



# Expanding Youth Apprenticeships

**THE PROJECT ON**  
**WORKFORCE**

## **EXPANDING YOUTH APPRENTICESHIPS**

Recommendations for the U.S. Department of Labor

S U M M E R F E L L O W S H I P S E R I E S

## The Project on Workforce at Harvard Summer Fellowship Series

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## Executive Summary

The U.S. Department of Labor (DOL) has recently engaged in several efforts to strengthen the American workforce and increase quality employment opportunities for youth. The expansion of Youth Registered Apprenticeships (Youth RA) is one promising strategy to support workforce development. A Youth Registered Apprenticeship is a program that provides paid on-the-job training and related classroom-based instruction for people ages 16 to 24. The DOL has identified five key components of an effective youth apprenticeship: (1) active involvement of business, (2) structured on-the-job training, (3) classroom-based academic instruction, (4) rewards, and (5) nationally recognized credentialing.[1]

Youth apprenticeships enable young people to access quality careers and provide opportunities for employers to fill labor shortages in high-growth industries.[2] However, in the U.S., **youth ages 16 to 18 are particularly underrepresented in the apprenticeship landscape compared to older peers** [See [Exhibit 1](#)].

According to data gathered from industry experts, practitioner reports, and DOL resources, six factors have primarily contributed to the under-enrollment of young people ages 16-18 in apprenticeships. This report examines each of those factors and concludes that the DOL can implement the following three high-impact strategies to increase participation in youth apprenticeships:

1. **Awareness:** Implement Targeted Strategies for Awareness & Engagement focusing on opportunity youth and employers.
2. **Complexity:** Map & Unify Practitioner Resources by mapping all touchpoints in the apprentice journey and creating standardizing guidebooks for practitioners.
3. **Metrics:** Improve Data Collection & Performance Reporting by tracking key indicators at each stage in the apprentice journey.

## Introduction



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## 1. Youth Interest & Engagement is Low

- Youth apprentices have limited opportunities to engage with other youth apprentices or peers who have completed apprenticeship programs.[14]
- Youth frequently cite time-commitment challenges, academic coursework, and the inability to secure work releases as barriers to program enrollment.[15]

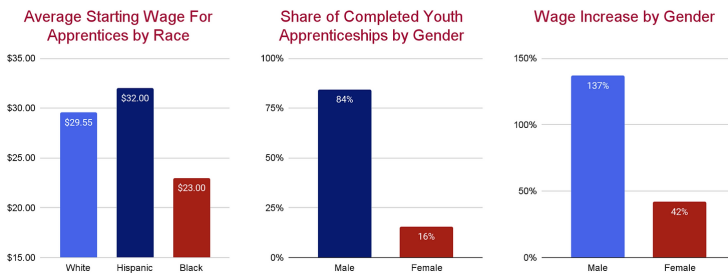
## 2. Program Design and Delivery Barriers

- Transportation is a common barrier to participation.[16]
- Key wraparound supports, including healthcare, child care, or caregiver assistance, and income vary considerably.[17]
- Most Youth Registered Apprenticeships require a high school diploma or equivalent.[18]
- Youth Registered Apprenticeships require participants to fulfill specific credential requirements outlined by the DOL.[19] However, credentials from non-registered programs may vary along with the ability of youth apprentices to earn college credit.[20]

## 3. Cultural Barriers Limit Broader Acceptance

- 75% of youth apprenticeships are in the trades,[21] whereas only 16% of youth are 'very likely' to consider a skilled trade career.[22] In contrast, "70% of [Swiss] high school graduates enter apprenticeships in 'new-collar' fields such as IT, banking, healthcare, hospitality, and advanced manufacturing," which suggests other fields are more attractive.[23]
- Historically, apprenticeships have been synonymous with 'dirty work,' which makes parents and youth reluctant to consider apprenticeships.
- Cultural barriers, discrimination, and misconceptions may be creating additional barriers to engagement for some demographic groups.

### Exhibit 3 [24]



## 4. Inconsistent Engagement Among Employers Hinders Growth

- Employers are hesitant to establish programs and hire youth apprenticeships because of the unknown ROI, legal liability, complicated setup, and long wait times.[25]
- Employers would rather pay more to have an employee immediately, but that is not feasible with the current skilled worker shortage.[26]

## 5. Complexity & Lack of Standardization Confuses Key Stakeholders

- The apprenticeship stakeholder landscape is extremely complex, with countless stakeholders such as the private sector, government, nonprofit, and education organizations impacting the space.
- Guidance resources related to youth apprenticeship best practices are difficult to navigate because they are not aggregated by comparative characteristics (e.g. industry, age group, state, etc.).
- The lack of shared language in the broader ecosystem creates confusion. For example, the term *youth apprenticeship* is not federally defined in the United States.

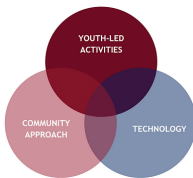
## 6. Data Gaps Limit Insights

- Currently, there are no large-scale qualitative studies of participant experiences or awareness levels that provide generalizable insights.
- Cost-Benefit, return on investment, startup costs, and equivalency costs of apprenticeship programs have not been well studied to provide guidance for employers.
- There is no data on metrics tied to specific stages of the apprenticeship journey to understand why / when apprentices drop out of the program.

# Recommendations

Based on the analysis of the six factors in the fishbone diagram, the U.S. Department of Labor has the greatest potential to impact under-enrollment in Youth Registered Apprenticeships in the following three ways:

## 1. Implement Targeted Strategies for Awareness and Engagement



The DOL must continue to invest in strategies that increase youth awareness of youth apprenticeships, especially for youth ages 16 to 18.

### Strategies to Increase Youth Awareness

#### Youth-Led Activities

- Establish an ambassadors program for youth apprentices or a youth-centered network that allows participants to connect with peers.[27]
- Host youth apprentice speaker panels to increase experiential feedback from youth. [28]
- Launch Youth Voice Design Sprints that foster participatory design and amplify youth perspectives (See the example launched by the Partnership to Advance Youth Apprenticeships).[29]

#### Community Approach

- Collaborate with community centers, school systems, and nonprofit organizations.
- Conduct focus groups with parents & youth.

- Launch in-school engagement efforts.

### Technology

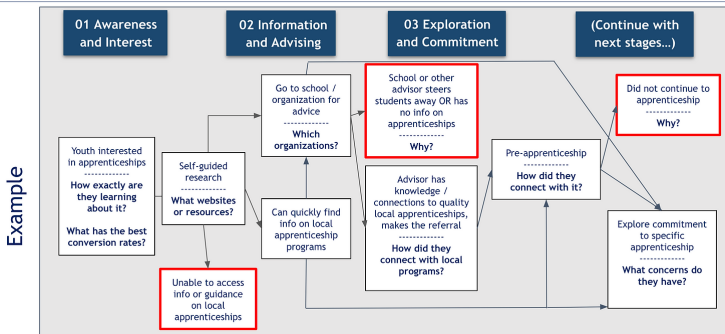
- Live stream relevant events, such as the National Apprenticeship Week, on social
- Allow youth apprentices to participate in social media takeovers using DOL's plat
- Provide multilingual video content.
- Boost digital engagement with paid social media campaigns.

Additionally, the agency should (1) expand the number of jobs in high-growth, high-demand sectors to help employers meet projected labor demands and (2) increase opportunities in sectors that have high retention rates, such as financial services and IT.[30] The DOL should also (3) increase opportunities in sectors with high percentages of women, like healthcare, to address gender disparities in apprenticeship enrollment[31] and (4) promote career pathways with livable wages.

## 2. Map and Unify Practitioner Resources

The DOL should create a comprehensive map of a youth apprentice's journey to visualize every stage during a Youth Registered Apprenticeship program. This crucial resource would support the agency's plan to deliver a user-centric "No wrong door" youth workforce system that offers seamless access to supportive services and workforce development opportunities for youth.[32]

### Map the "No Wrong Door" User Journey



Click to enlarge.

# 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!"



\*These are representative quotes and are not sourced from any person.

Click to enlarge.

In addition to the user journey map, the Youth Registered Apprenticeship ecosystem needs a simplified guidance resource featuring generalizable best practices and standardized language.

To map and unify guidance resources, the DOL should implement the following strategies:

### Strategies to Map and Unify Practitioner Resources

<b>Practitioner Guidebook</b>	Create a <b>practitioner guidebook</b> that creates definitive, standardized language and aggregates high-level takeaways from proven best practices for practitioners. Efforts within DOL's Office of Apprenticeship are already underway to create this resource, which will include content from this report.
<b>Standardize language</b>	Create a glossary of common apprenticeship-related terms that the DOL uses, similar to the Glossary & Acronym Guide in <a href="#">Maryland's CTE implementation guide</a> .  Create a <b>standardized federal definition</b> for what qualifies as a Youth Apprenticeship while considering state variations and programs that are currently non-registered.
<b>Mythbusting Factsheets</b>	Release <b>DOL-verified Mythbusting Factsheets</b> to dispel common misunderstandings around policy requirements that impact youth and employer engagement. For example, this type of resource can help address concerns regarding Child Labor laws. See <a href="#">an example of Mythbusting Factsheets</a> from Colorado.[33]
<b>Online Aggregation</b>	Organize <a href="#">Apprenticeship.gov</a> guidance resources and case studies using a <b>filterable search menu of aggregated characteristics</b> so that relevant case studies can be easily located. Website visitors should be able to search best practices by industry, state, age range, etc.

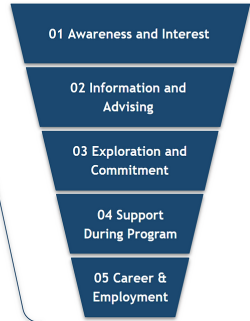
## 3. Improve Data Collection and Metrics

The DOL should update its data tracking system to include Key Performance Indicators at each stage of the Youth Registered Apprenticeship Journey. One example of a progress indicator is 'the number of social media impressions' among target youth. This type of progress indicator is quantifiable and can provide the agency with opportunities to measure awareness. Tracking performance indicators along the entire apprenticeship journey will also help identify where youth are entering and exiting the apprenticeship ecosystem. The DOL also needs to improve efforts to capture and assess relevant qualitative data from youth and employers.

## Conclusion

Given the growing demand for skilled labor in emerging industries and quality employment opportunities, strengthening the youth apprenticeship ecosystem is an essential step for achieving long-term U.S. economic stability. The U.S. Department of Labor has the unique combination of credibility, resources, and reach to address the three leading causes of apprenticeship under-enrollment for youth ages 16 to 18. Overall, low awareness levels among youth and employers, a confusing engagement process for practitioners, and limited performance measurements on the apprenticeship journey have complicated the Youth Registered Apprenticeship system. Based on the problem analysis in this report and the Department's authority, acceptance, and ability, the DOL can best strengthen the registered apprenticeship ecosystem through three strategies:

Key Performance Indicators  
For each stage



1. Implement targeted strategies for awareness and engagement that center youth experiences and integrate community and partnership feedback.
2. Map the "No Wrong Doors" apprenticeship journey and unify practitioner resources in an authoritative guidebook to promote system cohesion.
3. Improve data collection and performance reporting to measure key progress indicators along the apprenticeship journey to enhance targeted interventions.

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## About the Project on Workforce at Harvard

The Project on Workforce is an interdisciplinary, collaborative project between the Harvard Kennedy School's Malcolm Wiener Center for Social Policy, the Harvard Business School Managing the Future of Work Project, and the Harvard Graduate School of Education. The Project produces and catalyzes basic and applied research at the intersection of education and labor markets for leaders in business, education, and policy. The Project's research aims to help shape a postsecondary system of the future that creates more and better pathways to economic mobility and forges smoother transitions between education and careers. Learn more at [www.pw.hks.harvard.edu/our-work](http://www.pw.hks.harvard.edu/our-work).

## Appendix



## CASE STUDY: Maryland

### 1.) Awareness & Engagement

- The Maryland State Department of Education
  - Launched the “Maryland Works” Grant program
  - Awarded \$12.2 Million to six local educational agencies and three intermediaries that are working to develop quality college and career pathways
- The state of Maryland has engaged in several multi-agency partnerships that unite stakeholders in industries such as labor, commerce, education, and business.
  - Multi-agency collaboration:
    - Youth Apprenticeship Advisory Committee
    - Apprenticeship Maryland Program (AMP)
      - Partners include: (1) Maryland Department of Labor, (2) Maryland State Department of Education (MSDE), (3) Department of Commerce, (4) Public School Systems, (5) “community education and business partners,” (6) local employers[34]
    - Career and Technical Education Committee
      - Consists of several members, including the Secretary of Labor[35]
      - Unit within Governor’s Workforce Board

### 2.) Practitioner Guidance

- The state of Maryland provides practitioner guidance by providing a statewide definition of relevant terms such as “youth apprenticeship” and “school-to-apprenticeship.”[36]
- Maryland has outlined five principles for high-quality Youth Apprenticeships to scale programs.[37]
- The Blueprint for Maryland’s Future indicates that the state is focused on expanding high-demand career tracks for youth and announced a goal for 45% of high school graduates to “complete a registered apprenticeship program” and earn “an industry-recognized credential.”[38]
  - The Maryland Apprenticeship Locator is a navigation tool that is provided by the Maryland Apprenticeship Training Program (MATP) for apprentices and employers to search apprenticeship opportunities.[39]

### 3.) Data Collection & Performance Reporting

- Maryland gathers relevant data and conducts program evaluations.
  - In 2017, the Youth Apprenticeship Advisory and MSDE conducted a “School System Survey”[40] in 2017 to measure:
    - (1) school system awareness of apprenticeship opportunities
    - (2) student participation in apprenticeships
- Multi-agency programs such as the Apprenticeship Maryland Program implement student and business feedback.[41] This iterative process ensures that the state is relying on evidence-based strategies to expand youth employment options.

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