Understanding, Defining, and Building Career Pathway Systems

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Agenda

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 **<u>NOT</u>** a panacea for all education, economic and workforce problems

Understanding Career Pathways

"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)

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. <u>aligns with the skill needs of industries</u> in the economy of the State or regional economy involved;

B. <u>prepares an individual to be successful</u> in any of a full range of <u>secondary or postsecondary</u> education options, <u>including apprenticeships</u> 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. <u>includes counseling</u> to support an individual in achieving the individual's education and career goals;

D. includes, as appropriate, <u>education offered concurrently with and in the same context as workforce preparation activities</u> and training for a specific occupation or occupational cluster;

E. <u>organizes education, training, and other services to meet the particular needs of an individual in a manner that accelerates</u> the educational and career advancement of the individual to the extent practicable;

F. enables an individual to <u>attain a secondary school diploma or its recognized equivalent</u>, and at least <u>one recognized postsecondary credential</u>; and

G. <u>helps an individual enter or advance</u> 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
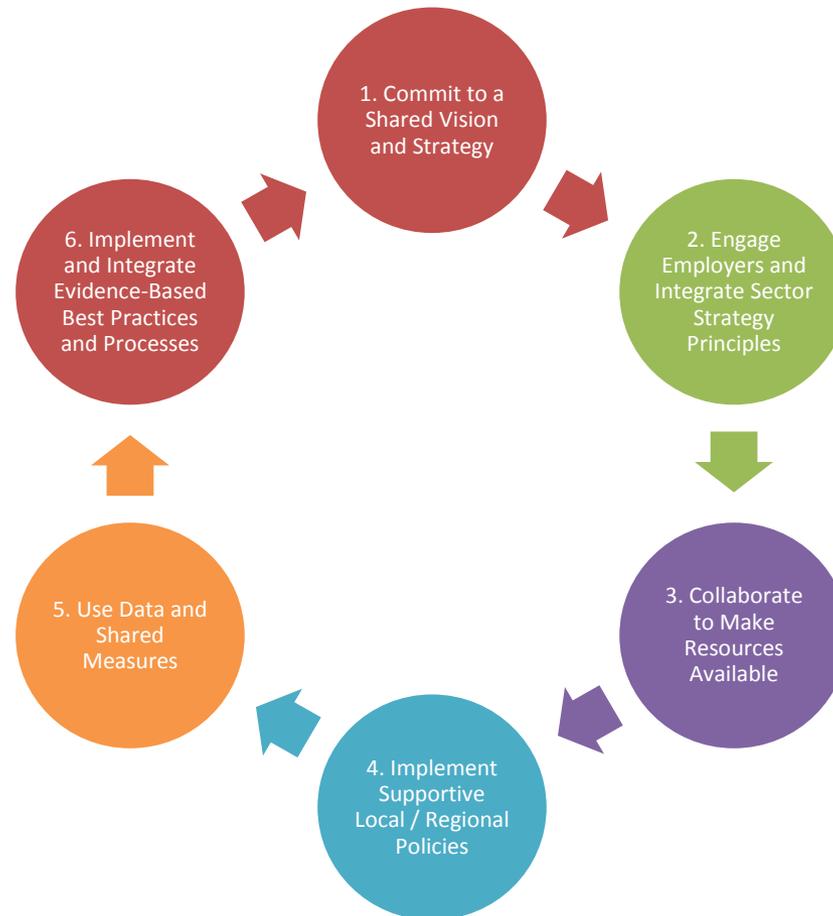
Elements of Career Pathway Systems (DOL, HHS, DOE)

ALIGNED	✓ Secondary, Postsecondary, Workforce Systems including Adult Education
CONNECTED	✓ Rigorous, sequential, connected, and efficient coursework that links basic education and skills training and integrates education and training
FLEXIBLE	✓ Multiple entry and exit points
SUPPORTIVE	✓ Comprehensive support services, such as career counseling, childcare, and transportation ✓ Financial supports or flexibility to accommodate labor market demands in order to allow individuals to meet their ongoing financial needs and obligations
ENGAGED WITH BUSINESS	✓ Active engagement of business in targeted industry sectors that are important to local, regional, and/or state economies
CONTEXTUALIZED	✓ Curriculum and instructional strategies that make work a central context for learning and developing work readiness skills (i.e., contextualized learning)
ACCELERATED	✓ Implementation of strategies that accelerate the educational and career advancement of participants (e.g., credit for prior learning)
ACCOMODATING	✓ Organized services to meet the particular needs of adults (e.g., accommodating work schedules)
SECTOR-FOCUSED	✓ A focus on secondary and postsecondary industry-recognized credentials, sector-specific employment, and advancement over time in education and employment within that sector
COLLABORATIVE	✓ 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
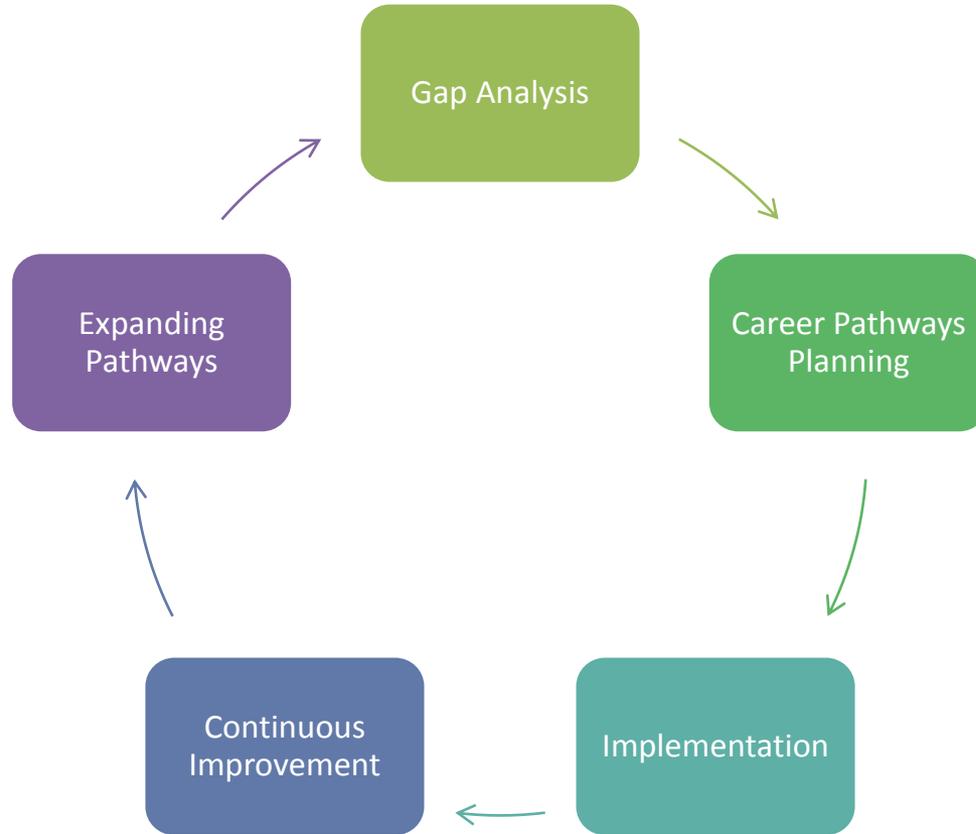
Jenkins, D. and Spence, C. (2006), p. 6.

Gap Analysis

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

Analyze labor demand and identify industries

Assess the strengths and weaknesses of existing education and workforce development services.

Identify gaps where needs are currently unmet.

Consider the return on potential public investments.

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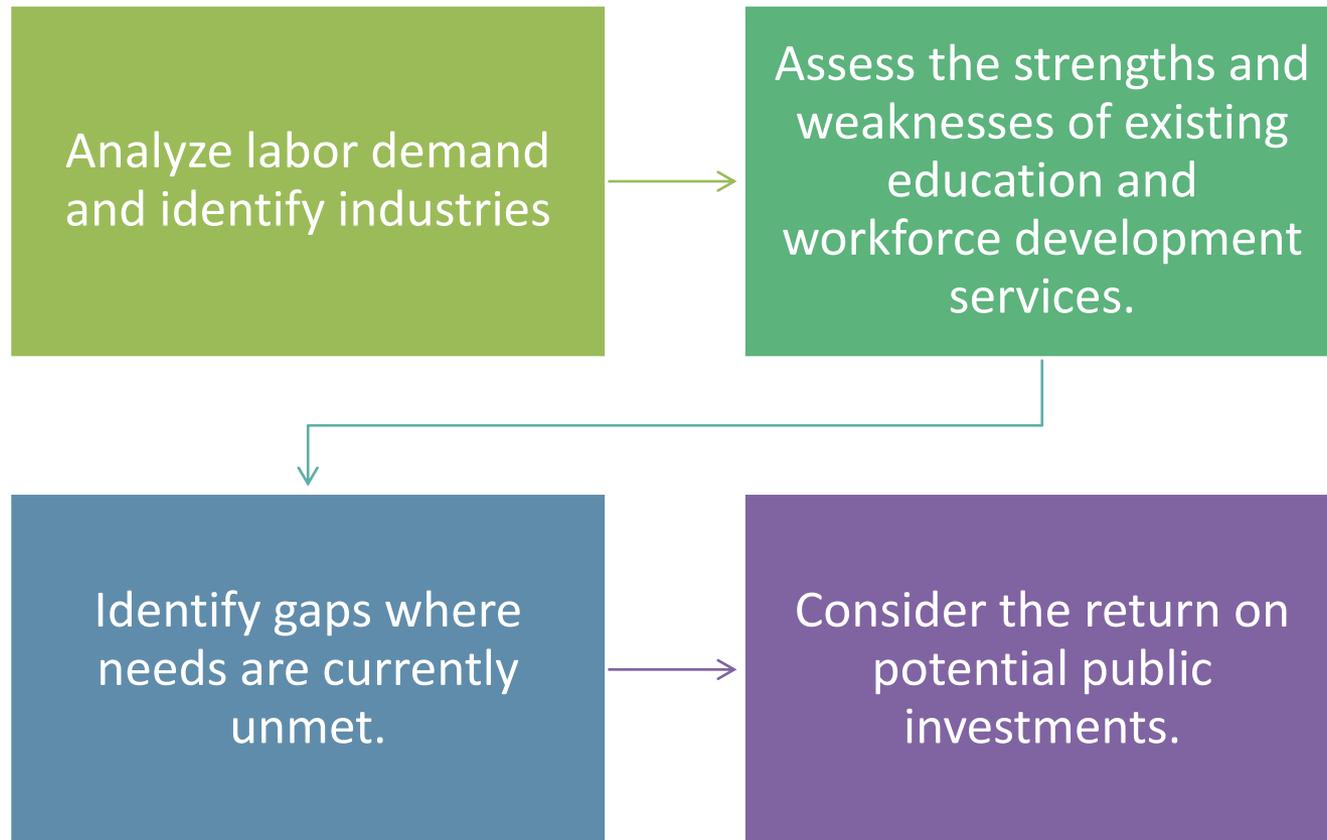
Career Pathway Planning

Form a partnership to develop a career pathways plan

| Organize Partners | Involve Employers | Rethink programs and services | Identify costs, and figure out how to pay for it | Develop communications plan to build support |
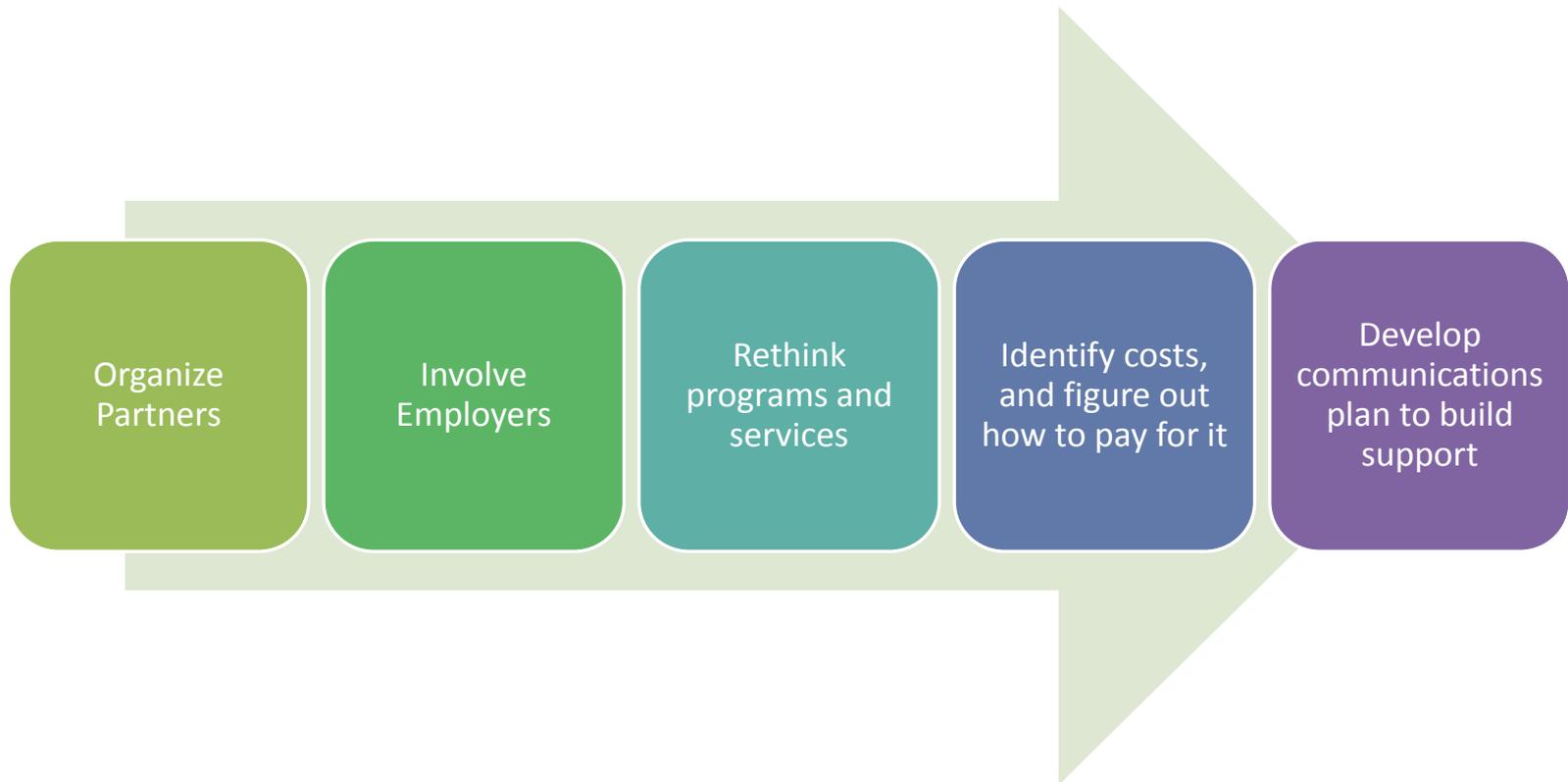
Jenkins, D. and Spence, C. (2006), p. 5.

Implementation

Coordinate the work of the partners

Coordinate

Specify
Roles

Establish
MOUS

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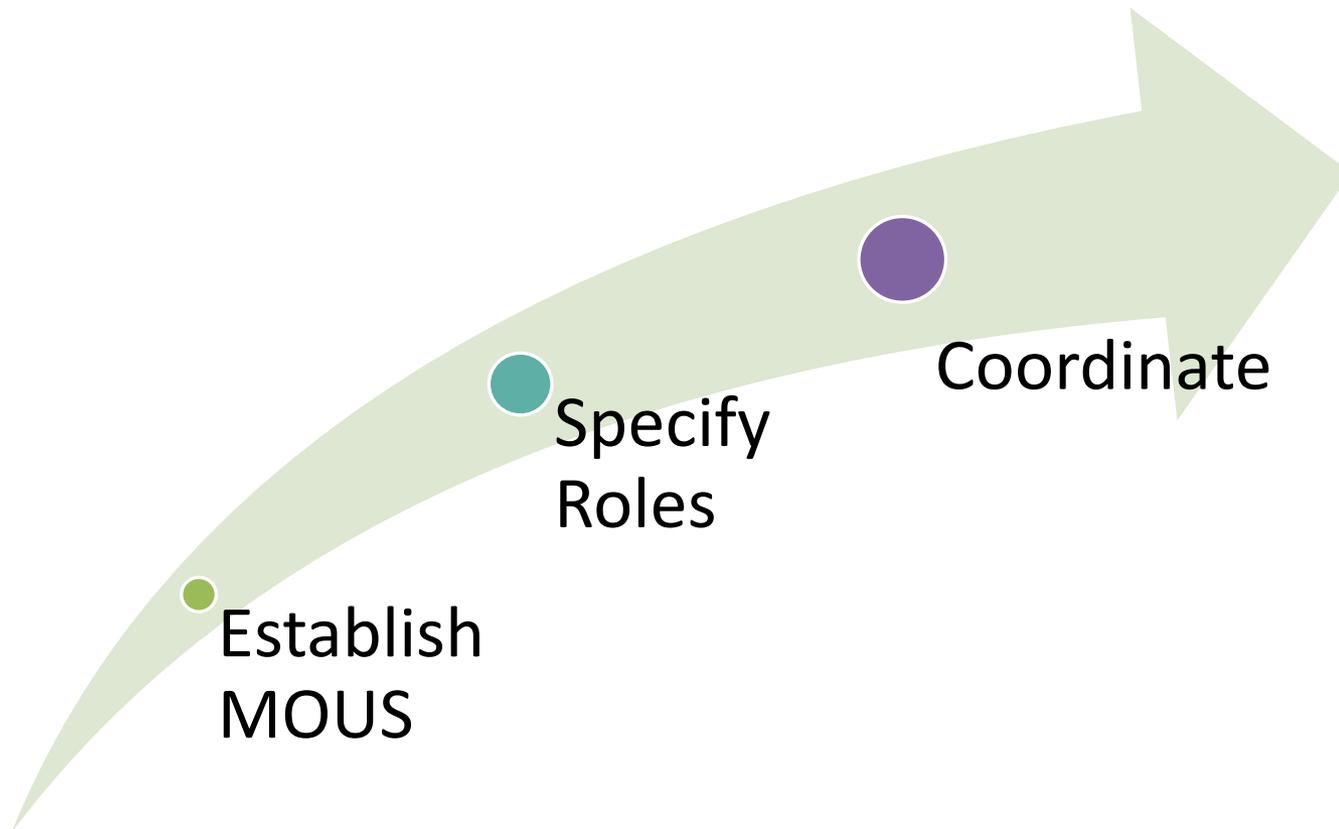
Continuous Improvement

Evaluate and continuously improve career pathways programs and services

Conduct regular in-process reviews of program performance.

Track the employment and further education outcomes of participants at each level.

Make adjustments based on evidence of program effectiveness and impacts.

Regularly reevaluate the mission, vision and goals.
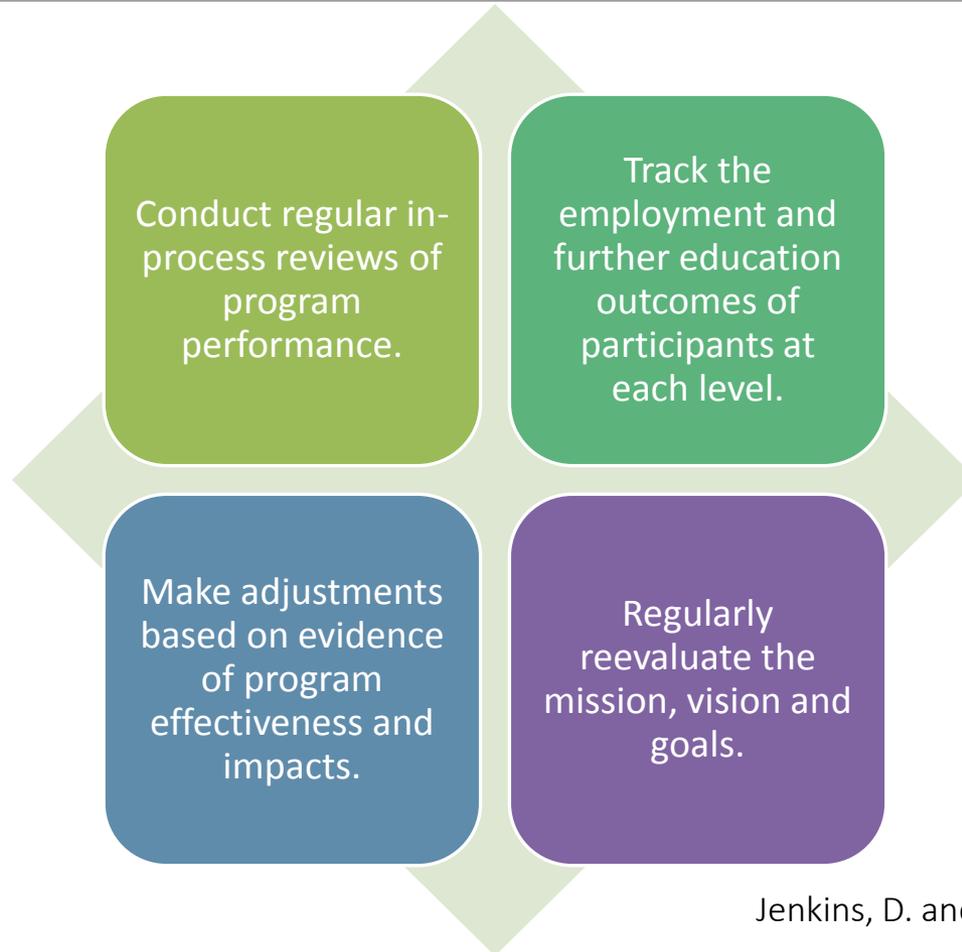
Jenkins, D. and Spence, C. (2006), p. 5-6.

Expanding Pathways

Expand the pathways process to involve other partners, populations of participants and sectors
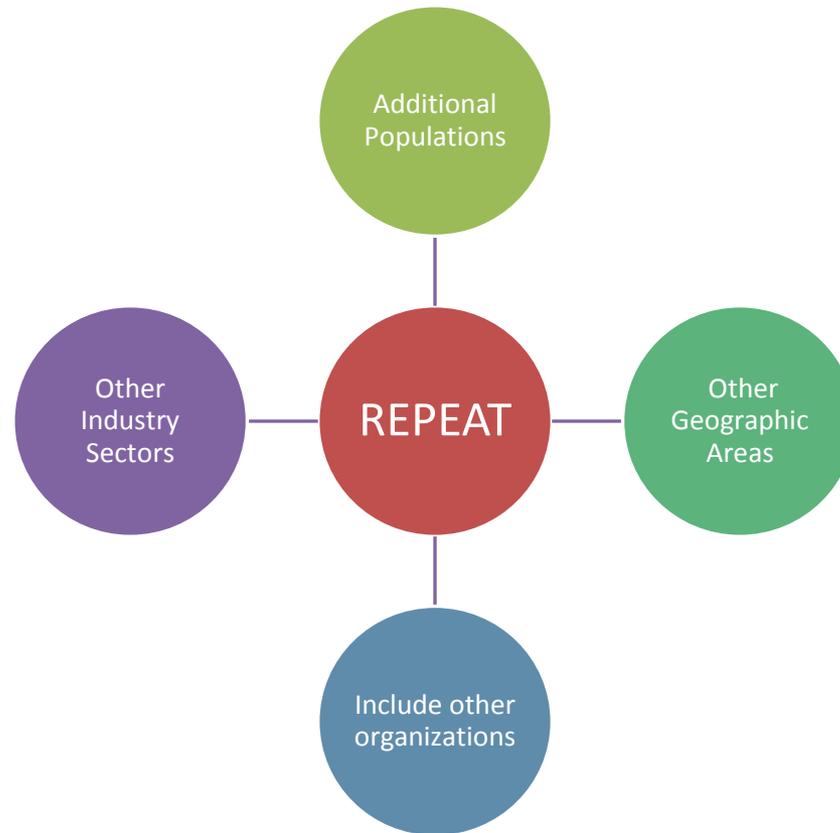
Jenkins, D. and Spence, C. (2006), p. 5-6.

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 |

Planning Activities

| **Meetings facilitated by Maher & Maher Team** | 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. |

State Plan

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 work to do	Advanced, but want to strengthen	Advanced	
	1	2	3	4	5	
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.						
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.	○	○	○	○	○	
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.	○	○	○	○	○	
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.	○	○	○	○	○	

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
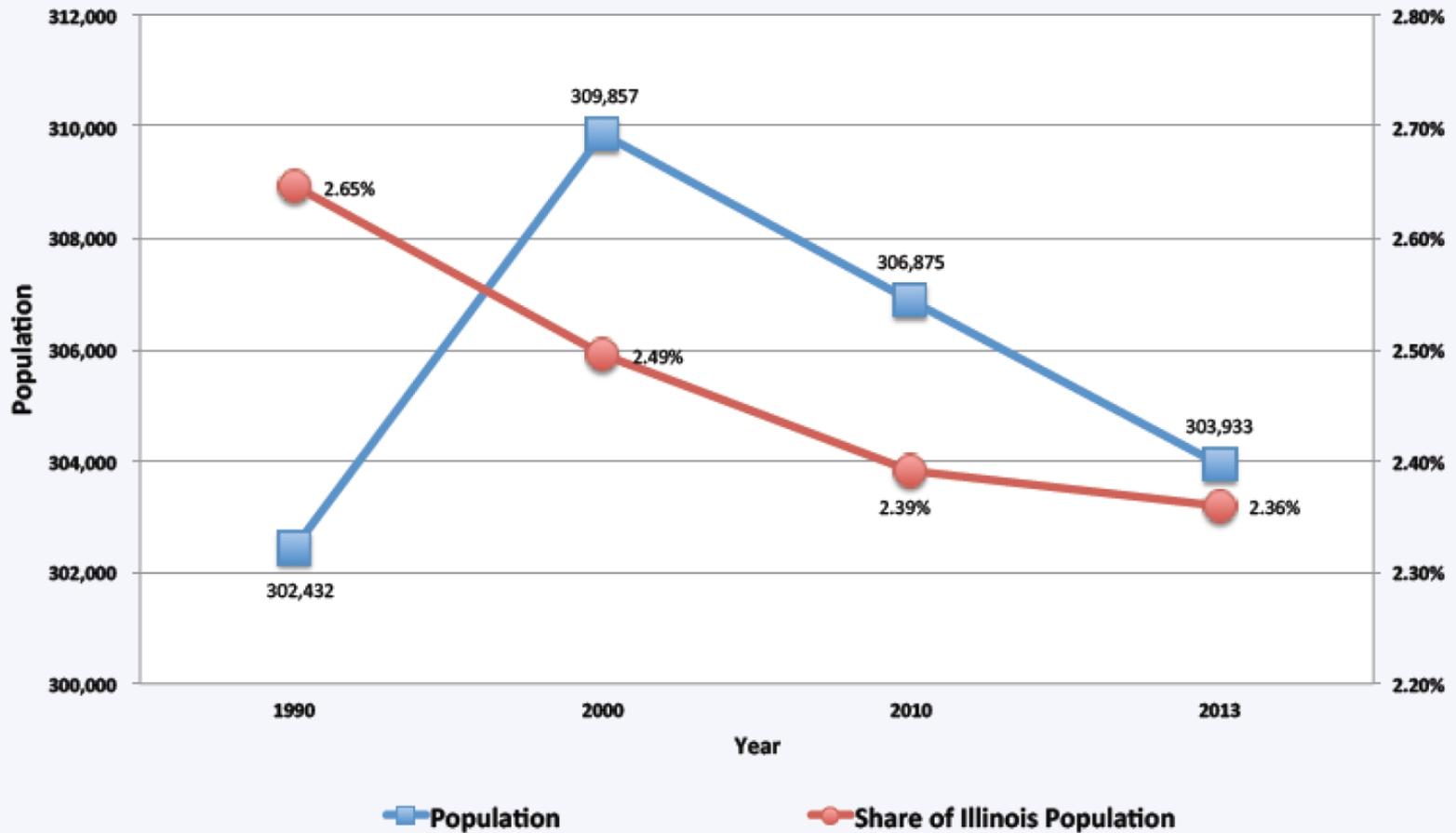
Organizing for Career Pathways
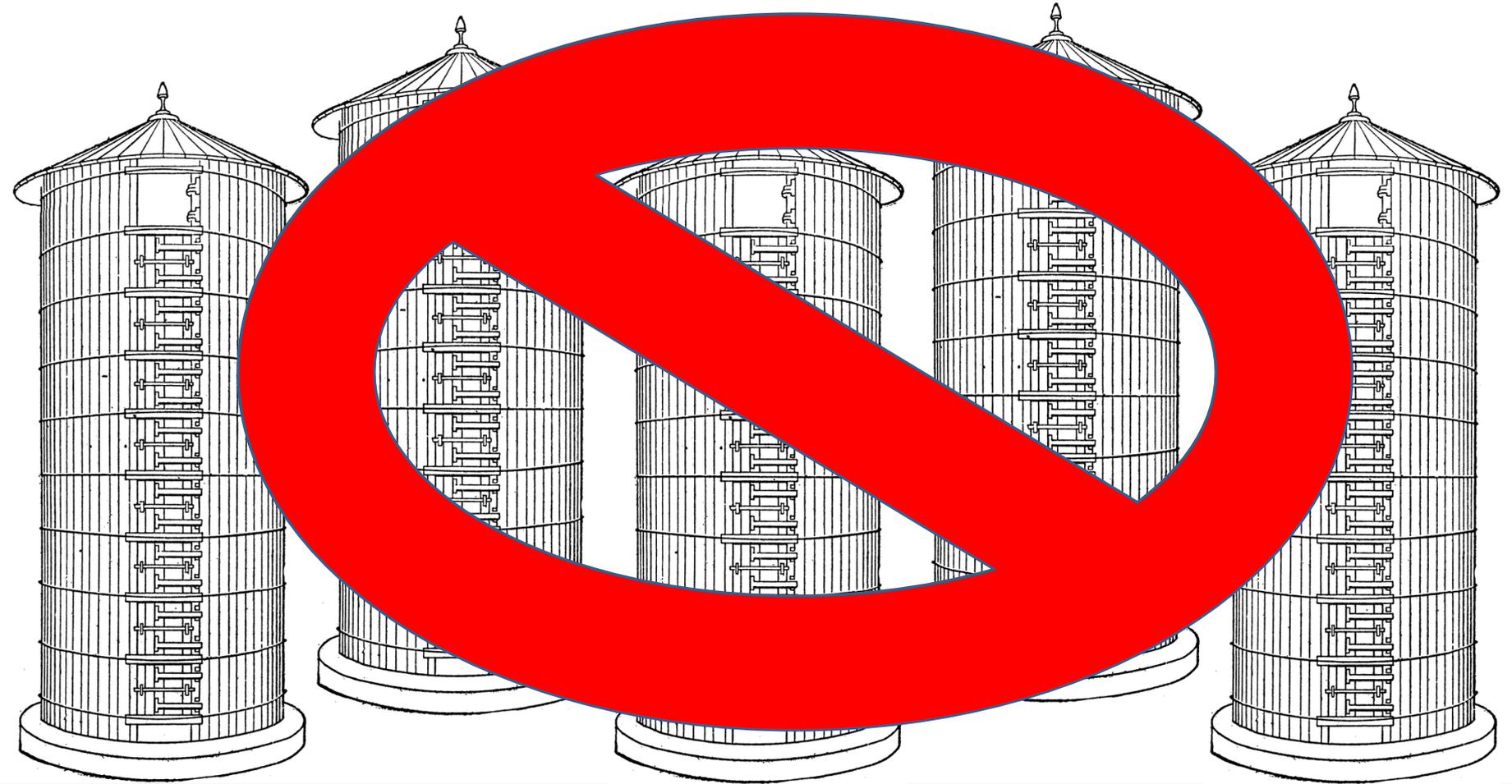
Organizing for Career Pathways

The Backbone Organization

Career Pathway Programs

The Alliance for Quality Career Pathways

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

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

WORK-BASED LEARNING

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

CAREER-FOCUSED INSTRUCTION
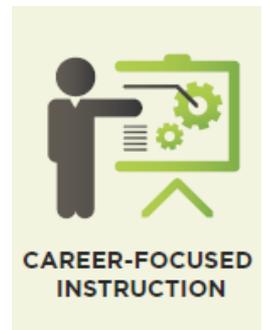
Sample Program Components: Progressive Design

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

PROGRESSIVE DESIGN

Sample Program Components: Participant Supports

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

PARTICIPANT SUPPORTS

Sample Career Pathway Program Components

Adult Education and English as a Second Language	High School	Offender and Ex-Offenders	Returning Adults
- Bridge Programs - Integrated Education and Training (IET) Opportunities - Stackable credentials - Integrated literacy and civics education	- Dual Credit - Early College Credit - Co-requisite remediation - Youth apprenticeship - Pre-Apprenticeship - Work-Based Learning	- Re-entry Counseling - Transition to re-entry initiatives - Tutoring services such as Peer Tutoring - Child-care services - Secondary school credit	- Math Refreshers - Placement Testing - Career Counseling - Financial Aid Counseling

Examples: Stackable Credentials

Harper College
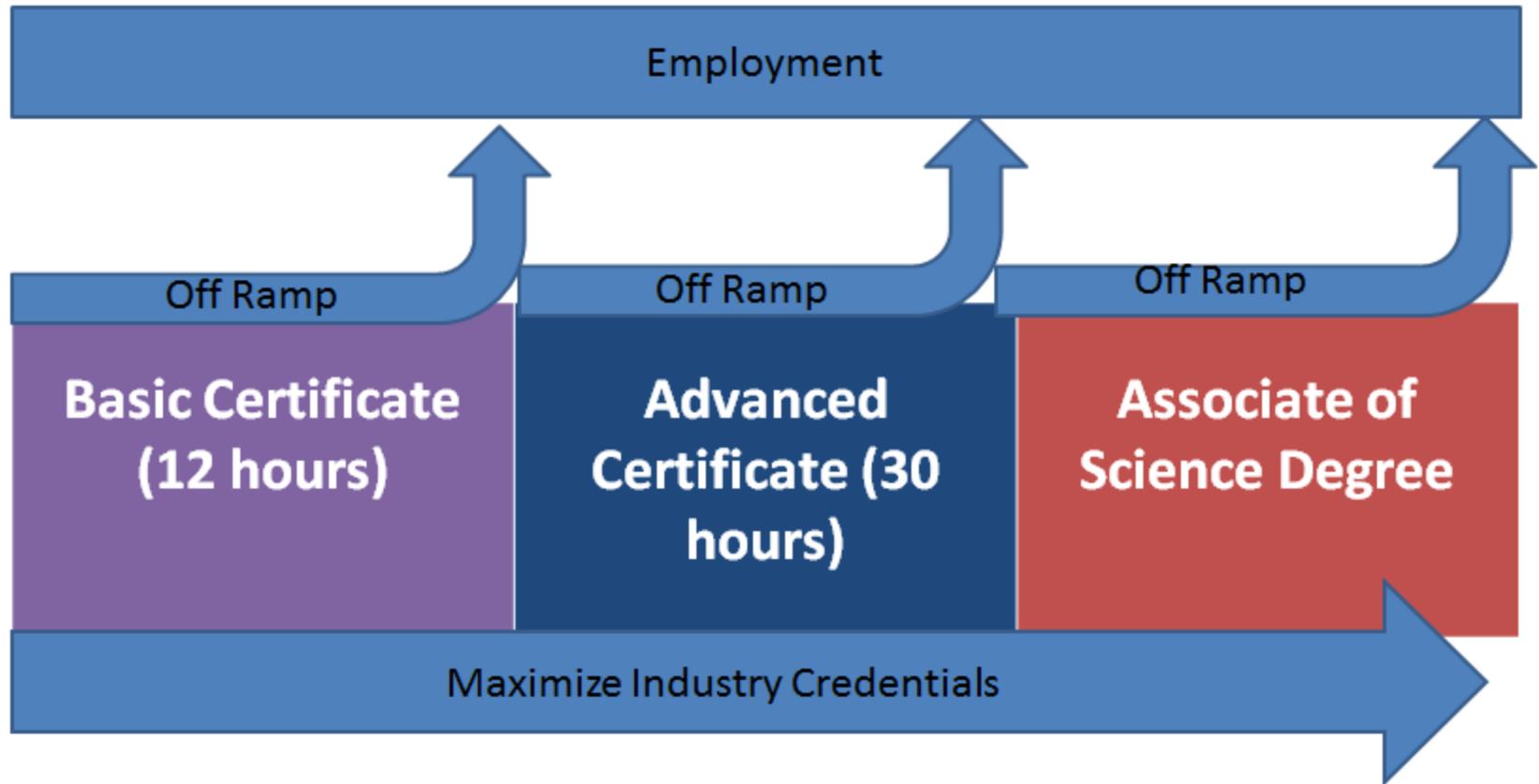
**Advanced Manufacturing Technology AAS**

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

Mechatronics/Automation	Precision Machining	Metal Fabrication	Supply Chain Management/Logistics

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.

Electrical Maintenance Certificate		Computer Numerical Control Oper I		Basic Welding Certificate		Inventory/Production Control	
10-hour certificate		15-hour certificate		16-hour certificate		12-hour certificate	
ELT110 Intro Electronics	4	MFT105 Machine Processes I	4	MNT111 Prints & Schematics	2	SCM 101 Supply Chain Mgt	3
ELT142 Electrical Wiring	2	MFT123 Intro CNC Machining	3	WLD110 Welding I	3	SCM 120 Production Control	3
ELT215 Industrial Controls	4	MFT125 Turning – Conv to CNC	3	WLD210 Welding II	3	SCM 122 Inventory Control	3
		MFT120 Machine Processes II	3	WLD211 Welding III	4	SCM 226 Material Requirements	3
		MNT111 Prints & Schematics	2	WLD212 Welding IV	4	Planning	

Industrial Electronics Certificate							
6 additional hours							
ELT120 Intro Ind Elec Mainte	**2**						
ELT140 PLCs	2						
ELT143 Advanced Electrical	2						

		Computer Numeric Control Oper II		Welding Fabrication Certificate		Purchasing Certificate	
		11 additional hours		13 additional hours		6 additional hours	
		MFT128 Milling - Conv to CNC	3	WLD 225 Welding Blueprints	2	SCM 125 Purchasing	3
		MFT130 Machining Blueprints	1	WLD240 Cutting Processes	3	SCM 259 Advanced Purchasing	3
		MFT201 Advanced CNC	5	WLD245 Fabrication I	4		
		MFT265 Properties of Materials	2	WLD250 Fabrication II	4		

Mechatronics/Automation Cert						Physical Distribution Certificate	
10 additional hours						6 additional hours	
ELT135 Optics & Sensors	2					SCM 121 Physical Distribution	3
ELT144 AC & DC Motors	2					SCM 227 Just-in-Time/Lean	3
ELT145 Variable Freq Drive	2						
ELT161 Industrial Controls	4						

Step 5: Complete AAS Degree

ENG101 Composition	3	ENG101 Composition	3	ENG101 Composition	3	ENG101 Composition	3
ENG103 or SPE101	3	ENG103 or SPE101	3	ENG103 or SPE101	3	ENG103 or SPE101	3
Science, Humanities, Soc Sci	9	Science, Humanities, Soc Sci	9	Science, Humanities, Soc Sci	9	Science, Humanities, Soc Sci	9
Approved Tech Electives	3	Approved Tech Electives	3			Approved Technical Electives	5

Step 6: Advance to a 4-year institution to pursue a baccalaureate degree.

Creating Pathways for Adult Learners

College
Training
Careers

Transition Services • Technology Skills • Career Development

Student

Foundation Level
Intermediate Level
Bridge I
Bridge II
Secondary Completion
Integrated Models

21st Century : Adult Education & Career Training System
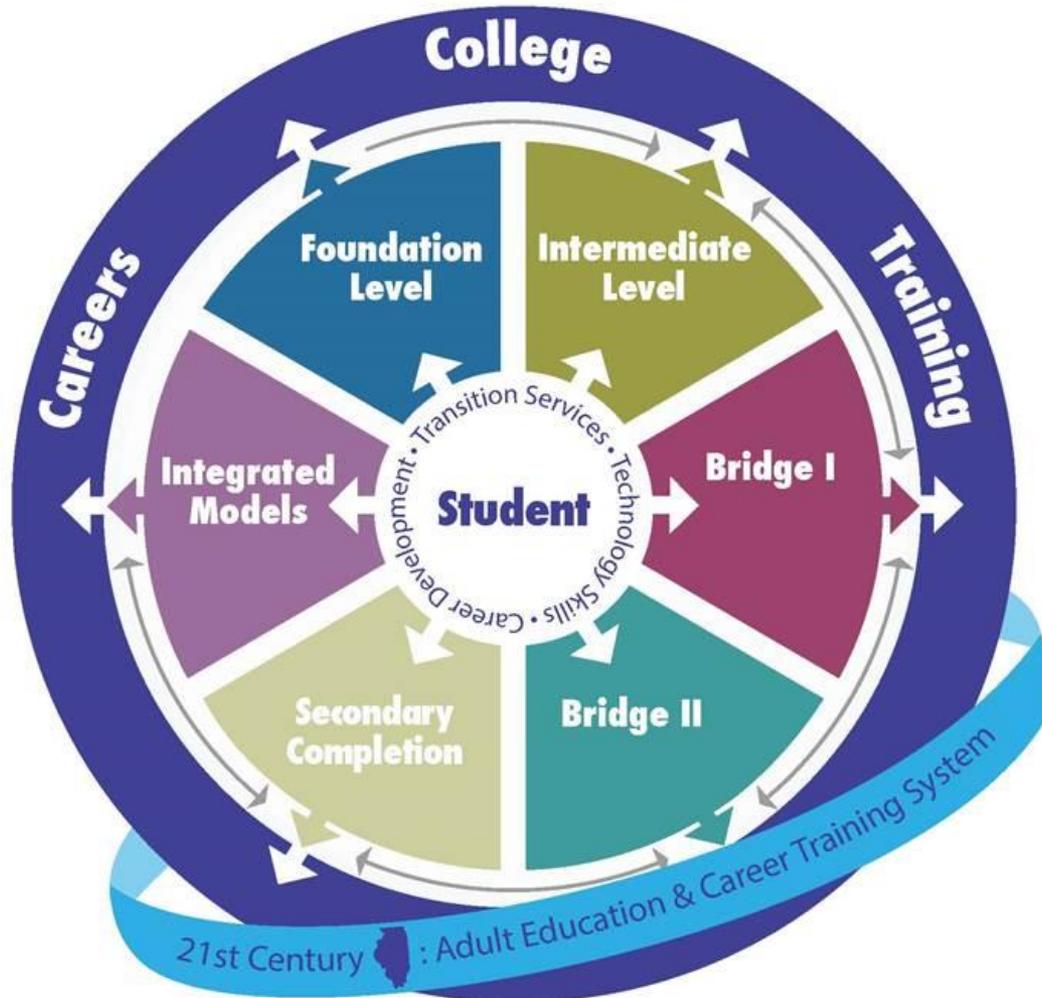
Triton College

Certified Medical Assistant ICAPS

TABE Placement Results

TABE Level	Courses
TABE 11.0-12.9	GED E50 Skills and Strategies for Ad to Succeed in College
TABE 9.0 – 10.0	• GED E71 & 72 (Parts 1&2) Medical Terminology • GED Math
TABE 6.0-8.9	• GED E69 Healthcare Bridge or GED E55 Admin Support • GED Math • GED E70 Tech Skills for Workforce and Postsecondary
TABE 4.0 - 5.9	• EDU E47 Career Exploration and Workforce Preparation • GED Math • EDU Basic Technology Course

Completion/ CMA Program

- CMA 200 Medical Assistant Practicum (1)
- CMA 250 CMA Seminar (3)

- CMA 180 Medical Asst Lab App (3)
- CMA 130 Medical Asst Clinical App II (3)

- AHL 107 IV Venipuncture (1)
- AHL 108 Electrocardiography (1)
- CMA 103 Medical Asst Ad App II (3)
- CMA 110 Medical Asst Clinical App I (3)

- AHL 103 Basic Pharmacology (1)
- CMA 101 Intro to Medical Asst (2)
- CMA 102 Med Asst Admin App I (3)

Pre-CMA/ Admission to CMA Program

GED Test/ ACCUPLACER
- BIS 190 Anatomy & Physiology (3)
- AHL 110 Medical Coding & Office Procedures (2)

Practice GED Test
- AHL 120 Comprehensive Medical Terminology (3)

TABE
- AHL 102 Ethics & Law for Allied Health Professionals (1)

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).

o *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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