Session 14: New Models and Emerging Practices

October 22 at 12:30 PM ET
Session 14: New Models and Emerging Practices

✓ Brandon S. McReynolds, Ph.D. (Colorado Department of Higher Education)
  Scaling Apprenticeship Grant

✓ Audrey Webb, M.Eng (Alabama Community College System)
  Scaling Apprenticeship Grant

✓ Carla C. Johnson, Ed.D. (NC State University)
  Closing the Skills Gap Grant

✓ Moderator: Wanda Monthey, Scaling Apprenticeship TA Coach
Public Health Pre-Apprenticeship Program

Colorado Scaling Apprenticeship Grant
Colorado Overview

✓ Healthcare
✓ 15+ Colleges and Universities
✓ Reimagining higher education
✓ Building on the state’s existing foundation
  ‣ BEL Commission
  ‣ Youth apprenticeships
  ‣ Sector Partnerships
  ‣ Existing Networks
Public Health Pre-Apprenticeship Program

- 1,000 students
- Top-down led (Governor)
- Hired by local health departments
- Colorado Public Health Workforce Collaborative
- Trailhead Institute
- Maps into multiple apprenticeships: Medical Assistant, Health Informatics, EMT, Mental Health, IT/Database management
The FAME Program

Alabama Scaling Apprenticeship Grant
Alabama Overview
The FAME Program

- 5 semester with average 72 credit hours
- Associate degree in Industrial Automation + certifications including an AAS Degree, OSHA 10, and Manufacturing Skill Standards Council (MSSC) certifications
- RTI – 2 days/week [8-10 hours] + OJT – 3 days/week
  - Manufacturing Core Exercise class requirement each semester
  - Students works with a mentor for OJT and RTI
  - Apprentices practice MCEs, including safety, Lean, problem solving, machine reliability and 5S.
AI Academy (AIA)

North Carolina State University – Closing the Skills Gap
AI Academy (AIA)

✓ 5,000 new professionals to enter AI careers
✓ Majority of focus is on incumbent workers
✓ Program can be completed in 20-40 weeks
✓ Part-time apprenticeship or released-time during work day
✓ National program – training coursework live online, apprenticeship virtual or face-to-face
Steps to Entering the AIA Program

APPLICATION
AI READINESS ASSESSMENT
EMPLOYER REVIEW
AIA PREREQUISITE FOUNDATIONS COURSE
EMPLOYER SPONSORSHIP
ENTER COHORT
AI Academy Overall

Two Pathways

- Upskilling
- General Track

**BASIC – 20 weeks**
- Intro to AI
- Data Mining

**Advanced – 20 weeks**
- Machine Learning
- Human Computer Interaction
AI Academy

- AI Academy Coursework
- On-the-job training
- Industry Credentials
AI Academy Prerequisite Foundations Course

Self-paced, 10-weeks approximately, Launch October 5

Course Competencies:

1. Basic programming concepts (data types, expressions, libraries)
2. Problem solving (decomposition, black box testing, debugging)
3. Control structures (functions, conditional structures, looping structures)
4. Data structures (linear, mapped)
5. Basic data science (algorithms, data visualization)
6. File handling (data processing)
7. Object-oriented design (classes)
8. Databases (entities and relationships, queries)
Cohort 1 – General Track

- 186 completed applications
- 52 in progress
Timeline – Cohort 1

- August 2020: AI Readiness Assessment
- October 2020: AI Foundations Course (no CS background)
- January 2021: AI Basic Pathway Program
- July 2021: AI Advanced Pathway Program
- December 2021: First Cohort Completes Full Program
Industry Partners (Sample)

- Hazardous Software/Diveplane
- Citrix
- Bank of America
- Corteva Agriscience
- Vector Solutions
Resources:

- Colorado Collegiate Apprenticeship Program
  - https://coapprentice.com/

- Colorado IRAP Framework
Thank You!