Expanding Your Talent Pool: Disability Inclusion in Advanced Manufacturing

February 16, 2022

AskEARN.org
Many thanks to the following for their assistance in preparing materials for today’s webinar:

• The Partnership on Inclusive Apprenticeship
  https://inclusiveapprenticeship.org/about/

• Dr. Scott Michael Robertson, Senior Policy Advisor, ODEP
Our Moderator

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Extension Associate
Training and Technical Assistance, EARN
Cornell University
Our Presenters

Frank Fatalyn
President
FALA Technologies

Hillary Nichols
Supervisor of Employment Services
Resource Center for Accessible Living
Expanding Your Talent Pool
Disability Inclusion in Advance Manufacturing

USDOL ODEP: Office of Disability Employment Policy
Yang Tan Institute
2/26/2022

Hillary Nichols
Resource Center for Accessible Living (RCAL)
Supervisor of Employment Services

Frank Falatyn
FALA Technologies President
Council of Industry Director / Workforce Chair
We’ve Walked In Your Shoes (1)

Workforce Crisis
How do We Find Create a Skilled Workforce?

Business Case
Targeted Workforce Populations
Entirely Overlooked Workforce
Who is FALA Technologies?

FALA has 76 years of experience in all aspects of manufacturing.

INDUSTRY SECTORS

- Semiconductor
- Aerospace and Defense
- Advanced Energy
- Transportation
- Industrial Products

Main Facility – Kingston, NY

R&D / Prototype Products

Custom Built Equipment
Struggling to Find Individuals Ready for Apprenticeships

NYS-Certified Apprenticeships

Most Common Introductory Apprenticeship

Industrial Manufacturing Tech

Most Common Introductory Apprenticeship

Machinist (CNC)
Toolmaker
Maintenance Mechanic
Welder
Electronics Technician
Quality Assurance Auditor
Electro-Mechanical Technician

FALA Technologies
40 Staff
NYSDOL: 89% of NYS manufacturers have 50 or less staff

Apprentices (Appr.)
Graduated Appr.: 3
In Appr. Training: 2
In Appr. Preparation: 6
Being Evaluated: 3
Appr. Unsuccessful: 3

% in Training
The Story of FALA’s Hiring for Apprenticeships (1)

2015

Mechanical Engineering

2017

NYS Seven (7) Regional Manufacturing Associations

2018

Electrical Engineering
New York State Advanced Manufacturing: The Story of How STEPs Was Started

Dutchess County Community College
Email Invitation to Meet with New York’s Developmental Disabilities Planning Council to Discuss Workforce Readiness Needs for Business

27 Hudson Valley Manufacturing Companies Invited

Join the Conversation on Workforce Readiness

In support of workforce readiness for post-secondary students with disabilities, Our Ability Alliance/Disability:IN New York is holding 10 facilitated conversations between regional businesses, interested employment service providers and community college faculty and staff across New York. The meetings’ purpose is to identify needed skills and potential skills gaps that influence hiring or promotion decisions.

We are pleased to let you know that Dutchess Community College will be hosting a meeting on October 12, 2018 from 8 a.m. to 11 a.m. in Bowno Hall Room 122. Our Ability Alliance/Disability:IN New York is seeking your participation in this event. The agenda will include a networking breakfast, panel discussion and a question and answer session.

Don’t miss this opportunity to provide insight on this important workforce development topic. Your feedback will inform Our Abilities’ recommendations to the Developmental Disabilities Planning Council for addressing the skills gap.

There is no cost to attend this event. Simply e-mail MaryBeth Schneider to register. Please include your name and the organization you represent.

Parking will be available in Lot 4, 53 Pendell Road, Poughkeepsie, NY.

We are looking forward to seeing you in October!

In partnership with:

1 Hudson Valley Manufacturing Company Attended
New York State Agencies

Job Placement Services
- Soft Skills for Work Readiness
- Job Seeking Skills Training
- Direct Placement Services
- Supported Employment

Hillary Nichols
- Trained FALA’s Executives
- Trained FALA’s Supervisor
- Trained FALA’s Co-workers
- Provided Workplace Site Recommendations
- Provided Job Coaching
- Solved Issues as they arose
The Story of FALA’s Hiring for Apprenticeships (2)

2015
Mechanical Engineering

2017
NYS Seven (7) Regional Manufacturing Associations

2018
Electrical Engineering

2022
NYSDOL Certified Tool Maker

2022
NYSDOL Certified Quality Assurance Inspector
The Story of FALA’s Hiring for Apprenticeships (3)

Neurodiverse Individuals with Engineering Degrees

2015
Mechanical Engineering

2018
Electrical Engineering

2022
NYSDOL Certified Tool Maker

2022
NYSDOL Certified Quality Assurance Inspector
Inclusive Talent Pipeline for American Businesses Prize Challenge

Request for Proposals
Fifty-four (54) Ideas

PHASE 1 Winners
- Toyota & The Arc of Southwest Indiana
- Kennesaw State University
- KPMG & Melwood
- Mentra
- FALA Technologies & RCAL

AWARD
April 2020
$20K

PHASE 2 Winners
- KPMG & Melwood
- Mentra
- FALA Technologies & RCAL

AWARD
February 2021
$60K

A diverse workplace is good for the bottom line. Research shows that American businesses that hire and support workers with disabilities see improved performance and productivity — 20% higher revenue and 30% higher profit margins than peer business that do not. Inclusive employers also report higher overall employee morale and higher retention rates of workers with disabilities.

However, businesses that want to diversify their workforce and don’t always know how to implement effective talent pipelines that include people with disabilities, and people with disabilities have historically been left out of the workforce.

In November 2019, ACL launched the Inclusive Talent Pipeline for American Businesses prize competition to help businesses expand their recruiting and retention programs to better include workers with disabilities (particularly people with intellectual and developmental disabilities). The goal is both to ensure Americans with disabilities can participate and succeed in the future economy, and to enhance and strengthen American businesses.

From more than 60 competitive proposals, ACL selected five first-phase winners. In phase two, three finalists were selected to compete for the $100,000 grand prize.
What is the STEPs Pre-Apprenticeship Program?:

**Industry Driven**

**INDUSTRY SPONSORED**
- Provides Training Classroom & Private Office
- Pays for Utilities & Internet Service
- Provides Access to Copier/Scanner

**INDUSTRY ENVIRONMENT**
- Classroom must be Located at or within Walking Distance of the Industry Site
- Trainees Start Mixing with Industry Staff the 1st day of Class
- A Goal is to Show How Workplace Tasks Utilize What Trainees Learn in Class
What is the STEPs Pre-Apprenticeship Program?:

Industry Worksite

ONE SITE FOR ONE

• A Large Company Uses STEPs for Internal Training
• Recruiting and Hiring Done by the Company
• Alternative Placement by Partnering Agencies

or

ONE SITE FOR ALL

• A Network of Common Large / Small Companies Use One Site’s Training
• Recruiting and Hiring Done by the Network of Companies
• Alternative Placement by Partnering Agencies
What is the STEPs Pre-Apprenticeship Program?:

**STEPs Trainees (1)**

**FOR EVERYONE**
- People with Disabilities Trained Alongside Non-disabled Peers
- Everyone Progresses in STEPs at Their Own Pace
- Businesses and Partnering Agencies Help Find and Support

**BEING TRAINED TO**
- Obtain and Maintain High Skilled In-demand Technician Jobs
- Be Work-ready and Basics Skills Certified for Industry Entry Level Jobs
- Start a Career Pathway that can Lead to Apprenticeships, with Some Becoming “Master Tech”
What is the STEPs Pre-Apprenticeship Program?:

**STEPs Trainees (2)**

LOOKING TO TRAIN

- Youth and Adults 18 Years and Older that have Graduated School
- Completed 9th Grade Educational Coursework that Include:
  - Basic Geometry & Trigonometry
  - Can Use a Basic Algebraic Formula
  - Can do Basic Word Problem Solving (with Refresher “Workplace Application Training” by STEPs)
- Good Candidates are Individuals Who Tried But Were Unable to Complete a Community College Education or Work in Industry

Where is STEPs Looking to Find these People?
Workforce Innovation and Opportunity Act (WIOA)

Internships / Entry Level Jobs / Apprenticeship Jobs

50% Individuals with Disabilities Listed Below

50% Individuals From Populations Listed Below

WIOA Strategic Industry Sector Partners

WIOA Priority of Service Populations

STEPs Targeted Workforce

WIOA Strategic VR Agency Partners
- Adults with Disabilities

WIOA Strategic DD Agency Partners
- Youth with Disabilities

WIOA Strategic Labor Agency Partners
- Underrepresented Youth Populations
  - At-Risk Youth
  - Adjudicated Youth

WIOA Strategic Education Sector Partners
- Underrepresented Adult Populations
  - Veterans
  - Dislocated Worker
The STEPs Pre-Apprenticeship Program (1)
The STEPs Pre-Apprenticeship Program (2)

Academic Credit Toward Future Degree Attainment

Basic Industry Skills Certified
- Certified Mfg Associate (CMfgA)
- Certified Production Technician (CPT)

Work Readiness Certified
- USDOL ODEP Skills to Pay the Bills (Work-Readiness)

WIOA Targeted Workforce Candidates

Internships

Job Placement & Support Services

Level 1
- Alternative Placement
- Support Services

Level 2
- Job Placement

Level 3
- Industry Job Placement
STEPrs Pre-Apprenticeship Program:

Industry Driven (1)

Alternative Placement

LEVEL 3
Advanced Apprenticeship

LEVEL 2
Introductory Apprenticeship

LEVEL 1
Six Common Entry Level Jobs
LEVEL 1

Six Common Entry Level Jobs:
Quality Control (QC) Inspector

<table>
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Every Manufacturing System

CUSTOMER (RFQ = Request for Quote)
SALES & ESTIMATING
PURCHASING

FABRICATION
TOOL CRIB / WAREHOUSE

INSPECTION

ASSEMBLY / PACKAGE

FINAL INSPECTION

SHIPPING
RECEIVING
LEVEL 1

Six Common Entry Level Jobs: Shipping Clerk and Receiving Clerk

Advanced Mfg. Direct Job Placement

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LEVEL 1

Six Common Entry Level Jobs:
Manufacturing Technician

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Every Manufacturing System

CUSTOMER (RFQ = Request for Quote)

SALES & ESTIMATING

PURCHASING

TOOL CRIB / WAREHOUSE

FABRICATION

INSPECTION

ASSEMBLY / PACKAGE

FINAL INSPECTION

SHIPPING

RECEIVING
LEVEL 1

Six Common Entry Level Jobs:

Tool Crib/Warehouse Clerk

Advanced Mfg. Direct Job Placement

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Every Manufacturing System

CUSTOMER
(RFQ = Request for Quote)

SALES & ESTIMATING

PURCHASING

TOOL CRIB / WAREHOUSE

FABRICATION

INSPECTION

ASSEMBLY / PACKAGE

FINAL INSPECTION

SHIPPING

RECEIVING

Finished Product
LEVEL 1

Six Common Entry Level Jobs:

Project Sales Specialist and
Project Launch Specialist

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LEVEL 1

Six Common Entry Level Jobs:

Part Prep Technician and Assembly Technician

![Advanced Mfg. Direct Job Placement table]

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![Every Manufacturing System diagram]
STEPS Pre-Apprenticeship Program:

Industry Job Placement (2)

Alternative Placement
- Manufacturing Not the Right Pathway
- Needs More “Polishing” Before Resuming Apprenticeship Pathway Training
- Advances into a Continuing Education Placement

LEVEL 3
Advanced Apprenticeship

LEVEL 2
Introductory Apprenticeship

LEVEL 1
Six Common Entry Level Jobs
We’ve Walked In Your Shoes (2)

Workforce Crisis

Today’s presentation will make the Business Case, that properly prepared and trained, WIOA Priority of Service Populations of youth and adults, who are an entirely overlooked workforce population that is seldom or never hired by manufacturers today, will be a strategic part of your future workforce.

Business Case

WIOA Priority of Service Locations
Entirely Overlooked Workforce
Business Case – 2 Years of Outcomes

**STEPs Trainees**

| WIOA | 100% |
| Priority of Service Populations |
| 75% Individuals with a Disability |
| 94% Low Income |
| 50% Ethnically Diverse |
| 2% At Risk |

**STEPs Placements**

| WIOA | Strategic Industry Sector Partners |
| NYS Advanced Manufacturing |
| 54% Manufacturing Hired |
| (15% Manufacturing Apprenticeship) |
| 8% Culinary Industry Hired |
| 23% Continuing Education |
| 15% Alternative Placement |
Who is the neurodiverse workforce?

“50-75% of the 5.6 million autistic adults in the U.S. are unemployed or underemployed. Nearly 50% of 25-year-olds with autism have never held a paying job, despite having the skill sets and expertise to excel in the workplace.” – Forbes (4/27/21)
Where Do We Go From Here?

• Focus on building Bridges and not just opening doors.
• Invest in pre-employment training and building meaningful relations with disability services organizations to create a pipeline of skilled workers.
• Add accessible elements to your recruitment, hiring and retention strategies such as: Job Profiling, Working Interviews, and use of tax and hiring incentives.
Barriers to Partnerships

- Many people on the Autism Spectrum and those with developmental disabilities do not have access to Industry specific pre-employment training for Industry.

- Disability Organization do not have adequate screening tools or resources to refer and prepare appropriate candidates to enter into high skilled industry jobs.

- Most “job developers” who support people with disabilities have a human services background, and do not understand the needs of the Advanced Manufacturing Businesses and struggle to put the correct supports in place.
Work Observations - Hiring Individuals with Disabilities

**Changed the Entire Work Culture**

**Perceived Weaknesses**
- Not Use to Working with Their Hands
- Takes a Longer Time to Train
- Not Great at Taking Notes
- Not Use to Working 40 hour weeks
- Handwriting is Hard to Read
- Directly Tell You What They Think

**Discovered Strengths**
- Have a Strong Tendency to Focus on Their Work
- Trust What You Tell Them
- Are Completely Engaged in Their Lessons
- When Focused on a Goal They Want to Achieve, They do Not Give Up
- Make Incredibly Loyal Workers
- Directly Tell You What They Think
Questions and Answers

**STEM & Technical Exploring Pathways (STEPS)**

**Expanding Your Talent Pool**

**Disability Inclusion in Advance Manufacturing**

**Hillary Nichols**
Resource Center for Accessible Living (RCAL)
Supervisor of Employment Services

**Frank Falatyn**
FALA Technologies President
Council of Industry Director / Workforce Chair
The Employer Assistance and Resource Network on Disability Inclusion (EARN) is a resource for employers seeking to recruit, hire, retain, and advance qualified employees with disabilities. This publication is fully funded by the U.S. Department of Labor’s Office of Disability Employment Policy (ODEP) under cooperative agreement No. OD-33975-19-75-4-36 with Cornell University. The total four-year cost of this agreement amounts to $10,000,000. This document does not necessarily reflect the views or policies of the U.S. Department of Labor, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.