, practical-application-focused **professional development services** that equip educators and workforce professionals with tools to address specific school needs related to equitable learning environments, student academic success and ultimately, college and career readiness.

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Equip Leaders

Change begins to happen when leaders are equipped and empowered with knowledge, tools and strategies.



Engage Staff

Change continues to happen when all staff are engaged to share a common language about educational equity.



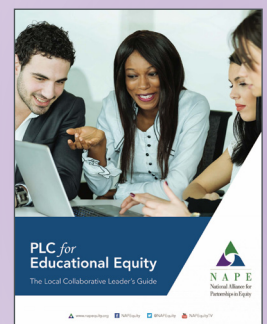
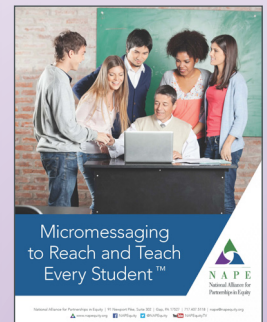
Encourage Discussion

Change is realized when staff are encouraged to dive deeper and continue the discussion.

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Curricula include:

- Micromessaging to Reach and Teach Every Student™
- Micromessaging Leading for Equity Edition
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- Realizing Potential with Mindset*
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- Explore Nontraditional Careers*
- Ensuring Equity in Problem-Based Learning*
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- Eliminating Barriers through Culturally Responsive Teaching*
- Professional Learning Communities for Educational Equity*



Learn more about NAPE's **services**, order **resources**, and request **professional development** at napequity.org.

* NAPE's series of turnkey implementation toolkits provides research-grounded strategies and processes designed to equip educators with new tools to reach, teach, and guide every student to realize their potential. Activities and lesson plans within the series are intended to be turnkey implementation tools for individual development and professional learning communities (PLCs) and, in some cases, for direct use with students. **Each of the toolkits serves as a workbook for an accompanying professional development workshop led by Certified Equity Instructors.**



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We believe that to reach educational equity and drive lasting change, educators must be equipped with knowledge and strategies, engaged to share a common language, and encouraged to continue meaningful discussions. Given that, we hope you'll use this tool to read, reflect, study, practice, apply, and share what you learn with your colleagues.

If you are interested in hosting professional development on this toolkit, we ask that you contact us so that our Certified Educational Equity Instructors can do that for you. Request professional development, order additional copies of the toolkits and digital downloads of worksheets optimized for printing at napequity.org. We can help you reach your campus' educational equity goals.

For access, equity, and diversity,
The NAPE Team

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A Theory of Change

Learning about equity in youth apprenticeships

Understanding the difference between equity vs equality

Understanding the impact of cultural stereotypes, implicit bias and the effect of micromessages on students

LEADS TO EFFORTS AROUND

Access

Belonging

Continuous Improvement

WHICH RESULTS IN

Student success

Apprenticeship program success

Employee pipeline retention



Executive Summary

The National Alliance for Partnerships in Equity (NAPE), along with eight other National Partners, have joined with New America in their launch of the Partnerships to Advance Youth Apprenticeship (PAYA). This multi-year initiative will support the expansion of high-quality youth apprenticeship opportunities for high school-age students in states and cities across the US, and across a broad range of industry sectors. The vision of the Partnership is that youth apprenticeship will transform how the nation's education system prepares young people for careers and launches them into a successful adulthood. The work of the partnership is supported from funding by the Annie E. Casey Foundation, Ballmer Group, Bloomberg Philanthropies, the Joyce Foundation, JP Morgan Chase & Co., and the Siemens Foundation.

NAPE joins other members of the Partnership in asserting that youth apprenticeship (YA) can promote a more inclusive economy while also meeting the needs of business and industry. A youth apprenticeship program allows high school students to earn postsecondary credit and credentials that are directly related to paid, work-based learning. Youth apprenticeship programs provide students with the guidance, structure, and effective feedback necessary to realize success. Youth apprenticeship also provides an effective pathway into good jobs and strong postsecondary programs that lead to meaningful careers with family-sustaining wages. With high-skill, high-wage, in-demand careers available to everyone, we as a nation can better realize our human, business, and economic potential.

To make this vision a reality, the PAYA National Partners have developed a set of guiding principles for high-quality youth apprenticeship to provide clear and common direction to the field. Grounded in research and experience, these principles are structured to be both practical and aspirational. They provide clear guidance to industry, education, and community leaders, and state and local policymakers, while at the same time setting a high bar for program design, outcomes, and continuous improvement.

- **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.

Introduction

HOW TO USE THIS TOOLKIT

Designed well, youth apprenticeships can advance equity by increasing access to valuable, affordable postsecondary credentials and by increasing social capital and paid work experience for young people. However, youth apprenticeship can also be designed and implemented in ways that advantage some individuals and hinder others, especially when structural barriers are not considered in the design or implementation of a program. It is important to remove barriers for all students, and especially for those from traditionally underrepresented groups, and to provide supports to ensure equitable representation and success. This toolkit is designed to help youth apprenticeship practitioners—including educators, employers, and other local leaders and stakeholders—increase their awareness of potential barriers to student access and success in youth apprenticeships, and to equip them with strategies to mitigate or eliminate those barriers.

Practitioners can move through this toolkit's sections, activities, and reflection tools at their own pace and do so individually or as a partnership. For those who desire a more structured experience, a suggested five-week schedule and checklist can be found in the Appendix.

PURPOSE

Youth apprenticeships (YA) can be invaluable in helping students achieve academic and career goals. Through YA, students gain practical experience and lifelong skills. However, with even the greatest of intentions, barriers to full participation for students from underrepresented groups can emerge as a result of the personal biases of adults and structural barriers that may exist within programs, or the education systems and labor markets in which they operate.

Personal Biases v. Structural Barriers

Personal biases are often unconscious attributions to individuals or social groups that are shaped by our experiences or learned associations; whereas, structural barriers are products of our environments that exclude those from marginalized identity groups from systems and structures of support (Greenwald & Banaji, 1995). It is crucial for those who design, lead and implement youth apprenticeship programs to do so in ways that value the diversity of student identity.



This toolkit examines three key drivers for ensuring youth apprenticeship programs acknowledge and address equity challenges: **Access, Belonging, and Continuous Improvement**. This toolkit provides resources and activities to help youth apprenticeship practitioners eliminate disparities and to purposefully establish equitable learning environments for all students.



Access

First, this toolkit will examine access to youth apprenticeships as the first step in creating an equitable experience. Access requires that students can participate in and fully acquire the benefits of a YA program. This means that students have full access to pre-requisite coursework and academic supports, recruitment and application information, enrollment materials, transportation to job sites, opportunities to provide feedback about the program, as well as an equitable work experiences. Using this toolkit, program leaders will gain knowledge of how stereotypes, implicit biases, and negative micro-messages create barriers to access by examining different scenarios and making recommendations about how to increase access for students.



Belonging

This toolkit will then examine the steps program leaders can take to foster a sense of belonging. This section will focus on moving beyond the idea of inclusion to ensure that learners feel that they belong. Students may be included, but if they do not feel that they belong and that their work is valued, they may become discouraged and ultimately decide to leave the youth apprenticeship. By understanding the context by which inequities arise, program leaders will understand positive actions they can take to ensure students feel they belong in a youth apprenticeship and a profession or field.



Continuous Improvement

Continuous Improvement is the final driver of equity addressed by this toolkit. Continuous improvement requires ongoing learning, and learning requires reflection. Through this section, program leaders will examine how to use data and follow established best practices to evaluate program intentions and progress towards goals, and to make adjustments to continuously improve program quality and efficacy.



Careerwise Colorado

At CareerWise, we believe that youth apprenticeship has the potential to act as a lever for critical systems change. Not only can we bring misaligned systems like education and workforce into alignment, but we can also break down barriers within and between those systems to build an entirely new system. If we do so intentionally - designing for equity from the outset - we can change the old story of success in our country where there is just one, single path (college) for many students. Instead, we can create more high-quality, high-value opportunities for young people, more ways to access those opportunities, and more ways to leverage those opportunities to further a journey towards contribution, learning, growth and - ultimately - self-sufficiency and upward mobility.

<https://www.careerwisecolorado.org/>



The readings, discussions, and activities in this toolkit, will equip youth apprenticeship program leaders with skills and knowledge to:

- ✓ Design and implement more equitable youth apprenticeship programs by recognizing how stereotypes, implicit biases, and negative micromessages prevent students from fully accessing youth apprenticeships;
- ✓ Create youth apprenticeship programs that strive for equity in the way they recruit, train, implement, support, and evaluate youth apprenticeship opportunities for students where students feel not just that they are included, but that they belong;
- ✓ Monitor and continuously improve youth apprenticeship programs to enable students, inclusive of gender, race, ethnicity, ability, sexual orientation, or religion to fully participate in youth apprenticeships..



THE IMPERATIVE FOR EQUITY IN YOUTH APPRENTICESHIPS

Designed well, youth apprenticeship can advance equity by increasing access to valuable, affordable postsecondary credentials and by increasing the social capital and paid work experience that are especially important for under-resourced youth. Programs must guard against inequities that unfairly limit access and opportunity by gender, income, disability, and—most starkly—race. Doing so requires programs to recognize inequities embedded within their educational and workforce systems and to develop programmatic interventions to address them, including student recruitment strategies, advising, and on-the-job support from employee mentors.

Youth apprenticeship programs that lead to equitable outcomes for apprentices can yield important benefits for employers, too. Inclusive workforces allow companies to win talent, improve customer experience, bolster employee satisfaction, hone decision making, and promote novel innovation (Hunt et al., 2015; Burns et al., 2012). At a more macro-level, evidence indicates that diversity stokes economic growth, while homogeneity slows it (Ashraf & Galor, 2011). Designed with equity in mind, youth apprenticeships can be a pipeline to diversity and equity in the workplace, which in turn allows more individuals to enjoy family-sustaining wages—a benefit not only to those individuals, but to their families and communities as well (Costello, 2012). Without a diverse and representative workforce, businesses and our economy cannot realize their full individual and collective potential.

Did you know?

It is commonly said that diversity in the workplace is good for business and innovation. This isn't just a platitude. Research indicates that promoting diversity in high-skill, high-wage, in-demand careers for women, people of color, and individuals with disabilities leads to better financial outcomes for our communities.

GENDER:

One study predicted that **closing gender gaps** in work would add as much as **\$28 trillion** to the annual GDP by 2025 (Woetzel et al., 2015).

RACE & ETHNICITY:

Companies in the top quartile for **ethnic and racial diversity** in management were **35%** more likely to have financial returns above the industry average (Hunt et al., 2015).

ABILITY:

87% of customers surveyed would prefer to give their business to companies who hired **individuals with disabilities** (Siperstein et al., 2006).

Equity in Youth Apprenticeships

MARGINALIZED GROUPS

There are significant benefits to participating in a youth apprenticeship program for students from underrepresented groups and those designated as special populations. To reach and serve these underrepresented groups, it is important to name and identify them. The 2018 Strengthening Career and Technical Education for the 21st Century Act (Perkins V) requires that states and local education agencies provide supports to increase the number of students from special populations entering high-skill, high-wage, in-demand careers.

Youth apprenticeship can provide a seamless, structured pathway for students in these special populations to access the training, experience, and networks they need to access and succeed in promising careers.

Groups identified as special populations include:

- Individuals with disabilities
- Individuals from economically disadvantaged families
- Individuals preparing for nontraditional fields, which are fields with 25% of a particular gender represented in the workforce
- Single parents, including single pregnant women
- Out-of-workforce individuals
- English learners
- Homeless students
- Youth who are in or who have aged out of foster care
- Children of active military

PARTICIPATION IN YOUTH APPRENTICESHIP

Students from these special populations are frequently underrepresented within youth apprenticeship programs. While data for YA programs can be difficult to obtain, state and national data from CTE programs and adult apprenticeship programs indicate that women, students of color, and individuals with a disability are largely underrepresented (Kuehn, 2017; U.S. Department of Labor, 2015).

Historically, apprenticeship programming has been rife with disparities, including lower participation rates for women and non-white participants (Kuehn, 2017). There is some evidence that women and people of color have historically been discriminated against in employer selection for apprenticeship candidates (Colborn & Jenkins, 2015). However, the gaps also reflect occupational gender segregation, which has made it difficult for women and girls to enter into primarily male dominated fields, many of which have a long history of apprenticeship (Kuehn, 2017). Data show that both women and non-white participants have lower apprenticeship completion rates as compared to white men (Kuehn, 2017). These populations have historically been concentrated in lower paying occupations and have faced serious pay gaps, which persist even within occupational training and apprenticeship programs (Colborn & Jenkins, 2015). These gaps are even more prominent when considered regionally, with persons of color who work in the South being at risk of receiving lower pay than their white counterparts.

In addition to these significant historic and structural barriers to equitable participation in apprenticeship programs, there are also persistent (and likely related) issues of perception that may discourage people of color, women, and other people from special populations from pursuing apprenticeship opportunities. In one study, for example, 28% of individuals interviewed regarding their views of apprenticeship programs saw them primarily as a training option for construction and the trades, rather than an avenue for a broader spectrum of careers (Colborn & Jenkins, 2015). Those interviewed did not see apprenticeship "...as a form of postsecondary education, work-based learning, or career advancement – [it was] instead widely understood as a "second chance" or "second best" option for those not able to obtain a Bachelor's degree".

To proactively address such perception issues, youth apprenticeship programs must take action to clearly communicate the opportunities they provide—namely, no-to-low-cost access to college credits and credentials, as well as valuable paid work-experience—and to showcase the range of occupational pathways they target. Doing so may be important not only for equity, but also to ensure a wide range of employers and other partners, given findings from the Brookings Institute that many employers and potential participants are unlikely to learn about youth apprenticeship programming because of the relative scarcity of employers offering youth apprenticeships (Lerman, 2014).

Youth apprenticeship programs may also exclude students from special populations through programmatic participation requirements such as prerequisite classwork in secondary schools or requirements that students have access to transportation. Such requirements, while generally well-intentioned, can significantly limit participation from underrepresented groups.

Youth apprenticeship programs must acknowledge and confront the full range of barriers that may exist to equitable participation, including:

Pay Gaps: differential pay that has historically been associated with race, gender, and other factors

Concentration in Lower-Paying Occupations: women and people of color overrepresented in lower-paying jobs

Regional Issues: certain regions of the country are harder hit by economic insecurity and/or face long and persistent legacies of discrimination, racial and otherwise

Social Stigma: negative stereotypes regarding apprenticeship programs as compared to college

Information Gaps: lack of information about available programming

Program Requirements: prerequisites and other requirements for participation



When YA programs are designed through a one-size-fits-all lens, they will not disrupt the barriers identified above. They may, in fact, perpetuate them. When programs adopt an equity lens, they recognize the prevalence of such barriers and the inequitable outcomes they can create, and differentiate how structures and supports can be designed and implemented to address them.

EQUITY OR EQUALITY?

The concept of diversity is often viewed through an “add people and stir” lens of equality where all learners and workers are treated the same. As we’ll see below, this approach is counter to the philosophy of equity which acknowledges that each person has unique and individual assets and needs. No two people are alike, thus creating an equitable learning and working environment asks us to move from an “Equality” lens to an “Equity” framework.

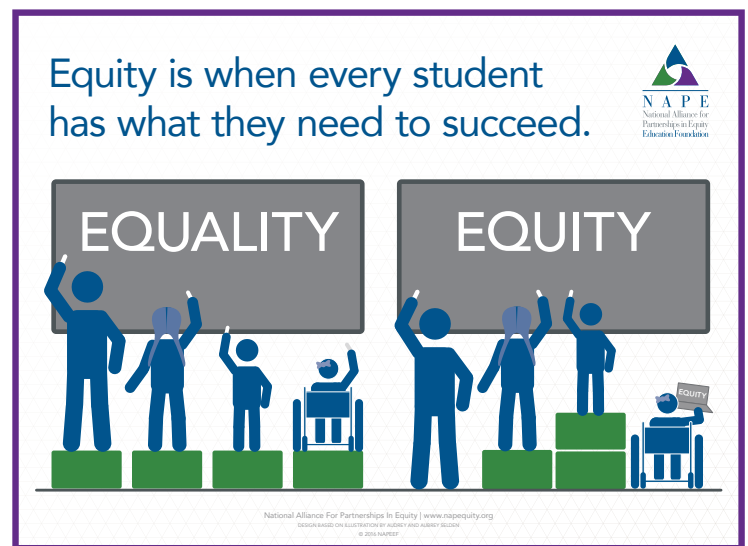
To ensure the maximum participation and success of all students, it is important to both reduce the structural barriers which may impede access to and participation in youth apprenticeships, and to create an environment where apprentices are welcomed, included, and respected as contributing and valuable members of their learning communities. One of the first steps is to create an equitable environment within which apprentices can learn.

Is Equity the same as Equality?

Equity is giving everyone what they need to be successful
Equality is treating everyone the same

Equity and equality are frequently used interchangeably to convey the same idea. NAPE holds that they are two different concepts, and thus two different approaches to interpersonal interactions and educational processes. While both are employed to promote evenhandedness, only one can provide learners with the tools to succeed by recognizing their needs.

The main difference between equity and equality is the idea of impartiality. Equality aims to promote fairness, but it can only work if everyone starts from the same place and needs the same help. Equity, on the other hand, is also an objective approach, but one that does not seek to reduce learner needs to a “one size fits all” framework. An equity-focused method of teaching recognizes the differences between learners and provides them with the tools that they specifically need. In youth apprenticeship, equity means that all learning—both classroom and on-the-job learning—is accessible to every student, with targeted supports for those adversely impacted by long-standing inequities in the education system and labor market.



*Equity vs Equality Design based on an illustration by Audrey and Aubrey Selden.
 Available at napequity.org*

Consider the picture below. Can you tell the differences between an equity focus and an equality approach?

What might learners in an equity-focused environment experience? Would they feel included? Would they feel that they belonged? Would they feel comfortable identifying their needs and concerns? Take, for example, a learner whose first language is not English. How might they feel if they were given the opportunity to have instructional materials provided in a language that would assist in their learning? Would they feel as though they belonged in the environment? Would they feel seen? Would they be more comfortable approaching their mentors with questions about the learning process? **An equity framework provides each learner with what they need to succeed.**

ACTIVITY: EQUITY OR EQUALITY?

Directions

Work individually or in groups to review the scenarios below. For each, identify whether each represents the concept of equity or equality. In the case where an equality approach is recognized, consider how the scenario would be different using an equity-based approach.

Scenarios	Equity or Equality	Outcome
<p>Example: Ms. Alexander trains four youth apprentices in her restaurant, two of whom are single parents of preschool aged children. To be fair to all, she asks them to work between 9 am and 5 pm, which are standard working hours.</p>	<p>Equality</p>	<p>Some of the apprentices, due to childcare issues, may be unable to participate and maintain acceptable standing. Providing flexible work hours may alleviate this.</p>
<p>Mr. Asfour trains three youth apprentice dental assistants, one of whose native language is Spanish. In an effort to keep his trainees current on the procedural expectations outlined by the American Dental Association, he provides literature to them, in both English and Spanish.</p>		
<p>Brayshawn lives in the city of Philadelphia and is a youth apprentice in agricultural engineering. Each day he uses public transit to travel approximately 15 miles from his home to his worksite. His trainer, Ms. Carpenter, has asked Brayshawn and his fellow youth apprentices to practice analyzing soil samples over the weekend, at home. The trainees are to take three differential samples, analyze them, and report results to Ms. Carpenter on Monday.</p>		
<p>Mr. Pha trains six youth apprentice carpenters in his woodworking shop. He often sends one or two apprentices out on jobs with skilled craftspersons. One of the criteria that he uses to choose who will work jobs outside of the main shop is whether trainees have their own tools to take to the off-site location.</p>		
<p>Ms. Oocuma is developing a youth apprenticeship program for local high school students in HVAC. She is interested in ensuring that youth who participate are provided with standard uniforms. When she contacts the uniform distributor, she orders three standard sizes: small, medium, and large.</p>		

Access

Access is an important element of a successful and equitable youth apprenticeship program. Students must be able to locate, enroll, attend, and participate fully in a YA program to support their academic and career goals. Access means that:

- The program exists and is available to students
- Information about the program is readily available
- The program facilities are physically accessible
- Students experience full participation in and benefit from the program

Despite our best efforts to create programs that welcome students, barriers to access can arise that deter or prevent students from fully participating in or receiving the maximum benefit of a YA program. Structural barriers are an everyday part of work environments and can easily be overlooked by those running programs. In effect, barriers will arise for students whenever their identities and characteristics are not fully realized, are overlooked, or undervalued in the design, implementation, or evaluation of a youth apprenticeship.

Where have unexamined aspects of your system or program possibly created unnecessary barriers for student groups?

BARRIERS TO ACCESS

The ease with which barriers become intertwined in the fabric of a program can reduce our ability to identify and remedy such issues. Many factors can limit access and lead to the underrepresentation of student groups in YA, spanning large institutional barriers driven by policy and culture, to interpersonal factors stemming from individual actions.

Existence - If a program is not in existence or available to a student, then they will not be able to participate. For example, if a student wants to apprentice with a technology firm, but no IT companies are hiring youth apprentices, then the YA experience is unavailable to the learner. This extends to prerequisite coursework as well. If a student does not have access to the courses required to qualify for a youth apprenticeship opportunity, that opportunity is unavailable.

Transportation - Transportation becomes a structural barrier to access when youth apprentices are unable to travel to and from a worksite or a college offering required coursework. For instance, if a student wishes to participate in a youth apprenticeship, but the bus commute is an hour and a half each way to a worksite, then transportation creates a barrier to access.

Cost of participation - While youth apprenticeship programs typically do not charge fees for participation, youth apprenticeship could be cost prohibitive if there are costs associated with the post-secondary coursework, transportation (such as bus fares), or workplace requirements such as uniforms, professional attire, protective equipment, tools, or equipment. For instance, a site for a chef's apprenticeship may require students to bring their own set of knives; this upfront cost may be a barrier for some students. Programs can address cost barriers by providing allowances for transportation, uniforms, special clothing, or necessary tools, and working with schools, colleges, and other partners to cover tuition, fees, and other prohibitive expenses related to participation.

Digital divide - Access to the internet and computers with enterprise software outside of the school and workplace are important factors influencing access. Although the digital divide has decreased over time, many students may not have reliable internet access at home, even when considering the use of mobile phones. The Pew Research Center (Anderson & Kumar, 2019) found that 26% of Americans with a lower income rely on their smartphones entirely for internet access. If a YA requires specific apps for their coursework or job, a device at home may not be guaranteed. Providing students with structured time within the school or workday can ensure equitable access to digital resources.

Physical barriers - Workplace and classroom settings that do not account for varying degrees of ability can hinder students from performing their best work safely and productively with dignity. For instance, a student requiring a wheelchair may find inadequate space to move about in an office cubicle. Similarly, a student may require special tools to interface with computers like a trackball. Programs should work with company leaders and the human resources department to maintain or improve the physical environment so all students can do their work satisfactorily. At the same time, program staff should work with education partners to ensure apprentices' needs are being met, particularly if they are taking courses in locations outside of their normal high school environment.

Language - Written materials used to convey details about YA programs are a common mode of providing information. While pamphlets and websites are easy things to produce, they can also limit their reach if language and reading levels are not considered. Providing information written in multiple languages will help recruit, enroll, and retain English Learners. Moreover, as student and parent reading levels and needs may vary, producing materials that utilize an appropriate reading level, are in large print and braille, or offer electronic equivalents, can ensure they are understood by a wide audience.

Evaluating YA programs to uncover hidden barriers requires that we take the perspective of our students, and particularly those underrepresented within a program. To help illustrate how simple aspects of a program may limit students' access, consider Angeline:

Angeline is excited about a youth apprenticeship in IT after helping her school transition to Chrome Books. She watches programming videos in her free time and dreams of owning her own IT company. She thinks a YA program will help her earn money while gaining college-level courses and valuable hands-on skills. However, her parents would prefer she attends a four-year university so that she can get the same type of education they received and be exposed to other career options that may be more suitable for her in the long run. They think it will be too hard for her to make it as a female in a traditionally male-dominated industry. Her parents believe youth apprenticeships are important, but not the best option for their daughter.

In this situation, Angeline is excited about a youth apprenticeship in IT, but Angeline's goals differ from her parents'. They would like her to pursue a four-year degree in an industry that is not traditionally male-dominated. Her parents are also unaware that the apprenticeship actually supports Angeline on track to a four-year degree, and that she will receive supports to help her succeed in a career that is traditionally male-dominated. A lack of readily available information describing these aspects of the program for both student and parent limits everyone's ability to realize the benefits of YA.

REFLECTION TOOL - IDENTIFYING STRUCTURAL BARRIERS TO ACCESS

Structural barriers, or organizational barriers, are systemic factors of an institution that represent the culmination of policy, culture, or tradition. This reflection tool will help you (1) define structural barriers that may exist for young people in your YA program, (2) guide you through a reflective process to help evaluate your current programming, and (3) provide you with specific actions you can take to address structural barriers facing the young people you serve today. with specific actions you can take to address structural barriers facing the young people you serve today.

<i>Structural Barriers to Access</i>	<i>Reflection</i>	<i>Action</i>
<p>Existence: If a program is not available in the student's region, then they will not be able to participate.</p>	<p>What different industries exist in your region?</p> <p>What strategies can be used to develop youth apprenticeship programs with industries in your area?</p> <p>Are there workforce agencies that are tasked with placing students?</p>	<p>Contact chamber of commerce or industry organizations to identify possible hiring partners.</p> <p>Collect success stories of youth apprenticeship programs to share with possible employers.</p> <p>Work to ensure youth apprenticeship programs are available, supported, funded, and set up for success.</p> <p>Secure multiple worksites to allow students choice and access.</p>
<p>Transportation: If students are unable to travel to and from an apprenticeship, that represents a barrier to access.</p>	<p>What public transit options are available in the area?</p> <p>What routes are available to get students from school to work?</p> <p>What other options are available?</p> <p>Are there buses available through the school?</p> <p>Do carpools exist for students to join with current employees?</p> <p>Are there groups of students that can share rides?</p> <p>Is there funding for ride-sharing for students?</p>	<p>Ask each student if they have transportation to the job site.</p> <p>Petition your public transit agency to add routes that help get students to the job site.</p> <p>Contact chamber of commerce or school districts to partner with solving transportation problems.</p> <p>Coordinate groups of students to share rides.</p> <p>Provide bus pass for students.</p> <p>Perkins V allows the use of funds to cover transportation for special needs populations. For more information see: https://napequity.org/PerkinsV</p>

Structural Barriers to Access	Reflection	Action
<p>Cost of participation: Participating in an apprenticeship may be cost prohibitive if there are requirements such as uniforms, professional attire, protective equipment, tools or equipment.</p>	<p>What tools/uniforms are necessary for the job?</p> <p>What funds are available to purchase these for students?</p> <p>Are there tools that can be checked out to students?</p> <p>Is there a community source for inexpensive/free new or used tools or uniforms?</p>	<p>Contact the hiring manager for a list of the tools and/or uniforms needed for the job.</p> <p>Create a budget to purchase tools or uniforms for students.</p> <p>Contact local nonprofits or civic organizations for tool donations.</p>
<p>Digital Divide: Availability of internet access may present a barrier to apprentice participation.</p>	<p>What are the different possible ways to communicate with students and parents?</p> <p>Does the job require internet access?</p> <p>Are there company mobile devices available for students to use?</p>	<p>Ask students the best way to communicate with them and their parents.</p> <p>If students need access to the internet or company computer programs, make sure they are given time in the workday.</p>
<p>Physical Barriers: Workplace and classroom settings that do not account for varying degrees of ability can hinder students from performing their best.</p>	<p>What stereotypes exist in the workplace about specific jobs and who can do them?</p> <p>How are the stereotypes being communicated?</p> <p>What are the “essential functions” of the job?</p> <p>How can the job tasks or the workplace be adjusted to accommodate a wider range of physical capabilities?</p>	<p>Ask the student what they need to be successful.</p> <p>Ensure that the workplace is ADA compliant.</p> <p>Have equipment that can accommodate all sizes of apprentices.</p>
<p>Language: Information that is written only in English can present a barrier to families as they support their students’ career paths.</p>	<p>What languages do the students and parents speak?</p> <p>What translation capabilities are available in the community?</p>	<p>Translate program information in the most common languages spoken by families in your community.</p>

ACTIVITY: ACCESS AND SUPPORTS

The following scenarios reflect common ways in which organizational practice results in limiting student access. While these scenarios are representative, they don't reflect every possible situation that you may encounter.

Directions

As you read each situation, consider:

- (1) *What barrier is present for the student?*
- (2) *How are cultural stereotypes, implicit biases, or negative micromessages reducing the student's ability to access and participate in the YA program?*

1. **Bright Smiles Dentistry** is proud of its youth apprenticeship program. Sean wants to apprentice as a dental assistant, but Bright Smiles Dentistry's office is not on a public bus line and assumes that its employees have their own transportation. Sean comes from a single-parent household and finances are tight. He knows a good paying youth apprenticeship is a valuable way to help contribute to the family income in a substantial way, but buying a car is not an option for Sean.
2. **Brookstown Bank** would like to employ a youth apprentice who can extend excellent service to its customers. Dylan is enrolled in advanced math classes at his local community college and wants to participate in a youth apprenticeship to become a bank teller. Dylan is eager to provide excellent customer service and is very personable. Dylan, however, is concerned that the bank would not be welcoming or understanding of his transgendered identity and would certainly not allow Dylan to work with the public.
3. **The state apprenticeship agency** is very proud of recruiting a network of employers willing to bring in youth apprentices. Alex, who loves his community and hopes to stay and work there one day, wants to participate in a YA program and realizes that there is only one company on the list of opportunities that aligns with his interests in engineering technologies. This company profits from products that are in direct conflict to his sincerely held religious beliefs.
4. A youth apprenticeship site, **HKJ Renewable Energy**, works hard on inclusivity and diversity initiatives and focuses on making sure students feel like they genuinely belong at the company. They work hard to recruit a cohort of apprentices that is 50% female and 50% male. The company wants feedback on the student experience at the end of the program so they can get even better at what they do, so they emailed a survey to students to complete at home once the youth apprenticeship was finished.

5. **iBoom's website** states that they value diversity in their workforce, and have pictures on their website that reflect this priority. Trevor is excited to pursue a youth apprenticeship that will put him on track to be a computer repair technician. He loves working with his hands and knows this could be a valuable and lucrative career path. Trevor mentioned to his supervisor how excited he is to work there. However, when he arrives for his first week of work, he notices he is the only apprentice of color and perhaps the only black employee in a department of thirty IT professionals. When he asks about the disparity between what he saw on the website and the actual workforce, his mentor says that sometimes employees are just not a "good fit" for the company culture.

6. **Ives & Alexander**, a prestigious law firm in the city interviewed Maria for an apprenticeship. Maria is eager to explore a legal career and knows this is a big opportunity for her. She notices, however, that everyone wears a suit in the office. Even with her apprenticeship income, she is concerned about the cost of a new wardrobe and dry cleaning if she is to fit in as a professional in the office.

7. **Good Health Pediatric Medicine Practice** would like to hire Ronald for a youth apprenticeship in medical office technology. Ronald became interested in helping children get better when he was treated for bone cancer in his leg as a young child. Because of his treatment, it is still uncomfortable for him to sit for long periods of time. He will be required to interact with patients at the built-in reception desk which is set to a fixed height. He really wants this apprenticeship, so he is planning to just "push through" any discomfort he feels while working at the reception desk.

8. **Jackson High School** is promoting a new early childhood education apprenticeship through the Wild Rose Childcare Center, a well-respected local business. Tamar wants to participate in a YA program so she can earn money and earn valuable experience and credentials that will help her in her future pursuit of becoming a child psychologist. The application materials are not available in her parents' preferred native language – the one in which they are most comfortable reading. Her parents do not want her to participate because they don't see the value in it and feel she could gain similar experience working for her aunt.

Belonging

As we continue examining how youth apprenticeship programs can work towards increased equity, an important question comes to the forefront:

How do YA programs ensure that apprentices from underrepresented groups feel that they are an integral part of the learning process?

Effective instruction begins with an asset orientation – where instructors understand who the learners are and encourage them to pull from their own lived experiences and personal expertise to achieve success. If a student feels as though they are not represented in the learning process, their willingness to engage in educational risk taking is minimized at best and stops at worst (Kohl, 1994; Steele & Aronson, 1995). Establishing an environment where students can incorporate their own knowledge and experiences has been shown to foster critical thought, educational risk taking, and educational success (Gay, 2013; Ladson-Billings, 1995; Banks, 2014; Robbins et al., 2005).

Recognizing this, youth apprenticeship programs can develop methods of promoting an equitable learning culture where students' contributions are recognized, welcomed, and elevated in both classroom and work environments. The focus should be on practices that move apprentices from merely co-learners within an integrated space to individuals who identify themselves as members of a professional community. Through this process, learners move from integration to inclusion, to belonging. Fostering belonging in YA programs allows apprentices to feel valued and integral not only to the program, but to the organizations where they work as well.

INTEGRATION-INCLUSION-BELONGING

Integration: placing learners, either partially or fully, within the larger educational or business environment.

The terms integration and inclusion are often used interchangeably; however, these terms represent different practices with drastically different outcomes for YA. We know, for example, that 65 years after the landmark ruling in Brown vs. Board of Education that put an end to de jure segregation in the nation's schools, efforts to provide more inclusive learning environments have not yielded the diversity or achievement proponents of Brown v. Board envisioned. To the contrary, more than half of all students in the U.S. go to school in racially segregated districts, where over 75 percent of students are either white or nonwhite and significant racial achievement gaps persist in nearly every district across the nation (EdBuild, 2019; NAEP, 2019).

Often times diversity is sought through means of integration, but with history as our teacher, we know diversity does not guarantee equity, and cannot serve as a standalone goal. To ensure that apprentices feel as though they are an integral part of the professional environment, youth apprenticeship programs must place their work in a historical context that moves beyond integration efforts and towards inclusion and belonging.

Inclusion: changing the values, culture, and practices within the educational environment to minimize exclusionary and discriminatory practices and recognize the unique contributions of cultures and groups that have traditionally been understated.

A comprehensive approach to education promotes the inclusion of all learners, regardless of race, ethnicity, disability, gender identity, sex, language, socio-economic status, etc. Beyond integration, inclusion ensures that all learners are not only present and represented, but also culturally acknowledged. YA organizations can foster inclusion by integrating learning materials that acknowledge the contributions of individuals from marginalized communities ensuring that participants have mentors who “look like” them and share similar identities and experiences. Inclusion challenges cultural stereotypes, as it values a wide range of learner identities and cultural contributions.

A method of promoting inclusion is through Culturally Responsive Teaching (CRT) (Gay, 2013; Ladson-Billings, 1995; Martin et al., 2015). CRT allows diverse learners to have their cultures represented and valued in the educational setting, including language, heritage, historical contributions, and inclusion in the curriculum. Inclusive teaching via CRT has increased learner achievement, closed the opportunity gaps, and promoted positive interaction within diverse workgroups by fostering caring, respect, relationship building, positive communication, and cultural awareness and sensitivity (Bondy et al., 2007; Madhlangobe & Gordon, 2012).

Multiple strategies can be used as you begin promoting culturally responsive teaching in your programming. The very first place to start, however, is by considering the three contexts within which youth apprentices learn:

- **Environmental Context** - what do learners see and interact within the environment?
- **Curriculum** - what types of information are being presented via instructional materials?
- **Pedagogical Practices** - what methods of instruction and training are being implemented?

It is important to remember that these three contexts are complementary, and they build on each other. Environmental factors are reflective of the curriculum. Pedagogical practices are bolstered by the goals of the curriculum, which are made visible in the environment of the workplace. Because they are complementary, each can be strategically implemented individually and as a unit to promote inclusion and eventually belonging within youth apprenticeship programs.

Belonging: promoting a sense of identity, acceptance, value, and positive regard towards learners within the work environments and professional communities into which they are being welcomed.

Belonging is defined as a sense of acceptance, value, and positive regard from others. A student’s sense of belonging relies heavily on the quality of their relationships with their peers, teachers, and mentors and is fundamental in their development of identity and group membership. Developing a sense of belonging in learners begins with sending positive cultural and social messages to the student regarding their involvement in the profession by creating a strong network of support (Bandura, 1982; Faulkner, 2011; Liptow et al., 2016; Wadors, 2016). Belonging emphasizes that learners are invaluable within the professional community by validating their self worth, inherent creativity, and self identified goals for success. Fostering a sense of belonging in an apprentice assists them in developing a strong identity as a professional in their field. It allows a student to answer the question, “Do I fit in here?” with a resounding, “Yes, I do!”.

FOSTERING BELONGING

Developing a sense of belonging in YA learners begins with minimizing exclusionary practices within the learning environment including microinequities where students are singled out, overlooked, ignored, or otherwise discounted based on an unchangeable characteristic such as race or gender (Sandler & Hall, 1986). Fostering belonging is also encouraged through a method of scaffolding, achieved through continual reinforcement of organizational goals and social support. The resulting social bonds between adults and the students they serve will foster a sense of belonging and promote group identity (Allen et al., 2016; Hirschi, 2017; Riley, 2019):

1. **Involvement** - participation in activities related to group membership.

Involvement among apprentices can be accomplished by: (1) curating an environment where everyone has the opportunity to collaborate and participate in activities and lessons; (2) ensuring no one's voice is more important, or louder, than others; and, (3) creating space where everyone's ideas and approaches to problem solving are heard and considered important by the group.

2. **Attachment** - acceptance of the norms and professional expectations of the group.

Students can be encouraged to build attachments by: (1) receiving communication about professional and educational norms and expectations; (2) preparing them for introduction into the professional group; (3) showing students how their own cultural values, interests, and experiences are reflective of those of the profession; and, (4) ensuring that everyone is provided the same type of training, development, and mentorship opportunities.

3. **Commitment** – the investment of time and energy to the group and its members.

A spirit of commitment can be fostered by: (1) centering student voice in the event of problems; (2) establishing procedures and plans of action to address the needs of all students; (3) creating an environment where everyone feels safe; and, (4) providing extra time and/or extra opportunities to ensure that students are comfortable with the material they learn.

4. **Beliefs** - positive views and feelings regarding group membership.

Feelings of group membership can be created by: (1) ensuring each learner's culture and/or individuality are welcomed and valued in the learning environment; (2) making clear connections between students' work and their community; (3) empowering learners with the ability to act in their own best interest within the organization; and, (4) providing means and opportunities for students to network with professionals in their field to build excitement and belonging.

ACTIVITY: SCAFFOLDING FOR BELONGING

Throughout this activity, keep in mind the following methods of scaffolding for belonging:

- Involvement - participation in activities related to group membership
- Attachment - acceptance of the norms and professional expectations of the group
- Commitment - investment of time and energy to the group and its members
- Beliefs - positive views and feelings regarding group membership

Instructions

1. Read the following scenarios and consider how belonging can be fostered.
2. Identify methods of scaffolding belonging under each of the 4 categories listed.
3. Reflect on how similar examples may show up in your own YA programming.

Scenario 1:

Justin, a 15-year-old African American, is excited about his first day as a YA in a welding program. He is one of only seven learners selected and is proud that he was included in the cadre of students invited to learn. When Justin arrives at the weld shop, he realizes that he is the only person of color in the room. None of the other learners are Black, and none of the instructors are of color. Immediately, he begins to feel like an outsider, and wonders whether or not he will be accepted by his fellow students and the trainers. He wonders if he should quit the program before he invests too much.

Scenario 2:

Carolina is a 17-year-old Native American YA, who is beginning her second year in an agriculture tech program. She is one of three young women registered. Her family has grown their own vegetables and raised chickens and pigs for personal use since she was a small child, and she learned how to care for the crops and animals at an early age, by shadowing her grandmother. She developed a love for farming as she began to understand the cultural relevance that it held to her community. During her first year in the YA program, she was excited about learning the science of agriculture, and often shared with her cadre some of her farming methods that had been passed down from generation to generation. Her instructors thanked her for her contributions but insisted that while her techniques might have been useful on a small farm, they had no real relevance to the agriculture industry as a whole. Carolina is beginning to wonder what she is doing in the YA program, and is second guessing whether or not a career in agriculture will be something that she will enjoy.

Scenario 3:

Kelly is a 17-year-old YA who openly identifies as LGBTQ+. He loves numbers and has excelled in the finance youth apprenticeship program in which he is enrolled. Kelly works hard and is collaborative with his cadre. While his fellow apprentices are welcoming and warm with him, Kelly feels shunned by his instructors and workplace mentors, who often look over him when his hand is raised, address the concerns of other students more readily than they address his own, are seldom available when he has questions in the office, and who laugh and interact with other program participants, but not him. Kelly has come to the conclusion that he needs to speak to someone about how he is feeling but does not know if there is anyone that would listen to him. He feels completely alone, and is wondering if he is getting the most out of his time in the program. He is also beginning to wonder if, because of his LGBTQ+ identity, he will be treated as an outsider throughout his career in finance.

Scenario 4:

Scott is a 14-year-old accounting YA. His family comes from a small town where most of his neighbors have worked blue collar jobs. Because he excelled in math, his teacher recommended he enter the program, which is hosted by a local accounting firm. While he has interacted with his immediate advisor, Scott has not met any of the firm's partners or associates. He has no idea what the day-to-day experience of being an accountant is, other than coming to work and managing ledgers. He is becoming increasingly apathetic about his training, and unconcerned with accounting as a career. Scott is not sure where he fits in and is second-guessing his choice to follow up on the recommendation that he received.

Scenario 5:

Jazelle is a 16-year-old YA, enrolled her second year of training in a marketing and advertising program. She loves marketing and advertising, and has been excited about her course of training, since she entered into the program a year ago. Increasingly, while she is doing well, Jazelle is feeling lost. Her first year of apprenticeship seemed much easier than her second, and she is unsure if she is making the progress that she should. Moreover, the learning materials that she received are written in jargon that she doesn't feel familiar with. Jazelle would like to talk to someone about what she feels she needs to succeed, but she has been politely told that she will eventually "get it". Jazelle is concerned that she will not be able to maintain her standing in the program.

Continuous Improvement

Equity work is never entirely completed, nor ever accomplished or achieved - it is ongoing work.

Striving for equity as individuals, as programs, and as systems requires intentional and persistent action and reflection. The Program Improvement Process for Equity™ (PIPE™) offers a valuable and structured continuous improvement framework to support YA programs in their ongoing efforts to continuously build upon the equity work they have completed.

PIPE for youth apprenticeships is most effective when stakeholders including families, employers, schools, and sponsoring organizations come together in support of the continuous improvement efforts.



Step 1: ORGANIZE

Who can best help uncover the circumstances leading to underrepresentation in your YA program?

The entry point for PIPE is to organize a team of dedicated professionals that will work together toward the goal of bringing equity to a YA program. The team may be comprised of anyone who can add value to the conversation and extend the viewpoints used to analyze program conditions. While the initial inclination will be to select those people directly overseeing a program, there is great value in adding the voices of those who a YA program might affect, including community representatives, parents, and students.

Step 2: EXPLORE

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

The second step of this process has team members review key program performance indicators with an equity lens. The primary outcome for this step is to identify where equity gaps exist between the majority population and underrepresented populations (e.g., between participation for boys versus girls) (Williams, 2014). The gaps become a baseline by which to monitor program improvements or deviations. As the program matures, longitudinal data for the program will grow and trends over time also become a valuable source of information.

While the outcome of this step is to determine gaps, EXPLORE must begin with a thorough search for representative data sets. Continuous improvement can only be as good as the data that drives it. Data should be disaggregated by and across various student identities to dig deeply into the ways that barriers are limiting student groups. In other words, it is insufficient to only analyze data at one level, say by race/ethnicity, or by ability. For example, women may be underrepresented in a manufacturing YA program, but further analyses show that almost all the women who do participate are White women. The absence of any women of color in the program is an important data point that will drive Step 3: DISCOVER.

Step 3: DISCOVER

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

The third step in the PIPE process is to DISCOVER the root causes leading to the discrepancies documented earlier. This outcome for this step of the process is to uncover the major research-based factors contributing to underrepresentation specifically for the YA program and institution in question. Research and documented accounts are vital to this step to ensure that bias is not swaying the work of the team. Various resources are available at napequity.org to support root cause analyses - Nontraditional Career Preparation Root Causes and Strategies and the PIPEline to Career Success for Students with Disabilities.

After the teams have identified which root causes are most likely to contribute to the gap realized in step 2, the teams collect more information to better understand the program landscape. This is best done by connecting with those groups most affected by the barriers. Through interviews, surveys, focus groups and equity environmental scans, key constituents can share their stories and their perspectives on the issues at hand. Few groups are better situated to understand the barriers impeding their success than those being marginalized.

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?

Using the root causes identified in Step 3, along with the data gathered through stakeholder engagement, the PIPE team researches key evidence-based and research-based strategies that have been shown to address the root causes at play. With an array of possible strategies outlined, the team is tasked with selecting strategies that fit the context of the environment. A SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) will support the team in reaching the primary outcome of SELECT - two to three strategies to implement that will work best for the situation.

Step 5: ACT

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

In the final phase of this process, ACT, teams implement the strategies previously identified. Process and outcome metrics are established and collected so that the team can best measure the effectiveness of their initiative. Process metrics best answer the question – Did we implement our initiative successfully? Outcome metrics best answer the question – Did the initiative successfully result in a change for students? The power of this data resides in its overlap; an increase in student completion as the result of a change is only helpful if it can be tied to the particular actions of the YA team.

In collecting both process and outcome (or formative and summative) data, the PIPE team can then evaluate the effectiveness of their work. This brings the team back to STEP 1 and starts the continuous improvement cycle once again.

EQUITY PRINCIPLES FOR CONTINUOUS IMPROVEMENT

Any continuous improvement process, including NAPE's PIPE process, is susceptible to being undone unwittingly by the very team members engaged in the process. Improving youth apprenticeship programs is an important goal that requires all stakeholders, including educators, employer partners, and other government and community organizations to take an equity stance.

The five steps of the PIPE process explained above alludes to some key equity principles that deserve expansion. These three principles transform an otherwise step-by-step process into a vehicle for substantive change for YA. More about these principles can be found at <https://www.napequity.org/>.

Equity Lens

Asset Orientation: An equity lens asserts an asset orientation – a view of students and the community that views their backgrounds as beneficial to the learning process. The humanity of the communities being served by an institution is elevated, and the wealth of knowledge and ability inherent in otherwise marginalized groups are seen and valued. An equity lens embraces, cultivates, and leverages the diversity of each individual within a YA program.

Systems are Not Neutral: Systems-based improvement plan models can treat YA programs and educational systems as neutral processors that handle all inputs equally. It is assumed that the internal workings of the institution are not responsible for the varied and inequitable outcomes being realized for various student groups. Institutions are not neutral – apprenticeship outcomes strongly predicted by group membership (e.g., ability, race, language) are the signs of biased mechanisms. Consequently, data that purposefully include various markers allow evaluators to create an accurate picture that includes the effects of group identification on performance.

Grounded Action: An equity lens recognizes the depth of knowledge within a community, including its individual members. It follows that no one is better situated to speak to the problems within the community than the very individuals and families experiencing depressed outcomes. The stories of those negatively impacted by current policies and procedures with youth apprenticeships are the best sources of data, and the best sources of solutions to improve outcomes.



What's Next?

Work rooted in equity principles requires constant reflection and an active practice of integrating what you learn with how you show up with and for youth apprentices. This toolkit has prepared you with the information you need to articulate equitable youth apprenticeship practices to others, create programming where students feel a sense of self-worth and belonging, and monitor your program with a lens of continuous improvement and inclusion. Now it's important to extend this cognitive understanding into practice.

Often times, the first place to start is within yourself and in the relationships you maintain and continue to build with the young people in your life. What would it take for you to show up differently tomorrow? What is one step you can take that brings theory into practice? Who else needs access to this information? What is the name of one youth apprentice in the program whose expertise and effort deserves to be uplifted and celebrated? What is your role in helping the youth apprentices you work with become the catalysts for change in their own day-to-day environments?

Thank you!

At NAPE, we are here to support you as you continue to move through your own learning journeys. This work cannot and should not be done alone. We would be honored to hear and learn from you as you create, transform, and grow your own youth apprenticeship programs. Your dedication to this work, your community, and your students is essential in cultivating thriving learning environments. We cannot thank you enough for the time you've dedicated to centering the success of your students.

For more information about how to contact us and join our community of educators, agencies, and state affiliates please visit our website at napequity.org. There you can find more information about becoming a member, participating in one of many professional development opportunities, or joining us as we track and advocate for legislation that addresses access, equity, and diversity in the classroom.



Appendix

SUGGESTED SCHEDULE AND TOOLKIT CHECKLIST

Suggested Schedule	Completed	Notes
Week 1: Introduction		
Theory of Change		
Executive Summary		
Introduction		
Week 2: Equity in Youth Apprenticeships		
Marginalized Groups		
Participation in Youth Apprenticeships		
Equity vs. Equality		
Activity: Equity vs. Equality		
Week 3: Access		
Barriers to Access		
Reflection Tool: Identifying Structural Barriers to Access		
Activity: Access and Supports		
Week 4: Belonging		
Integration-Inclusion-Belonging		
Fostering Belonging		
Scaffolding for Belonging		
Week 5: Continuous Improvement		
Organize, Discover, Explore, Select, and Act		
Equity Principles for Continuous Improvement		
What's Next		

ANSWERS: SCENARIOS - IDENTIFY EQUITY V EQUALITY

Scenarios	Equity or Equality	Outcome
Example: Ms. Alexander trains four youth apprentices chefs in her restaurant, two of whom are single parents of preschool aged children. To be fair to all, she asks them to work between 9 am and 5 pm, which are standard working hours.	Equality	Some of the apprentices, due to childcare issues, may be unable to participate and maintain acceptable standing. Providing flexible work hours may alleviate this.
Mr. Asfour trains three youth apprentice dental assistants, one of whose native language is Spanish. In an effort to keep his trainees current on the procedural expectations outlined by the American Dental Association, he provides literature to them, in both English and Spanish.	Equity	Because of Mr. Asfour's actions, the students who may be in the process of learning English would not face a language barrier as they are training.
Brayshawn lives in the city of Philadelphia and is a youth apprentice in agricultural engineering. Each day he uses public transit to travel approximately 15 miles from his home to his worksite. His trainer, Ms. Carpenter, has asked Brayshawn and his fellow youth apprentices to practice analyzing soil samples over the weekend, at home. The YAs are to take three differential samples, analyze them, and report results to Ms. Carpenter on Monday.	Equality	Because Brayshawn lives in an urban area where he may not have the opportunity to collect samples. He would have to travel away from home just to complete the assignment. He may not have the financial resources or time to do so. These barriers can create a deficit in the training program for him due to economic standing and location.
Mr. Pha trains six youth apprentice carpenters in his woodworking shop. He often sends one or two apprentices out on jobs with skilled craftspersons. One of the criteria that he uses to choose who will work jobs outside of the main shop is whether trainees have their own tools to take to the off-site location.	Equality	While Mr. Pha is trying to level the playing field, not all students have access to expensive tools. If the criteria for outside work is whether or not trainees have tools, some trainees will be excluded by virtue of economic standing.
Ms. Oocuma is developing a youth apprenticeship program for local high school students in HVAC. She is interested in ensuring that youth who participate are provided with standard uniforms. When she contacts the uniform distributor, she orders three standard sizes: small, medium, and large.	Equality	While small, medium and large may appear to represent inclusion, shop uniform sizes are generally reflective of male proportions. Women may not have access to what they need.

DISCUSSION: ACCESS AND SUPPORTS

1. Bright Smiles Dentistry is proud of its youth apprenticeship program. Sean wants to apprentice as a dental assistant, but Bright Smiles Dentistry's office is not on a public bus line and assumes that its employees have their own transportation. Sean comes from a single-parent household and finances are tight. He knows a good paying youth apprenticeship is a valuable way to help contribute to the family income in a substantial way, but buying a car is not an option for Sean.

Help the student overcome transportation barriers that may exist.

2. Brookstown Bank would like to employ a youth apprentice who can extend excellent service to its customers. Dylan is enrolled in advanced math classes at his local community college and wants to participate in a youth apprenticeship to become a bank teller. Dylan is eager to provide excellent customer service and is very personable. Dylan, however, is concerned that the bank would not be welcoming or understanding of his transgendered identity and would certainly not allow Dylan to work with the public.

Create an inclusive environment by celebrating unique differences. Set all students up for a positive and successful youth apprenticeship. Focus on building student skills and helping them to achieve their career goals.

3. The state apprenticeship agency is very proud of recruiting a network of employers willing to bring in youth apprentices. Alex, who loves his community and hopes to stay and work there one day, wants to participate in a YA program and realizes that there is only one company on the list of opportunities that aligns with his interests in engineering technologies. This company profits from products that are in direct conflict to his sincerely held religious beliefs.

Give students choice. Work to foster many different business relationships and youth apprenticeships sites in the community to provide many different options to students that align with their goals and preferences.

4. A youth apprenticeship site, HKJ Renewable Energy, works hard on inclusivity and diversity initiatives and even focuses on making sure students feel like they genuinely belong at the company. They work hard to recruit a cohort of apprentices that is 50% female and 50% male. The company wants feedback on the student experience at the end of the program so they can get even better at what they do, so they emailed a survey to students to complete at home once the youth apprenticeship was finished.

Ensure that students can access all aspects of the youth apprenticeship, and that all work can be done onsite professionally and safely. Enable full participation in the youth apprenticeship by giving students access to necessary workspace, materials, and equipment they will need to be successful on the job, including computers and internet access.

5. iBoom's website states that they value diversity in their workforce, and have pictures on their website that reflect this priority. Trevor is excited to pursue a youth apprenticeship that will put him on track to be a computer repair technician. He loves working with his hands and knows this could be a valuable and lucrative career path. Trevor mentioned to his supervisor how excited he is to work there. However, when he arrives for his first week of work, he notices he is the only apprentice of color and perhaps the only black employee in a department of thirty IT professionals. When he asks about the disparity between what he saw on the website and the actual workforce, his mentor says that sometimes employees are just not a "good fit" for the company culture.

Continuously educate employees about the importance of an inclusive culture; communicate about equity initiatives and work to nurture an inclusive culture. Ensure all employees understand the importance of equity initiatives and what they can do to support an inclusive environment in which all apprentices feel they belong.

6. Ives & Alexander, a prestigious law firm in the city interviewed Maria for an apprenticeship. Maria is eager to explore a legal career and knows this is a big opportunity for her. She notices, however, that everyone wears a suit in the office. Even with her apprenticeship income, she is concerned about the cost of a new wardrobe and dry cleaning if she is to fit in as a professional in the office.

Maintain awareness and take actions to remove structural barriers to access. Be aware of structural barriers that may prevent students from accessing the apprenticeship and take action to remove those barriers. Institute affordable dress policies. If students need their own equipment, provide affordable methods for acquiring them.

7. Good Health Pediatric Medicine Practice would like to hire Ronald for a youth apprenticeship in medical office technology. Ronald became interested in helping children get better when he was treated for bone cancer in his leg as a young child. Because of his treatment, it is still uncomfortable for him to sit for long periods of time. He will be required to interact with patients at the built-in reception desk which is set to a fixed height. He really wants this apprenticeship, so he is planning to just "push through" any discomfort he feels while working at the reception desk.

Allow for safe navigation and working environments for all students regardless of their ability or disability. Consider the safety, comfort, and physical needs required for all students.

8. Jackson High School is promoting a new early childhood education apprenticeship through the Wild Rose Childcare Center, a well-respected local business. Tamar wants to participate in a YA program so she can earn money and earn valuable experience and credentials that will help her in her future pursuit of becoming a child psychologist. The application materials are not available in her parents' preferred native language – the one in which they are most comfortable reading. Her parents do not want her to participate because they don't see the value in it and feel she could gain similar experience working for her aunt.

SCAFFOLDING FOR BELONGING

Scenario 1 - Possible Scaffolding Interventions:

1. Ensuring that each learner's culture and/or individuality are welcomed and valued in the learning environment (respect) – beliefs
2. Ensuring that everyone feels safe within the learning environment (fostering trust) - commitment
3. Ensuring that all YA are provided the same type of training and development (support/equity) - attachment
4. Promoting mentoring opportunities for YA (relationship building) - attachment
5. Ensuring that everyone has the opportunity to collaborate and participate in activities and lessons (ensuring equity) - involvement
6. No one's voice(s) are more important, or louder, than others (avoiding microinequities) – involvement

Scenario 2 - Possible Scaffolding Interventions:

1. Everyone's ideas and approaches to problem solving are considered by the group and are understood as important (ensuring equity) – involvement
2. No one's voice(s) are more important, or louder, than others (avoiding microinequities) - involvement
3. Showing the YA how their own cultural values, interests, and experiences are reflective of those of the profession - attachment
4. Ensuring that the voices of YA are heard, in the event of problems (scaffolding) – commitment
5. Ensuring that YA understand the connection between their work and their community – beliefs
6. Ensuring that each learner's culture and/or individuality are welcomed and valued in the learning environment (respect) - beliefs

Scenario 3 - Possible Scaffolding Interventions:

1. No one's voice(s) are more important, or louder, than others (avoiding microinequities) - involvement
2. Ensuring that all YA are provided the same type of training and development (support/equity) – attachment
3. Ensuring that the voices of YA are heard, in the event of problems (scaffolding) - commitment
4. Establishing procedures and plans of action to address the needs of the YA (scaffolding) - commitment
5. Ensuring that everyone feels safe within the learning environment (fostering trust) -commitment
6. Ensuring that each learner's culture and/or individuality are welcomed and valued in the learning environment (respect) – beliefs
7. Ensuring that learners feel that they have the ability to act in their own best interest within the organization (fostering agency) - beliefs

Scenario 4 - Possible Scaffolding Interventions:

1. Ensuring that everyone has the opportunity to collaborate and participate in activities and lessons (ensuring equity) – involvement
2. Ensuring that professional and educational norms and expectations are articulated well - attachment
3. Preparing YA for eventual introduction into the professional group – attachment
4. Promoting mentoring opportunities for YA (relationship building) – attachment
5. Ensuring that the voices of YA are heard, in the event of problems (scaffolding) - commitment
6. Providing means and opportunities for students to network with professionals in their field, to build excitement and belonging (encouraging social capital) - beliefs

Scenario 5 - Possible Scaffolding Interventions:

1. Ensuring that professional and educational norms and expectations are articulated well – attachment
2. Promoting mentoring opportunities for YA (relationship building) - attachment
3. Ensuring that the voices of YA are heard, in the event of problems (scaffolding) - commitment
4. Establishing procedures and plans of action to address the needs of the YA (scaffolding) - commitment
5. Ensuring that everyone feels safe within the learning environment (fostering trust) - commitment
6. Providing extra time and/or extra opportunities to ensure that learners are comfortable with the material that they learn (scaffolding) - commitment
7. Ensuring that learners feel that they have the ability to act in their own best interest within the organization (fostering agency) - beliefs

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