



for Individuals with Disabilities

Career Pathways Training for VR Professionals

July 9, 2018

**DSS Central Regional Office Training Center
1604 Santa Rosa Road, Richmond**

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Welcome

- Opening remarks from our Leaders



Norms for today

- Computers/Phones/Focus
- Approach with a spirit of inquiry
- Task yourself to learn at least 2 new things today
 - We're going to take a journey today.
 - We will do our best to cover everything, but our most important goal is to bring you some worthwhile discussion about this contemporary approach to VR services.
 - Thanks for your flexibility.

Who Is Here Today?

- Counselors?
- Placement Professionals?
- Regional Directors?
- Administrators?
- Others?

Training Objectives

- By participating today, you should be able to:
 - Describe why occupational clusters and career pathways are important to VR.
 - Identify career pathways and how to integrate the concept into VR process.
 - Include new and expanded information to your career counseling approach, including how high demand occupations in different regions can benefit clients in terms of salary.
 - Expand your consideration of support services, particularly Assistive Technology and how it can increase an individual's career options/considerations.

Pre-Test/Post-Test

- Demonstrate your Career Pathways knowledge here.
- After the training we'll circle back and look at how you've expanded your knowledge or added to your career pathways approach.

In Advance of This Meeting

- You reviewed:
 - Podcast giving you general information dealing with Career Clusters and Career Pathways.
 - The 'What is WIOA and How Does It Relate to Vocational Rehabilitation Services and CPID?' presentation.
 - Instructional materials relating to the Career Index Plus (TCI+).

Thank You for Preparing

- We will expand on that information throughout the day and will talk to how it fits in when using a Career Pathways focused approach.
- Please email Susan Gaillard if you would like to receive CRC Credit for the time you spent reviewing these pre-session materials at Susan.Gaillard@dars.virginia.gov
- Also, please note these materials along with this presentation will be made available at the CPID website located at:
https://www.vadars.org/gsp/cpid/cpid_home.htm

CPID and WIOA

It's Not Just a Project...

- There is a much larger umbrella under which CPID exists
- Career Pathways are a new way of looking at employment and changes how the system (and VR as a part of that system) looks at accessing employment.
- https://careerpathways.workforcegps.org/resources/2016/10/20/10/11/Enhanced_Career_Pathways_Toolkit

Some Highlights

- "WIOA provides ... an integrated, job-driven, public workforce system that links diverse talent to businesses. This revitalized workforce system includes three critical hallmarks of excellence:
 - The needs of business and workers drive workforce solutions;
 - American Job Centers work with consumers and businesses; and
 - The workforce system supports strong regional economies and plays an active role in community and workforce development.

Partners

- Adult education, postsecondary education, and other partners collaborate ...so Americans can attain the skills and credentials needed for jobs in their regional economy.
- Workforce, human service, and educational systems must be in alignment through cross-agency planning, sharing common performance measures that inform data-driven decision making, and develop strategies for sector partnerships and career pathway systems and programs at the Federal, state, and local levels.
- The State Plan ensures that all state agencies play a role in the development of a vision for a career pathways state system, as well as how the state system interplays with regional and local career pathways and career pathways plans.“

Career Pathways and Clusters

Career Pathways

- The Career Pathways Work Group developed a shared definition during the writing of the strategic plan:
 - “We define our career pathways system as a series of connected education and training programs and support services that enable individuals to secure employment within a specific industry or occupational sector and to advance over time to successively higher levels of education or employment in that sector. Each step on a career pathway is designed explicitly to prepare for the next level of employment and education.”

Sector Strategies

- “Sector strategies are partnerships of employers within one industry that bring government, education, training, economic development, labor, and community organizations together to focus on the workforce needs of an industry within a regional labor market. At the state level, they are policies and investments that support the development of local sector partnerships. Sector strategies can do the following:
 - Address current and emerging skills gap
 - Provide a means to engage directly with industry across traditional boundaries
 - Better align state programs and resources serving employers and workers”

Source: National Governor’s Association

Career Clusters

- Career Clusters help students investigate careers and design their courses of study to advance their career goals. For this reason, Virginia has adopted the nationally accepted structure of career clusters, career pathways and sample career specialties or occupations.
- A Career Cluster is a grouping of occupations and broad industries based on commonalities. Within each career cluster, there are multiple career pathways that represent a common set of skills and knowledge, both academic and technical, necessary to pursue a full range of career opportunities within that pathway – ranging from entry level to management, including technical and professional career specialties. Based on the skills sets taught, all CTE courses are aligned with one or more career clusters and career pathways.

How Do Clusters and Pathways relate to my work as a Counselor?



Manufacturing Cluster
Production Pathway
Logistics and Inventory Pathway
Maintenance Pathway

Why Focus on Specific CPID Pathways?

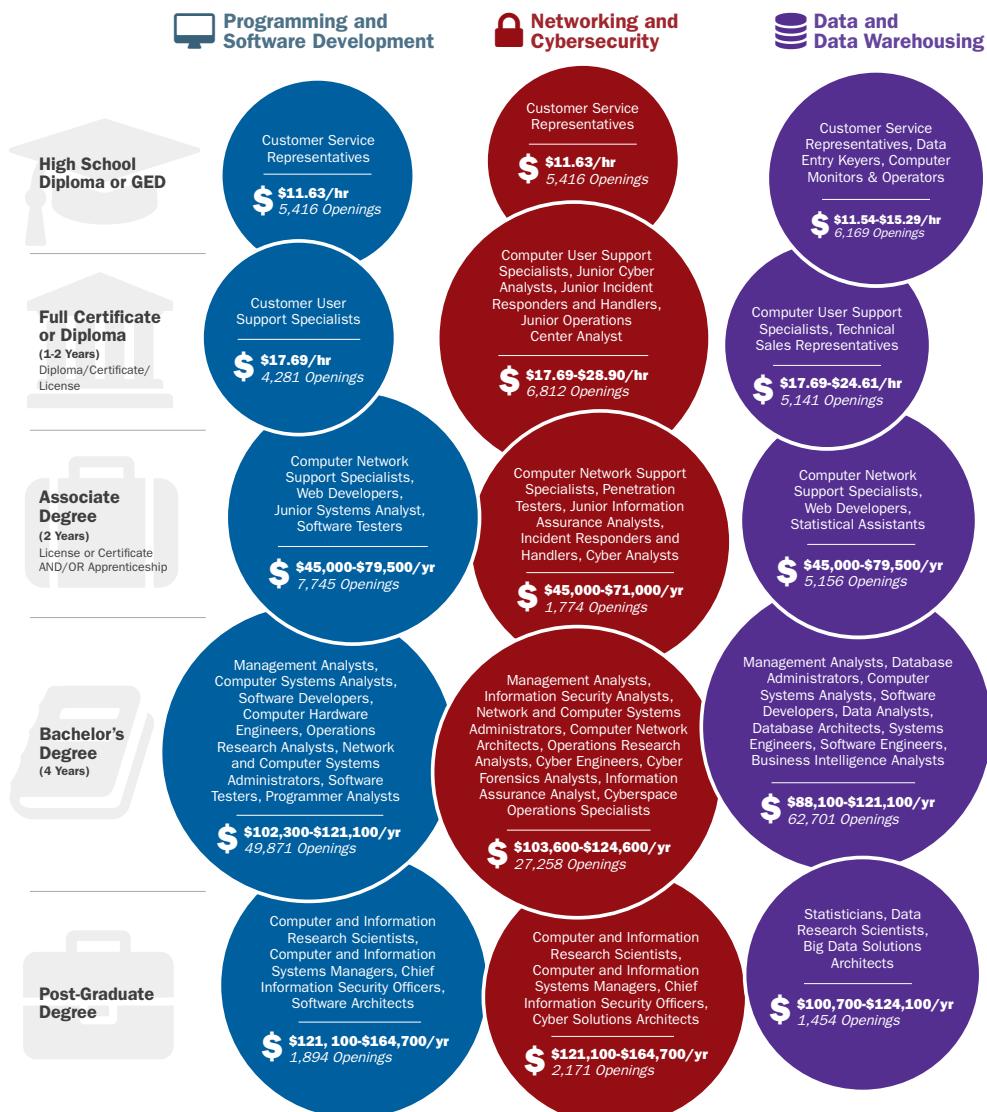
- Manufacturing
- Logistics
- IT
- Why were these Pathways selected?
- What is the relationship to LMI in region?

6
5
4
3
2
1

Job Category	Sample Job Titles	Median Hourly Wage Range	Minimum/Preferred Training Qualifications
Technical, Engineering and Supervisory 4-Year Degree and Beyond	Industrial Engineer Production Manager Logistics Engineer Mechanical Engineer You can advance to leadership and other roles from here!	\$24.00-\$48.00 Or Salaried	Manufacturing Experience Technical Training Strong Leader and Communicator
Skilled Technician/Journeyman Two Year Degree Licensure	Maintenance Mechanic Robotics Technician Mechanical Drafter Machinist Journeyman	\$21.00-\$31.00	Apprenticeship and/or Two Year Degree 4+ Years' Experience
Entry Level Apprenticeship Technician/Licensure Advanced Credentials	CNC Machinist Maintenance Worker Production Technician Welder: ARC, TIG, MIG	\$16.00-\$26.00	High School Diploma or GED Problem Solver with Technical Fundamentals Manufacturing Experience a Plus
Entry Level Skilled Short Term Certifications and Credentials, Usually 6 Months or Less On-the-Job Training	Production Specialist Production Technician Materials Handler Packing and Filling Operators	\$13.00-\$25.00	Strong Work Habits Good Problem Solver and Communicator Basic Blueprint Reading and Measurement High School or GED Preferred
Semi-Skilled With High School or GED	Stock Clerk Production Worker Packer	\$9.00- \$15.00	Strong Work Habits 5 th -6 th Grade Literacy Manual Dexterity (Assemblers/Packers) High School or GED Preferred
Unskilled Labor	Poultry Production Worker, Helper, General Production	\$7.25-\$8.00	Reliable, Heavy Lifting

Wage Source: Virginia LMI.com Credential Training supported by CPID: Manufacturing Specialist, Manufacturing Technician 1, Certified Logistics Associate, Certified Logistics Technician, OSHA 10, Forklift.

NOVA WORKFORCE INFORMATION TECHNOLOGY Career Ladder



www.nvcc.edu/workforce

Wages represented are the typical entry-level wages for the position within the region for High School and Full Certificate/Diploma levels. Wages represented are typical median wages for the position within the region for Associate, Bachelor, and Post Graduate levels. Job openings derived from Burning Glass' number of positions advertised online from June 1, 2016 through May 31, 2017. Degree level represents the average requirements for the occupation. Job openings are for the occupation and do not represent a particular industry. Wages derived from Bureau of Labor Statistics 2016 report on wages by occupation.

Building Linkages in IT Occupations Framework: For Entry Level, Technical, and Professional Careers Related to the Design, Development, Support and Management of Hardware, Software, Multimedia, and Systems Integration Services.

Sample of Career Specialties / Occupations <ul style="list-style-type: none"> Network Design and Administration: Communications Analyst * Data Communications Analyst * Information Systems Administrator * Information Systems Operator * Information Technology Engineer Network Consulting Engineer Network Pre-Sales Engineer Network: Administrator * Analyst * Architect * Engineer * Manager * Operations Analyst * Security Analyst * Specialist * Technician * Transport Administrator PC Support Specialist * Systems: Administrator * Engineer * Support Lead Technical Support Specialist * User Support Specialist Telecommunications Network Technician 	<p>Database Development and Administration: Data: Administrator * Analyst * Architect * Management Associate * Modeler * Modeling Specialist Database: Administration Associate * Administrator * Analyst * Developer * Manager * Modeler * Security Expert * DSS (Decision Support Services) * Knowledge Architect</p> <p>Senior: Database Administrator * Systems Analyst Systems: Administrator * Analyst Tester Technical Writer: Desktop Publisher * Document Specialist * Documentation Specialist * Editor Electronic Publications Specialist * Publisher Instructional Designer, Online Publisher Technical Communicator * Editor * Publications Manager * Writer Technical Support: Analyst * Call Center Support Representative * Content Manager Customer: Liaison * Service Representative * Service Professional Help Desk Specialist * Technician Maintenance Technician * PC Support Specialist * PC Systems Coordinator * Product Support Engineer * Sales Support Technician * Technical: Account Manager * Support Engineer * Support Representative Testing Engineer</p> <p>Enterprise Systems Analysis and Integration: Application Integrator * Business Continuity Analyst * Cross-Enterprise Integrator Data: Systems Designer * Systems Manager * Warehouse Designer E-Business Specialist * Electronic Transactions Implementer Information Systems: Architect * Planner Systems: Analyst * Architect * Integrator</p>	<p>Digital Media: 2D/3D Artist * Animator * Audio/Video Engineer * Designer * Media Specialist * Media/Instructional Designer Multimedia: Author * Authoring Specialist * Developer * Specialist Producer * Production Assistant * Programmer * Streaming Media Specialist * Virtual Reality Specialist Web: Designer * Producer * Specialist Web Development and Administration: Web: Administrator * Architect * Designer * Page Developer * Producer * Site Developer * Specialist Webmaster Web Developer Social Networking Specialist Blog Developer * Search Engine Marketing Specialist Search Engine Optimization Specialist</p>	<p>Programming / Software Engineering: Applications: Analyst * Engineer Business Analyst * Computer Engineer * Data Modeler Operating System: Designer/Engineer * Programmer Analyst Program Manager * Programmer * Programmer/Analyst * Project Lead Software Applications: Specialist * Architect * Design Engineer * Development Engineer * Engineer * QA Specialist * Tester Systems: Analyst * Administrator Test Engineer * Tester</p>	
Pathways	Network Systems	Information Support and Services	Web and Digital Communications	Programming and Software Development
CCTC /Career Ready Practices	<p>The Common Career Technical Core (CCTC) includes a set of standards for each of the 16 Career Clusters™ and their corresponding Career Pathways that define what students should know and be able to do after completing instruction in a program of study. The CCTC also includes an overarching set of Career Ready Practices that apply to all programs of study. The Career Ready Practices include 12 statements that address the knowledge, skills and dispositions that are important to becoming career ready.</p>			

Some Project Particulars...

- CPID provides opportunities for independence by building access to career pathways for individuals with disabilities through provision of additional services, tutoring, training and getting the accommodations and assistive technology needed to train, obtain employment, and stay employed.
- The CPID grant also seeks to identify and bridge gaps in career pathways for individuals with disabilities, and build best practices in Career Pathways.

Career Pathways Grantees

- CPID Projects beyond Virginia
- Three other states were awarded the CPID Grant
- Nebraska - <http://www.vr.nebraska.gov/pathways/>
- Georgia- https://prezi.com/kvlixvzsd_mf/e3-presentation/?utm_campaign=share&utm_medium=copy
- Kentucky- <https://kcc.ky.gov/Office-for-the-Blind/projectcase/Pages/default.aspx>

Some Other Parts of the Equation

Industry Partners

- VMA – Manufacturing Skills Institute
 - Industry Forum opportunities
 - Accessibility Benchmark System
 - Disability Advocacy
- NVTC
 - Webinars
 - Titan Events
 - Participation in Subcommittees

Business Engagement

- The VR Workforce Studio – available in iTunes or at vrworkforcestudio.com
- Tours
- Demand Side Meetings
- Foundations/ Community Organizations

As We Move Along Today...

- We intend to give you more information relating to the various moving parts (resources, assessments, supports, funds, reporting, etc.) and why a Career Pathways approach can be helpful as you collaborate with your client through all phases of the rehabilitation process.

Activity 1 CPID Baseline Discussion

- Talk in small groups about the following:
 - Have you already interacted with the CPID Project?
 - What activities, assessments, resources, trainings or other CPID initiatives have impacted the work you do with your clients and in what ways?
 - Beyond CPID, how does a Career Pathways approach fit with what you already do with clients and in what ways is it different?

Career Pathways and Establishing the Employment Goal

The Employment Goal

- All our efforts have a direct relationship to the Employment Goal.
- Let's look at how Career Pathways directly relate to IPE Development and the employment goal.

IPE Guidelines and Considerations for Development

A Springboard for our Discussions Today

IPE Development Tool

- 1. Establishing an Employment Goal**
- 2. Employment Goal Considerations**
- 3. IPE Supporting Services**

Establishing an Employment Goal

How Does a Career Pathways Approach Support This Task?

Traditional Assessment Approaches for Goal Development

- Intake Interview (G & C)
- Vocational Evaluation (Paper/Pencil)
- Vocational Evaluation (WWRC or VRCBVI)
- Situational Assessment Case Staffing
- Online Resources

Applying CPID Sources of Information

- Academies – exploration of technology careers through tours, project, presentations and friendly competitions
- Tours
- Resources
 - Loaner library
 - AT eval and / or recommendation to the DARS AT specialist
 - Occupational and / or Physical Therapy if needed
 - Ergonomic / Work site evaluation
 - Adult Education
 - Behavioral Support

Beyond Paper and Pencil

- Some clients benefitting from CPID may have been 'ruled out' by traditional measures.
- Pathways Approach is about 'ruling in' (expanding vocational exploration; provision of innovative accommodations; assistive technology; learning supports) as opposed to 'ruling out'.
- Academies have impacted many individuals relating to their learning about occupational information.

Motivational Interviewing and the Employment Goal

- Workforce Partners and approach used in this project
- Shared language of MI
- Some applicable MI principles
- Counseling and Guidance can be enhanced with MI

Some MI Basics

- MI is all about Change – You are getting consumer to talk themselves into change
- Conversation not inquisition – turn those questions into statements
- Make educated ‘guesses’ and the consumer will latch on, or will tell you you are wrong...
- Reflection and consumer readiness ‘There’s a Nail in Your Head’

MI Spirit – Things to Remember

- Here's the hard part – no advice!
- Avoid being “Dr. Judges-Too-Much”
- Give folks – ‘A Menu of Options’
- Reinforce change process (affirmations); non-attending skills for sustaining status quo
- Many simple techniques –
 - Importance and Confidence Rulers: Scaling 1 – 10:
 - How Important is this to you? (Build Importance – Why are you at a 6 and not a 2 or 3?)
 - How confident are you? Build Confidence –(What would it take to go from a 6 to an 8?)

Tools to Evoke Change Talk

- Querying Extremes – What concerns you most about being employed? What would be the best results if you make this change? You have no time to make this change...
- Looking back – Remember back to when you were employed before the accident.. What was your life like?
- Looking forward – If you decide to make this change, how will your life be different?

Career Pathways – A Different Direction

- Many times we focus from the ground up and look at all the variables we discussed relative to building up to an employment goal.
- Sometimes we can benefit from looking at the goal then down onto the match between the person and the environment.
- CPID attempts to innovate the job selection process with a heavy emphasis on labor market information and career progression.
- CPID Scenario... the basics summed up in a real world example.

Working Lunch

- Success Scenarios - Sam Rothrock and team in Richmond.

Career Fund of Knowledge

- Decision making is informed and enhanced via increasing an individual's fund of career related knowledge.
- Expanding the pool of viable employment outcomes is directly related to the information individuals have relating to the world of work.
- We're going to discuss several ways to enhance and add to that career related fund of knowledge.

TCI+ and Employment Goal Considerations

Employment Goal Considerations

- Consumer's Physical, Mental, or Cognitive Limitations
- Clients prior education, training and employment history
- Labor Market
- Legal Barriers (Criminal record or Driving Record)
- License, Degree, or Certificate Requirements
- Training Requirements (Time Frame)
- Consumer's Salary or Wage Requirements
- Consumer's Scheduling Needs (PT, FT, Days, & Hours)
- Other factors

Using TCI+

- Let's use CI+ to look at one of the positions described earlier on the Advanced Manufacturing Career Pathway graphic.
- CI+ can get you information about 'Manufacturing Production Technicians' on all these various employment goal considerations.
- You and your client can decide how the position matches/does not match his or her needs or situation.

Manufacturing Production Technician

The screenshot shows the homepage of The Career Index Plus. At the top, there is a navigation bar with links for Account, My Stuff, and Log Out. Below the navigation is the website's logo, "THE CAREER INDEX PLUS". The main search area features two input fields: "Keyword(s)" containing "Manufacturing Production Technicians" and "Location" containing "23236". To the right of these fields is a blue "Search" button. Above the search button is a question mark icon. A large text box below the search fields contains the placeholder text: "Enter keyword(s) and location to search for an occupation. Then click "Search" – or use one of the tools below." At the bottom of the page, there are three green buttons labeled "My Stuff", "Just Job Postings", and "Resource Links". The footer contains links to "Comments/Questions", "About Us", "Terms of Service", and "Privacy Policy", along with a copyright notice: "© 2018 All Rights Reserved. • The Career Index". On the right side of the footer, there is a small logo for "o-net".

Suitability Tab - Interests



The Holland Profile for this occupation is RI

First Interest Area

Realistic Work Interest (Doer)

"Realistic" means you like working with your hands and body, with tools, machines and things. You are practical, mechanically inclined, physical, tool-oriented. You prefer doing something about a problem rather than thinking or talking about it. You like to work with THINGS.

Other sample occupations that are "Realistic": Carpenters, Plumbers, Truck Drivers, Electricians, Machinists, Construction Workers, Civil Engineers, Civil Drafters, Auto mechanics, Security Guards, Police Officers, Firefighters, Taxi Drivers, Tree Trimmers.

- Your preferences for activities and occupations involve manipulation of machines tools and things.
- You value material rewards for tangible accomplishments.
- You are typically practical, conservative, and have manual and manipulative skills - maybe lacking interpersonal skills.
- Your values or personal styles are practical, productive, concrete and robust, risky and adventurous styles.
- Your job or environment should involve concrete, practical activity; use of machines, tools, materials.
- Your job typically requires manual and mechanical competencies and interaction with tools, machines and objects.

Second Interest Area

Investigative Work Interest (Thinker)

"Investigative" means you like working with theory and information, analytical, intellectual, scientific. You tend to prefer individual rather than people oriented activities. You like to work with DATA.

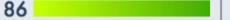
Other sample occupations that are "Investigative": Computer Programmers and Engineers, Pharmacists, Laboratory



Suitability – Work Context

PHYSICAL FACTORS	
Spend Time Standing	More than half the time
Spend Time Making Repetitive Motions	About half the time
Spend Time Sitting	Less than half the time
Spend Time Walking and Running	Less than half the time
Spend Time Bending or Twisting the Body	Less than half the time
Spend Time Kneeling, Crouching, Stooping, or Crawling	Less than half the time
Spend Time Keeping or Regaining Balance	Never
STRESS FACTORS	
Importance of Being Exact or Accurate	Very important
Time Pressure	Once a week or more but not every day
Freedom to Make Decisions	Some freedom
Impact of Decisions on Co-workers or Company Results	Important results
Consequence of Error	Serious
Importance of Repeating Same Tasks	Important
Frequency of Decision Making	Once a month or more but not every week
Structured versus Unstructured Work	Limited freedom
Level of Competition	Moderately competitive

Suitability - Tasks

DESCRIPTION	MOST COMMON	RELEVANCE TO OCC	IMPORTANCE
Core task: Adhere to all applicable regulations, policies, and procedures for health, safety, and environmental compliance.	Daily	100  87	
Core task: Inspect finished products for quality and adherence to customer specifications.	Daily	100  85	
Core task: Set up and operate production equipment in accordance with current good manufacturing practices and standard operating procedures.	More than weekly	86  83	
Core task: Calibrate or adjust equipment to ensure quality production, using tools such as calipers, micrometers, height gauges, protractors, or ring gauges.	More than weekly	90  78	
Core task: Set up and verify the functionality of safety equipment.	Daily	86  75	
Core task: Troubleshoot problems with equipment, devices, or products.	More than weekly	95  73	
Core task: Test products or subassemblies for functionality or quality.	Daily	77  73	
Core task: Monitor and adjust production processes or equipment for quality and productivity.	Daily	100  73	
Core task: Plan and lay out work to meet	Daily	88  70	

Suitability - Activities

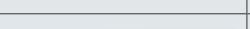
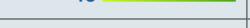
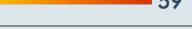
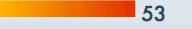
DESCRIPTION - CLICK FOR DETAILS	LEVEL	IMPORTANCE
SHOW ALL ACTIVITIES		
Making Decisions and Solving Problems	57	58
Controlling Machines and Processes	74	57
Getting Information	49	57
Communicating with Supervisors, Peers, or Subordinates	60	56
Inspecting Equipment, Structures, or Material	55	55
Monitor Processes, Materials, or Surroundings	61	55
Evaluating Information to Determine Compliance with Standards	47	53
Updating and Using Relevant Knowledge	63	53
Identifying Objects, Actions, and Events	50	52
Interacting With Computers	47	52
Thinking Creatively	61	52
Repairing and Maintaining Mechanical Equipment	59	51
Drafting, Laying Out, and Specifying Technical Devices, Parts, and Equipment	58	50
Estimating the Quantifiable Characteristics of Products, Events, or Information	46	49

Suitability - Abilities

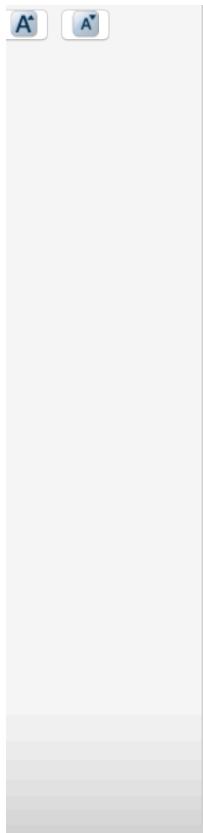
IMPORTANT ABILITY LEVELS FOR MANUFACTURING PRODUCTION TECHNICIANS

- Click on the blue Information icon to get a description, complete definition and scale explanation.
- The green bar measures the level of complexity or difficulty of the ability for the job on a scale of 1-100.
- The orange bar measure the importance of the ability for the job on a scale of 1-100 where 1 is "Not Important" and 100 is "Extremely Important."
- Click the  in the column header to sort the data accordingly.

Note: Only abilities with an importance score of more than 40 (Important) has been included. Click on "Show All" to show all abilities.

 DESCRIPTION - CLICK FOR DETAILS SHOW ALL ABILITIES	 LEVEL	 IMPORTANCE
COGNITIVE ABILITIES		
Oral Comprehension	 57 	 65
Oral Expression	 51 	 65
Visualization	 51 	 62
Problem Sensitivity	 50 	 68
Deductive Reasoning	 48 	 59
Written Comprehension	 48 	 59
Written Expression	 48 	 59
Information Ordering	 48 	 53
Category Flexibility	 48 	 50

Suitability – Knowledge Levels



IMPORTANT KNOWLEDGE LEVELS FOR MANUFACTURING PRODUCTION TECHNICIANS			
DESCRIPTION - CLICK FOR DETAILS SHOW ALL KNOWLEDGE	LEVEL	IMPORTANCE	
Mechanical	77	76	
Production and Processing	59	73	
Engineering and Technology	61	71	
Mathematics	59	67	
Design	59	64	
Computers and Electronics	61	61	
English Language	44	55	
Physics	47	47	
Education and Training	46	43	
Public Safety and Security	40	41	



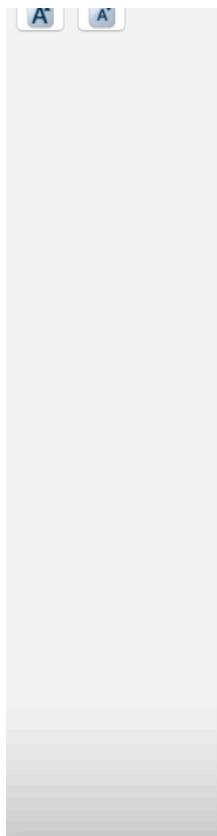
Suitability – Skill Levels



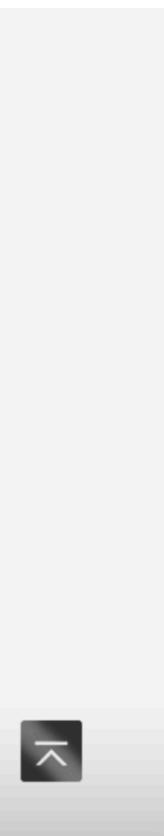
The screenshot shows a software application window with a light gray background. At the top left are two small icons labeled 'A' and 'A'. In the top right corner is a black square button with a white double-headed horizontal arrow icon. The main content is a table with a blue header bar. The header contains three columns: 'SHOW ALL SKILLS' (with a blue button), 'LEVEL' (with a dropdown arrow), and 'IMPORTANCE' (with a dropdown arrow). The table has 16 rows, each representing a task with its corresponding level and importance score. The tasks listed are: Operation Monitoring, Critical Thinking, Reading Comprehension, Active Listening, Equipment Maintenance, Monitoring, Complex Problem Solving, Operation and Control, Quality Control Analysis, Repairing, Judgment and Decision Making, Troubleshooting, Coordination, Speaking, Time Management, and Writing.

	SHOW ALL SKILLS	LEVEL	IMPORTANCE
Operation Monitoring	i 51	<div style="width: 100%;">51</div>	<div style="width: 75%; background-color: #ff9900;">75</div>
Critical Thinking	i 48	<div style="width: 100%;">48</div>	<div style="width: 65%; background-color: #ff9900;">65</div>
Reading Comprehension	i 48	<div style="width: 100%;">48</div>	<div style="width: 65%; background-color: #ff9900;">65</div>
Active Listening	i 48	<div style="width: 100%;">48</div>	<div style="width: 62%; background-color: #ff9900;">62</div>
Equipment Maintenance	i 50	<div style="width: 100%;">50</div>	<div style="width: 62%; background-color: #ff9900;">62</div>
Monitoring	i 50	<div style="width: 100%;">50</div>	<div style="width: 62%; background-color: #ff9900;">62</div>
Complex Problem Solving	i 46	<div style="width: 100%;">46</div>	<div style="width: 56%; background-color: #ff9900;">56</div>
Operation and Control	i 46	<div style="width: 100%;">46</div>	<div style="width: 56%; background-color: #ff9900;">56</div>
Quality Control Analysis	i 50	<div style="width: 100%;">50</div>	<div style="width: 56%; background-color: #ff9900;">56</div>
Repairing	i 48	<div style="width: 100%;">48</div>	<div style="width: 56%; background-color: #ff9900;">56</div>
Judgment and Decision Making	i 41	<div style="width: 100%;">41</div>	<div style="width: 53%; background-color: #ff9900;">53</div>
Troubleshooting	i 50	<div style="width: 100%;">50</div>	<div style="width: 53%; background-color: #ff9900;">53</div>
Coordination	i 42	<div style="width: 100%;">42</div>	<div style="width: 50%; background-color: #ff9900;">50</div>
Speaking	i 44	<div style="width: 100%;">44</div>	<div style="width: 50%; background-color: #ff9900;">50</div>
Time Management	i 42	<div style="width: 100%;">42</div>	<div style="width: 50%; background-color: #ff9900;">50</div>
Writing	i 44	<div style="width: 100%;">44</div>	<div style="width: 50%; background-color: #ff9900;">50</div>

Suitability – Work Styles



DESCRIPTION	IMPORTANCE
Attention to Detail	88
Dependability	87
Integrity	85
Adaptability/Flexibility	79
Analytical Thinking	77
Persistence	77
Cooperation	76
Self Control	73
Initiative	68
Innovation	68
Stress Tolerance	68
Achievement/Effort	67
Independence	62
Concern for Others	59
Leadership	53
Social Orientation	44



Suitability – Work Values

Keyword(s) Manufacturing Production Technicians Location 23236 Home Search

Manufacturing Production Technicians (O*NET 17.3029.09)

Overview Related Jobs Jobs Viability Suitability Training Print

Interests Work Context Tasks Activities Abilities Knowledge Skills Styles Values Tools

WORK VALUES FOR MANUFACTURING PRODUCTION TECHNICIANS

The green bar indicates the degree to which an item affects the nature of an occupation on a scale of 1-100.
Move your mouse over the "Description" to get a definition.

DESCRIPTION	LEVEL
Support	71

Careers that satisfy this work value offer supportive management that stands behind employees. Corresponding needs are Company Policies, Supervision: Human Relations and Supervision: Technical.

Achievement	57
Working Conditions	57
Recognition	52
Relationships	42

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Suitability - Tools

TOOLS & TECHNOLOGY
Angle gauge Examples: Angle plates
Benchtop centrifuges Examples: Laboratory centrifuges
Blow molding machines Examples: Blow molding machines
Boring machines Examples: Boring tools
Cable splicing kits Examples: Wire splicers
Calipers Examples: Dial calipers Digital calipers Vernier calipers
Comparators Examples: Optical comparators
Conductivity meters Examples: Conductivity meters
Desktop computers Examples: Desktop computers
Dial indicator or dial gauge Examples: Dial indicators
Drilling machines Examples: Drill presses
Dropping pipettes Examples: Pipettes
Electric boilers Examples: Electric boilers
Extruders Examples: Extruding machines
Facial shields Examples: Protective face shields
Fiber optic test sources Examples: Optical power meters
Flowmeters Examples: In-line flowmeters



Viability Tab - Wages

Keyword(s) Manufacturing Production Technicians Location 23236 Home Search

Manufacturing Production Technicians (O*NET 17.3029.09)

Overview Related Jobs Jobs Viability Suitability Training Print

Wages Job Trends Industries

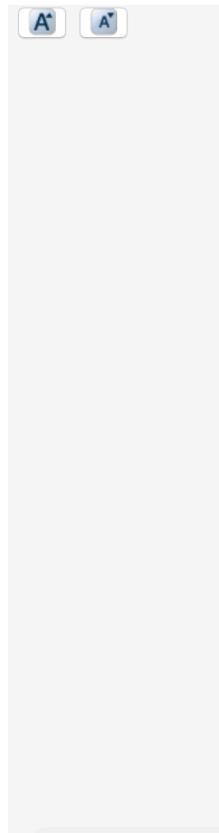
MEDIAN SALARIES FOR MANUFACTURING PRODUCTION TECHNICIANS IN RICHMOND, VA

DESCRIPTION	BLS 2015 MEDIAN SALARIES FOR MANUFACTURING PRODUCTION TECHNICIANS
Low	A: \$ 33,500 - \$ 16.11/hr
Median	A: \$ 43,630 - \$ 20.97/hr
High	A: \$ 73,300 - \$ 35.24/hr
	A: \$ 73,400 - \$ 35.29/hr
	A: \$ 97,900 - \$ 47.07/hr

Low 10% make less, 90% more. Median 50% make less, 50% more. High 10% make more 90% less
Richmond, VA VA State-wide

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Viability – Job Trends



Jobs Tab – Clicking on Hyperlink brings you to Indeed.com and the Actual Job Posting

<p>Note: Job Links open in a new window. To get back to this screen, close the new window.</p> <p>Field Engineer Technician (external link) Assists in training and mentoring of new Installation Technicians and Field Engineering Technicians on task specific activities as assigned....</p>	Richmond, VA	MRA Member Career Opportunities Web - Map - News	07/03/18
<p>Boiler Technician (external link) General Maintenance positions are responsible for keeping machinery running to maintain continuous production. You must be able to set up, adjust and break down...</p>	Glen Allen, VA	Tyson Foods, Inc. Web - Map - News	07/02/18
<p>Maintenance Technician (external link) Perform general clean-up of production areas. Maintenance Technician is responsible for troubleshooting, repairing, and maintaining all assets in the production...</p>	Richmond, VA	Open Plan Systems Web - Map - News	06/28/18
<p>Cellar Technician (external link) Previous experience and/or training in a production brewing environment preferred. Accurate and thorough recording of and adherence to all production parameters...</p>	Richmond, VA	Stone Brewing Co. Web - Map - News	06/27/18
<p>QC Lab Tech (external link) Design-build, site development, transportation, water and asphalt and aggregate production. Receives and analyzes product related technical data coming from...</p>	Richmond, VA	Allan Myers Web - Map - News	06/25/18
<p>Destruction Technician, Secure Shredding (external link) Destruction Technicians serve customers by accurately processing and destroying all materials delivered to the production facility....</p>	Richmond, VA	Iron Mountain Web - Map - News	06/23/18

Related Jobs Tab

The screenshot shows a web browser displaying the O*NET website. The search bar at the top contains "Manufacturing Production Technicians" in the Keyword(s) field and "23236" in the Location field. To the right are "Home" and "Search" buttons. Below the search bar is a navigation menu with tabs: Overview, Related Jobs (which is selected), Jobs, Viability, Suitability, Training, and Print. Sub-tabs include Also Known As, Related By Skill, Related By Interest, Career Pathways, and Transitions. The main content area is titled "Manufacturing Production Technicians (O*NET 17.3029.09)". It features a table titled "MANUFACTURING PRODUCTION TECHNICIANS ARE ALSO KNOWN AS".

Advanced Manufacturing Technician	Manufacturing Engineer	Manufacturing Process Technician
Manufacturing Production Technician	Manufacturing Technician	Process Engineer
Product Introduction Manager	Production Technician	Production Technician, Semiconductor Processing Equipment
Research and Development Machinist	Semiconductor Manufacturing Technician	Solar Hot Water Heater Manufacturing Technician

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career pathways for Individuals with Disabilities

Related Jobs – Career Pathways

Manufacturing Production Technicians (O*NET 17.3029.09)

Overview Related Jobs Jobs Viability Suitability Training Print

Also Known As Related By Skill Related By Interest Career Pathways Transitions

OTHER OCCUPATIONS IN THE PRODUCTION CAREER PATHWAY.

Occupations are listed from the lowest preparation and skills to the highest. Salary noted in RED with a down arrow is less than Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic. Education listed in RED with a down arrow requires more education than Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic.

SAVE	TITLE - CLICK TO SELECT	TYPICAL WAGE	EDUCATION
Compared to	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	\$ 30,140 - \$ 46,640	High School/GED
<input type="checkbox"/>	Sewing Machine Operators	\$ 20,860 - \$ 28,070	Less than a High School Diploma
<input type="checkbox"/>	Sewers, Hand	N/A	Less than a High School Diploma
<input type="checkbox"/>	Shoe Machine Operators and Tenders	N/A	High School/GED
<input type="checkbox"/>	Helpers-Production Workers	\$ 20,480 - \$ 33,420	High School/GED
<input type="checkbox"/>	Textile Bleaching and Dyeing Machine Operators and Tenders	N/A	High School/GED
<input type="checkbox"/>	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	N/A	High School/GED
<input type="checkbox"/>	Textile Cutting Machine Setters, Operators, and Tenders	N/A	High School/GED

Related Jobs – When you click hyperlink...

Keyword(s) Location Home

Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic (O*NET 51.4031.00)

Overview Related Jobs Jobs Viability Suitability Training Print

OVERVIEW OF CUTTING, PUNCHING, AND PRESS MACHINE SETTERS, OPERATORS, AND TENDERS, METAL AND PLASTIC

Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic are in the Metal and plastic machine workers job family

Description
Set up, operate, or tend machines to saw, cut, shear, slit, punch, crimp, notch, bend, or straighten metal or plastic material.

 **Career Video**

Summary

Typical entry level education: High school diploma or equivalent

Work Experience in Related Occupation: None

On-the-job Training: See "How to become one" below

Typical Qualifications

On the job training, NIMS credential a plus. Prefer a high school education and ability to read, write, and

Training Tab

Manufacturing Production Technicians (O*NET 17.3029.09)

Overview Related Jobs Jobs Viability Suitability Training Print

Schools Licenses and Certifications Related Training Experience/Education

PREPARATION LEVEL

Job Zone Three: Medium Preparation Needed

Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.

Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.

Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

MOST COMMON RELATED WORK EXPERIENCE

Over 10 years	0%
Over 8 years, up to and including 10 years	4%
Firefox years, up to and including 8 years	0%

Some TCI+ Closing Thoughts

- This is to inform the counseling/selection process... it's not a 'TCI+ said you should be an accountant' type of thing.
- Don't allow for information overload!
- A word about the 'Overview' tab
- You can assign homework and share reports between you and consumers.
- The 'My Stuff' tab

Beyond The Career Index+

[**A Career Interests Game**](#) Game from the University of Missouri. Basic Holland Code set up where you imagine being at a party and deciding on who you would like to talk to by clicking on the choices.

[**Dream it Do it Virginia**](#) Explore your career by looking at your interests, work preference, profile your skills and consider some hands on academies. This free site is sectioned into Explore, Ready, Train, Assess and Employ. Includes videos and job listings.

[**My Next Move**](#) Interactive toolkit from O*net that lets you look at your career options. Includes tasks, skills, salary information and over 900 different careers.

[**My Skills My Future**](#) Career One-stop self assessments. Looks at Interest, skills and work values. Also includes a section to further explore career choices and career planning. App is also available at Career Onestop Mobile.

[**Occupational Outlook Handbook**](#) Looks into the nature of work, training, education, earnings, job prospects and working conditions. This is a national outlook.

[**Virginia View**](#) Statewide look at careers. Includes regional median wages, school links, outlooks, job titles etc.. Resources also has interest inventories, professional web links, apprenticeships, financial aid information, and job readiness.

More Resources

[O*net Academy](#) To keep pace with the rapidly changing work environment and to keep your knowledge of O*NET fresh, you need high quality training that is relevant timely and online! From self-paced courses and tutorials, to live webinars, O*NET provides you with high caliber online learning 24 hours a day.

[Northstar digital Literacy Assessment](#) Examines basic skills needed to perform tasks on computers and online. assessed through online, self-guided modules. Included are basic computer digital literacy standards and modules in ten main areas: Basic Computer Use, Internet, Windows Operating System, Mac OS, Email, Microsoft Word, Social Media, Microsoft Excel, Microsoft PowerPoint, and Information Literacy.

[Pathsource App](#) Includes an interest inventory that will recommend careers in an easy to use format. Includes lots of videos and in-depth career information.

[Get That Gig App](#) Fun memory card game from the CPID grant in Georgia. Learn about jobs in high demand and skills you'll need to succeed. Includes who's hiring; To your health; Around the house; Dress the Part; and Feeling it.

[Internship.com](#) Listed internships available in local area. Also includes an internship predictor. Students can filter search results to display paid internships, summer jobs or entry level jobs.

Activity 2

- Jane arrived at WWRC for Computer Repair. While in her training program she faced some significant setbacks with her health and living situation. Jane is no longer interested in Computer Repair and needs to explore an alternative goal.
 - How can you use career pathways and career clusters to inform your work with Jane?
 - How would labor market information inform your research with Jane?
 - What resources relative to CPID might be helpful in gathering more information for Jane?

Jane and Outcome

- Jane participated in a CPID Academy. She reported to her counselor that she found manufacturing and logistics very interesting and thought this may be something she would be good at.
- Jane's counselor asked for a focused evaluation from Voc. Eval. and results showed that Jane had the aptitude for the MTT class.
- Jane attended MTT with technical assistance from CPID
- After graduation Jane attended her "Next Steps Meeting" and found out that there were not a lot of manufacturing positions in her home area so Jane worked with her counselor and CPID to relocate.
- The BDM found a position that she was interested in and she was hired!

We Have a Potential Goal. Can CPID Help?

Some of the Who and What Functions or Counselor FAQ's

General FAQs

- Is CPID for anyone in the state?
- Is it only for folks with a goal that CPID focuses on?

Matching Clients with Pathways

- General guidance relative to the demands of the certifications; potential work settings; demands.
- Context/examples – Look beyond minimum capabilities and toward ways to work with client to reach goals.
 - Resilience and 'Grit' go a long way.

How do I know who is appropriate for which Pathway/Certification?

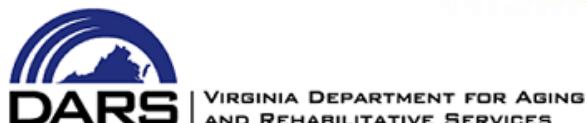
Assessment/ Education level- Math and reading levels

PluggedIn model

Collaboration with adult education

Soft Skills- accountability, teamwork and maturity

Document Repository: What Do I Need to Know?



DARS documents have been organized by division and program. Click the links below to select the appropriate division or program to see all internal and public documents in one listing.

You can also [search all DARS documents](#), internal and public, or find [Public View Only Documents](#) on the DARS Public site.

[Adult Protective Services](#)

[Brain Injury Services](#)

[Centers for Independent Living](#)

[Communications](#)

[Community Rehabilitation Case Management Services](#)

[DRS Vocational Rehabilitation](#)

[Employment Services and Special Program](#)

[Grants and Special Programs](#)

[Personal Assistance Services](#)

[Service Reference Manual Fee Schedule](#)

DARS CPID

The screenshot shows a web browser window with the URL <https://www.vadars.org/DARSdocviewer.html>. The page title is "VA DARS Document Repository". On the left, there is a sidebar with four icons: "Agency Expenditures" (magnifying glass over a globe), "DARS Virginia Performs" (house icon), "WWRC Virginia Performs" (house icon), and "eVA Transparency in Procurement" (eVA logo). The main content area is titled "Grants and Special Programs". It contains several sections with download links:

- Grants and Special Programs**
 - [Download File](#) Career Pathways Flowchart
 - [Download File](#) CPID AWARE Layout
 - Information on CPID funds available in AWARE.
- [Download File](#) CPID FAQ's
- Frequently Asked Questions about CPID services.
- [Download File](#) CPID Referral Sheet
- [Download File](#) Financial Health Assessment (FHA)
 - FHA can be authorized as a Work Incentives Specialist Advocate (WISA) service by using procedure code A3023 in AWARE.
 - Please contact Michael.klinger@dars.virginia.gov for a list of approved FHA vendor
- [Download File](#) Grant Proposal Development Form
 - Grant proposal development form
- [Download File](#) List of Partnership Plus TTW EN's
 - List of Ticket to Work (TTW) Employment Network's (EN) approved to take ticket handoffs upon DARS case closure.
- [Download File](#) National Disability Institute FHA

DBVI Document Repository

File name	URL Link	File Title	Description	Category	SubCategory	Document Type	Create doc Dated
Download File	CP flowchart for DBVI repository (002).docx	Career Pathway Flowchart	Flowchart showing the steps to identify a career pathway.	Virginia Department for the Blind and Vision Impaired Forms	Program Services	Graphic	6/4/2018
Download File	DBVI CPID_FAQs for repository (1).docx	CPID FAQs	FAQs for the Career Pathways program	Virginia Department for the Blind and Vision Impaired Forms	Program Services	FAQ	6/4/2018
Download File	Funds for DBVI repository.docx	CPID Case Service Funding	Explanation of Case Service Funding in AWARE for CPID.	Virginia Department for the Blind and Vision Impaired Forms	Program Services	Document	6/4/2018
Download File	referral sheet for DBVI repository.docx	CPID Referral Form	Referral form for CPID program.	Virginia Department for the Blind and Vision Impaired Forms	Program Services	Referral Form	6/4/2018

CPID Funds in AWARE

Case service funding is available for CPID participants in AWARE. CPID may fund on a case by case basis:

- Stipends
- Paid internships
- OJT
- Job coach training services
- Travel
- Tuition

And comprehensive services support:

- Therapeutic Behavioral Services (TBS)
- MT1 assessments
- Assistive Technology
- Job Coaching for manufacturing training and other career pathways in community programs such as community

AWARE Touch Points

● Special Programs

1. Programs

Special Programs Options* ?

- | | |
|---|---|
| <input type="checkbox"/> AbilityOne | <input type="checkbox"/> Autism Budget |
| <input type="checkbox"/> Autism Program Participant | <input type="checkbox"/> Cold Case |
| <input type="checkbox"/> CPID | <input type="checkbox"/> CPID Budget |
| <input type="checkbox"/> Delayed PreETS Eligible | <input type="checkbox"/> Developmental Disability Council |
| <input type="checkbox"/> Employment First | <input type="checkbox"/> Foster Care (Active) |

DBVI AWARE

- In AWARE
 - Click special programs

The screenshot shows a software window titled "Special Programs Mini-Search". At the top, there are buttons for "Finish", "Actions", and "Cancel", with "Actions" being the active button. Below the title bar is a section labeled "1. Search Results" with "Select All" and "Clear All" buttons. The main area is a table titled "Special Programs" with a column of checkboxes and corresponding program names.

	Special Programs
<input type="checkbox"/>	CPID
<input type="checkbox"/>	Developmental Disability Council
<input type="checkbox"/>	Eye Condition 20/70 or worse
<input type="checkbox"/>	Home Schooled
<input type="checkbox"/>	Job Retention
<input type="checkbox"/>	Leap Program
<input type="checkbox"/>	Less than a 30 Degree Field
<input type="checkbox"/>	Life Program
<input type="checkbox"/>	Mental Health Agency

Work Smarter, Not Harder

- How do I get a sense of how much time it takes to get someone on a career pathway?
- What can Career Pathways Approach/CPID do to make me more efficient/have better outcomes/etc.?

Performance Measures

- Regional Manager
 - WIOA is a new model and begins a new day in Vocational Rehabilitation
 - There is now a greater focus on quality of outcomes as opposed to quantity of outcomes
 - Agency will be reporting to RSA more frequently to identify trends
 - Approach should allow for more accurate comparison of performance among core partners
 - Work groups established to examine performance measures within agencies

VR Supporting Services

IPE Supporting Services

- Job Readiness
- Job Placement Assistance
- Supported Employment / Job Coach Training
- Physical/Mental Restoration
- Vocational Training
- Assistive Technology
- Transportation & Driving
- Child Care

Training Resources

- Certification Programs – Details...

<u>RESOURCES</u>					
<u>Location</u>	<u>Certifications</u>	<u>WWRC</u>	<u>VCCS Sites</u>	<u>CTE Sites</u>	<u>Private Providers</u>
CENTRAL	Manufacturing Technician 1	MSS	CCWA		Spark
	Network +, A+, Security+	All	CCWA	Henrico, Code RVA, Hanover, Univ. of Richmond, New Chesterfield	Horizons
	Cert. Logistic Assoc./Technician	Coming	CCWA		

Support for Training

- Supports for passing certification process: Providing the correct accommodations for the testing process - more time, test read aloud – or reading software, calculator, retakes; Peer group support and study sessions; additional time in class.
- Behavioral Supports for ADHD, Autism, Mental Health: Evaluation and treatment / medication to assist with behaviors that interfere with class work / work potential
- Sensory processing needs: Sensory processing evaluation, trial of sensory AT, adjust schedules or routines to accommodate needs, incorporating changes from school to work.
- Tutoring: provided by Adult Ed or WWRC teachers, and / or classroom instructors

Assistive Technology

- **Loaner Assistive Technology:** CPID has a loaner library for participants in the program and beyond.
- CPID has investigated AT specifically for manufacturing.
- Previous need for AT is now filled due to lean manufacturing and good ergonomics
- Referral to AT Specialist and Rehab Engineer may be needed if there is a specific need.

What Questions Do You All Still Have?

Talk in Small Group Discussions

Activity 3

- Looking back at the pre-training assessment, how has your understanding of a career pathways approach changed?
- Work in small groups and develop a listing of questions you still have after hearing the info shared all day.
- We will process your responses shortly as a group.

Share Your Thoughts/Process



How do I access CPID for my clients?

- The short answer is:
 - If you **are** interested in learning about Career Pathways or **Manufacturing, IT OR Logistics** training or academies, please email your single point of contact:
 - For DBVI: Tish Harris at Tish.Harris@DBVI.virginia.gov
 - For DARS: Emily West at Emily.West@DARS.virginia.gov
 - Any staff member can refer an individual to the program. Tish and Emily can provide program information, coordinate with other grant staff, arrange assessments, and offer resources to assist the individuals that we serve in planning and entering a career pathway.
 - https://www.vadars.org/gsp/cpid/cpid_home.htm

Some Related Topics

- Max Initiative
- Financial Health Assessment

Follow Up Questions?



- **Rob Froehlich**
 - (804)794-6667
 - rfro@gwu.edu
- **Maureen McGuire-Kuletz**
 - (202)994-9428
 - mkuletz@gwu.edu

Thanks For Your Participation

Thank
you

