GROW APPRENTICESHIP CALIFORNIA

POWERED BY THE FOUNDATION *for* CALIFORNIA COMMUNITY COLLEGES

The James Irvine Foundation

HIGH ROAD ALLIANCE
equitable career pathways

Building and Growing Apprenticeship with Equity in Mind

An Equitable Apprenticeships Toolkit

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Prepared by
Jennie Mollica and Peter Simon
HIGH ROAD ALLIANCE

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About High Road Alliance

High Road Alliance (HRA) convenes partnerships to open doors to equitable, inclusive employment opportunities and career advancement. Through program development, planning, research, technical assistance, and facilitation of peer learning, HRA promotes the development and growth of pre-apprenticeship and apprenticeship programs that lead to high road employment opportunities, offer livable wages and benefits, and contribute to a sustainable economy and shared economic prosperity. www.highroadalliance.org

Apprenticeship Support Network

The Apprenticeship Support Network (ASN) of the Foundation for California Community Colleges (FoundationCCC) supports over one hundred California Apprenticeship Initiative projects and the larger apprenticeship ecosystem in California by providing technical assistance and convening. ASN offers a monthly newsletter, an online community of practice, a webinar series, and virtual and in-person convenings, including quarterly learning labs.

INTRODUCTION

This Toolkit was created to help those whose work involves designing and running pre-apprenticeship and apprenticeship programs to intentionally encourage and support the inclusion of apprentices who reflect the full diversity of our communities — in terms of race, ethnicity, gender, primary language, disability, age, sexual orientation, and other factors.

The U.S. federal government and many states have committed to expanding apprenticeship as a strategy for advancing workers to higher-paid jobs and careers and meeting the hiring needs of employers. As we chart a post-pandemic economic recovery, the expansion of apprenticeships will contribute to rapid up-skilling and re-employment across in-demand industries and equitable distribution of training and employment opportunities. **With intention — both in policy and in programming — apprenticeships will be part of a solution to the historical marginalization of Black, Indigenous, and people of color (BIPOC), immigrants, women, people with disabilities, and other workers and the growth of sectors poised to shape a vibrant and resilient economy.**

With intention is an important part of this statement; without intentionality, persistent disparities will be replicated. **Although we have evidence of the power of apprenticeships to lift workers into higher-quality jobs and strengthen the workforce,[1] Americans have not accessed this training model equitably. Only 9 percent of active apprentices are women, 25 percent are Latinx, 10 percent are Black, 2 percent are Asian, and 2 percent are American Indian or Alaskan Native.[2]**

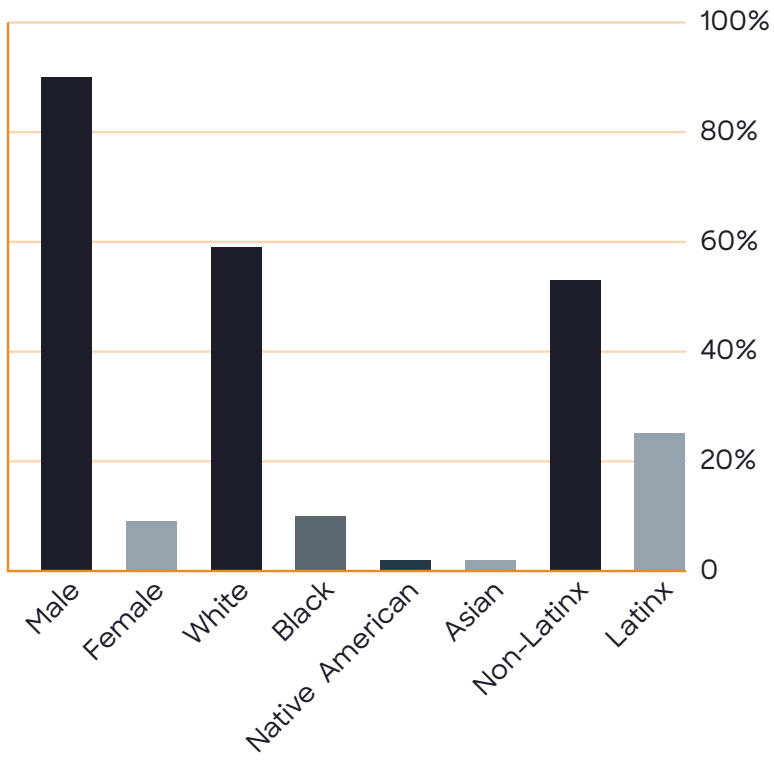
Other identifiers, such as disability and sexual orientation, are not required fields for apprenticeship reporting in the national system, making underrepresentation difficult to quantify. The intersectionality of identities masks the multiple challenges faced by many Americans who could benefit from apprenticeship training and the potential for high-quality jobs as a result.

If we believe in the role apprenticeship can play in bettering our society and our economy, then we must apply an equity lens to every aspect of apprenticeship — and pre-apprenticeship — design and delivery. Also, we must support each other in this movement to expand equitable apprenticeship, building networks of partners who share successes and challenges and learn from each other.

1. See Lerman, R. I. (2010) *Expanding apprenticeship: A way to enhance skills and careers.* Washington DC: Urban Institute; Holzer, H. J., and Lerman, R. (2014) Work-based learning to expand jobs and occupational qualifications for youth. *Challenge* 57(4): pp.18-31.

2. U.S. Department of Labor, 2020.

Active Apprenticeships in the U.S. (FY 2020)[2]



This Toolkit, specifically focused on equitable access to the benefits of apprenticeship, complements a number of available tools designed to assist in the process of apprenticeship development. Our hope is that this Toolkit will make a unique contribution to the library of apprenticeship resources, and that it will grow and improve over time as we collectively test new approaches, share lessons learned, and develop new tools.

Equitable access to apprenticeship is not accomplished by simply providing an open door. The purpose of this Toolkit is to encourage applying an equity lens to every aspect of pre-apprenticeship and apprenticeship program planning, design, staffing, outreach, delivery, evaluation, and improvement. Equity is both a mindset and an array of practices that can be intentionally undertaken. The result should be a program that is industry-driven as well as worker-centered and community-oriented.

We invite you and your team to familiarize yourself with the Equitable Apprenticeship Framework and explore the variety of tools, examples of effective practice, and links to resources that are compiled here to support you on your journey. We hope this process will be fruitful and lead to the successful participation and contributions of workers who otherwise might not have been included in your apprenticeship programs.

DEFINITIONS

Equity

Whereas equality means providing the same to all, **equity** means recognizing that we do not all start from the same place and acknowledging and making adjustments to provide a "level playing field" for everyone. When we look critically at these different starting places and the need to remedy them, we apply an **equity lens.**

Quality Jobs

Quality jobs provide workers with family-sustaining wages and benefits, safe and healthy work environments, a voice in decision-making about working conditions and wages, and accessible opportunities to learn and grow along a career pathway. In quality jobs, workers' rights are protected, and their work is valued and respected.

Registered Apprenticeship

A registered apprenticeship is defined by the following elements:[3]

- A formalized, written plan that embodies the terms and conditions of apprentices' employment, training, and supervision by signatory employers
- A sponsor who has undertaken to carry out the apprenticeship training program
- Full-time employment of the apprentice that includes paid on-the-job training
- Related classroom instruction in technical subjects
- Formalized wage progression based on time in apprenticeship or competencies achieved
- Successful completion leading to portable certification
- Oversight by a body of employers and unions, if involved, designated by the sponsor to administer the training program
- Registration either with a state apprenticeship agency or the US Department of Labor (DOL), or both.

3. See 29 CFR 29 Labor Standards for the Registration of Apprenticeship Programs.

Pre-Apprenticeship

Pre-apprenticeship programs can take one of two forms:

- A **registered pre-apprenticeship** program prepares participants to succeed in a registered apprenticeship program. To be registered in California, for example, a pre-apprenticeship must have a documented partnership with at least one apprenticeship program and be approved by the state apprenticeship agency. Those completing a registered pre-apprenticeship are allotted space in the partnering apprenticeship(s).
- A **non-registered pre-apprenticeship** program has not been registered with the state apprenticeship agency, and it may or may not lead to a particular apprenticeship program; however, it is designed to prepare participants for one or more apprenticeship programs, or for careers in an industry sector that offers apprenticeships.

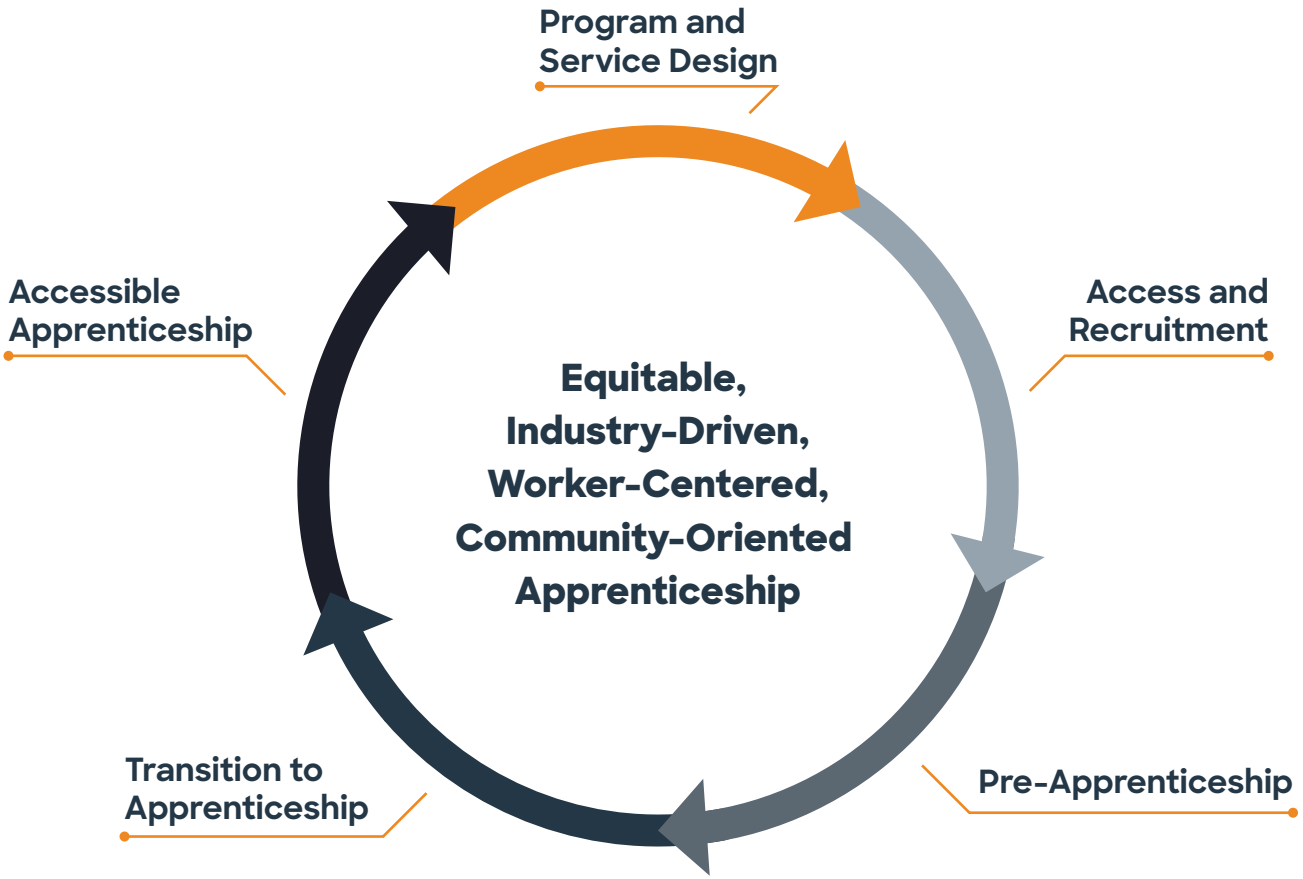
Beyond this basic definition, there is great variety in the content and delivery of pre-apprenticeship programs. Pre-apprenticeships may include career exploration, workplace readiness training, safety training, or basic skills instruction in English as a second language (ESL), high school completion/GED, or math. Pre-apprenticeships may also offer supportive services to address participants' potential barriers to apprenticeship participation, such as transportation, childcare, costs of acquiring tools, etc.

Equitable Apprenticeship

Equitable apprenticeship programs address the barriers — both immediate and historical — that may impede pre-apprenticeship or apprenticeship access, acceptance, and an apprentice's integration and growth in the industry. Barriers addressed include: required levels of basic skills (such as English or math), a high school diploma or equivalent, or readiness for postsecondary level technical instruction, as well as limited awareness of specific occupations or industries or a criminal record. Additional barriers are the need for transportation, childcare, healthcare, or other essential supports; physical access barriers, such as non-Americans with Disabilities Act (ADA) compliant workspaces; the need for income during training; and unconscious or overt bias encountered in recruitment, in hiring, or on the job. Equitable apprenticeship responds to these barriers through program development and implementation to achieve the "level playing field" of equity.

Looking for federal regulations related to apprenticeship equity and access? This toolkit supports compliance with the regulations and considers equity beyond these requirements. See the Equal Employment Opportunity (EEO) Regulations for Registered Apprenticeship: https://www.dol.gov/agencies/eta/apprenticeship/eeo

EQUITABLE APPRENTICESHIP FRAMEWORK



This Equitable Apprenticeship Framework guides the Toolkit's approach to identifying and addressing issues of equity in apprenticeship. The Framework's five elements — Program and Service Design, Recruitment and Access, Pre-Apprenticeship, Transition to Apprenticeship, and Accessible Apprenticeship — are realms where your team's intentionality will make a difference. In each of these five areas, you may identify disparities in access and inclusion, devise solutions, try out new strategies, and learn from what you put in place to continuously address equity challenges as they arise. The Toolkit will guide your team's process of information-gathering, reflection, and action planning across the five elements.

Five Framework Elements

The Framework's five elements could be seen as a sequence — from designing a program, to recruiting for it, helping someone prepare and transition into it, and delivering apprenticeship training. But **applying an equity lens is not a one-time activity.** The purpose of this Toolkit is to guide a team's embrace of an equity mindset and the unfolding of an ongoing process of data-driven reflection, learning, and intentional effort to achieve equitable apprenticeship access and outcomes. For this reason, the Framework is represented as a circle. Each of its elements should be revisited as a program grows and more is learned.

When equity is considered consistently and extensively throughout this process, programs are not limited to providing **accommodations** to address programmatic or systemic inequities. Instead, **programs and systems can be inclusive by design.** In simple terms, accommodations are used when the system is broken; however, it is better to have a system that is designed with inclusivity in mind.

Program and Service Design describes the upfront and ongoing work of rigorous gathering and use of data on industry, worker, and community needs and equity-related outcomes. It also describes listening to workers, employers, and other stakeholders to identify barriers to equity and the best path forward to address them. It also describes the necessary and continuous engagement of partners and leveraging of resources that are needed to build and sustain equitable programs. Information-gathering Tools #1-6 and Action-Planning Tool #1 relate to Program and Service Design.

Recruitment and Access describes a proactive approach to reaching communities and addressing barriers to entry into a training program. Specifically, this approach to recruitment promotes equity in program entry requirements, engages workers and community partners, and supports workers' career awareness and agency. Opening the door to an apprenticeship is not enough; equity-focused recruitment and access strategies get the word out widely and ensure that entry requirements and procedures are fair and equitable. Action-Planning Tools #2-3 relate to Recruitment and Access.

Pre-apprenticeship programs equitably prepare prospective apprentices with the basic skills, soft skills, digital literacy skills, industry awareness, and readiness needed to do well and succeed in apprenticeship and on the job. Like apprenticeship, they respond to industry demand so that participants are genuinely prepared for structured pathways into in-demand, quality jobs. Action-Planning Tool #4 relates to Pre-Apprenticeship.

Supports for **Transition to Apprenticeship** ensure equitable access by advocating for and accompanying an apprentice over the threshold of apprenticeship entry. Transition support may be needed to overcome racism and discrimination, a lack of accommodations or cultural relevance, bureaucratic hurdles, or an apprentice's own fears or discouragement. This element of the framework describes a holistic approach to supporting workers' entry into apprenticeship by removing barriers, advocating, and creating direct linkages. Action-Planning Tool #5 relates to Transition to Apprenticeship.

Accessible Apprenticeship builds inclusion and support into classroom instruction, on-the-job training, and culturally responsive programming, accommodates differences in background and skills levels, and equitably prepares workers with the technical, academic, digital, and soft skills needed to succeed in quality occupations and careers. An accessible apprenticeship takes into consideration embracing the "whole apprentice," and breaking down barriers to success in training and on the job. Action-Planning Tools #6-7 relate to Accessible Apprenticeship.

USING THE EQUITABLE APPRENTICESHIP TOOLKIT

Why should we use the Toolkit?

This Toolkit will help your team ensure that existing and envisioned apprenticeship programs and services reach and benefit the full diversity of community members. When your program is in development, the Toolkit will guide you through steps to gather information, reflect, and design your program with a focus on equity. When a program is already operating, the Toolkit will help you apply an equity lens to continuously evaluate, refine, and expand what you offer.

Who is the Toolkit for?

The Toolkit is intended for use by an entire team involved in designing or delivering an apprenticeship and/or a pre-apprenticeship program. Depending on where you are in the process of partner engagement and program development, your team may be big or small; in any case, be inclusive, and invite partners to use the Toolkit together. If your apprenticeship program has an existing apprenticeship committee, these partners should be included. You may want to also invite new partners to participate specifically in efforts to address equity. (Action Planning Tool #2 relates to securing these partners.) Consider including on your team:

- Apprenticeship administrators and training coordinators
- Employers (supervisors, mentors, human resources representatives...)
- Industry associations
- Unions
- Labor-management partnerships
- Apprentices and other workers
- Community colleges (deans, instructional faculty, counselors...)
- Adult education providers (administrators, teachers, transition specialists...)
- Local workforce development boards
- Other public agencies, such as county social services agencies, probation departments, Department of Rehabilitation, and others. (To consider the range of possible public partners and the funding sources that they may leverage, see the Federal Resources Playbook for Registered Apprenticeship.)
- Community-based organizations with capacity and reach to provide community outreach, direct services, advocacy, etc.

While the origins of the Toolkit are in California and many of the examples included here are in this state, it is designed to be useful to teams across the United States.

How should we use the Toolkit?

The Toolkit is a guide for group reflection, discussion, and planning. A few steps are recommended:

1. Are you and a few colleagues champions for addressing equity in your apprenticeship program? Take the lead in reviewing the entire Toolkit and considering how it could be most helpful in your context.
2. Identify someone in your group to lead the process and facilitate conversation.
3. Have a plan to document what is learned and determined through the process, and designate a lead documenter.
4. Identify all the team members who will be invited to participate, and let them know about the opportunity.
5. Ensure that all team members have adequate familiarity with the program to understand and engage with the tools (eg., your existing apprenticeship documents, basic program participation, or outcome data).
6. Define a projected timeline and goals for the process.
7. Consider which tools to use first. The tools may be used in any order, and not all tools may be needed by your team; however, it is important to complete Information Gathering Tools at the outset, as this data informs your choice of Action Planning Tools.
8. Convene your team for a series of discussions using the tools as guides.
9. Consider holding your Toolkit and the information you gather in a shared drive where team members can view and contribute to them.
10. Capture the information you gather and action steps you define in the tables, which are contained in each tool and in the accompanying Workbook.
11. Use the completed table in each Information-gathering Tool to inform your team's action planning.
12. Use the completed table in each Action Planning Tool as an action plan to guide your team's program design and improvement.

When should we use the Toolkit?

The Toolkit can be used at any and all stages of apprenticeship development, review, and expansion. It can help your team answer questions about equity whether you are just putting pieces in place for a future program or aiming to improve on what you currently offer. At the very least, your team should have already taken first steps to identify the target sector and occupation(s) for your apprenticeship program(s).

OVERVIEW OF THE EQUITABLE APPRENTICESHIP TOOLKIT

The Toolkit contains six Information Gathering Tools and eight Action Planning Tools. Each of the tools will help your team explore an element of the Equitable Apprenticeship Framework:

Information Gathering Tools

The Information Gathering Tools will help your team assess the current conditions of equity and inequity and understand for whom inequities may exist. Each tool is headed by a guiding question, along with key equity perspectives and other things to consider as you begin work with the tool. Links are provided to resources that may help you gather the information you need, and examples are given of analyses that informed other programs. In every tool is a table that your team will fill in with the most relevant information you can find — the compelling take-aways that will inform your future action steps, and that you may wish to update over time. At the end of the tool are questions for reflection on the information in your table.

1. Community Demographics and Skills
2. Occupation Demographics and Skills
3. Industry Employment Requirements
4. Apprenticeship Training Entry Requirements
5. Potential Apprentices' Goals, Interests, and Challenges
6. Conditions for Equity-Focused Change

Action Planning Tools

The Action Planning Tools help you zero in on inequities and opportunities you identified through information-gathering, review promising practices and examples relevant to your situation, and commit to specific actions that your team will undertake to address equity issues. Each tool starts with a question to help you name the problem you aim to solve. The tool then lists a menu of possible solutions, with links to help your team learn more about specific practices and how they have been applied in other contexts. The table in each of these tools is an action plan; your team will add actions to each relevant area, with detail on who will lead the action and by what date. The final action planning tool will help your team look more holistically at your intentions to address equity in the immediate future and for continuous improvement of your pre-apprenticeship and/or apprenticeship program.

1. Defining the Goals of Your Equitable Apprenticeship Team
2. Securing Partnerships
3. Making Apprenticeship Entry Accessible
4. Designing a Pre-apprenticeship Program
5. Removing Barriers and Supporting Transition to Apprenticeship
6. Making Apprenticeship Classroom and On-the-Job Training Accessible
7. Providing Support During Pre-apprenticeship and Apprenticeship Training
8. Keeping Equity Front and Center

INFORMATION GATHERING TOOLS

1. Community Demographics and Skills

GUIDING QUESTION

What are the demographics and skill levels of community members who might consider joining our pre-apprenticeship/apprenticeship program?

THINGS TO CONSIDER

- What are the geographic boundaries of your "community"? Define these boundaries in a way that makes the most sense for your apprenticeship program, i.e. a city, a county, or a region defined by an employer's hiring pool or an education provider's service area.
- Remember the intersectionality of identities. Individuals in your community will share multiple identities, and this is significant to your understanding of community demographics and dynamics. As you complete the table below, make note of these intersectionalities and gather relevant data.
- Some information about your community demographics and skills levels may already be known and can be added to the table right away. Other information may be harder to come by. Be creative, and do not hesitate to seek out this data wherever it is available, even if it is anecdotal.
    - *For example, if you hope to learn whether your online apprenticeship courses are accessible to community members, you may want to reach out to community-based organizations and adult education providers that know specific populations or neighborhoods. Pose questions specific to the information you're aiming to gather, for example: what is the range of digital skills levels among the community members you serve?*
- Think about what data points invite deeper research and fill in the table with more detail where it is helpful. If a data point is compelling, go deeper in your analysis.
    - *For example, San Diego has the third-highest number of veterans of any county in the nation, and 14% of businesses in the county are owned by veterans. Knowing this may encourage a team to consider strategies to ensure equitable access to apprenticeship for veterans in this community.*
- Considering the far-left column of the table below, are there other demographic or skill level indicators that are relevant to or descriptive of your community? If so, add these to the table.
- Return to this tool as you work on equity issues and raise new questions to make sure that data on the community continues to drive your planning and priorities.

KEY EQUITY PERSPECTIVE

- Understanding community demographics will be important to later analysis of inequities and actions to address them.
    - *For example, if Latinx adults comprise 50% of community members and 60% of entry-level workers in our industry, but only 5% of apprentices and 4% of higher-skilled workers, then we have identified an inequity and an opportunity to "level the playing field" by making changes to the apprenticeship program.*
- Apprenticeship design should be data-driven; however, not all inequities are revealed by publicly available data sources. Equity-minded apprenticeship teams look at the published data, identify possible gaps, and design for the inclusion and success of groups who might remain hidden.

RESOURCES

- Census.gov data profiles are available by county, city, or other geographic area.
- The PIAAC U.S. Skills Map provides state and county indicators of adult numeracy and literacy.
- Data used to inform CA Adult Education Program (CAEP) planning (2016) includes demographics of the adult population by region.
- American Community Survey data includes information on household computers and use of broadband internet service.
- The Annual Disability Statistics Compendium drills down on disability data by county.
- County-level data on the number of individuals currently on parole is available from the California Department of Corrections and Rehabilitation. Data on the number of individuals on probation may be available from the county probation office. California does not track the number of individuals with prior convictions. Working with re-entry service provider organizations and county offices of probation may be the best way to identify need in your community.

EXAMPLES FOR INSPIRATION

- Some local governments publish their own concise data summaries. Here is an example from the City of San Bernardino that summarizes U.S. Census and other relevant data.
- This report from the UCLA Labor Center, Young Workers in California: A Snapshot, looks at age and ethnicity data to show the number of workers ages 18-29, their education levels, and their representation in low-wage, frontline occupations, with recommendations for investment in career ladders and accessible training opportunities.

REFLECTION QUESTIONS

1. Who does this data suggest may not be well-served by our existing training programs, or represented in our target occupations?
2. What does this data tell us about community members' current readiness to enter our target sector or occupations, or about possible key gaps in readiness?
3. What does this data tell us about the support that might be needed for more members of our community to access apprenticeship training and enter these occupations?

Category	Data Relevant to Prospective Apprentices	Source
Race and Ethnicity		
Gender and Sexual Orientation		
Age		
Veterans Status		
Right-to-Work Documentation Status		
Justice System Involvement		
Foster Care System Involvement		
English Language Levels		
Basic Academic English levels		
Basic Math Levels		
Digital Skills Levels		
High School Diploma/Equivalency Attainment		
Prior Postsecondary Education or Training		
Disability and/or Special Education Status		
Digital Access (i.e. broadband, cell phone)		
Other:		

2. Occupation Demographics and Skills

GUIDING QUESTION

What are the demographics and skills levels of incumbent workers in our target occupation(s)?

THINGS TO CONSIDER

- Before you begin using this and subsequent tools, it's important that your team identify your target industry sector and/or occupation(s).
- Published data may be so broadly regional, state, or national that it fails to describe your unique community; however, it may provide good points of reference and make up for gaps in local data.
- To learn about the incumbent workforce in your specific occupations and your specific community, prioritize employer and union interviews. Not only will these give you very specific and relevant information; the interviews themselves may also help you build relationships between industry and other apprenticeship partners.
- Certain data — like information on workers' disabilities, sexual orientation, or literacy levels — may be difficult to obtain because it is not routinely disclosed by workers or gathered by employers, or because it is confidential. Be sensitive to ways in which stigma associated with an identity or fear of retribution may contribute to a lack of data.

KEY EQUITY PERSPECTIVES

- Demographic differences between community members and the workforce in this industry may suggest a need for targeted outreach and strategies to facilitate access.
- Demographic differences between the entry-level workforce in this industry and the workforce in higher-skilled target occupations may reveal inequities to be addressed through pre-apprenticeship and apprenticeship.
- Skill-level differences among community members, the entry-level workforce in this industry, and the workforce in higher-skilled target occupations may suggest opportunities for targeted skills training.

RESOURCES

- Employer and union interviews
- Published industry reports
- Local Workforce Development Board (LWDB) or America's Job Center (AJC) Business Services representatives
- Adult education programs engaged in career education or connecting students to employment
- Community colleges' industry sector regional directors
- Community colleges' labor market research divisions
- Regional industry advisory bodies (for example, Association of Manufacturers Bay Area)
- Bureau of Labor Statistics (BLS) provides national data by age, disability, educational attainment, foreign-born status, and other demographic characteristics, though not always by occupation.

EXAMPLES FOR INSPIRATION

- This article about the BYD/SMART Apprenticeship Program describes how targeted hiring practices have contributed to a workforce with much higher percentages of workers of color than the national transportation equipment manufacturing workforce.
- This case study on manufacturing pathways in Milwaukee uses data on racial and gender disparities by occupational level to explain the need for an accessible intermediate step on the apprenticeship pathway. The case study says "'non-traditional' [women and people of color] workers now make up a significant share of Milwaukee's production workforce, but the most highly skilled workers still tend to be older, white, and male... Opportunities to enter... apprenticeship programs are limited, and they are generally the domain of white men."
- This Profile of Domestic Workers in California (UCLA Labor Center) presents data on workers in multiple domestic worker occupations.
- This and other Bureau of Labor Statistics special reports highlight special populations, such as persons with a disability.

REFLECTION QUESTIONS

1. Where are there differences between the demographics of our community and of jobs in the target industry?
2. Where are there disparities in the demographics of the entry-level and higher-skilled workforces?
3. What are the differences between the skills levels of entry-level and higher-skilled workers?
4. What equity issues could be addressed through pre-apprenticeship and apprenticeship?
5. What does the data tell us about opportunities for targeted skill development?

Target Industry:

Target Occupation(s):

Category	What is known about the current workforce in entry-level positions in this industry?	What is known about the current workforce in higher-skilled positions in this industry?	Sources
Race and Ethnicity			
Gender and Sexual Orientation			
Age			
Veterans Status			
Right-to-Work Documentation Status			
Justice System Involvement			
Foster Care System Involvement			
English Language Levels			
Basic Academic English levels			
Basic Math Levels			
Digital Skills Levels			
High School Diploma/ Equivalency Attainment			
Prior Postsecondary Education or Training			
Disability and/or Special Education Status			
Digital Access (i.e. broadband, cell phone)			
Other:			

3. Industry Employment Requirements

GUIDING QUESTION

What are employers' or the industry's requirements of skills, certifications, prior experience, and other qualifications to enter the target occupation(s)?

THINGS TO CONSIDER

- Because an equitable apprenticeship must be industry-driven to lead participants to a job and a career, a strong understanding of industry requirements is an essential starting point for program design.
- Learn about employers' requirements through interviews with managers or human resources personnel, or by reviewing job postings or published reports.
- For unionized occupations, seek out the union's perspective on hiring requirements, in particular the perspective of union representatives at the workplace (e.g., shop stewards).
- Hear from entry level workers what qualifications they believe would be required to advance to higher positions, and hear from higher-level employees what qualifications were key to their hire.
- Published labor market data, such as that found in O*NET Online, is a good complement to locally-derived information. Consider asking local employers to react to and validate it.

KEY EQUITY PERSPECTIVES

- Understanding target occupations' required qualifications can enable your team to "backwards map" to ensure your apprenticeship program scaffolds and prepares participants for success.
- Employment requirements can be questioned and challenged, through national or state policy advocacy or through individual or regional employer engagement.
    - *For example, the national Ban the Box campaign advocates to remove employment requirements that inequitably limit opportunities for certain groups, such as individuals with a prior arrest or conviction record.*
- You may want to question whether the hiring requirements in your target industry or occupation are appropriately aligned with job requirements, or whether they unnecessarily exclude individuals who would otherwise meet job requirements.
    - *For example, job postings may include boilerplate language about minimum language fluency or about physical ability to lift and carry heavy loads, which could be questioned for some job classifications.*

RESOURCES

- Employer, union, and worker interviews
- The California Community Colleges' Centers of Excellence for Labor Market Research publish valuable region- and sector-specific reports, including data on required skills and certifications.
- O*NET Online is searchable by occupation keyword, career cluster, or job family for reports on tasks, knowledge, skills, abilities, typical education and experience requirements, and wage and employment trends (by state or national).
- The BLS Occupational Outlook Handbook is searchable by occupation and provides information on typical required education, certifications, experience, and skills.
- Job postings can be reviewed on websites such as Indeed.com or Glassdoor.com, which also provide summary information on occupations and career pathways, compiled from their multiple postings.
- For unionized occupations, the Collective Bargaining Agreement or contract defines job classifications.
- The CareerOneStop Certification Finder allows for searches by occupation to identify common certifications and certifying bodies.
- Local workforce development boards typically convene regional industry leaders and produce analyses of labor market information in priority sectors.

EXAMPLES FOR INSPIRATION

- This case study of the St. Alphonsus Health Center's Environmental Services pre-apprenticeship and registered apprenticeship program in Idaho describes the "confirmatory job analysis" (see pages 11-13) that has been used to inform program design, "evidence-based selection" of participants, and a tailored career coaching service.
- This Behavioral and Mental Health Workforce Needs Assessment by the California Community Colleges Chancellor's Office Centers of Excellence for Labor Market Research includes detail on skill and certification requirements specific to occupations.
- These slides are an overview of an employer survey on key skills needed in the manufacturing sector that was used to inform community college training curriculum.

REFLECTION QUESTIONS

1. Where are there likely to be gaps between community members' skills and experience, and industry requirements for the target occupations?
2. What sorts of instruction and/or support (e.g., exam preparation support, pre-apprenticeship training) could help to address these gaps for our community?

Category	Data on Employment Requirements for Target Occupation(s)	Source
English Language*		
Math Level*		
Digital Skills*		
Industry-specific Technical Skills		
Knowledge of Target Industry/Occupation		
Hands-on Work Experience in the Industry		
High School Diploma or Equivalency		
Postsecondary Degree		
Industry Certification		
Physical Ability		
No Prior Arrest or Conviction Record		
Other:		

* Note that English, math, and digital skills levels may be determined in various ways, including academic transcripts, diplomas, standardized tests, employer-specific tests, or self-reporting.

4. Apprenticeship Training Entry Requirements

GUIDING QUESTION

What is known about the skill levels and abilities needed to enter and succeed in the pre-apprenticeship or apprenticeship training?

THINGS TO CONSIDER

- The point of entry to an apprenticeship is not the only point at which equity is a consideration; however, entry requirements are the most direct statement of the barriers — intentional or otherwise — that a program may impose on prospective applicants.
- Your most localized and relevant information may come from interviews with employers, union representatives, education providers, and — if the apprenticeship program is already in existence — the apprenticeship coordinator and members of the apprenticeship committee.
- Training prerequisites may be identified in a college course catalog or in training providers' course descriptions and curricula.
- For an existing apprenticeship program, the Program Standards outline qualifications needed to enter the program, as well as skills to be gained through the program. Take note of what the Program Standards say about required basic skill levels and other qualifications that may be a challenge for members of your community.

KEY EQUITY PERSPECTIVES

- Some apprenticeship programs set the bar very high. By defining extensive requirements for entry into the program, they may turn away community members who otherwise would do well in training and on the job.
- In some cases, advocacy for flexible apprenticeship requirements may advance equity goals.
    - *For example, if a program requires a high school diploma for entry, analyze data on skills and competencies needed for training and employment success; assess ways education and support could be integrated with the apprenticeship's technical training, such as through an Integrated Education and Training (IET) program (see Action Planning Tool #6) to determine whether a loosening of this requirement should be considered.*
- When an apprenticeship requires a level of skills or abilities that poses barriers for community members, a pre-apprenticeship program could be designed specifically to tackle those barriers and pave the way for a more diverse and representative pool of qualified apprenticeship applicants.

RESOURCES

- Employer, union, education provider, and apprenticeship administrator interviews
- Apprenticeship Program Standards
- Apprenticeship webpage, flyers, application materials, orientation materials
- Training program descriptions of prerequisites, including course catalogs

EXAMPLES FOR INSPIRATION

- In these national program standards for electrical apprenticeships, the section on Qualifications for Apprenticeship (beginning on page 15) presents multiple options for local programs, which may choose to define a minimum age, math level, education level, work experience, or physical ability. Several options are specific to a program's decisions to qualify high school students, military veterans, Job Corps participants, or other special groups.
- This webpage of an electrical apprenticeship provides an example of "Minimum Requirements to Apply," which include high school diploma or GED and algebra. Non-English diplomas and transcripts are accepted when translated and notarized.
- The Northern California Teamsters' Transportation, Distribution, and Logistics Apprenticeship is a partnership with the community-based West Oakland Jobs Resource Center, which provides recruitment, pre-apprenticeship, and placement assistance. Pages 13-15 of the apprenticeship's approved program standards describe the program's application process and its entry requirements.

REFLECTIONS

1. What barriers to entering and succeeding in this pre-apprenticeship or apprenticeship training are our community members likely to face?

For apprenticeship programs (new or existing):

2. Do entrance requirements strike the right balance between defining minimum qualifications (based upon what is necessary for success in training and on the job) and not excluding certain populations?
3. Are there entrance requirements that should be adjusted to facilitate more equitable access among diverse community members?

For existing pre-apprenticeship programs:

4. How well does the pre-apprenticeship address the skills required for success in target apprenticeship(s) to provide access to communities or populations that have been excluded from such opportunities? What might need to be added or adjusted?

For pre-apprenticeship programs in development:

5. Given what we know from Tool #1 and this Tool, what instruction and support mechanisms need to be included in the pre-apprenticeship to facilitate equitable access to target apprenticeship(s)?

Requirement/Prerequisite	Existing Requirements (i.e., specific level, course, qualification)	How Requirements Are (or Will Be) Assessed (i.e., exam, interview, transcript)	Sources
Course Prerequisites			
Minimum English Level			
Minimum Math Level			
Digital Skills			
Technical Skills or Experience			
Physical Ability			
Other			

5. Potential Apprentices' Goals, Interests, and Challenges

GUIDING QUESTION

What is known about the goals and interests of potential apprentices (both incumbent workers and other community members) and their real and perceived barriers to apprenticeship access and success?

THINGS TO CONSIDER

- Bringing workers' voices into this information-gathering process is essential. Focus groups, individual interviews, and surveys are ways of hearing from workers about their goals, interests, experiences, and barriers.
- It is important to hear both from potential new workers and from entry level incumbent workers who may have been excluded from upskilling or upward mobility.
- Existing apprenticeships or other training programs may already have engaged workers and community leaders, for example as instructors or advisory group members. Reach out to hear their views.
- Partners can help your team to understand workers' perspectives. These may include labor organizations, adult education providers, community-based organizations, and others that have direct contact with workers and community members. Partners can also identify and engage potential participants in your information gathering, for example by recruiting focus group participants or distributing surveys.
- Be prepared to communicate with workers in their primary languages, make accommodations for individuals with disabilities, and take other actions to ensure all voices are heard.

KEY EQUITY PERSPECTIVE

By listening to community members' experiences, aspirations, and perceptions of work opportunities and obstacles, your team will build an apprenticeship program that responds to genuine interests and needs.

SAMPLE QUESTIONS FOR A POTENTIAL APPRENTICE

1. What is your level of interest in working as a [name of target occupation]?
2. If you have interest in this job, why? What would make it a good job for you?
3. What experience have you had trying to move into this job?
4. What is your interest in accessing training to help you enter this job?
5. Drawing on your past experience or your imagination, what challenges do you imagine you would face if you tried to complete training needed to move into this job?
    - [*Prompt: challenges related to the industry, training, systemic barriers, discrimination, etc.*]
    - *Are there specific skills or qualifications you're aware of that are required to move into this job?*
    - *What would it take for these obstacles to be removed or overcome?*
6. Other:

SAMPLE QUESTIONS FOR INCUMBENT WORKERS IN THE TARGET INDUSTRY

1. What is your interest in moving into a job as a [name of target occupation]?
2. What would it take for you to be hired into this job? Is there a clear pathway from your position into this job?
3. What do you perceive as challenges to moving into this job?
4. What training would help someone enter this job? Is this something you would be interested in?
5. Other:

SAMPLE QUESTIONS FOR PARTNERS (EMPLOYERS, UNIONS, PROGRAM SPONSORS, INDUSTRY STAKEHOLDERS)

1. What is the interest among your community members in moving into [name of target job]?
2. What are the opportunities for members of your community to enter this job?
3. What do you think are the biggest obstacles to accessing this job?
4. What do you hear are the biggest obstacles to accessing or succeeding in job training?
5. Other:

REFLECTION QUESTIONS

1. Having listened to input from community members, what have you learned about the program elements, services, and resources that will facilitate access to and achievement in your apprenticeship?
2. Having analyzed what you heard from community members, what additional questions do you have?
3. Having analyzed what you heard from incumbent workers in this industry, what additional questions do you have?

Information	Response
Level of interest in the target occupation(s)	
Level of interest in training in the target occupation(s)	
Opportunities to enter the target occupation(s)	
Obstacles to entering the target occupation(s)	
Obstacles to accessing or succeeding in training for the target occupation(s)	
Possible ways to address obstacles	
Other key learnings	

6. Conditions for Equity-Focused Change

GUIDING QUESTION

What are the industry and community conditions that could accelerate or hinder change in the target apprenticeship(s) to promote equity?

THINGS TO CONSIDER

- Interviews with employers, unions, and community groups may reveal interest in and institutional priorities related to diversity, equity, and inclusion (DEI).
- Some employers and industries have made formal commitment to DEI, documented in policies and public statements. Others may not have formally declared these goals.
- For federal contractors and subcontractors, federal law dictates that affirmative action must be taken by covered employers to recruit and advance workers of color, women, workers with disabilities, and covered veterans. Per Section 503 of the Rehabilitation Act, for example, a federal contractor's affirmative action plan must include activities to recruit, hire, promote, and retain individuals with disabilities.
- Some local governments have mandated local hire or equal opportunity employment policies that promote hiring of target groups.
- Some communities have in place project labor agreements (PLAs) for publicly-funded construction and infrastructure projects. These are negotiated agreements among labor unions, employers, community members, and local governments that mandate hiring from targeted zip codes or specific community groups.
- In communities or industries where formal policies, agreements, and mandates are not in place, apprenticeship programs can be informed by interviews, focus groups, or surveys of key stakeholders to assess the conditions for equity-minded change.

KEY EQUITY PERSPECTIVES

- To the extent that inequities exist in current training, hiring, and apprenticeship practices, partners in apprenticeship development must assess the conditions that could contribute to addressing those inequities, or that could hinder efforts to address them.
- Equipping your apprenticeship team with data on existing inequities and information on training and hiring practices will prepare you to make the case for change.

RESOURCES

- Learn more about Project Labor Agreements in this overview of PLAs, or in this report produced for the San Francisco Foundation, Improving the Effectiveness of PLAs.
- Learn more about and see examples of Community Benefits Agreements in the Partnership for Working Families' Community Benefits 101.
- Community Workforce Agreements are described, along with sample policy language, in Policy & Tools: Community Workforce Agreements from the Partnership for Working Families.
- Read about the U.S. Department of Labor's EEOC mandates in Equal Employment Opportunity in Apprenticeship.
- Local and targeted worker hire programs are described on this webpage of Economic Development Los Angeles County.
- BestCompaniesAZ has compiled this list of ideas to promote inclusion and workplace diversity.

EXAMPLES FOR INSPIRATION

- Inclusion Boston, a program of the Boston YMCA, supports organizations to develop and meet their DEI goals.
- Greater Des Moines Partnership created this Diversity & Inclusion Strategy Toolkit for employers wanting to establish a DEI strategy.
- In Los Angeles, Worker Education and Resource Center (WERC) engaged public sector employers in an "equity audit" to identify needs and gather employers' recommendations for pilot projects.
- Oakland's Good Jobs Agreement is an example of a far-reaching agreement to assure high-quality, living wage jobs for local residents and new people entering the industry, not excluding community members with criminal records.

REFLECTION QUESTIONS

1. How deep is our community's — and our apprenticeship stakeholders' — commitment to change toward more equitable training, hiring, and apprenticeships?
2. What partners can we engage with to address apprenticeship equity goals? Are these new partners, or will we engage with existing partners more deeply toward these goals?

Information	Description
Employer's or Industry's Commitments to DEI	
Employer's or Industry's Informal Statements	
Government Mandates in Favor of DEI	
Local PLAs	
Union Commitments to DEI	
Community Advocacy Supporting DEI	
Other:	

ACTION TOOLS

1. Defining the Goals of Your Equitable Apprenticeship Team

GUIDING QUESTION

What are the goals of our team related to creating or growing equitable apprenticeship opportunities?

THINGS TO CONSIDER

- The information you've gathered in Information Gathering Tools #1-5 will help you focus on the key equity-related needs (or inequities) that could be addressed through adaptations to your apprenticeship program design and delivery.
- It's important at this point to be clear on who are your essential partners, and who can collaborate and leverage resources to further equity goals. Revisit who is participating in your team, and if there's anyone missing, invite them to participate in goal-setting and action.
- Create a forum where this team can come together to reflect on the information you've gathered in the Information Gathering Tools, identify key needs to be addressed, and define 3-5 common goals.
- Moving forward, these essential partners may establish a formal working group, with defined roles and responsibilities, to move the apprenticeship program toward achieving its common goals and objectives.

Category	Description
Apprenticeship Name/Occupation	
Pre-Apprenticeship Name (if applicable)	
Essential Partners (in design and delivery)	
Key Equity-related Needs to be Addressed	
Equitable Apprenticeship Goals (3-5)	

2. Securing Partnerships

GUIDING QUESTION

What organizations and resources exist in our community that could help to address equity issues for our apprenticeship program?

THINGS TO CONSIDER

- As you identify inequities to be addressed and priority strategies to address them, consider whether the necessary resources are available in the community and could be linked to the apprenticeship program or to individual apprentices.
- Potential partners include community-based organizations, faith-based organizations, labor organizations, K-12 schools, adult education providers, supportive service providers, and public agencies, including workforce development, social services, veterans administration, Department of Rehabilitation, and others.
- Partners may have specialized expertise and relationships of trust with community groups that your apprenticeship program aims to serve, for example racial and ethnic groups, immigrants and refugees, women, adults without a high school diploma, veterans, former foster youth, individuals with disabilities, or justice system-involved individuals.
- Services and resources provided through partnerships may include: outreach and recruitment, adult basic skills education, education and career counseling, case management, language support, transportation and childcare assistance, support for or provision of accommodations, work uniforms and tools, income support, public benefits access, records expungement, driver's license assistance, food and housing support (including CalFRESH enrollment), legal services and know-your-rights education, physical and mental health care access, workplace and programmatic assessments of accessibility, diversity training and expertise, and others.
- Relationships with these partners could benefit your program and its participants, whether roles are established formally through a memorandum of understanding (MOU) or more informally through referral networks or advisory roles.

KEY EQUITY PERSPECTIVE

Partnership development to address equity and inclusion issues must be ongoing. Come back to this tool repeatedly to consider the ways in which partnerships could benefit your program and participants and to guide your partnership development activities.

EXAMPLE FOR INSPIRATION

Milwaukee's building trades apprentices are supported by the Community Workforce Partnership (CWP). CWP "is a formal network of community based organizations that provide specialized services often needed to address barriers to employment for Milwaukee residents, including lack of transportation, childcare, education, employability skills, re-entry, and income support. Through this partnership, WRTP | BIG STEP coordinates with others to engage and support participant recruitment, screening, and employment readiness education and training activities, as well as job placement and retention services."

Partner	Populations Served	Services Offered

3. Making Apprenticeship Entry Accessible

PROBLEM DEFINITION

What inequities or barriers were identified related to the entry point to your apprenticeship program (exam, interview, prerequisites, requirements...)?

THINGS TO CONSIDER

- Look at Information Gathering Tool #4 to understand your apprenticeship training entry requirements. Also understand the data in Information Gathering Tool #1 to be clear about the diversity of the community and in Information Gathering Tool #5 related to community members' goals and interests. Think about Information Gathering Tool #3's assessment of industry employment requirements and how these compare to apprenticeship entry requirements. Information Gathering Tool #6 will help your team consider conditions of readiness to change current apprenticeship requirements.
- Requirements for apprenticeship program entry should be gauged so that the apprentice will succeed in on-the-job training that mirrors entry-level employment expectations and progressively develops skills through work.
- Requirements should take into consideration that with scaffolding and support, apprentices can acquire skills and competencies while in the program that prepare them for success in increasingly responsible positions.
- Apprenticeship programs should periodically review and update their entry requirements to ensure that they truly reflect the necessary qualifications for program and employment success. Some apprenticeship programs undergo legal review to affirm that entry requirements are not exclusionary, but not all programs are subject to this.
- Entry requirements should be transparent and well-communicated to prospective apprentices through outreach and recruitment, during a pre-apprenticeship, and at the point of apprenticeship application and screening.
- Well-designed entry requirements can help to determine not only if someone is prepared to begin apprenticeship training, but also if they could receive credit for prior learning or experience, or if they would benefit from additional support or instruction.

OPPORTUNITIES TO ADDRESS INEQUITIES AND BARRIERS

Potential Barriers or Inequities	Opportunities to Address Inequities and Barriers
Community awareness of pre-apprenticeship and apprenticeship opportunities and entry requirements	• Targeted outreach to community members and incumbent workers who are not equitably represented among apprentices and higher-skilled occupations • Engagement and education of counselors, case managers, teachers, community leaders, and others to promote apprenticeships in their communities
Match between entry requirements/ exams/ prerequisites and skills and attributes needed for success in training and on the entry-level job	• Elimination or adjustment of entry requirements that are unnecessarily or inequitably exclusionary • Review of apprenticeship entry exam to address discriminatory or exclusionary elements
Accessibility of application process	• Program web pages meet standards for access by people with disabilities (see the Section 508 compliance standards and the WAVE Web accessibility tool to confirm digital accessibility of websites) • Informational and application materials in multiple languages and in accessible/alternative formats • Staff with bilingual ability and sensitivity to and respect for the needs and assets of diverse applicants • Physical accessibility of in-person orientations, interviews, and exams
Options/resources for applicants who initially do not meet entry requirements	• Ongoing communications with/database of interested community members • Pre-apprenticeship referrals (see Action Planning Tool #4) • Preparatory education referrals (basic skills, ESL, work readiness training, industry-contextualized bridge programs, community college career development certificates, etc.) • Entrepreneurship training for individuals without right-to-work documentation • Support services/barrier removal • Re-application/retest process
Supports to applicants who could succeed in apprenticeship with concurrent training or support	• Exam/applicant assessment results used to identify need for individualized supports, co-requisite education, or integrated basic skills education during apprenticeship • Supportive apprenticeship design (see Action Planning Tool #7)

EXAMPLES FOR INSPIRATION

- Chicago Women in Trades maintains a website of outreach flyer templates, videos, and other resources. The Pink to Green Toolkit linked on their page guides the creation of a targeted outreach plan to recruit women.
- North America's Building Trades Unions (NABTU) created this concise summary of apprenticeship entrance requirements.
- These national guidelines for electrical apprenticeships include sample entry requirements for a School-to-Registered-Apprenticeship program (see page 23 of Program Standards) and for a pre-apprenticeship (page 26).
- CASAS provides skills assessments such as workplace math and ESL Life and Work, as well as accommodations materials for visual impairment/blindness
- The Northstar Digital LIteracy Assessment, certificate, and digital badges are designed to demonstrate basic computer and digital literacy skills to employers.
- California community colleges offer a variety of Career Development and College Preparation (CDCP) certificates, which are short-term, noncredit programs in English as a Second Language, basic skills, vocational education, and workforce preparation. North Orange Continuing Education offers a Funeral Service Assistant CDCP certificate that is designed to give students introductory skills and a realistic expectation of the rigors of funeral service practice before students apply for the degree program or Funeral Service apprenticeship.

REFLECTIONS ON ACTION

1. Which of these opportunities best address the barriers and inequities we have identified?
2. Which of these opportunities will we pursue?
3. What partnerships do we need to have in place?

Opportunities	Actions	Lead	Partners	By When

4. Designing a Pre-Apprenticeship Program

PROBLEM DEFINITION

What inequities or barriers were identified that indicate a need for a preparatory pre-apprenticeship program, linked to apprenticeship?

GENERAL TOOLS FOR BUILDING PRE-APPRENTICESHIPS

If your team is new to pre-apprenticeship, consider working with these more general tools for designing your pre-apprenticeship program:

- JFF's Framework for a High-Quality Pre-Apprenticeship Program
- Apprenticeship.gov pre-apprenticeship resources
- US DOL Training and Employment Notice 13-12: Defining a Quality Pre-apprenticeship Program
- California's process for the registration of pre-apprenticeships
- California Apprenticeship Initiative Creating Access to Opportunity: Using Pre-Apprenticeship Programs to Connect to Registered Apprenticeship

THINGS TO CONSIDER

- Use this tool to define actions your team can take to design a pre-apprenticeship program with an equity lens.
- Look at Information Gathering Tools #1, 2, and 5 to understand the workers and community members who will benefit from the pre-apprenticeship, their skills, and potential barriers. Consider Information Gathering Tools #3 and 4 about the requirements the pre-apprenticeship will prepare its participants to meet, and Information Gathering Tool #6 to think about the possibility of changing these requirements or otherwise addressing equity issues through pre-apprenticeship.
- Keep in mind that in some cases a pre-apprenticeship may not be the most appropriate solution to the equity issues or needs that have been identified. For example, it may be possible to integrate preparatory instruction and support into the apprenticeship program itself, eliminating the need for the pre-apprenticeship. This could save an individual time, effort, and expense and result in a more efficient pathway to apprenticeship completion.
- Not all of the opportunities identified below will be necessary or appropriate for your program. Note in the left column the equity issues your team has identified, then consider the corresponding opportunities in the right column that could address those issues.
- A pre-apprenticeship should have a direct connection to an apprenticeship that has employer commitment and leads to high-quality jobs and careers.
- Your Action Plan will be unique to your program. Complete this Action Plan with your proposed actions, leads, partners (desired or already identified), and timeline.
- Use Action Planning Tool #2 to help your team identify the partners you need to address equity issues through pre-apprenticeship.
- Note that Action Planning Tool #7 will help your team integrate supportive services with the pre-apprenticeship.

OPPORTUNITIES TO ADDRESS INEQUITIES AND BARRIERS

Potential Barriers or Inequities	Opportunities to Address Inequities and Barriers
Basic English or math skills; High school diploma or equivalent	• Contextualized basic skills education (English, ESL, science, or math courses, or a high school diploma or equivalency program) for the apprenticeship occupation(s) or industry (see Contextualized Teaching and Learning: A Faculty Primer and Insights Into Contextualized Teaching and Learning for general resources, and this Integrated GED/Transportation. Distribution & Logistics curriculum as an example) • Integrated Education and Training (IET) (see existing resources at the Penn State IET Initiative Library, the CalPRO IET video library, and LINCS IET resources) • Supplemental (co-requisite or optional) basic skills education or support, which may include basic skills courses offered to pre-apprentices; support from an in-class basic skills teacher assistant or peer assistant; individual or small group review or tutoring; academic mentoring; or use of an independent basic skills learning platform, such as Cell-Ed or Voxy
English communication ability	• Classroom instructors trained to support English learners during instruction (see Limited English Proficiency Students: A Guide for Ironwork Instructors) • Classroom instruction in students' first language or bilingual (see Milwaukee Area Technical College bilingual barber apprenticeship and Growing Opportunities in America for Latinos (GOAL)) • First language or bilingual teaching materials • Bilingual mentors or coaches • Supplemental English language instruction, in-class or through online platforms (such as Cell-Ed or Voxy)
Work readiness, communication, or leadership skills	• Integrated soft skills training, including industry and/or occupation specific soft skills training (see California Community Colleges' Hi-Touch Health Care: The Critical Six Soft Skills) • Supplemental work readiness workshops (see Habits of Work curriculum developed for students with disabilities) • Individual work readiness counseling
Digital skills and access	• Facilitated internet and/or device access (see EveryoneOn) • Integrated digital skills instruction (see Foundational Digital Skills for Career Progress and LINCS Integrating Digital Literacy into English Language Instruction) • Digital learning orientation (see IDEAL Distance Education and Blended Learning Handbook, Chapter 4) • Digital resource navigation assistance (see DigitalUS' Digital Navigator service model and related toolkit) • Mobile-friendly online instruction (see IDEAL Handbook, Chapter 5)

Potential Barriers or Inequities	Opportunities to Address Inequities and Barriers
Industry, career, or apprenticeship awareness	• Integrated industry/career awareness instruction (See Unlocking Career Potential: An Analysis of the Career Navigation and Guidance Landscape) • Hands-on work-based learning, job shadowing, or job simulation • Networking opportunities with employer and industry representatives • Industry and career fairs • Overview of local apprenticeship opportunities, requirements, and application procedures
Apprenticeship exam and/or interview readiness	• Exam and interview preparation assistance (see tips offered by the Electrical IBEW Aptitude Test) • Exam preparation classes (see Oakland Adult and Career Education's Math Test Preparation for the Trades course outline) • Mock interviews
Ability or condition	• Accommodations for individuals with disabilities (see the Partnership on Inclusive Apprenticeship resource library) • Instruction following Universal Design for Learning (UDL) guidelines • OJT design that is disability-inclusive (see Inclusion@Work: A Framework for Building a Disability-Inclusive Organization, from Employer Assistance and Resource Network on Disability Inclusion (EARN) for resources for employers and work sites) • Integrated self-advocacy training for individuals with disabilities (see Explore Work Self-Advocacy Training) • Multiple means of assessing apprenticeship readiness or prior learning (see IMTfolio assessment of IMT apprenticeship readiness) • Physical conditioning/boot camp
Income	• No-cost courses and textbooks • Accelerated courses to minimize time of unemployment • Flexible scheduling to accommodate work during pre-apprenticeship • Stipends for training participation (possibly provided by WIOA Title I funds or community college work experience) • Pre-apprenticeship hours award advance training hours to a new apprentice, accelerating advancement to higher apprenticeship wages
Inclusion and respect, especially in industries and occupations traditionally lacking diversity	• Instruction to foster a sense of belonging (see Equity in Youth Apprenticeship Programs, pages 20-24) • Instruction in worker confidence-building and resilience (see Chicago Women in Trades You Can Do It guide) • Instruction in learner confidence-building and developing a positive learner identity • Classroom instructor selection and professional development to support respect and inclusion • Mentoring and role models

EXAMPLES FOR INSPIRATION

- Los Angeles Urban League's Construction Careers Academy is a 10-week pre-apprenticeship focused on preparation for written and oral apprenticeship examinations and soft skills.
- The Multi-craft Core Curriculum (MC3) is a pre-apprenticeship curriculum widely used in the building trades. California's Proposition 39 funded pilot projects to create an ecosystem of these pre-apprenticeship programs across the state.
- The National Center for Women's Equity in Apprenticeship and Employment published Bridging the Gender Gap: Creating a National Pre-Apprenticeship Program to Prepare Women for the Ironworking Industry.
- This case study of women-only pre-apprenticeship programs describes multiple program models and their key elements.

REFLECTIONS ON ACTION

1. Which of these opportunities best address the barriers and inequities we have identified?
2. Which of these opportunities will we pursue?
3. What partnerships do we need to have in place?

Opportunities	Actions	Lead	Partners	By When

5. Removing Barriers and Supporting Transition to Apprenticeship

PROBLEM DEFINITION

What inequities or barriers were identified that could be addressed by supporting individuals' transition to apprenticeship?

THINGS TO CONSIDER

- Reference Information Gathering Tools #3 and 4 to review the entrance requirements for your apprenticeship program and the industry.
- Solutions to barriers to apprenticeship transition will be most effective if they respond to worker and community member input on these barriers and opportunities. Consider the possible barriers identified in Information Gathering Tools #1, 2, and 5, and the conditions for change found in Information Gathering Tool #6.
- If you have already worked with Action Planning Tool #4, think about the possible barriers to apprenticeship transition for pre-apprenticeship completers, as well as for apprenticeship applicants who have not benefited from the pre-apprenticeship.
- Use the table of opportunities to identify which of the opportunities your team will take on. Then complete this Action Plan with your proposed actions, timeline, and leads.

OPPORTUNITIES TO ADDRESS INEQUITIES AND BARRIERS

Potential Barriers or Inequities	Opportunities to Address Inequities and Barriers
Existing career training or services' linkage to apprenticeship	• Registered pre-apprenticeship with formal linkage agreement (see the California Labor Code definition of registered pre-apprenticeship connection to apprenticeship) • Engagement of existing training programs other than pre-apprenticeship that could link students to apprenticeship
Awareness of apprenticeship opportunity	• Direct support and advocacy (by instructors, counselors, union, etc.) to connect individuals to apprenticeship
Pre-apprenticeship completers' entry into apprenticeship	• Priority credit and/or advanced standing for pre-apprenticeship completers (see sample linkage agreement) • Credit for prior learning attained in addition to pre-apprenticeship (see general Credit for Prior Learning resources) • Employer commitment to interview pre-apprenticeship completers for consideration for apprenticeship
Readiness for college-level apprenticeship instruction	• First-year apprenticeship content integrated into pre-apprenticeship in a supported or decelerated format • Pre-apprenticeship or apprenticeship training offered in a decelerated or self-paced format

Potential Barriers or Inequities	Opportunities to Address Inequities and Barriers
Options for individuals who don't score highly on or pass apprenticeship entry exam or interview	• Referrals to basic skills instruction • Referrals to pre-apprenticeship • Exam/applicant assessment results used to identify need for individualized supports, co-requisite education, or integrated basic skills education during apprenticeship • Supportive apprenticeship design (see Action Planning Tool #7)
Resources to actively address barriers to entry	• Wraparound support • Education and career navigation counseling • Partnerships to address specific barriers re: transportation, childcare, criminal records, language access, health care access, food, housing (see Action Planning Tools #2 and #7)

EXAMPLES FOR INSPIRATION

- RichmondBuild (profiled on pages 9-10 of these case studies) has negotiated direct entry for its MC3 pre-apprenticeship completers into the carpenters, laborers, dry wall/lathers, and iron workers unions.
- The International Union of Operating Engineers (IUOE) Job Corps pre-apprenticeship generally averages one year to complete, but the program is self-paced to accommodate individuals' needs.
- The Anti-Recidivism Coalition's Second Chance Union Training Program offers returning citizens two weeks of soft skills classes, a 12-week building trades pre-apprenticeship program using the MC3 curriculum, supportive services, and direct placement into union apprenticeships.

REFLECTIONS ON ACTION

1. Which of these opportunities best address the barriers and inequities we have identified?
2. Which of these opportunities will we pursue?
3. What partnerships will we need to have in place?

Opportunities	Actions	Lead	Partners	By When

6. Making Apprenticeship Classroom and On-the-Job Training Accessible

PROBLEM DEFINITION

What inequities or barriers to retention and success in apprenticeship training were identified that could be addressed through adaptations of the program's classroom and on-the-job training?

GENERAL TOOLS FOR BUILDING REGISTERED APPRENTICESHIPS

If your team is new to apprenticeship, consider working with these more general tools for designing your registered apprenticeship program:

- Apprenticeship.gov resources provided by the U.S. Department of Labor
- WorkforceGPS apprenticeship resources
- A Quick-Start Toolkit: Building Registered Apprenticeship Programs
- International Labor Organization (ILO) Tool for Quality Apprenticeships Volume 1 (policy) and Volume 2 (practitioner)
- Many state apprenticeship offices and associations host resource pages. In California, these include CalApprenticeship.org and the California Apprenticeship Initiative (CAI) Hub

THINGS TO CONSIDER

- Review the demographics and career goals of incumbent workers and other community members identified in Information Gathering Tools #1, 2, and 5. Also consider the conditions for change found in Information Gathering Tool #6.
- Look at what your team found in Information Gathering Tool #3 about industry employment requirements, since these must inform the content of apprenticeship training.
- Use this tool to define actions your team can take to design or improve upon an apprenticeship program with an equity lens.
- Not all of the opportunities identified below will be necessary or appropriate for your program. Note in the left column the equity issues your team has identified, then consider the corresponding opportunities in the right column that could address those issues.
- By contextualizing and integrating instruction in skills such as English, math, science, digital, communication, and workplace readiness, apprenticeship programs can avoid requiring demonstration of these skills as a condition of entry, and instead ensure that apprentices acquire them in the course of apprenticeship training.
- Complete this Action Plan with your proposed actions, leads, partners (desired or already identified), and timeline. Your Action Plan will be unique to your program.
- Use Action Planning Tool #2 to help your team identify the partners you will need to address equity issues through apprenticeship.
- Note that Action Planning Tool #7 will help your team integrate supportive services with the apprenticeship.

OPPORTUNITIES TO ADDRESS INEQUITIES AND BARRIERS

Potential Barriers or Inequities	Opportunities to Address Inequities and Barriers
Basic English or math skills; High school diploma or equivalent	• Contextualized basic skills education (English, ESL, or math courses, or a high school diploma or equivalency program) for the apprenticeship occupation(s) or industry (see Contextualized Teaching and Learning: A Faculty Primer and Insights Into Contextualized Teaching and Learning for general resources, and this Integrated GED/Transportation. Distribution & Logistics curriculum as an example) • Integrated Education and Training (IET) (see existing resources at the Penn State IET Initiative Library, the CalPRO IET video library, and LINCS IET resources) • Supplemental (co-requisite or optional) basic skills education or support, which may include basic skills instruction either included in or in addition to RSI hours; support from an in-class basic skills teacher assistant or peer assistant; individual or small group review or tutoring; academic mentoring; or use of an independent basic skills learning platform, such as Cell-Ed or Voxy • Competency-based apprenticeship model used to facilitate demonstration of skills and abilities acquired on the job, rather than requiring these be demonstrated as a condition for hire. • On-the-job training that reinforces basic skills instruction, achieved through supervisor/mentor training and coordination with classroom instruction
English communication ability	• Classroom instructors trained to support English learners during instruction (see Limited English Proficiency Students: A Guide for Ironwork Instructors) • Classroom instruction in students' first language or bilingual (see Milwaukee Area Technical College bilingual barber apprenticeship and Growing Opportunities in America for Latinos (GOAL)) • First language or bilingual teaching materials • Bilingual supervisors or mentors (or minimal bilingual training for English-speaking supervisors or mentors) • Supplemental English language instruction, in-class or through online platforms (such as Cell-Ed or Voxy)
Work readiness, communication, or leadership skills	• Integrated soft skills training, including industry and/or occupation specific soft skills training (see California Community Colleges' Hi-Touch Health Care: The Critical Six Soft Skills) • Supplemental work readiness workshops (see Habits of Work curriculum developed for students with disabilities) • Individual work readiness counseling

Potential Barriers or Inequities	Opportunities to Address Inequities and Barriers
Digital skills and access	• Facilitated internet and/or device access (see EveryoneOn) • Integrated digital skills instruction (see Foundational Digital Skills for Career Progress and LINCS Integrating Digital Literacy into English Language Instruction) • Digital learning orientation (see IDEAL Distance Education and Blended Learning Handbook, Chapter 4) • Digital resource navigation assistance (see DigitalUS' Digital Navigator service model and related toolkit) • Mobile-friendly online instruction (see IDEAL Handbook, Chapter 5)
Ability or condition	• Accommodations for individuals with disabilities (see the Partnership on Inclusive Apprenticeship resource library) • Instruction following Universal Design for Learning (UDL) guidelines. • OJT design that is disability-inclusive (see Inclusion@Work: A Framework for Building a Disability-Inclusive Organization, from Employer Assistance and Resource Network on Disability Inclusion (EARN) for resources for employers and work sites) • Integrated self-advocacy training (see Explore Work Self-Advocacy Training) • Multiple means of assessing apprenticeship readiness or prior learning (see IMTfolio assessment of IMT apprenticeship readiness) • Physical conditioning/boot camp
Income	• No-cost courses and textbooks • Accelerated courses to minimize time of unemployment • Flexible scheduling to accommodate work during pre-apprenticeship • Stipends for training participation (possibly provided by WIOA Title I funds or community college work experience) • Pre-apprenticeship hours award advance training hours to a new apprentice, accelerating advancement to higher apprenticeship wages
Inclusion and respect, especially in industries and occupations traditionally lacking diversity	• Instruction to foster a sense of belonging (see Equity in Youth Apprenticeship Programs, pages 20-24) • Instruction in worker confidence-building and resilience (see Chicago Women in Trades You Can Do It guide) • Instruction in learner confidence-building and developing a positive learner identity • Classroom instructor selection and professional development to support respect and inclusion • OJT supervisor and mentor training to support respect and inclusion (see the Job Accommodation Network's resources on Disability Etiquette at the workplace)

EXAMPLES FOR INSPIRATION

- Hospitality Training Academy, which recruits apprentices among incumbent workers and local adult school students, uses an IET co-teaching approach to help workers gain basic, academic, and soft skills and earn industry-recognized credentials and both state and federal apprenticeship certificates.
- The Lippert Components manufacturing apprenticeship uses bilingual classroom training to include Spanish-speaking incumbent workers in the apprenticeship.
- The Early Care & Education Pathways to Success (ECEPTS) apprenticeship hires diverse faculty, delivers training on flexible schedules and at alternative locations, provides specialized academic advising and tutoring, gives financial assistance for books and fees, and uses a cohort-based model to promote inclusion and peer support among apprentices with varied backgrounds.
- Wisconsin Regional Training Program/BIG STEP promotes the inclusion of diverse individuals in its Industrial Maintenance Technician (IMT) registered apprenticeship model by linking directly to a pre-apprenticeship, as well as to high school and incumbent worker points of entry; providing orientation, assessment, and career development and planning support; and allowing flexible pathways into higher-skilled roles to account for life changes or needs for extra support.

REFLECTIONS ON ACTION

1. Which of these opportunities best address the barriers and inequities we have identified?
2. Which of these opportunities will we pursue?
3. What partnerships will we need to have in place?

Opportunities	Actions	Lead	Partners	By When

7. Providing Support During Pre-Apprenticeship and Apprenticeship Training

PROBLEM DEFINITION

What support could be provided during the pre-apprenticeship and/or apprenticeship program's classroom and on-the-job training to address inequities or barriers that were identified?

THINGS TO CONSIDER

- A core apprenticeship team of employers, education providers, unions (if involved), and apprenticeship administrators may be unable to provide all an apprentice needs to be successful. With an eye on your equity goals, seek to collaborate with partners who can address these needs.
- Refer to Information Gathering Tools #1-6 to define the inequities and barriers that will be addressed through partnerships.
- Partnerships can help your apprenticeship or pre-apprenticeship program leverage valuable public resources for support services, such as through enrollment in Vocational Rehabilitation, CalFresh, TANF, Trade Adjustment Assistance, or WIOA Adult or Youth programs.
- If your team needs to learn more about the community-based services providers in your community, search by region and service area using directories such as www.charitynavigator.org, www.charities.org, or www.guidestar.org/NonprofitDirectory.aspx.

OPPORTUNITIES TO ADDRESS INEQUITIES AND BARRIERS

Potential Barriers or Inequities	Opportunities to Address Inequities and Barriers
Persistence and retention in training	• Case management, including WIOA-funded employment counseling, community-based organization services, and other forms of individual support • Mentoring and wraparound services during training (see this rigorous study of mentoring of women apprentices in the trades now underway)
English language ability	• Use of first languages in support services, such as through bilingual counseling or mentoring, or by providing bilingual informational materials
Childcare and transportation	• WIOA Supportive Services and Follow-up Services • Driver's license assistance • Transportation assistance • Child care assistance
Criminal record	• Records expungement (see this general information on California records)
Disability	• Disabled Student Programs and Services (DSPS) offices of community colleges • Industry-specific accessibility resources, such as those offered by AgrAbility
Other personal and basic needs	• Public benefits access • Income support • Financial literacy education and coaching • Food and housing support • Physical and mental health care access • Legal services, including assistance with right-to-work documentation • Funding allocation flexibility to permit use of apprenticeship funds for apprentices' out-of-pocket costs, such as transportation, childcare or housing (see this proposal for the Pre-Apprenticeship Wrap-around Support Services Fund Act of 2021)

REFLECTIONS ON ACTION

1. Which of these opportunities best address the barriers and inequities we have identified?
2. Which of these opportunities will we pursue?
3. What partnerships will we need to have in place?

Opportunities	Actions	Lead	Partners	By When

8. Keeping Equity Front and Center

GUIDING QUESTION

What will be the ongoing work of our team to sustain our equity practices and continue building our apprenticeship program with an equity lens?

THINGS TO CONSIDER

- You may want to formalize your team into an active advisory group with shared goals and objectives, and with ongoing roles and responsibilities. In fact, the committed involvement of this inclusive group could be key to keeping equity front and center, and to maintaining intentionality behind the actions you take to promote equity.
- Your team may contribute to a continuous refinement and improvement process of program design, delivery, and sustainability, using data on program participation and outcomes to inform the directions you take.
- Revisit the 3-5 equity-related goals that you identified in Action Planning Tool #1: Defining the Goals of Your Equitable Apprenticeship Team. Revise these goals when necessary. Consider what data you will need to collect and review to demonstrate equitable learner access, participation, progress, and success, and to identify persistent barriers and inequities.
- Plan to reconvene and revisit this and other tools with outcome data in hand to support continuous program improvement across the five areas of the Equitable Apprenticeship Framework.

PROGRAM AND SERVICE DESIGN (AND INFORMATION GATHERING)

Ongoing Actions	Team Ceckpoints (month or quarter)	Success Metrics

ACCESS AND RECRUITMENT

Ongoing Actions	Team Ceckpoints (month or quarter)	Success Metrics

PRE-APPRENTICESHIP

Ongoing Actions	Team Ceckpoints (month or quarter)	Success Metrics

TRANSITION TO APPRENTICESHIP

Ongoing Actions	Team Ceckpoints (month or quarter)	Success Metrics

ACCESSIBLE APPRENTICESHIP

Ongoing Actions	Team Ceckpoints (month or quarter)	Success Metrics

CONCLUSION

As our state navigates post-pandemic economic recovery, apprenticeship expansion will contribute to rapid up-skilling and re-employment across in-demand industries, and an equitable distribution of training and employment opportunities. When designed with a focus on diversity, equity, and inclusion, apprenticeships will be a part of a solution to the marginalization of Black, Indigenous, people of color, and immigrants, and will be instrumental in shaping an equitable economic recovery. Now is the moment for California to invest in the growth of equitable apprenticeship, through CAI and tailored technical assistance and peer learning among apprenticeship teams committed to applying the Equitable Apprenticeship Framework.

GROW APPRENTICESHIP CALIFORNIA

Supporting the expansion of apprenticeships and providing access statewide.