

Apprenticeship Inclusion Models (AIM)  
for Youth and Adults with Disabilities

# Designing Inclusive Apprenticeships and Pre-Apprenticeships

August 21, 2020



# Housekeeping

- **Personalized Captions:** Open the captioning web page in a new browser. The link is posted in the Chat (<https://www.streamtext.net/player?event=CFI-SPRA>)
- **Questions:** Please type questions into the Q&A panel. We'll save time at the end for Q&A
- **Technical Support:** If you are experiencing technical issues, open the participants list and select the Raise Hand button next to your name

# Agenda

- Welcome Remarks
- Introduction & nod to [ADA30](#)
- AIM Project Overview and Publication Series
- Discussion
  - Quality Pre-apprenticeship
  - Inside TRACKS
  - Universal Design for Learning
  - Designing with UDL
- Closing and Questions

# Welcome

## **Jennifer Sheehy**

Deputy Assistant Secretary,  
Office of Disability  
Employment Policy (ODEP),  
U.S. Department of Labor



# Introduction

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# NAPE's Mission

We build **capacity** to implement **effective solutions** for increasing **access**, **equity** and workforce **diversity**.

**equity**

**access**

**diversity**



# Key legislation

- 30<sup>th</sup> Anniversary of the Americans with Disabilities Act (ADA)
- The Individuals with Disabilities Education Act (IDEA) as amended in 1997
- Section 504 of the 1973 Rehabilitation Act
- The Workforce Innovation and Opportunity Act (WIOA – 2014)
- The Strengthening Career and Technical Education for the 21<sup>st</sup> Century Act (Perkins V)
- CARES Act – Schools must continue to provide special education and related services even if schools operate through distance education

Sources: <https://adata.org/learn-about-ada>; <https://sites.ed.gov/idea/about-idea/>;  
<https://www.hhs.gov/sites/default/files/ocr/civilrights/resources/factsheets/504.pdf>;  
<https://www.ncsl.org/blog/2020/07/15/idea-at-45-how-the-pandemic-affects-students-with-disabilities.aspx>

# Perkins V

- **Special Populations:** individuals preparing for nontraditional fields by gender; **individuals with disabilities**; individuals from economically disadvantaged families, including low-income youth and adults; single parents, including single pregnant women; out-of-work individuals; English Learners; homeless individuals; youth who are in or have aged out of foster care; and individuals with active military parents



# Perkins V (cont'd)

- Focus on increasing educational and employment opportunities for people from historically underrepresented groups in **high-skill, high-wage, in-demand programs of study and careers.**

# Access to high quality CTE

- Equity gap analyses at the state and local level – Comprehensive Local Needs Assessment (CLNA)
- Career guidance and academic counseling for the middle grades (5<sup>th</sup> Grade)
- Set-asides for recruitment of special populations

# Access to high quality CTE (cont'd)

- Emphasis on STEM (including computer science) – access, student engagement, and success
- Professional development for CTE programs fostering opportunities for students with disabilities
- Work-based Learning (a key focus for over ½ of the states)
- **Universal Design for Learning**

# Equity is when every student has what they need to succeed.



# NAPE Resources:

## [www.napequity.org](http://www.napequity.org); Special Programs

- PIPEline to Career Success for Students with Disabilities
- Make the Future™ - Connecting Girls to Manufacturing
- Equity in Youth Apprenticeship Programs



# Project Overview

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# Team

## SPR



Vinz  
Koller



Jessie  
Oettinger



Leela  
Hebbar



Caleb  
van Docto



Melissa  
Mack



Kristin  
Wolff



Caitlin  
Grey

## JFF



Tom  
Hooper



Jackie  
Gonzalez



Tara  
Smith



Patricia  
McGuire



Josh  
Christianson



Lauren  
Rabb

## Wheelhouse

# Apprenticeship Inclusion Models (AIM)

**Funded by:** USDOL Office of  
Disability Employment Policy  
(ODEP)

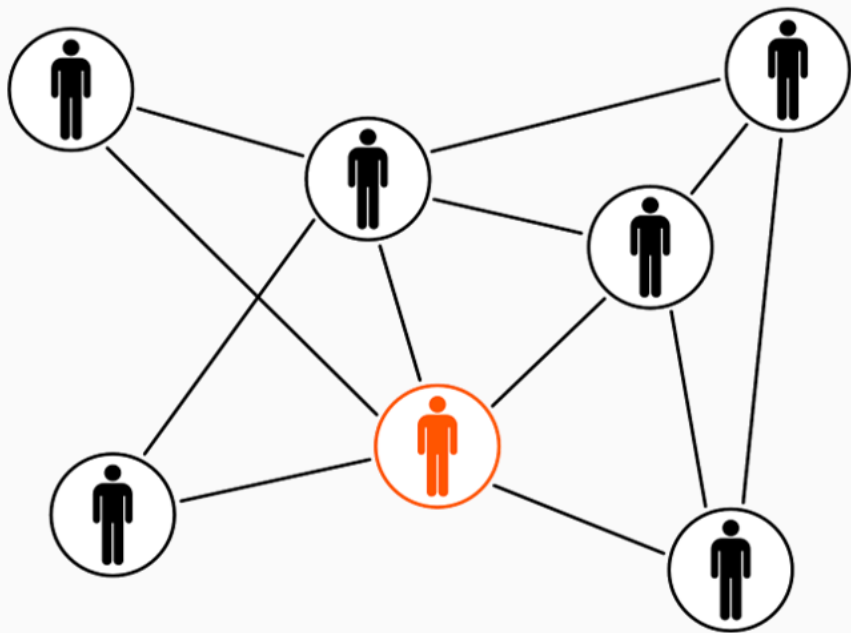
**Focus:** Expand access to  
occupational skills training,  
credential attainment, and job  
placement and retention  
**through apprenticeship and  
pre-apprenticeship models**



# Apprenticeship Inclusion Models (cont'd)

**Goal:** Learn as much as possible about how the apprenticeship and pre-apprenticeship model is serving and can be adapted to serve people with disabilities

**Approach:** Support, research, and evaluate innovative apprenticeship pilot models in high-growth, in-demand industries/sectors (IT, healthcare, and advanced manufacturing)



# The Objective

- Build apprenticeship pathways that target youth and adults with disabilities into high-demand, well-paying careers
- Gain insights on how to scale up inclusive apprenticeship
- Contribute ideas and actionable practices to the national conversation on apprenticeship

# Presenters

————— **SPR** —————



Leela Hebbar



Caleb van Docto

————— **KY DOE** —————



Mary Taylor

————— **CAST** —————



Sam Johnston

# What is Pre-Apprenticeship?

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# Quality Pre-Apprenticeship



TRAINING  
CURRICULUM



HANDS-ON  
SKILL  
DEVELOPMENT



SUPPORTIVE  
SERVICES



SUPPORT  
ALIGNMENT,  
APPLICATION  
& TRANSITION  
TO RA



FACILITATED  
ENTRY TO RA

# Legislative Supports

- Pre-Apprenticeship & Secondary CTE
  - Individuals with Disabilities Education Act (IDEA)
    - Individualized Education Programs (IEPs)
- Accommodation in the workplace
  - Americans with Disabilities Act (ADA)
- Pre-Employment Transition Services (Youth)
  - WIOA
- Universal Design for Learning (UDL)
  - Strengthening Career and Technical Education for the 21st Century Act (Perkins V)

# Strategies for Increasing Inclusivity



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TRAINING  
CURRICULUM



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HANDS-ON  
SKILL  
DEVELOPMENT

- Incorporate UDL practices
- Make educational content accessible

# Strategies for Increasing Inclusivity



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SUPPORTIVE  
SERVICES

- IEPs are a student-centered approach
- Establish partnerships— for example, assess for co-enrollment
- Request/allow more time for certification test completion



# Strategies for Increasing Inclusivity



SUPPORT  
ALIGNMENT,  
APPLICATION  
& TRANSITION  
TO RA



FACILITATED  
ENTRY TO RA

- Individual Level
  - Self-advocacy training for program staff, parents, and students on workplace accommodations
- Program Level
  - Align curricula with RAP entry requirements
  - Make curricula accessible to students with disabilities
  - Explore options for receiving credit for prior learning and skill completion

# Strategies for Increasing Inclusivity



SUPPORT  
ALIGNMENT,  
APPLICATION  
& TRANSITION  
TO RA



FACILITATED  
ENTRY TO RA

- System Level
  - Kentucky's TRACK program—creates a support infrastructure for school districts to align their secondary CTE curricula with RAPs.

# Recap of Recommended Strategies

- Incorporate UDL and accessibility into curricula
- Customized supports (from tutoring to co-enrollment) to support participant retention and completion
- Support transition to RAPs—individual, program, system

# Inside...

## Tech Ready Apprentices for Careers in Kentucky



# TRACK Origins



- Partnership between the Kentucky Department of Education's Office of Career and Technical Education and the Kentucky Office of Apprenticeship
- Recognizing the need for additional pathways into careers

# Why Registered Apprenticeship?

- ▶ Valid career pathway
- ▶ Regulation
- ▶ Oversight
- ▶ Nationally recognized portable credential



# CTE is the Key!

- ▶ Career and Technical Education is the crucial connection for *all* students to develop employability skills and find career opportunities!
- ▶ Pairing it with RAP via TRACK benefits students and employers.



# TRACK Incentives for Schools



- Districts are meeting the needs of regional employers.
- The industry certification awarded to the student will count as successful completion of an apprenticeship pathway and will make the student career ready under transition readiness.
- The industry certification awarded to the student counts as a postsecondary credential in the state Perkins V state plan for accountability.



# Pre-Apprenticeship

- Streamlined approach in collaboration with designated industry partners that allows the student to prepare for application to a Registered Apprenticeship training program after graduation.



# Established TRACK Pre-Apprenticeships

- ✓ Carpentry
- ✓ Electrical
- ✓ Masonry
- ✓ Welding
- ✓ Designed to scale in other occupations



# TRACK

## Pre-Apprenticeship Model

- 4 courses in a pathway selected by industry partners
- End-of-program assessment



# Partner Commitments

- ✓ U.S. DOL Registered Apprenticeship program in good standing
- ✓ Identify targeted schools
- ✓ Have a visible presence in schools at least once annually
- ✓ Guarantee an interview to graduates with TRACK certificate
- ✓ Awarded credit is at the partner's discretion



# TRACK Certificate Value

- ✓ TRACK certificate does not expire!
  
- ✓ Credit students can earn:
  - Bypassing the entrance exam
  - Earning up to one year of apprenticeship credit
  - Attaining higher entry wages



# Youth Apprenticeship

- Allows the student to work with a specific employer. The student will receive credit towards their apprenticeship for on-the-job learning hours obtained through a paid cooperative education placement. In addition, credit for prior learning for CTE coursework can be accepted for the Related Technical Instruction (RTI) component.



# TRACK Youth Apprenticeship Model

- The model requires a minimum of 3 CTE courses related to the apprenticeship and a paid work-based learning experience (co-op) for course credit.
- Students who have reached CTE concentrator status are eligible to apply; the employer works with the school(s) to identify students and the selection process.
- The employer determines if a student successfully completes and transitions as a full-time apprentice after graduation.



# Established & Upcoming Youth Apprenticeships



<u>Initial Pilot Pathways</u>	<u>Expansion</u>	<u>Future Priorities</u>
<p>Carpentry Electrical Machining Manufacturing Welding</p>	<p>Accounting Administrative Specialist Automotive &amp; Diesel Techs Culinary Early Childhood Education Engineering Healthcare Information Technology Insurance Associate</p>	<p>Agriculture *Equine Industry *Horticulture</p> <p>Business *KY Retail Federation *KY Credit Union League</p> <p>KY Rural Water Association</p>



# TRACK Stats

- ▶ 1 year after graduation:
  - ✓ 86% employed
  - ✓ \$22,241 median wage
- ▶ 2 years after graduation:
  - ✓ 93% employed
  - ✓ \$33,613 median wage
- ▶ 3 years after graduation:
  - ✓ **100% employed**
  - ✓ **\$41,539 median wage**



# Universal Design for Learning

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# UDL is...

...a scientifically valid framework for guiding educational practice. Practices that:

(A) provide **flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged**; and

# UDL is (also)...

...practices that:

(B) **reduce barriers in instruction**, provide appropriate accommodations, supports, and challenges, and **maintain high achievement expectations for all students**, including students with disabilities and students who are limited English proficient.

# The Universal Design for Learning Guidelines

## Provide options for ENGAGEMENT

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Affective Networks  
The *WHY* of Learning

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Provide options for...

- Recruiting Interest
- Sustaining Effort and Persistence
- Self Regulation

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GOAL: Expert learners who are...  
Purposeful & Motivated

## Provide options for REPRESENTATION

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Recognition Networks  
The *WHAT* of Learning

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Provide options for...

- Perception
- Language & Symbols
- Comprehension

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GOAL: Expert learners who are...  
Resourceful & Knowledgeable

## Provide options for ACTION & EXPRESSION

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Strategic Networks  
The *HOW* of Learning

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Provide options for...

- Physical Action
- Expression & Communication
- Executive Functions

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GOAL: Expert learners who are...  
Strategic and Goal-Directed

# Designing with UDL

## The Process

### Set Clear, Rigorous, Relevant Goals

- Clearly defined
- Multiple paths/options for achievement
- Trainers, teachers, apprentices, and employers understand goals

### Anticipate Barriers

- Talk with numerous stakeholders about barriers
- Understand the various types of PAs
- Ensure PA assessments are inclusive and all participants understand the assessment process

### Design Options to Reduce Barriers for All

- Provide solutions to all participants
- Design with stakeholders to meet specific participant needs (before, during, and as they arise)

# Career navigation cycle and product landscape

Expose - what is out there?

Discover - what do I like?

Document - what am I good at?

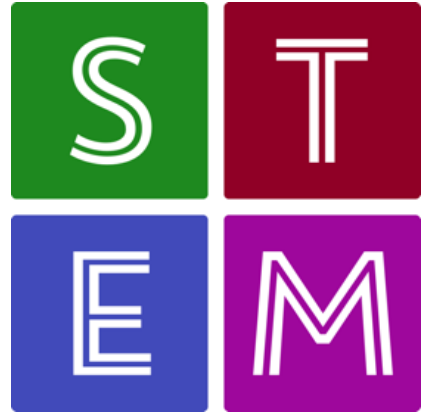
**Achieve - Land the job (most products sit here)**

[Entangled Solutions, Unlocking Career Potential](#)

# STEMfolio: Original Application

Our partnership with YouthBuild USA focuses on building STEM skills and career skills:

- Science
- Technology
- Engineering
- Math
- Career Skills



Funded by the National Science Foundation



# Co-design is Essential

Met 24 times with young adults from 7 YouthBuild sites;  
held 7 focus groups with YouthBuild staff

Currently conducting an experimental study for  
STEMfolio at sites across the U.S.



# IMTFOLIO



IMTfolio is a part of Apprenticeship Inclusion Models (AIM): Expanding career pathways for people with disabilities



 **CAST** | Until learning has no limits®

# What does IMTfolio do?

**Document** evidence of learning - pre-apprentices can show what they know in different ways

**Support** skill and knowledge development trainers can target what skills they want pre-apprentices working on, see their effort, give feedback

**Share** your work with the right people - employers, trainers



# Trainers author challenges

Challenges are ways trainers can prompt an apprentice to demonstrate a skill or knowledge. There are five challenge categories:

- Safety
- Quality Practices & Measurement
- Manufacturing Processes & Production
- Maintenance Awareness
- Essential Industry Skills

IMTFOLIO

CHALLENGES

CREATE A NEW CHALLENGE

Created by: All FILTER Clear all filters

41 CHALLENGES

**ESSENTIAL INDUSTRY SKILLS**  
#1 Logon to the IMTFOLIO website.  
4 views

**SAFETY**  
5 Ways to prevent falls  
3 views

**MAINTENANCE AWARENESS**  
Can you change a flat tire?  
1 view

**MANUFACTURING PROCESSES & PRODUCTION**  
Can you change feed length gears?  
4 views

**SAFETY**  
Complete Stop the Bleed training  
3 views

**MANUFACTURING PROCESSES & PRODUCTION**  
Cut down on production waste  
1 view

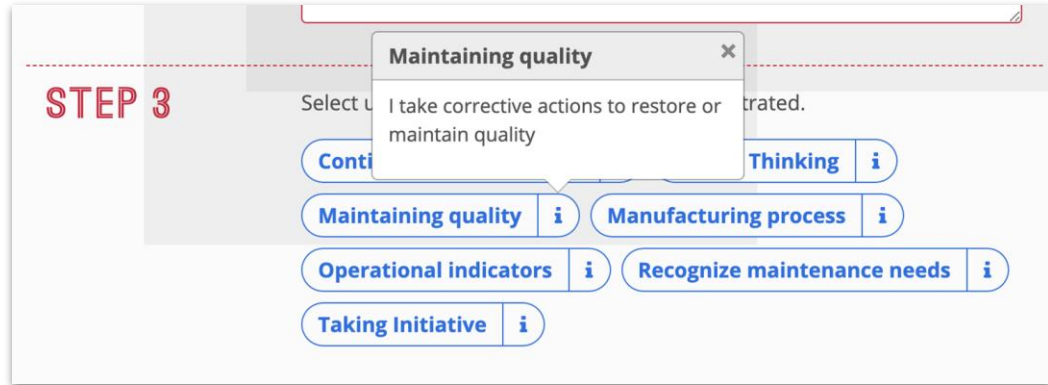
Sam Johnston  
Logout

IMTFOLIO

# Competencies

Competencies are the skills that IMT pre-apprentices will need to succeed on the job.

[bit.ly/IMT-comps](https://bit.ly/IMT-comps)



# Trainers can create challenges in two ways

Navigate to 'Challenges'

1. Create a new challenge
2. Copy and adapt an existing challenge

Fillable template to create a challenge

- Pick a category
- Add a description and media
- Select up to seven competencies targeted with that challenge
- Post

The screenshot shows a web form titled "CHALLENGE TITLE" with a blue header. The form contains several input fields and buttons:

- A dropdown menu for "Select a category" with the text "Choose One".
- A text input field for "Title your challenge" with the placeholder "Enter challenge title here" and a character limit of "some # of characters max".
- A larger text input field for "Write directions" with the placeholder "Enter challenge directions here" and a character limit of "some # of characters max".
- Two buttons: "UPLOAD IMAGE" and "EMBED VIDEO".
- A text input field for "Write a caption" with the placeholder "Enter your caption here" and a character limit of "some # of characters max".
- A text input field for "Write an alternative text description" with the placeholder "Enter your alt text here" and a character limit of "some # of characters max".
- A note: "Tag this challenge with 5-7 aligning competencies."
- A "Filter tags by:" input field with the placeholder "enter keyword(s)".
- A list of seven tags: "Applying Engineering Practices", "Applying Math Reasoning", "Applying Technology", "Asking Questions", "Communication", "Community", "Computer Programming", and "Computers & Electronics". Each tag has a small "i" icon to its right.
- A "Selections:" input field.
- A label "Assign your challenge:" followed by a dropdown menu showing "North Shore".
- At the bottom, three buttons: "POST", "SAVE DRAFT", and "CANCEL".

# Pre-apprentices take challenges

## Goal:

To document the user's job skills through their work at WRTP

## Supports:


- Simple directions - just three steps
- Variety of media types for giving directions
- Responses can be submitted using photo, video, and/or text

**MAINTENANCE AWARENESS**

### CAN YOU CHANGE A FLAT TIRE?

**STEP 1**

Show your ability to change a flat tire by following these steps 1. Check that your spare is in good shape 2. Ensure you have the correct tools ready 3. Make sure you're in a safe location and have proper safety equipment 4. Block the tire 5. Loosen the lug nuts (but don't remove yet) 6. Use your jack to lift the tire off the ground 7. Remove the lug nuts and flat tire 8. install spare tire, replace lug nuts and tighten 9. Lower jack and remove 10. Retighten lug nuts and remove



How to Change a Flat Tire | Bridgestone

**STEP 2**

Upload a photo or video

Enter your response

**STEP 3**

Select up to 3 competencies that you demonstrated.

Preventative maintenance  Problem Solving

Recognize maintenance needs  Responsibility

Safe practices

**SUBMIT**

# Pre-apprentices take challenges


## Supports (cont'd):

- Competencies can be tagged to the response
- Choice in how to receive information through text-to-speech
- Choice in how to record your responses through speech-to-text

**MAINTENANCE AWARENESS**  
**CAN YOU CHANGE A FLAT TIRE?**

**STEP 1**

Show your ability to change a flat tire by following these steps 1. Check that your spare is in good shape 2. Ensure you have the correct tools ready 3. Make sure you're in a safe location and have proper safety equipment 4. Block the tire 5. Loosen the lug nuts (but don't remove yet) 6. Use your jack to lift the tire off the ground 7. Remove the lug nuts and flat tire 8. install spare tire, replace lug nuts and tighten 9. Lower jack and remove 10. Retighten lug nuts and remove



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Select up to 3 competencies that you demonstrated.

[Preventative maintenance](#) [Problem Solving](#)  
[Recognize maintenance needs](#) [Responsibility](#)  
[Safe practices](#)

**SUBMIT**

[POST](#) [CANCEL](#)



# Global Accessibility Utilities

**Texthelp toolbar** - built in read aloud, translation, and dictionary functions



Show or describe a time when you conducted an experiment to test out a hypothesis. What did you discover?



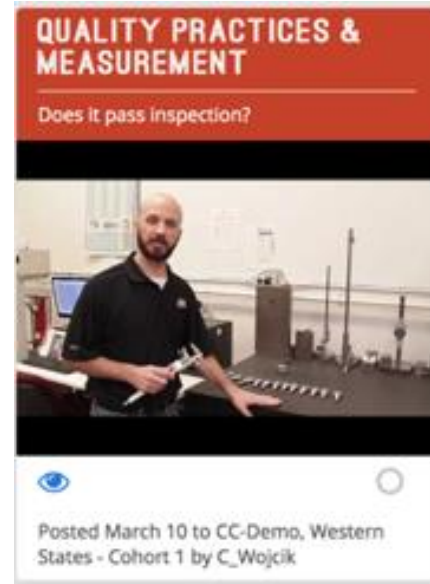
**Speech-to-text** - voice inputs for all text fields are available on mobile and desktop



**Closed captioning** - all videos include subtitles in English with auto-translation available for additional languages

# WRTP training with Western Envelopes

Pre-apprentices completed challenges during their training on the various skill areas needed to qualify them for on-the-job training milestones.



# Other Applications Underway

- Expand to YouthBuild programs
- Career and Technical Education
- Corrections to support reentry
- In-service professional development
- Vocational Rehabilitation for employment services

# UDL: Small-Scale or System-Level

## **Set Clear, Rigorous, Relevant Goals**

- Clearly defined
- Multiple paths/options for achievement
- Trainers, teachers, apprentices, and employers understand goals

## **Anticipate Barriers**

- Talk with numerous stakeholders about barriers
- Understand the various types of PAs
- Ensure PA assessments are inclusive and all participants understand the assessment process

## **Design Options to Reduce Barriers for All**

- Provide solutions to all participants
- Design with stakeholders to meet specific participant needs (before, during, and as they arise)

**Questions? Answers.**

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## Today's Presenters



Leela Hebbar

[Leela\\_hebbar@spra.com](mailto:Leela_hebbar@spra.com)



Sam Johnston

[sjohnston@cast.org](mailto:sjohnston@cast.org)



Mary Taylor

[Mary.taylor@education.ky.gov](mailto:Mary.taylor@education.ky.gov)



Caleb van Docto

[Caleb\\_van\\_docto@spra.com](mailto:Caleb_van_docto@spra.com)



Ben Williams

[bwilliams@napequity.org](mailto:bwilliams@napequity.org)

# AIM Research Brief Webinar Series

- 8/27, 12:30 ET: **Understanding Institutional Funding Sources as Part of Apprenticeship System Building**
- 9/16, TBD: **Resilient Apprenticeship and Pre-Apprenticeship: Lessons from a Pandemic.**

Register at [www.spra.com/AIM](http://www.spra.com/AIM)

# Thank You

Social Policy Research Associates, Inc.  
1333 Broadway, Ste. 310  
Oakland, CA 96412  
Phone: (510) 763-1499  
Fax: (510) 763-1599

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[www.spra.com/aim](http://www.spra.com/aim)

