



SOUTHSIDE VIRGINIA
COMMUNITY COLLEGE

Hot Topic Academies to Attract Youth to Modern Manufacturing

Begin with the End in Mind

- Average salary of IWD is ***
- Average Salary of someone working in AM -- ****
 - With benefits usually without a waiting period!
 - Full Time Work
 - Training is typically 18 weeks
 - Multiple Credentials
 - Multiple entry and exit points
 - 1-2-7 IDEA
 - Job Growth is on the rise – some areas in VA even more – expansion and retirements --

Workers with disabilities earn less than their peers

For every dollar paid to workers without disabilities, those with disabilities receive only 63¢, on average

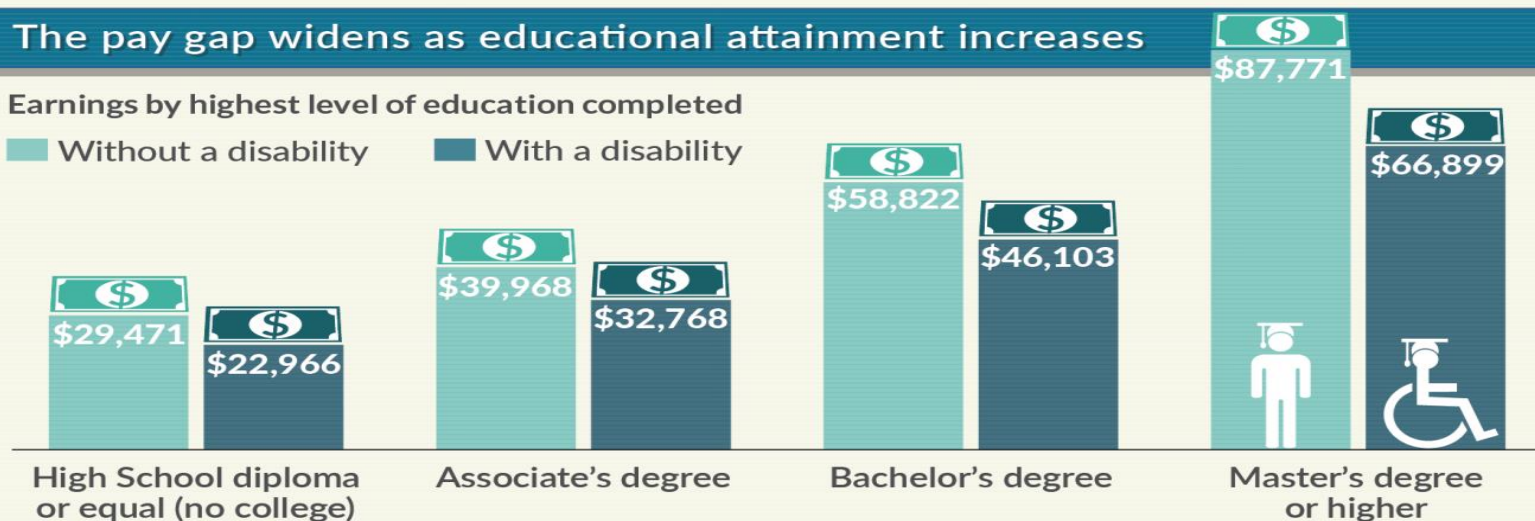


The pay gap widens as educational attainment increases

Earnings by highest level of education completed

Without a disability

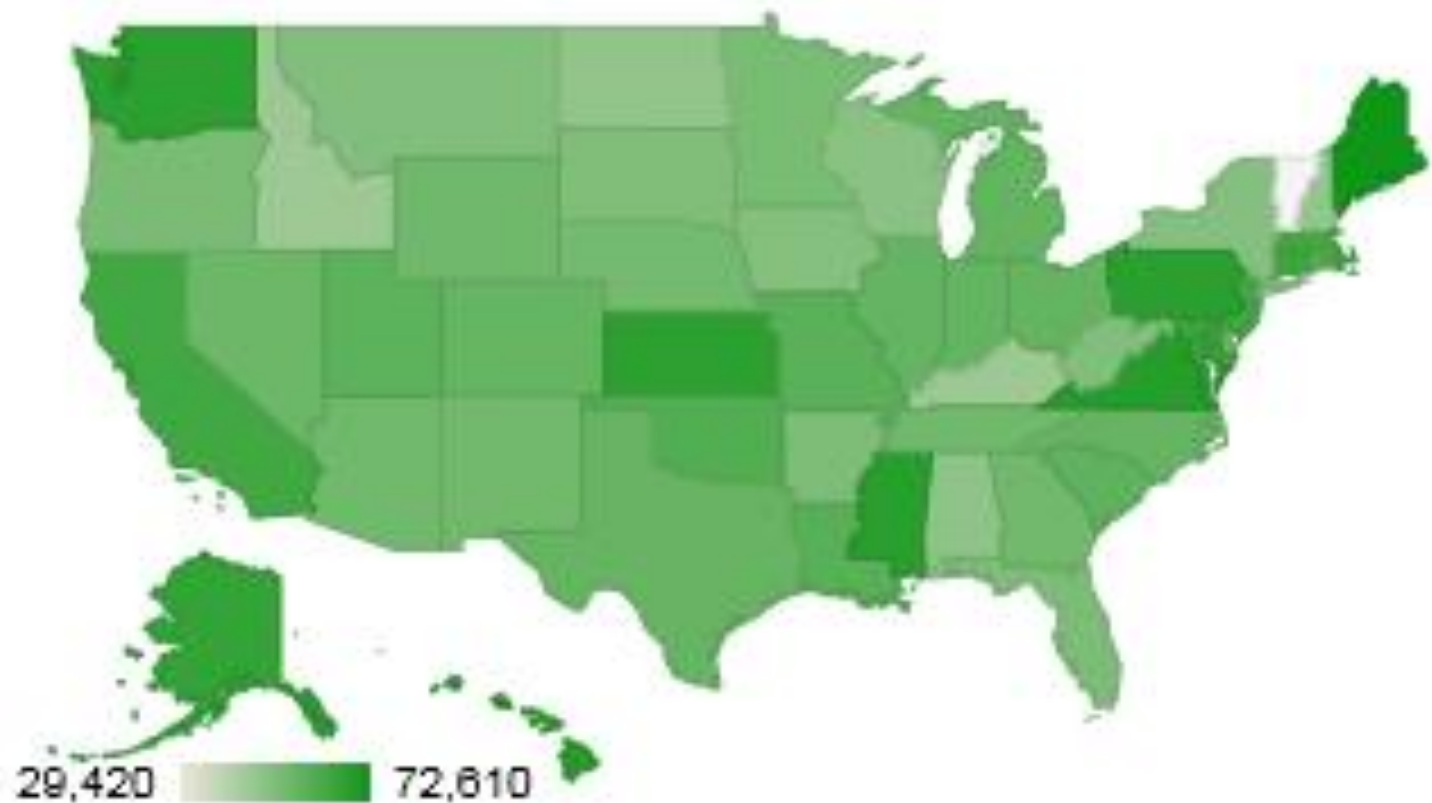
With a disability



Source: *An Uneven Playing Field: The Lack of Equal Pay for People with Disabilities*, 2014, American Institutes for Research

www.air.org

Median Salary for Production Technicians with State



Information for 2016 accessed from Recruiter. Com on 9/1/16,
<https://www.recruiter.com/salaries/manufacturing-production-technicians-salary>

Modern Manufacturing can close the gap

- Benefits-usually without a waiting period!
- Full Time Work
- Training is typically 12 weeks (+6 for CRC, OSHA)
- Multiple Credentials
- Multiple entry and exit points
- Job Growth is on the rise – some areas in VA even more – expansion and retirements – let's look at the numbers!

Modern Manufacturing can close the gap

- ◉ With benefits usually without a waiting period!
- ◉ Full Time Work
- ◉ Training is typically 12 weeks (+6 for CRC, OSHA)
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- ◉ 1-2-7
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From Difficulty Comes Opportunity: Manufacturers Need a Skilled Workforce!

2.7M baby boomer retirements

+ 700K manufacturing jobs expected from economic expansion

3.4M manufacturing jobs are likely to be needed by 2025

– 1.4M jobs are likely to be filled

2M jobs unfilled due to the skills gap

Success in the New Economy by Kevin Fleming lays out the ratio of workers needed in our economy:

Confirmation of this path

For every 10 Job Opportunities,

1 : 2 : 7

1 Requires a Master's Degree

2 Require a 4 year Degree

7 Require Certifications or a 2 year Degree

What are Career Pathways?

In today's highly technical knowledge based economy, having and perfecting skills that employers need can be an achievable goal.

- Numerous training options
- Practical Time Frames
- Multiple entry and exit points
- Combines education, training, and experience to move through a pathway

Changing Perceptions of a Manufacturing Career Pathway....

- Parents
 - Students
 - High School Teachers
 - DARS/DBVI Counselors
-
- How do we address Changing the view for Students and Families?

The PERCEPTION GAP: From this....



To THIS!

Technical skills are needed and cross training provides variety and mobility



What Would You Do?

- DBVI Consumer: years old with a mitochondrial disorder that results in vision impairment rendering him legally blind , cochlear implants, diabetes currently under control, and energy levels that vary widely through the day. This consumer has a supportive family that encourages his independence. He has graduated high school through a community program and has had some college classes with mixed success. This consumer desires to be a drone operator.
- WHAT WOULD YOU DO?

What We Did!



...And It's Going to Get More Difficult

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Perceptions....

- ◉ Parents
 - ◉ Students
 - ◉ High School Teachers
 - ◉ DARS/DBVI Counselors
-
- ◉ How do we address Changing the view for Students and Families?

Technical skills are needed and cross training provides variety and mobility



All Academies Had Some Similarities

- Everyone attending these academies had to be a WIOA or a DARS participant or potential participant
- All academies were a week long (30 hours – 2 Non-credit Hours of Training)
- Participants were transported to the academies by WIOA Staff
- Participants were fed breakfast, lunch, and an afternoon snack
- WIOA Staff also took participants on field trips
- The VMA Liaison with DARS attended each camp to administer assessments on all participants and speak about Career Pathways
- WIOA participants were paid a training stipend for attending the academy
- Each academy had a final competition
- Each winner of the competitions won a \$100 gift card to Wal-Mart

Robotic and Drone Academy

- Academy was held at Southside Virginia Community College's Daniel Campus in Keysville, Virginia
- The Instructor was Vincent Brown, Robotics Instructor for SVCC
- Twenty-two Youth Participated, 21 were WIOA Participants and 7 of those were co-enrolled in DARS
- Built Robots
- Learned to fly drones
- Acquired the skill to take still and live pictures with drones
- Studied about Career Opportunities Available in the Field of Robotics
- Went on Field Trips to UAV Pro in Fort Pickett, Blackstone, VA and Dollar General Distributing in South Boston, VA
- Raced their robots on a course for speed based on their independent design
- Showed their still pictures and videos to their fellow classmates and a panel of judges to be graded on quality and stability.







3-D Imaging Academy



- Academy was held in the Lake Country Advanced Knowledge Center in South Hill, Virginia
- The Instructor was Scott Edmonds, Instructor for SVCC
- Ten WIOA Youth Participated in this Academy
- Learned of Career Pathways and opportunities in 3-D Imaging
- Learned how to use the software program AutoCAD which is used to design items to be printed with the 3-D printers
- Created name tags, company logos, and trophies with AutoCAD and printed them on the 3-D printer and made a 2-D portfolio of their work
- Went on a field trip to Cardinal Homes, Incorporated a Modular Home Manufacturer in Wylliesburg, Virginia and Dollar General Distributing in South Boston, Virginia.
- Each participant made a portfolio of their original designs and presented it to their fellow classmates and to a group of judges. They were also given an oral test on their AutoCAD skills to demonstrate to the judges.



Welding Academy

- Academy was held at the Southern Virginia Higher Education Center in South Boston, Virginia
- The Instructor was Fernandez Bruce, Instructor for the SVHEC
- Ten WIOA Youth Participated, three were co-enrolled in DARS
- Learned of Career Pathways and training opportunities in Welding
- Learned about different types of welding like MIG, TIG, and Stick
- Worked in a team environment to create two drafting tables
- Creatively worked independently to design fireplace pokers and shovels
- Went on a field trip to Slap Nasty Designs in South Boston, Virginia and Dollar General Distributing also in South Boston, Virginia.
- Gave presentations on what they learned in the academy and showed their pokers and shovels to be judged independently





Academies

- ◉ Academies as Situational Assessments
- ◉ Opportunities to see other Careers
- ◉ Experiential learning
- ◉ Next steps on the pathway
- ◉ Interviewing and resume uses

Dream It. Do It.



Explore ▾

Decide ▾

Train & Certify ▾

Employ ▾

Search



Announcements

February 9, 2016 : 2016 Manufacturing Technology Camp Schedule

February 26, 2015 : Carson City Library First in Nation to Offer Manufacturing Training Program



**I MAKE
PLANES
STRONG**
**SO WHAT DO
YOU DO?**

Engineering

Design, integrate, or improve manufacturing systems or related processes. May work with commercial or industrial designers to refine product designs to increase producibility and decrease costs.

[Learn More >](#)



START YOUR CAREER JOURNEY TODAY

Create an account to begin your exploration and track your journey

CREATE ACCOUNT

WWRC Training Opportunities

- WWRC – Manufacturing Academy Pilot
- MT1 and MSI Training
- Nationally recognized credentials



Articulation Agreements

- Clear articulation agreement with MT1 certificates to receive college credit with Blue Ridge Community College.

Flexibility of Choices for training and supports

- ◉ Regional Summer Academies
- ◉ Community College
- ◉ Adult Education
- ◉ Plugged In
- ◉ Aztec Software
- ◉ Various online opportunities

Critical Manufacturing “Mid-Skill” Occupations

- Positions require certification regarding broad-based knowledge about multi-step processes to successfully trouble-shoot and solve problems beyond traditional “machine” operators:
 - Operator
 - Production Operator
 - Production Technician
 - Technician
 - Chemical Equipment Operator
 - Chemical Operator
 - Fixers
 - CNC Technician
 - Manufacturing Technician
 - Production Manufacturing Specialist
- New occupational description for operating precision ***machinery, systems and processes*** in modern manufacturing = **Manufacturing Technician (MT)**



Lessons learned

- Referrals need work
- IWD can flourish in an integrated setting
- Disclosure can be an issue
- Interest is out there
- Academies have sparked new interest in career goals
- Woman ROCK!
- Need to increase awareness of opportunities for woman



Questions?????