



# Understanding, Defining, and Building Career Pathway Systems

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## Agenda

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- I. Understanding Career Pathways
- II. Defining Career Pathways
- III. Elements of a Career Pathway System
- IV. Building a Career Pathways System
- V. Organizing for Career Pathways
- VI. Career Pathway Programs
- VII. Sample Program Components
- VIII. Real World Examples
- IX. Measuring Career Pathways

## Understanding Career Pathways

Career Pathways **ARE** about continuously improving the connection between education, the economy and workforce systems based upon decades worth of experience and grounded in a tradition of strong CTE, support systems and workforce systems

## Understanding Career Pathways

Career Pathways is **NOT** a panacea for all education, economic and workforce problems

## Understanding Career Pathways

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“A theory that explains everything,  
explains nothing”

— Karl R. Popper

It is important to understand what we mean by career pathways

## Defining Career Pathways

Joint Letter from HHS, USDOE and USDOL (4/12/2012)

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Career pathways are:

- A series of connected education and training strategies and support services that enable individuals to secure industry-relevant certification and obtain employment within an occupational area and to advance to higher levels of future education and employment in that area.”(Dann-Messier, Oates, and Sheldon, 2012).

# Defining Career Pathways

## Workforce Innovation and Opportunities Act (WIOA)

**CAREER PATHWAY.**—The term “career pathway” means a combination of rigorous and high-quality education, training, and other services that—

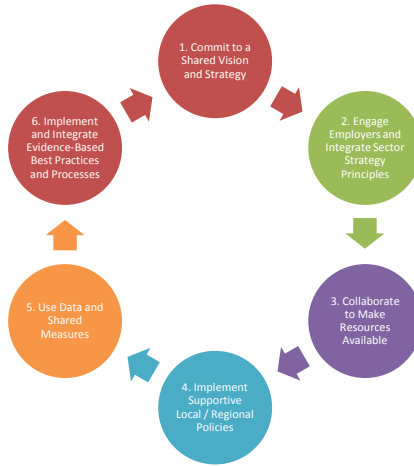
- A. **aligns with the skill needs of industries** in the economy of the State or regional economy involved;
- B. **prepares an individual to be successful** in any of a full range of **secondary or postsecondary** education options, **including apprenticeships** registered under the Act of August 16, 1937 (commonly known as the “National Apprenticeship Act”; 50 Stat. 664, chapter 663; 29 U.S.C. 50 et seq.) (referred to individually in this Act as an “apprenticeship”, except in section 171);
- C. **includes counseling** to support an individual in achieving the individual’s education and career goals;
- D. includes, as appropriate, **education offered concurrently with and in the same context as workforce preparation activities** and training for a specific occupation or occupational cluster;
- E. **organizes education, training, and other services to meet the particular needs of an individual in a manner that accelerates** the educational and career advancement of the individual to the extent practicable;
- F. enables an individual to **attain a secondary school diploma or its recognized equivalent**, and at least **one recognized postsecondary credential**; and
- G. **helps an individual enter or advance** within a specific occupation or occupational cluster

## USDOL 6 Key Elements of a Career Pathway System



# Elements of a Career Pathway System

Alliance for Quality Career Pathways

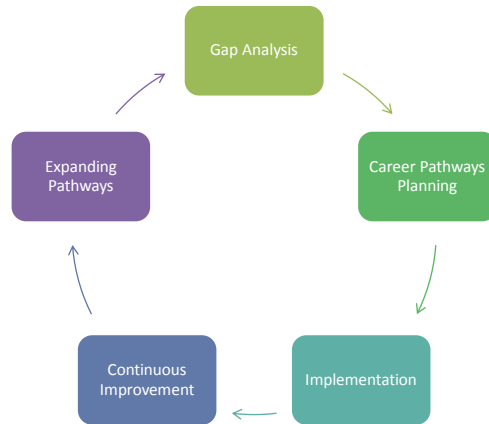


## Elements of Career Pathway Systems (DOL, HHS, DOE)

<b>ALIGNED</b>	✓ Secondary, Postsecondary, Workforce Systems including Adult Education
<b>CONNECTED</b>	✓ Rigorous, sequential, connected, and efficient coursework that links basic education and skills training and integrates education and training
<b>FLEXIBLE</b>	✓ Multiple entry and exit points
<b>SUPPORTIVE</b>	<ul style="list-style-type: none"> <li>✓ Comprehensive support services, such as career counseling, childcare, and transportation</li> <li>✓ Financial supports or flexibility to accommodate labor market demands in order to allow individuals to meet their ongoing financial needs and obligations</li> </ul>
<b>ENGAGED WITH BUSINESS</b>	✓ Active engagement of business in targeted industry sectors that are important to local, regional, and/or state economies
<b>CONTEXTUALIZED</b>	✓ Curriculum and instructional strategies that make work a central context for learning and developing work readiness skills (i.e., contextualized learning)
<b>ACCELERATED</b>	✓ Implementation of strategies that accelerate the educational and career advancement of participants (e.g., credit for prior learning)
<b>ACCOMODATING</b>	✓ Organized services to meet the particular needs of adults (e.g., accommodating work schedules)
<b>SECTOR-FOCUSED</b>	✓ A focus on secondary and postsecondary industry-recognized credentials, sector-specific employment, and advancement over time in education and employment within that sector
<b>COLLABORATIVE</b>	✓ A collaborative partnership among workforce, education, human service agencies, business, and other community stakeholders to manage the system

U.S. Department of Education, Office of Career, Technical, and Adult Education. (2015, February).

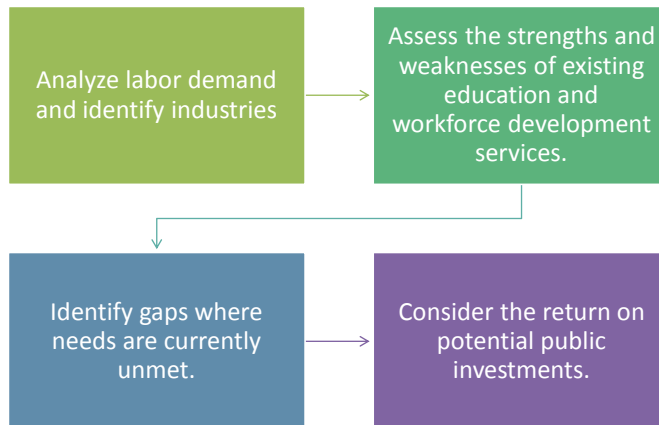
## Steps to Building a Career Pathway System



Jenkins, D. and Spence, C. (2006), p. 6.

## Gap Analysis

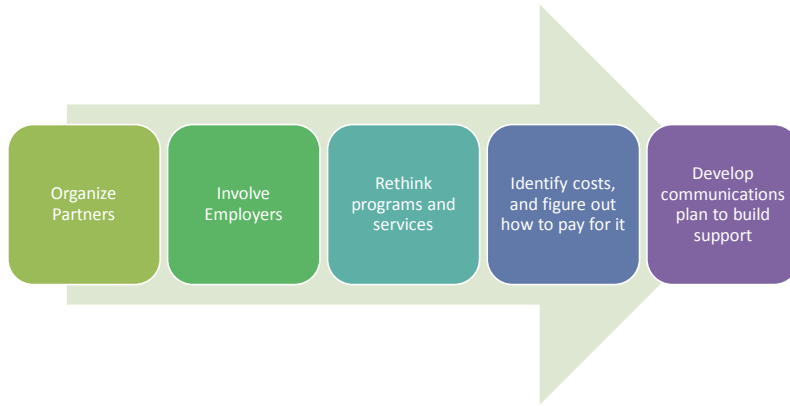
Target industries and jobs that will support individual advancement and regional growth



Jenkins, D. and Spence, C. (2006), p. 5.

# Career Pathway Planning

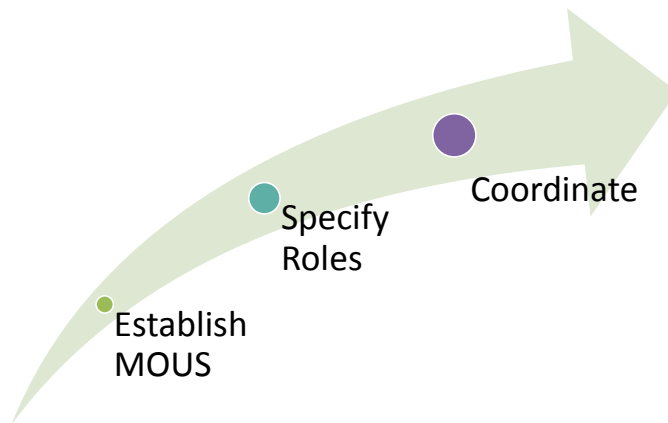
Form a partnership to develop a career pathways plan



Jenkins, D. and Spence, C. (2006), p. 5.

# Implementation

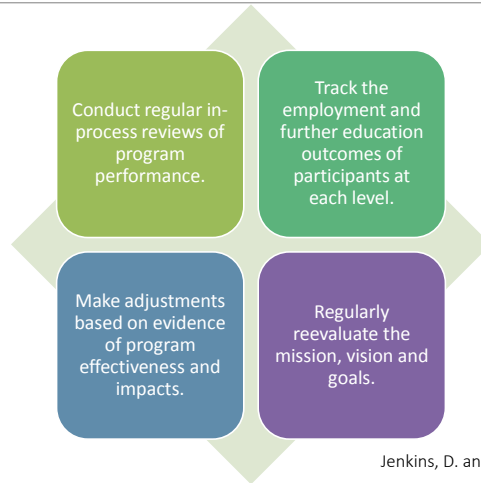
Coordinate the work of the partners



Jenkins, D. and Spence, C. (2006), p. 5.

# Continuous Improvement

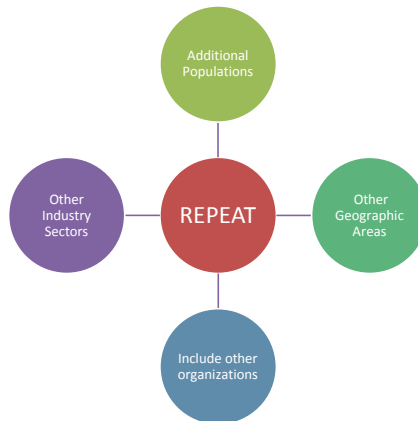
Evaluate and continuously improve career pathways programs and services



Jenkins, D. and Spence, C. (2006), p. 5-6.

# Expanding Pathways

Expand the pathways process to involve other partners, populations of participants and sectors



Jenkins, D. and Spence, C. (2006), p. 5-6.



# Congruent to Regional Planning

## WIOA Planning Framework

**Overall Vision: Illinois Workforce, Education, Economic Development State Leadership Team**

*"Business driven talent solutions that integrate education, workforce and economic development resources across systems to provide businesses, individuals, and communities with the opportunity to prosper and contribute to growing the state's economy."*

### Guiding Principles: State Plan & Regional Plans

Business Demand / Data Driven Orientation	Strong Partnerships with Business at All Levels	Career Pathways to Jobs of Today and Tomorrow	Cross-agency Collaboration & Alignment	Integrated Service Delivery	Access and Opportunity for all Populations	Clear Metrics for Progress and Success	Focus on Continuous Improvement and Innovation
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### Planning Activities

<b>Meetings facilitated by Maher &amp; Maher Team</b>	State Data Team Data gathering & analysis provided to regional teams	Regional self-assessment to determine current levels of inter-agency inter-program collaboration	Action oriented implementation steps	Local Plan - Identify specific activities and resources to support implementation of regional plans as well as discuss the mechanics for integrated and coordinated delivery of services.
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### State Plan

### Building an Integrated Regional Planning Framework: Self-Assessment for Regional Teams



#### III. Self-Assessment Questions

**Regional Team:** \_\_\_\_\_ **Name:** \_\_\_\_\_ **Organization:** \_\_\_\_\_

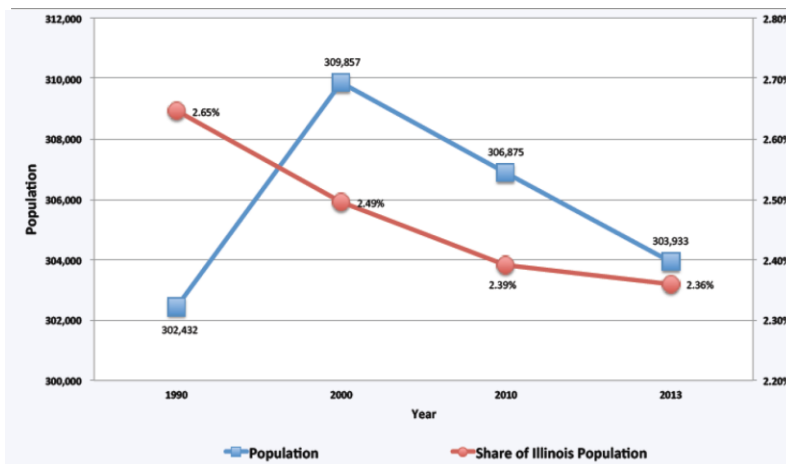
For each of the factors in the sections that follow, please select a rating from 1 ("haven't started yet") to 5 ("advanced") that reflects your perspective on where your region stands in relation to the factor [1-5 scale with accompanying descriptions will be provided].

Factors to Consider:	Rating					Comments / Notes
	Have not started	Just beginning	Making progress but need to do	Advanced, but want to strengthen	Advanced	
	1	2	3	4	5	
<b>STRATEGY #1: Align and integrate economic development, workforce development, and education at the state and regional levels to improve the economic growth and competitiveness of Illinois businesses and their workforce.</b>						
a. Economic development, workforce development, education, and other partners have jointly reviewed available data and validated that data with businesses to identify shared target industries for strategic focus in our region.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
b. At the service delivery level, partners in our region have organized on a unified, region-wide business services team to coordinate outreach to and support for companies in our region.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
c. We actively, intentionally, systematically, and regularly collaborate across agency, program, and funding stream "silos" to align our goals, strategic efforts, investments, and service delivery activities to meet shared targets for our business and job seeker/worker customers in our target sectors.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

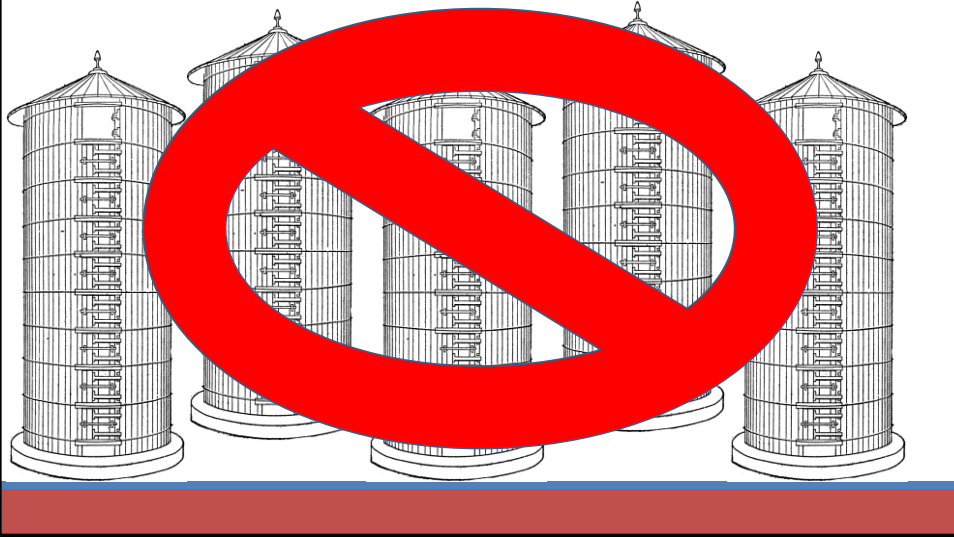
# Gap Analysis Findings Example

Current Implications	Future Implications
██████ has been focusing on providing more work-based learning opportunities for customers (On-the-Job Training, Work Experience for youth and adults, Incumbent Worker Training)	Different recruitment strategies will need to be developed due to the 75% out-of-school mandate and decreased youth population
██████ is continuing to focus on employment opportunities including OJT, Work Experience, and training for adults and youth	██████ will count less GED and Adult Ed hours and will require more work-based activity
██████ has developed bridge manufacturing and healthcare programs, including transition and job skills in the classroom or to the workforce	██████ is expanding recruitment efforts, career awareness, and transitioning activities within classroom
██████ offers a dual credit Health Careers program to recruit high school students in the health sciences career pathway	██████ will refer former incarcerated individuals for OJT

# Data Analysis Example



# Organizing for Career Pathways



# Organizing for Career Pathways

The Backbone Organization



# Career Pathway Programs

The Alliance for Quality Career Pathways

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Three features of a quality career pathway:

1. Well-connected and transparent education, training, support services, and credentials within specific sector or cross-sector occupations (often delivered via multiple linked and aligned programs)
2. Multiple entry points that enable well-prepared students, as well as targeted populations with limited education, skills, English and work experiences, to successfully enter the career pathway. Targeted populations served by career pathways may include adult education or other low-skilled adult students, English Language learners, offenders or ex-offenders, high school students, disconnected or “opportunity” youth, some former military personnel, un- or under-employed adults, or others
3. Multiple exit points at successively higher levels that lead to self- or family-supporting employment and are aligned with subsequent entry points.

# Career Pathway Programs

The Alliance for Quality Career Pathways

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The 4 Essential Functions of a Quality Career Pathway

1. Participant-focused education and training;
2. Consistent and non-duplicative assessments of participants’ education, skills, and assets/ needs;
3. Support services and career navigation assistance to facilitate transitions, and; and,
4. Employment services and work experiences.

## Sample Program Components: Work-Based Learning

Focus on Education, Foundational Discipline/Soft-Skills, Learn by Doing

*All pathways participants engage in a personalized and coordinated continuum of work-based learning (WBL) experiences designed to help them master and demonstrate academic, technical, and foundational professional skills*



## Sample Program Components: Career-Focused Instruction

Focus on Education and Foundational Disciplines/Soft-Skills

*The career-focused instructional sequence relates to real-life situations and experiences, focuses on the application of learning, and integrates academic and technical content with foundational professional skills*



## Sample Program Components: Progressive Design

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Focus on Education and Learn by Doing

*Pathways enable participants to gain entry to or advance within a given career cluster, facilitate efficient transitions to non-duplicative continuing education, and incorporate stackable and portable industry-recognized credentials*



## Sample Program Components: Participant Supports

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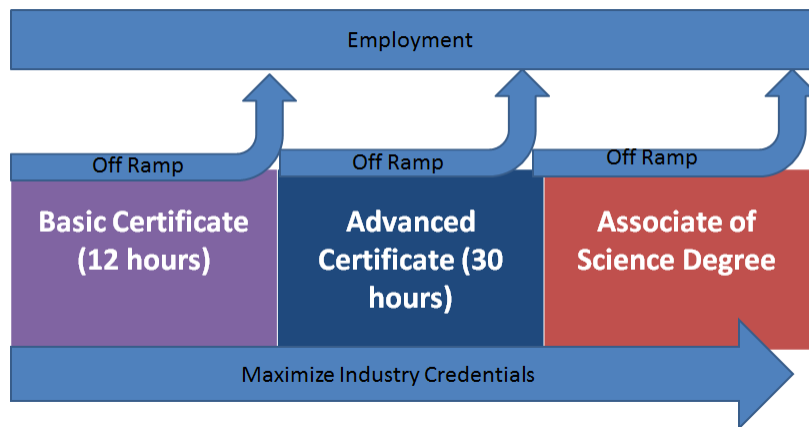
*Pathways participants are provided supports to ensure their successful selection and navigation of the pathway and entry into the career field*



## Sample Career Pathway Program Components

Adult Education and English as a Second Language	High School	Offender and Ex-Offenders	Returning Adults
<ul style="list-style-type: none"> <li>Bridge Programs</li> <li>Integrated Education and Training (IET) Opportunities</li> <li>Stackable credentials</li> <li>Integrated literacy and civics education</li> </ul>	<ul style="list-style-type: none"> <li>Dual Credit</li> <li>Early College Credit</li> <li>Co-requisite remediation</li> <li>Youth apprenticeship</li> <li>Pre-Apprenticeship</li> <li>Work-Based Learning</li> </ul>	<ul style="list-style-type: none"> <li>Re-entry Counseling</li> <li>Transition to re-entry initiatives</li> <li>Tutoring services such as Peer Tutoring</li> <li>Child-care services</li> <li>Secondary school credit</li> </ul>	<ul style="list-style-type: none"> <li>Math Refreshers</li> <li>Placement Testing</li> <li>Career Counseling</li> <li>Financial Aid Counseling</li> </ul>

## Examples: Stackable Credentials





Advanced Manufacturing Technology AAS

**Step 1: Manufacturing Production Certificate (full time = 1 semester; part-time = 1 year)**

This 16-hour certificate is designed to build the core competencies of manufacturing production to prepare students for internships and entry level positions in manufacturing. MFT102, MFT104, MFT108, and MFT109 prepare the student for an industry recognized certification assessment. Students who successfully pass all four assessments will be recognized as Certified Production Technicians by the Manufacturing Skill Standards Council (MSSC).

MFT 102	Intro to Manufacturing & Safety (MSSC)	4	MFT 109	Intro to Manufacturing Maintenance (MSSC)	2
MFT 104	Quality and Measurement (MSSC)	2	MTH 097	Tech Math	3
MFT 108	Manufacturing Processes (MSSC)	3	MFT 119	Manufacturing Internship	2

**Step 2: Select a field of specialization**

<b>Mechatronics/Automation</b>	<b>Precision Machining</b>	<b>Metal Fabrication</b>	<b>Supply Chain Management/Logistics</b>
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**Step 3: Obtain an internship related to field of specialization. Work 16 hours per week while continuing coursework.**

**Step 4: Complete two or three certificates in the specialization field.**

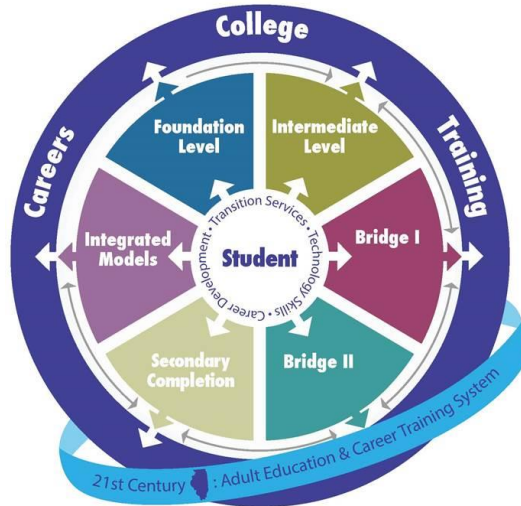
<b>Electrical Maintenance Certificate</b> 10-hour certificate ELT110 Intro Electronics 4 ELT142 Electrical Wiring 2 ELT215 Industrial Controls 4	<b>Computer Numerical Control Oper I</b> 15-hour certificate MFT105 Machine Processes I 4 MFT123 Intro CNC Machining 3 MFT125 Turning - Conv to CNC 3 MFT120 Machine Processes II 3 MNT111 Prints & Schematics 2	<b>Basic Welding Certificate</b> 16-hour certificate MNT111 Prints & Schematics 2 WLD110 Welding I 3 WLD210 Welding II 3 WLD211 Welding III 4 WLD212 Welding IV 4	<b>Inventory/Production Control</b> 12-hour certificate SCM 101 Supply Chain Mgt 3 SCM 120 Production Control 3 SCM 122 Inventory Control 3 SCM 226 Material Requirements Planning 3
<b>Industrial Electronics Certificate</b> 6 additional hours ELT120 Intro Ind Elec Mainte 2 ELT140 PLCs 2 ELT143 Advanced Electrical 2	<b>Computer Numeric Control Oper II</b> 11 additional hours MFT128 Milling - Conv to CNC 3 MFT130 Machining Blueprints 1 MFT201 Advanced CNC 5 MFT265 Properties of Materials 2	<b>Welding Fabrication Certificate</b> 13 additional hours WLD 225 Welding Blueprints 2 WLD240 Cutting Processes 3 WLD245 Fabrication I 4 WLD250 Fabrication II 4	<b>Purchasing Certificate</b> 6 additional hours SCM 125 Purchasing 3 SCM 259 Advanced Purchasing 3
<b>Mechatronics/Automation Cert</b> 10 additional hours ELT135 Optics & Sensors 2 ELT144 AC & DC Motors 2 ELT145 Variable Freq Drive 2 ELT161 Industrial Controls 4			<b>Physical Distribution Certificate</b> 6 additional hours SCM 121 Physical Distribution 3 SCM 227 Just-in-Time/Lean 3

**Step 5: Complete AAS Degree**

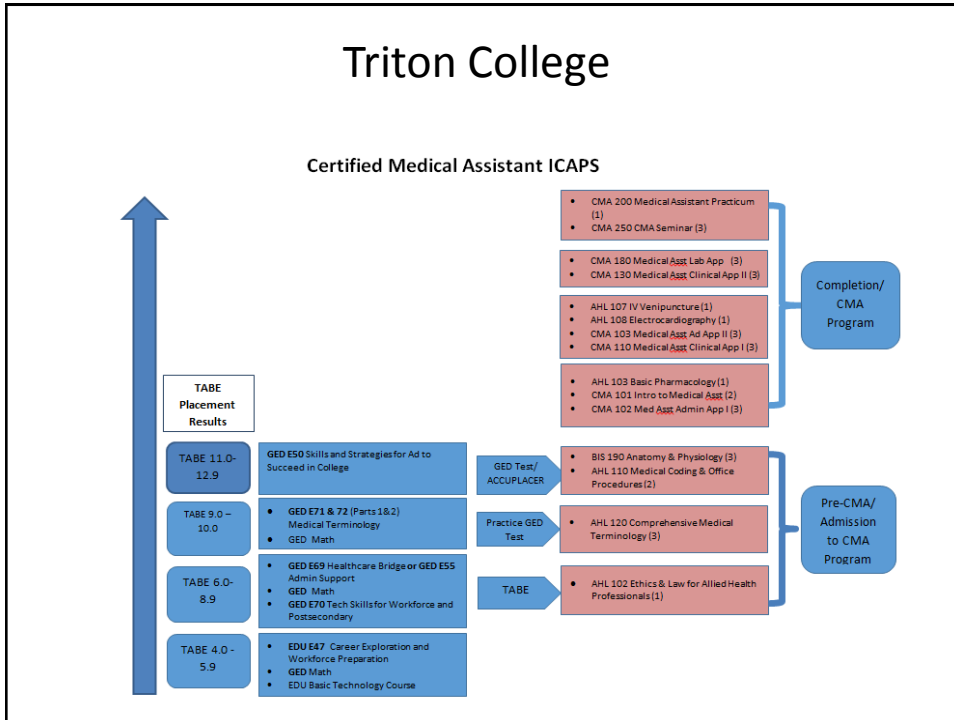
ENG101 Composition 3 ENG103 or SPE101 3 Science, Humanities, Soc Sci 9 Approved Tech Electives 3	ENG101 Composition 3 ENG103 or SPE101 3 Science, Humanities, Soc Sci 9 Approved Tech Electives 3	ENG101 Composition 3 ENG103 or SPE101 3 Science, Humanities, Soc Sci 9 Approved Technical Electives 5	ENG101 Composition 3 ENG103 or SPE101 3 Science, Humanities, Soc Sci 9 Approved Technical Electives 5
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**Step 6: Advance to a 4-year institution to pursue a baccalaureate degree.**

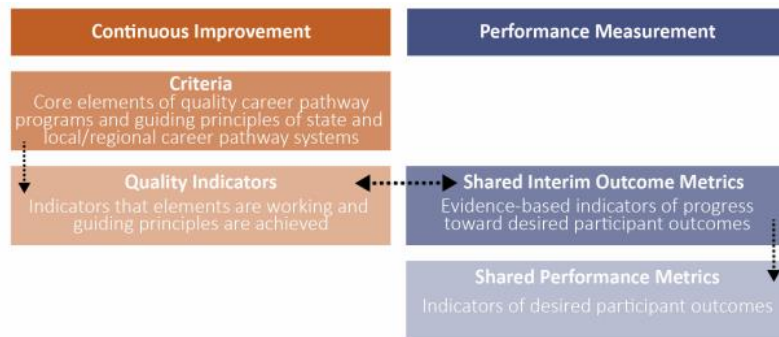
**Creating Pathways for Adult Learners**







## Career Pathway Metrics: The Alliance for Quality Career Pathways



Center for Postsecondary and Economic Success at the Center for Law and Social Policy and the Alliance for Quality Career Pathways. (2013, February).

## Career Pathway Metrics: The Alliance for Quality Career Pathways

- **Criteria** for defining high-quality systems and programs;
- **Quality indicators** for all criteria that signal how well the systems and programs are functioning to support the achievement of desired participant outcomes;
- **Interim participant outcome metrics** that indicate progress toward achieving desired longer-term outcomes; and
- **Performance outcome metrics** that are shared across education, training, employment, and other public, private, and philanthropic systems involved in the career pathway system (e.g. Shared measures in WIOA Title I and Title II)

Center for Postsecondary and Economic Success at the Center for Law and Social Policy and the Alliance for Quality Career Pathways. (2013, February).

## Sample Metrics based upon ACQP

➤ **Sample Criterion:** A clear referral method and procedures has been adopted for referrals to services (Center, et al., 2013).

☐ **Sample Quality Indicator:** *Staff are knowledgeable about referral policies and use them to refer clients / students appropriately* (Center, et al., 2013).

◦ **Sample Interim participant outcome metrics:** *Data analysis suggests students who are referred to appropriate services fare better than students who do not receive referrals, despite eligibility.*

- ✓ **WIOA Outcome Measure:** *Attainment of a Degree or Certificate (Youth Measure)*  
*Entered Employment (Adult Measure)*

Center for Postsecondary and Economic Success at the Center for Law and Social Policy and the Alliance for Quality Career Pathways. (2013, February).

# Questions?

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For Questions about this power point contact:

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[www.iccb.org](http://www.iccb.org)

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