

Expanding Youth Apprenticeships

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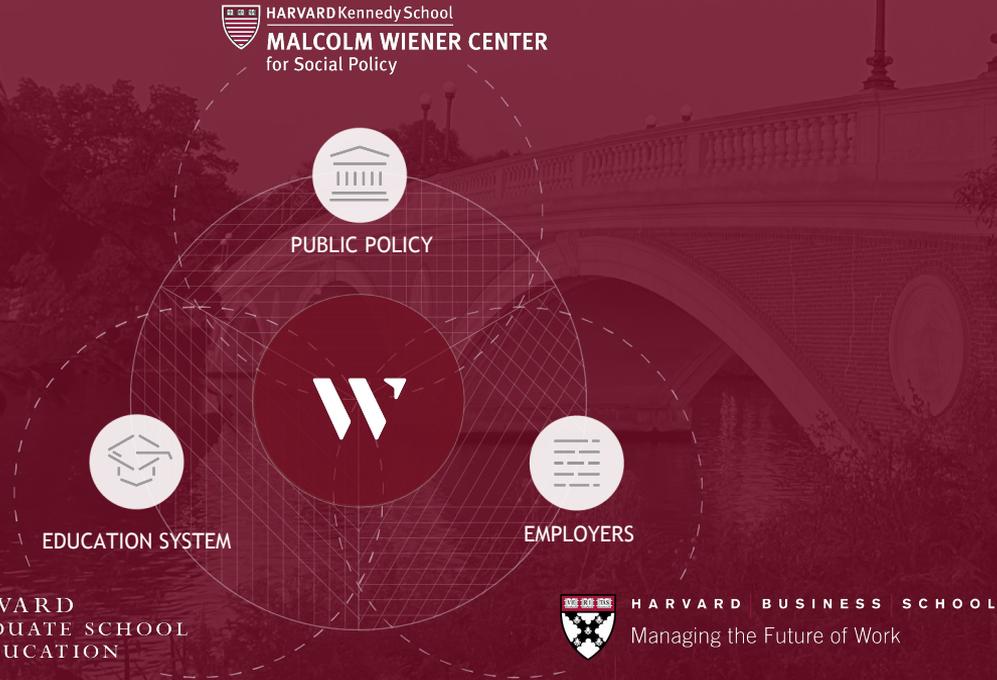
U.S.
Department of
Labor



JULY 25, 2023

This analysis will define and assess industry-specific challenges related to youth apprenticeship programs and youth employment in the United States.

Who We Are

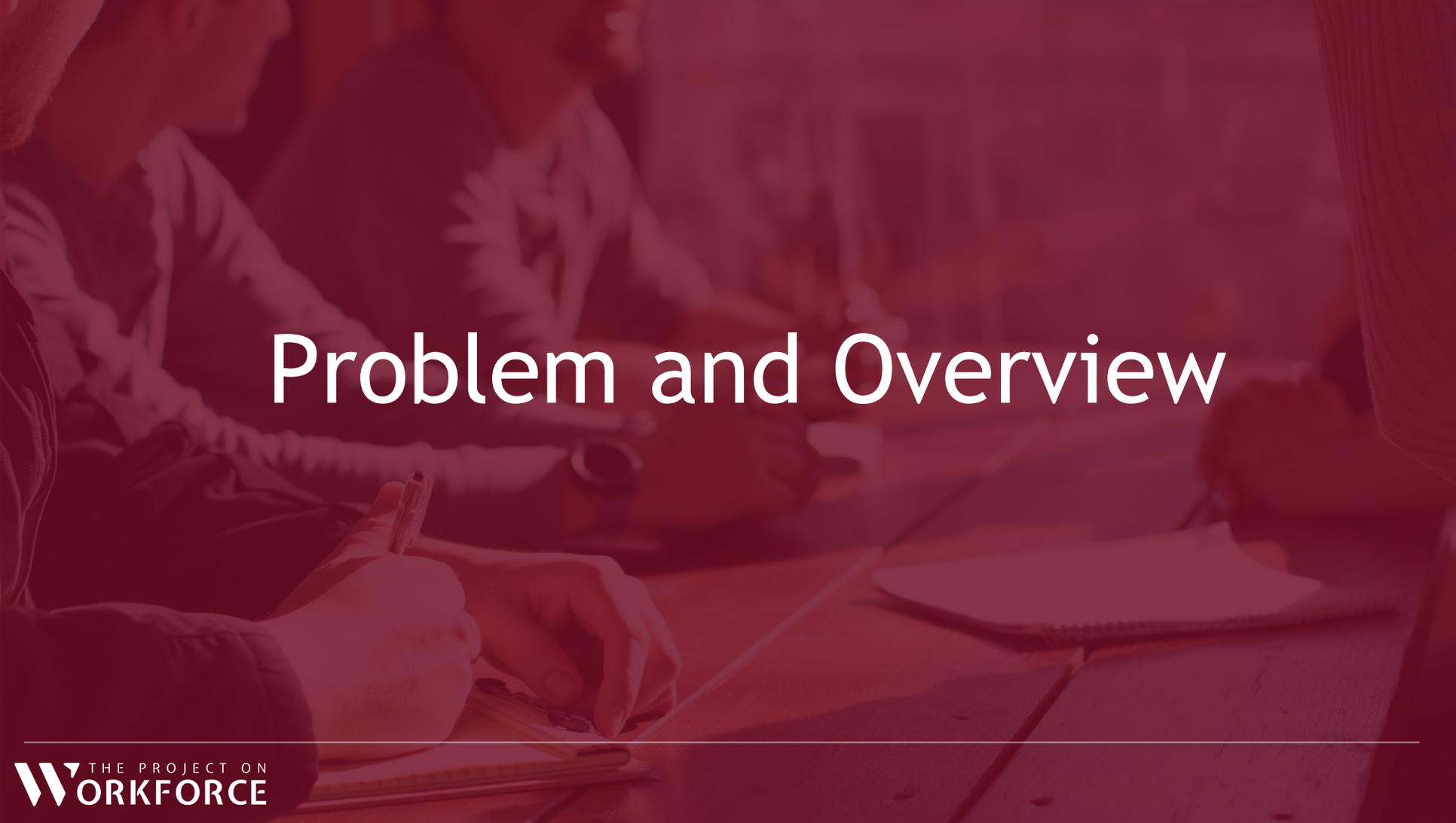


The Project on Workforce is an interdisciplinary, collaborative project between the Harvard Kennedy School Malcolm Wiener Center for Social Policy, the Harvard Business School Managing the Future of Work Project, and the Harvard Graduate School of Education.

Agenda



- **Problem and Overview**
- **Analysis**
- **Recommendations**
- **Case Study**
- **Conclusion and Q&A**
- **Acknowledgement**

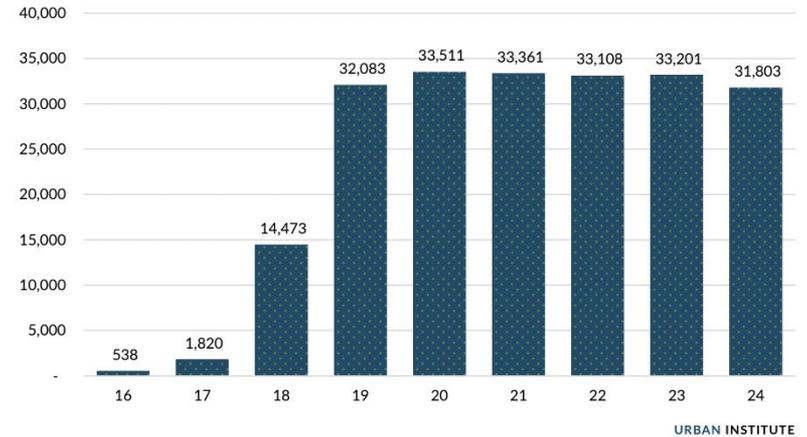


Problem and Overview

Problem Statement

Youth Apprenticeships provide opportunities for people 24 years old and under to access quality careers. In the US, youth ages 16 to 18 are particularly underrepresented in the apprenticeship landscape compared to older peers.

FIGURE 1
Active Youth Apprentices (Ages 16 to 24) by Age, 2021



US Labor Policy Context

The US is prioritizing expanded production capabilities in key industries

Investing in America

- American Rescue Plan, Bipartisan Infrastructure Law, CHIPS and Science Act, Inflation Reduction Act

*“To meet this moment, we must ensure students and workers at **all stages of life** have equitable access to education and training for good jobs in their communities.”*

Labor shortage in key industries

TSMC says skilled worker shortage delays start of Arizona chip production

By Reuters
Published 5:43 AM EDT, Fri July 21, 2023



Youth Employment

Creating quality career pathways for youth will strengthen the US economy

**2.3
Million**

Youth ages 18-24 are out of
work (Brookings)

**83
Percent**

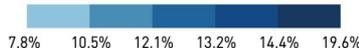
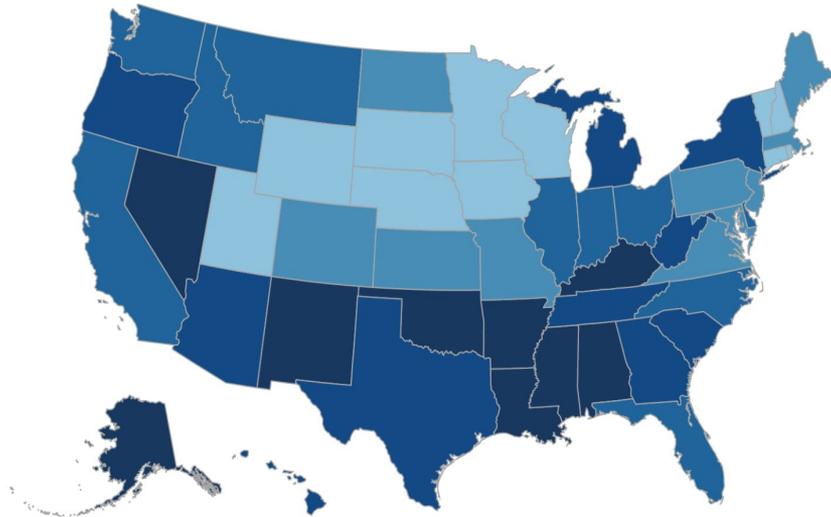
Of Employers have had
difficulty recruiting
suitable candidates in the
past 12 months (SHRM)

**10
Percent**

Skilled tradespeople
are 10% older than the
general workforce
(Angi)

Opportunity Youth

Expanding career pathways for youth who are disconnected from work and school is critical



- **4.8 million opportunity youth in 2020 (12.6% of all youth)**
- **States with the highest rates**
 - **Arkansas (17.4% or 60,700 youth)**
 - **Alaska (19.5% or 15,000 youth)**
 - **New Mexico (19.6% or 47,900 youth)**
- **Rural areas have high disconnection rates**
 - **Rural counties (17.3%)**
 - **Towns (13.3%)**
 - **Urban centers (11.2%)**

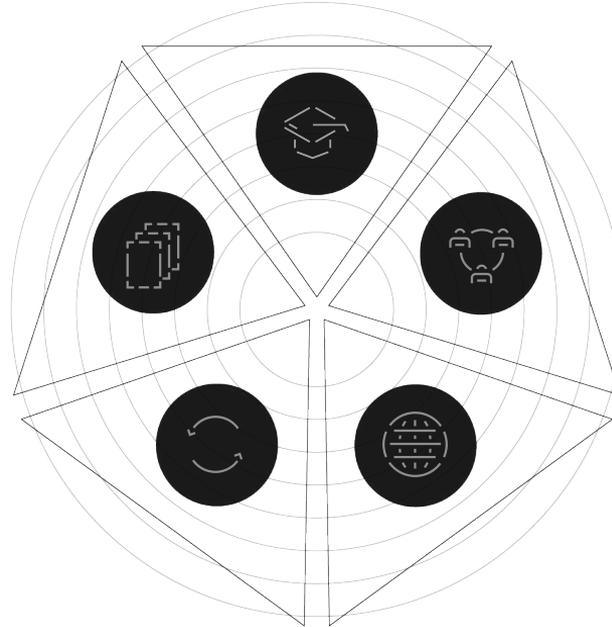
Key Elements of Youth Apprenticeships



NATIONALLY RECOGNIZED CREDENTIALING



CLASSROOM BASED
ACADEMIC TRAINING



ACTIVE INVOLVEMENT OF BUSINESS



STRUCTURED ON THE JOB
TRAINING



REWARDS

An Apprentice's Journey

01	Awareness and Interest	"I saw a TikTok video about someone who works in cybersecurity after finishing a tech apprenticeship at 16. Sounds really cool!"
02	Information and Advising	"After doing some research online, I found a local company that runs a cybersecurity apprenticeship that I'd be eligible for."
03	Exploration and Commitment	"My school had worked with that company before, so getting a work-release for my apprenticeship was pretty easy."
04	Support During Program	"My family had to move further away halfway through the year, but the program let me do some of the courses virtually so I wasn't as drained from commuting."
05	Career & Employment	"I love my company and stayed after the apprenticeship ended. Now, I make 80K a year while finishing my associate's degree!"

Executive Summary

Under-enrollment in Registered Youth Apprenticeships for ages 16-18 is due largely to:



Low Awareness



Confusing Engagement Process

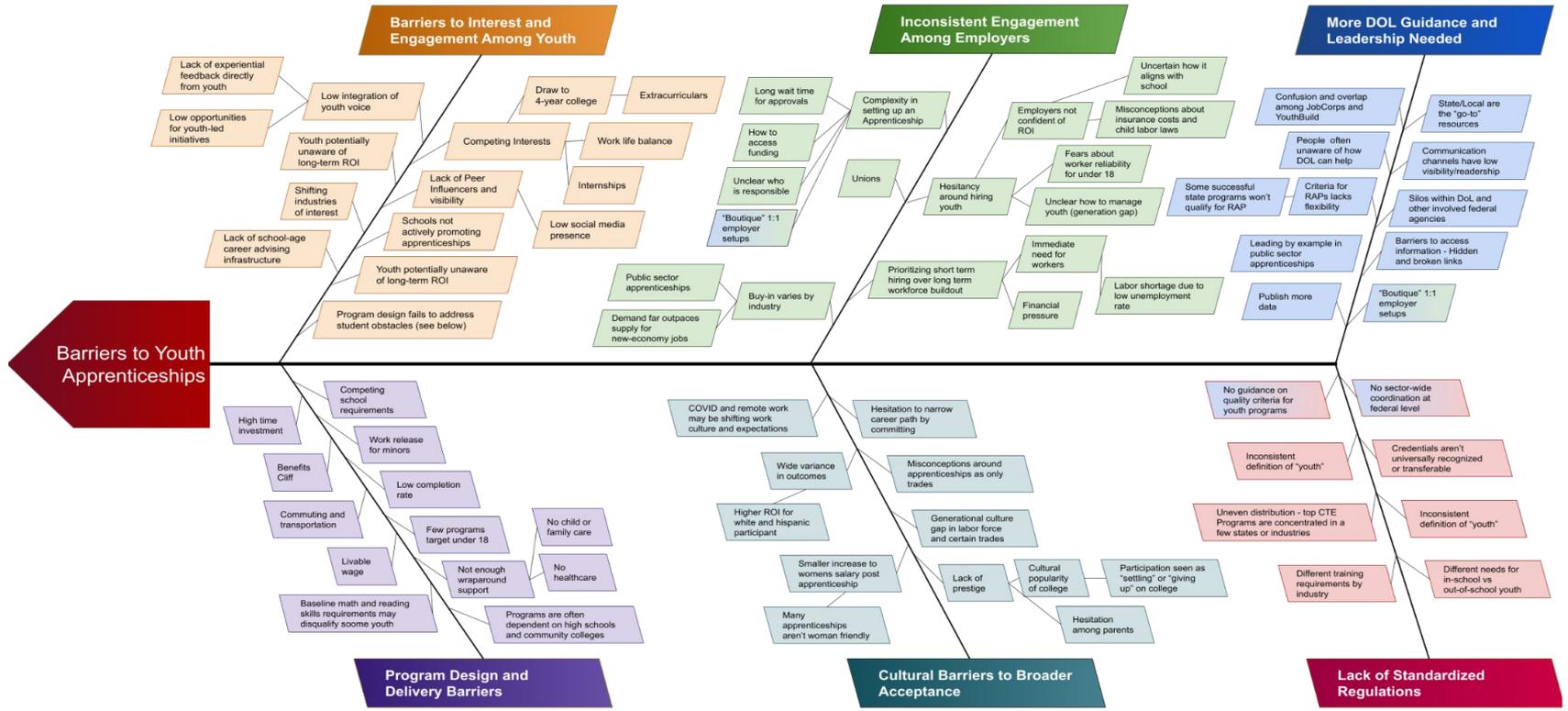


Limited Performance Measurements

A group of people are seated around a long wooden table, focused on writing in their notebooks. The scene is captured from a side angle, showing their hands and the pages of the books. The entire image is overlaid with a semi-transparent red filter. The word "Analysis" is centered in the middle of the image in a large, white, sans-serif font.

Analysis

Factor Analysis and Opportunity Identification



Youth Interest and Engagement Barriers

Kinaya Hines

**Business Operations Assoc. at Roche Diagnostics
North Central High School Junior**

Kinaya says:

“My goals, being within the business field, are in direct alignment with this apprenticeship. It’s everything I really could’ve hoped for! I think the modern apprenticeship is helping me by giving me honest feedback, teaching me the ways of the workforce, and giving me the experience that I know I need. My favorite part is learning new things, getting to meet new people, and feeling included.”

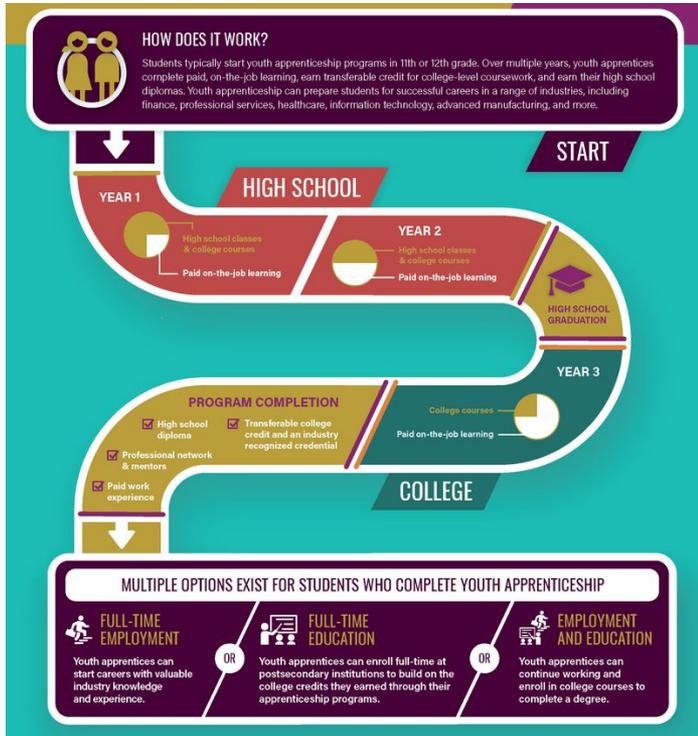


“I think the modern apprenticeship is helping me by...giving me the experience that I know I need.”



- Limited data on youth awareness of apprenticeship opportunities
- Lack of peer visibility
 - Peer-to-peer recommendations
 - Program completers
- Competing interests (e.g. internships, extracurriculars, etc.)
- Lack of direct youth engagement channels
 - Reliance on school administrators
 - Youth voice on social media

Program Design and Delivery Barriers

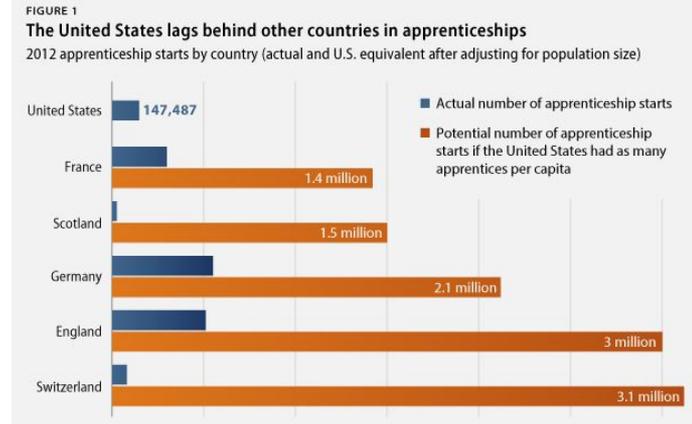


- *Variance in Credentials*
 - CTE courses and apprenticeship credit
 - College credit (2-year or 4-year institutions)
 - Some credentials not nationally recognized
- *Logistics Challenges*
 - Inability to drive
 - Access to public transportation (e.g. rural areas)
 - School work-release challenges
 - Schedules and academic requirements
- *Missing Wrap-around Supports*
 - Livable wage
 - Healthcare benefits
 - Childcare or caregiver assistance
 - Benefits Cliff
- *Access*
 - Low visibility for opportunity youth
 - Limited opportunities in high-growth, high-demand industries
 - Apprenticeship prerequisites

Cultural Barriers

WIDE VARIANCE IN OUTCOMES	LACK OF PRESTIGE	MISMATCH BETWEEN JOBS OFFERED AND DESIRED
<p data-bbox="256 456 301 527"></p> <p data-bbox="137 565 436 669">White and Hispanic Apprentices make \$6.50 - \$9.00 more per hour</p> <p data-bbox="137 714 436 855">Females make up 16% of youth apprenticeships and receive smaller wage gains</p>	<p data-bbox="606 456 672 527"></p> <p data-bbox="523 565 749 669">Hesitation Among Parents Related to 'Dirty' Jobs</p> <p data-bbox="523 714 749 817">62% of high school graduates entered college</p>	<p data-bbox="967 456 1025 527"></p> <p data-bbox="852 565 1136 669">84% Of youth are 'Not Very Likely' to consider a skilled trade career</p> <p data-bbox="857 714 1130 817">75% Youth apprenticeships are in the trades</p>

Europe has overcome many of these cultural barriers



66% of voters support expanding youth apprenticeships

Employers' Views on Youth Apprenticeship



HESITANT TO HIRE YOUTH

- **Liability and insurance** concerns for youth
- ROI calculators are limited and context specific
- Generation gap makes it difficult to onboard **Gen Z**



SETTING UP AN APPRENTICESHIP IS COMPLEX

- Focused on short term hiring needs rather than long-term
- New programs can take **over 2-years**
- Responsibilities between DoL, states, intermediaries, and employers is unclear



BUY-IN VARIES BY INDUSTRY

- **45% Employers** don't understand their responsibility
- Employers don't see themselves as key educational partners
- **77% Of Tradespeople** believe there is a labor shortage
- Hesitation to collaborate with industry partners

Lack of Standardization



No shared language in the broader ecosystem

- What counts as a “youth”?
 - WIOA vs Census
- What is a “youth apprenticeship”?
 - Registered and Unregistered
- Non-standardized credentials
- Performance metrics vary across stakeholders
 - Completion, retention (definitions)
 - SAA vs OA States



Practitioner coordination and navigation guidance

- Limited coordination among stakeholders
 - Siloed across the apprentice journey
- Guidance resources lack aggregation by comparative characteristics
- Quality frameworks and definitions are hard to find and implement

Limited Data

Data gaps in the apprenticeship ecosystem at a national level



Qualitative study of
participant
experiences



Cost-Benefit
Return on investment,
startup costs,
equivalency costs



Awareness levels
among general public
and partners



Median tenure,
Granular exit data

Analysis Summary

PROBLEM STATEMENT

In the US, youth ages 16 to 18 are particularly underrepresented in the apprenticeship landscape compared to older peers.

PRIMARY CONTRIBUTORS



Low Awareness



Confusing Engagement Process



Limited Performance Measurements

Recommendations



WHAT CAN BE DONE TO DRIVE
YOUTH APPRENTICESHIPS?

Three High-Impact DOL Approaches to Expand Youth Apprenticeships



Implement Targeted
Strategies for Awareness &
Engagement

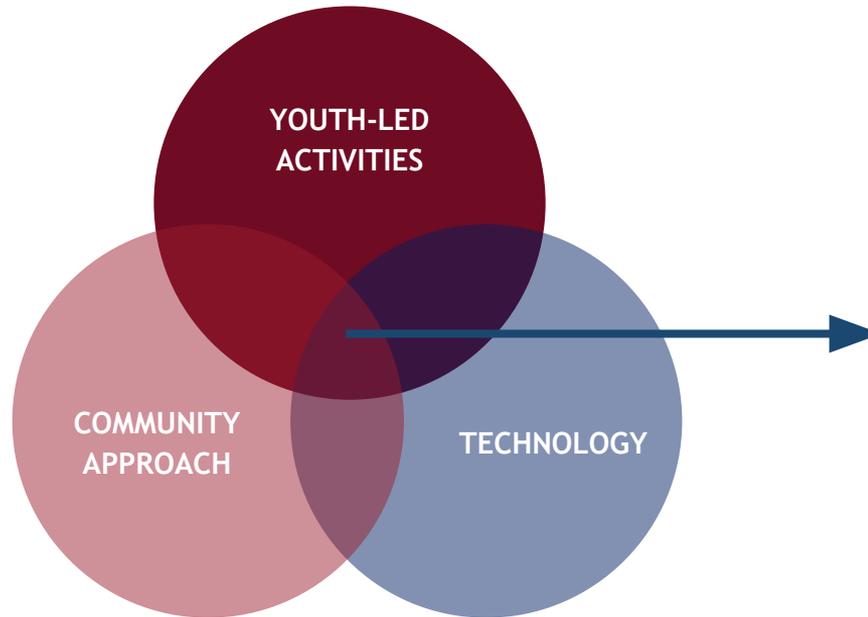


Simplify and Unify
Practitioner Resources



Improve Data Collection &
Performance Reporting

Increase Youth Awareness



A. Youth-led Activities

- Apprentice Ambassador Program
- Panels & success stories (Apprentice Trailblazer Initiative)
- Youth Voice Design Sprint (PAYA)

B. Community Approach

- Focus groups for parents & youth
- Local events (i.e. Youth Apprentice Interview Day)

C. Technology

- Live streaming events (National Apprentice Week)
- Apprentice social media takeover
- Multilingual video content
- Paid social media campaigns

Focus on High-Growth, Quality Job Sectors

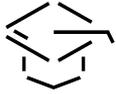
OCCUPATION	GROWTH RATE, 2021-31	2021 MEDIAN PAY
<u>Nurse practitioners</u>	46%	\$120,680 per year
<u>Wind turbine service technicians</u>	44%	\$56,260 per year
<u>Ushers, lobby attendants, and ticket takers</u>	41%	\$24,440 per year
<u>Motion picture projectionists</u>	40%	\$29,350 per year
<u>Cooks, restaurant</u>	37%	\$30,010 per year
<u>Data scientists</u>	36%	\$100,910 per year
<u>Athletes and sports competitors</u>	36%	\$77,300 per year
<u>Information security analysts</u>	35%	\$102,600 per year
<u>Statisticians</u>	33%	\$95,570 per year
<u>Umpires, referees, and other sports officials</u>	32%	\$35,860 per year
<u>Web developers</u>	30%	\$77,030 per year

- Expand apprenticeships in high-growth, high-demand sectors
 - Advanced manufacturing
- Increase opportunities in sectors with high percentages of women
 - Healthcare
- Boost career pathways in sectors with high retention rates
 - Financial services
 - IT
- Promote career pathways with livable wages

*Image depicts top 11 occupations from a list of 20 total occupations.

Simplify and Unify Guidance Resources

The DOL has credibility, resources, and reach to standardize practitioner guidance at the national level



Practitioner Guidebook

Create definitive standardized language and guidance for practitioners



Release Mythbusting Factsheets

Dispel common misunderstandings



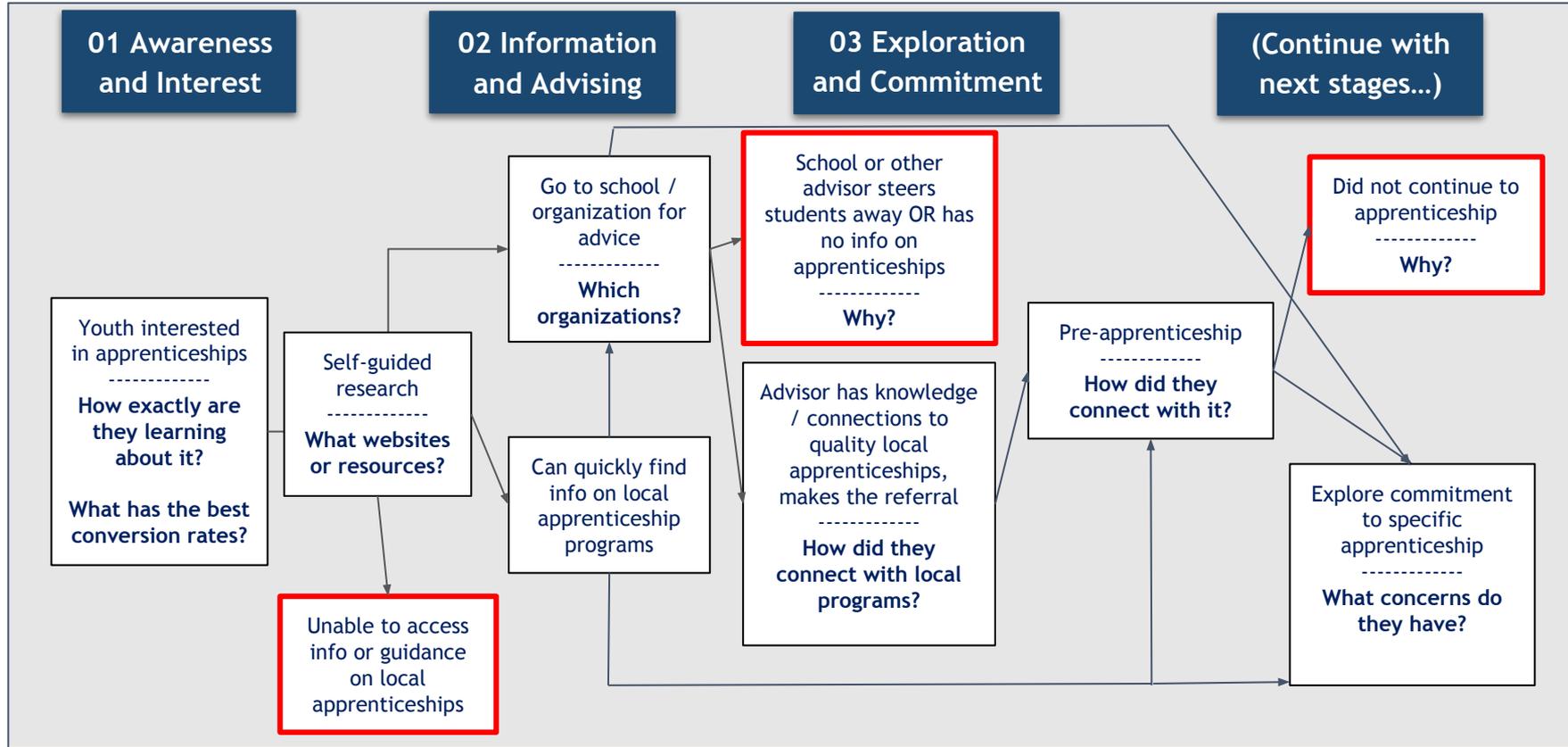
Online Information Navigation Experience

Organize online resources by a menu of aggregated characteristics

Example:
*Search Best Practices by:
State - Age - Industry - Duration*

Map the “No Wrong Door” User Journey

Example

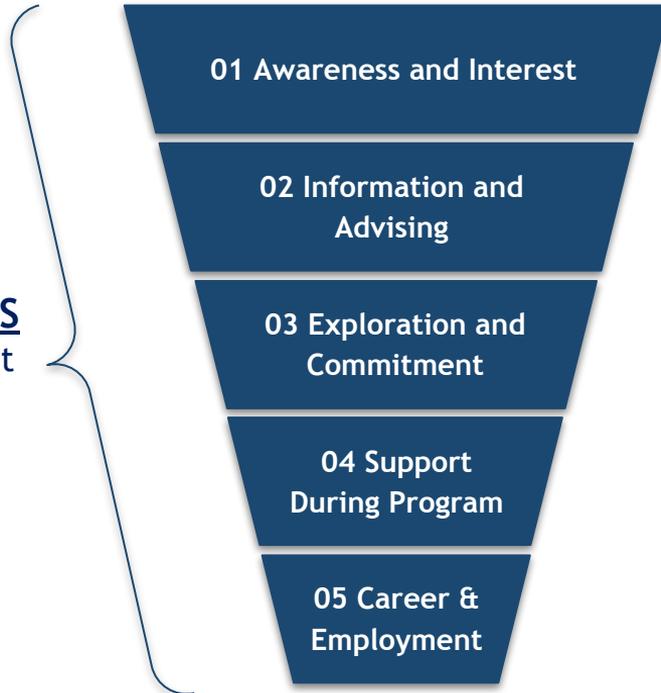


Track Performance Indicators by Apprenticeship Journey Stage

*Current reporting is focused on aggregate outcomes
Track underlying metrics to understand what drives outcomes*

EXAMPLE PERFORMANCE INDICATORS

OUTCOMES
of youth at
each stage



of social media impressions among target audiences
% of schools that discuss youth apprenticeships as part of career advising
% of pre-apprenticeships that are tied to an apprenticeship spot
% of programs that offer wrap-around services
of apprentices that are employed 1 year later

Maryland Case Study



Awareness & Engagement

- \$12 Million Investment
- Multi-agency collaboration:
 - Youth Apprenticeship Advisory Committee (2014)
 - Apprenticeship Maryland Program (2015)
 - Career-and-Technical Education Committee (2023)



Practitioner Guidance

- Statewide definitions
- 5 principles for high-quality apprenticeship
- School-to-apprenticeship (CTE)
- Focus on high-growth career tracks



Data Collection & Performance Reporting

- Conducted “School System Survey” (2017)
 - School Awareness of Apprenticeships
 - Student Participation
- Implement student & business feedback



Conclusion and Q&A

PROBLEM STATEMENT

Youth Apprenticeships provide opportunities for people 24 years old and under to access quality careers. **Youth ages 16 to 18** are particularly underrepresented in the apprenticeship landscape compared to older peers.



Implement Targeted Strategies for Awareness & Engagement

Focus on Youth Awareness



Simplify and Unify Practitioner Resources

“No Wrong Door” User Journey & Guidebook



Improve Data Collection & Performance Reporting

Track Key Indicators by Journey Stage

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