Adult Career Pathways

TOOLKIT

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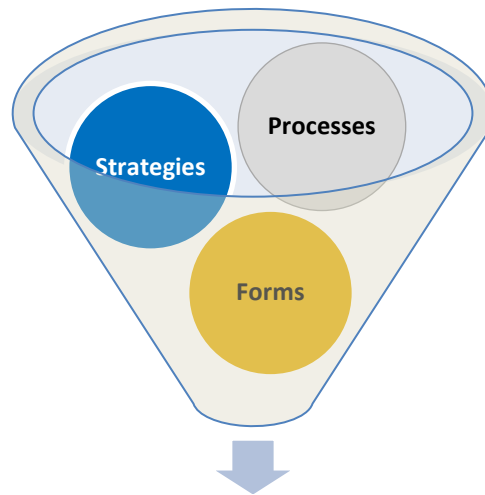
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Contents

Introduction

Welcome to the Adult *Career Pathways Toolkit.* The purpose of the toolkit is to help educators and other stakeholders understand their roles in developing and delivering Adult Career Pathways (ACP) programs.

Adult Career Pathways Toolkit

It is recommended that the reader peruse NCPN's *Overview of Career Pathways Toolkit* prior to reading this toolkit (downloadable from the NCPN website, www.ncpn.info). The reader should be familiar with the ten components of OVAE's program of study (POS) design framework:

1. **LEGISLATION AND POLICIES:** Federal, state, and local legislation or administrative policies promote POS development and implementation.

2. **PARTNERSHIPS:** Ongoing relationships among education, business, and other community stakeholders are central to POS design, implementation, and maintenance.

3. **PROFESSIONAL DEVELOPMENT:** Sustained, intensive, and focused opportunities for administrators, teachers, and faculty to foster POS design, implementation, and maintenance.

4. **ACCOUNTABILITY AND EVALUATION SYSTEMS:** Systems and strategies to gather quantitative and qualitative data on both POS components and student outcomes are crucial for ongoing efforts to develop and implement POS.

5. **COLLEGE AND CAREER READINESS STANDARDS:** Content standards that define what students are expected to know and be able to do to enter and advance in college and/or their careers comprise the foundation of a POS.

6. **COURSE SEQUENCES:** Non-duplicative sequences of secondary and postsecondary courses within a POS ensure that students transition to postsecondary education without duplicating classes or requiring remedial coursework.

7. **CREDIT TRANSFER AGREEMENTS:** Credit transfer agreements provide opportunities for secondary students to be awarded transcripted postsecondary credit, supported with formal agreements among secondary and postsecondary education systems.

8. **GUIDANCE COUNSELING AND ACADEMIC ADVISEMENT:** Guidance counseling and academic advisement help students to make informed decisions about which POS to pursue.

9. **TEACHING AND LEARNING STRATEGIES:** Innovative and creative instructional approaches enable teachers to integrate academic and technical instruction and students to apply academic and technical learning in their POS coursework.

10. **TECHNICAL SKILLS ASSESSMENTS:** National, state, and/or local assessments provide ongoing information on the extent to which students are attaining the necessary knowledge and skills for entry into and advancement in postsecondary education and careers in their chosen POS.

The final section of the toolkit consists of forms that will help you in obtaining information about your current situation and how best to proceed.

Good luck in your endeavors in the Career Pathways arena!

What Are Adult Career Pathways (ACP)?

Adult Career Pathways represent a specialized application of *Career Pathways.* A Career Pathway is

> a coherent, articulated sequence of rigorous academic and career/technical courses, commencing in the ninth grade and leading to an associate degree, baccalaureate degree and beyond, an industry-recognized certificate, and/or licensure. The Career Pathway is developed, implemented, and maintained in partnership among secondary and postsecondary education, business, and employers. Career Pathways are available to all students, including adult learners, and lead to rewarding careers. (Hull et al., *Career Pathways: Education with a Purpose,* CORD, 2005)

An Adult Career Pathway focuses more on the special needs and circumstances of adults, especially those who were not initially successful in public education. Whereas the target population of Career Pathways is high school students, the target populations of Adult Career Pathways include demographics such as high

> **ALL COURSE SEQUENCES** *should have multiple entrances (including for the adult learner) and multiple exits.*

school dropouts, holders of GEDs (but no further credential), high school graduates with no college, foreign-born residents, ex-offenders, re-entering workers, and employed persons who seek to upgrade their skills. (For more on Adult Career Pathways, see Hinckley et al., *Adult Career Pathways: Providing a Second Chance in Public Education,* CORD, 2011.)

Our focus will include the many career-limited *adults* who do not have the education and/or training necessary to earn a "living wage." (For statistics on "living wages" for localities across the country, visit the "Living Wage Calculator" at http://www.livingwage.geog.psu.edu.)

Career-limited adults need a second chance in public education that enables them to enter and exit the Career Pathways system as their circumstances dictate. ACP provide the necessary flexibility in points of entry and exit. The need varies from region to region, and the partners in each region must work together to define the role of ACP in the broader communitywide Career Pathways system.

The population of American adults who need a second chance in public education comprise the following groups (which sometimes overlap):

1. High school dropouts

2. High school completers who did not pursue further education and training

3. College noncompleters

4. Returning veterans who entered military service after high school

5. Immigrants

6. Criminal offenders who have completed their terms of incarceration

7. Adults who need to retool (to change careers, reenter the workforce, or advance in their present careers)

National Vision of ACP

As noted above, ACP programs work within the Career Pathways umbrella and offer multiple entrance and exit points for adults. An ACP program consists of the guidance, remediation, curricula, and other support elements required to enable career-limited adults to enter the workforce and progress in rewarding careers. It is a systemic framework that connects adult education programs, work, and postsecondary education. Each step in an ACP program is designed to prepare the student for the next level of work and education.

Typical ACP program components include the following:

> **ADULT EDUCATION** *is at a crossroads and finds itself changing to meet the new demands of a global economy.*

- A "prep stage" designed to prepare participants for job entry and college study

- Industry-focused curriculum

- A multistep career ladder

- Partnerships with community and government agencies

- Part-time employment (usually beginning after completion of the prep stage)

- Personal and academic support services

ACP programs are designed to *expedite transitions*—from unemployment to employment, from underemployment to better employment, or (as in the case of displaced workers) from one industry to another. (Hinckley et al., *Adult Career Pathways: Providing a Second Chance in Public Education,* CORD, 2011)

The following graphic describes some of the key aspects of ACP programs.

Systematic Framework	•ACP is a systemic framework that consists of a connected series of education programs, with integrated support services and work experience, that enables adults to combine work and learning.
Connections to Economic Development	•ACP is an economic development *process*—the synergy created when best practices and resources are aligned to target an employment sector that is critical to a regional labor market.
Connections to Business	•Business (the customer) drives the process by identifying targeted sectors, skills, and competencies and reviewing curriculum.
Clear Goal: Work-Readiness	•ACP programs empower adult education students to enter postsecondary education and earn degrees, certificates, and/or industry credential.
Stackable Credentials	•All training counts (*college credit*). ACP programs provide academic credentials and increased educational opportunities .
Partnerships	•ACP programs involve collaborative efforts among stakeholders and the joining of educational missions (*workforce, academic, remediation, student affairs and categorical programs*) to eliminate *silos.*
Bridge Programs	•ACP programs bridge gaps between *adult basic education* and *college* and between *remedial* and *for-credit courses*
Contextual Teaching	•ACP programs use contextualized, integrated academics that optimize learning gains and career and college readiness.

The following graphic describes the "new basics" toward which adult education is evolving via ACP programs.

Customer	Student is the primary customer	→ Students and employers are the customers
Goal of Curricula	Life skills are the primary goal	→ Work readiness skills and preparation for postsecondary education are the primary goals
Content focus	Applying literacy, numeracy and English language learning to everyday life tasks	→ Literacy and numeracy and English language learning as well as thinking and reasoning skills such as problem solving, team work and following instructions
How work readiness is taught	Might include some employment-related tasks like filling out a job application	→ Teaches basic skills in a work context and stresses good work habits such as punctuality, diligence, communication, and appropriate dress and behavior
Program focus	Driven by students' personal goals, needs and interests	→ Driven by students' employment goals, the skill needs of family-sustaining jobs and the entry requirements for postsecondary education and training
End goal	Most Adult Education students never achieve a GED, much less the postsecondary education that is the key to success in today's economy.[9]	→ Most students achieve a high level of basic and workforce readiness skills and are prepared to enter postsecondary education and training and family-sustaining jobs.

Source: *Guide to Adult Education for Work: Transforming Adult Education to Grow a Skilled Workforce,* National Center on Education and the Economy, 2009

FORM 1	**FORM 1** will help you obtain a "pulse" of the adult education system in your community and whether the system is moving toward the "new basics."

Career Ladders (Maps)

Every ACP program can be represented visually by a ladder or map that illustrates the steps to further education and employment. (In the literature, the terms *ladder* and *map* are used interchangeably. We will use the term *ladder.*) The key components of pathway ladders commonly include the following:

- Potential jobs in the pathway industry

- The progression of education and training within the pathway

- Salary information

- Service providers

- Partnerships

- Support services

- Linkages between pathway components

Following is a sample career ladder for a pipefitter welder for the coal mining industry in southwest Virginia.

Pipefitter Welder

CAREER LADDER

Pipefitter Welder Foreman

Salary range: $45,000 to $70,000
Required Experience: 4 yrs.

Required Skills
- Welding and pipefitting tasks as mentioned in previous ladder steps.
- Extensive knowledge of welding and piping systems
- Assigns, directs and supervises work of other employees
- Participate in personnel management
- Direct and coordinate personnel as needed
- Provide technical oversight
- Analyze and improve procedures to guide personnel
- Train personnel as needed
- Lead continuous improvement activities
- Perform quality management
- Extensive knowledge of applicable codes and standards
- High level of leadership skills

Pipefitter Welder (Journeyman)

AAS Degree/Journeyman Certificate
Salary range: $35,000 to $70,000
Avg. Time to Complete Education:
AAS Degree - 2 years
Journeyman Certificate – 4-5 years

Required Skills
- Completes welding prep work (layout, positioning, clamping, etc.)
- Select and performs appropriate welding methods
- Perform quality welds on a variety of metal products
- Read and interpret advanced blueprints, schematics and other prints
- Lay out, assemble, fabricate pipes and pipefittings
- Maintain, fabricate and repair piping systems
- Perform advanced tasks related to: welding, brazing, soldering, pipe threading, pipe grinding
- Troubleshoots welding equipment failures
- Performs preventative maintenance on welding equipment
- Able to analyze work orders and complete required documentation

Pipefitter Welder Tech (Pre-Appren.)

Tech. Diploma/Pre-Apprenticeship Cert.
Salary range: $20,000 to $40,000
Avg. Time to Complete Education:
Technical Diploma - 2 years
Pre-Apprenticeship Certificate - 6 months
Education/Training Resources: Southwest Virginia Community College Welding Diploma

Required Skills
- Completes welding prep work.
- Select and performs appropriate welding methods
- Perform quality welds on a variety of metal products
- Read and interpret blueprints, schematics and other prints
- Lay out, assemble, fabricate pipes and pipefittings
- Maintain, fabricate and repair piping systems
- Perform related tasks such as: brazing, soldering, pipe threading, etc.
- Setup and operate equipment
- Troubleshoots welding equipment failures
- Performs preventative maintenance on welding equipment

Certified Welder

Combination Welding Certificate
Salary range:$20,000 to $37,000
Avg. Time to Complete Education: 1 year
Education/Training Resources: Southwest Virginia Community College Welding Certificate, Mountain Empire Community College Welding Certificate

Required Skills
- Completes welding prep work
- Select and performs appropriate welding methods
- Perform quality welds on a variety of metal products
- Set and operate equipment
- Read technical drawings and blueprints
- Read written instructions and follow verbal instructions
- Read and interpret bill of materials
- Knowledge of occupational safety procedures

Welder's/Pipefitter's Assistant

High School Diploma/GED
Salary Range: $15,000 to $20,000

Education/Training Resources: Southwest Virginia Community College Welding Career Studies Certificate Program, Mountain Empire Community College Career Studies Certificate Program

Required Skills
- Assist welder/pipefitter in various capacities
- Complete basic prep-work
- Knowledge of basic welding/pipefitting processes
- Basic welding experience
- Basic metal working experience
- Welding small components
- Cleaning shop and associated facilities
- Knowledge of occupational safety procedures

Pathway ladders are developed as information is collected on the pathways they represent (e.g., labor market data, related postsecondary courses). Each regional partnership must decide what industry sector(s) and related occupations are imperative for the region and develop the

corresponding career ladders. The ladders should be updated regularly to reflect changes in partners or course requirements or other relevant changes.

In an ACP program, the academic ladder should be aligned with the career ladder of the targeted industry, as in the following illustration.
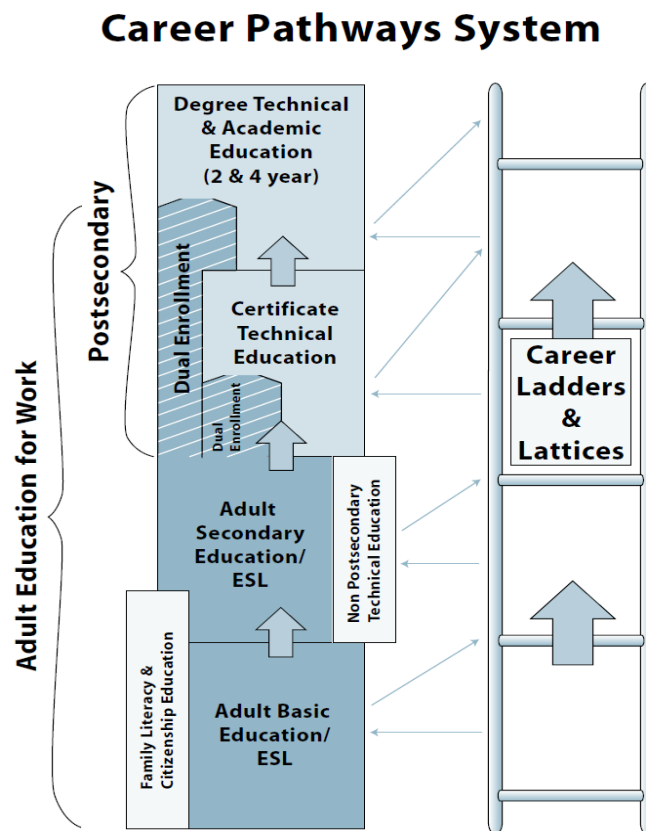
Career Pathways System

Source: *Guide to Adult Education for Work: Transforming Adult Education to Grow a Skilled Workforce,* National Center on Education and the Economy, 2009

Key features of a comprehensive, fully implemented ACP system should include:

- Basic skills instruction contextualized for a specific occupation or cluster of occupations within an industry or field

- Support services, such as counseling, academic advising, tutoring, career counseling, financial aid, and job placement

- Curriculum and coursework that are broken into steps that are aligned with and articulate to academic and career advancement

- Visual diagrams or "road maps" that show multiple entry and exit points and depict vertical and lateral movement within occupations or career clusters

- Transition or "bridge" programs designed to help adults improve their basic skills and prepare for postsecondary-level courses, especially math, reading, and writing courses

- Community and business partnership arrangements that provide support services (e.g., childcare, transportation, and case management), job shadowing, and internships

Resource: In November 2010, ACE of Florida, the Florida Department of Education, and other partners broadcasted a three-hour webinar about building Career Pathways for Florida's adult students. The webinar gives viewers a clear picture of the Florida initiative and how adult education and literacy programs can participate. For an in-depth look at Florida's vision for the ACP system, review the webinar at http://www.wfsu.org/vod/ace-111010.php. Please keep in mind that your state's vision may be different.

What to Do First

One of the first steps in building an ACP program is to identify an employment sector and a suitable target population. This should be done in partnership with business and industry. (See NCPN's Partnership Toolkit and NCPN's Effective Advisory Committees Toolkit, both downloadable from the NCPN website, www.ncpn.info.) When selecting a sector to focus on, consider two main factors:

Employment growth and demand for workers

Existing training or educational programs

While you may identify several potential sectors, consider the one that presents the most opportunities for growth and development of Career Pathways. What are the possible entry points for the adult learner? Once an industry sector has been targeted and occupations identified by industry, programs available to high school students and AE/ESOL learners should be identified. What secondary and postsecondary programs are available? Are those programs candidates (with possible modifications or "bridge" programs for adults) for entry into the pathway for the targeted audience?

FORM 2	FORM 2 will serve as a beginning inventory tool.

Frameworks for the Adult Learner

For educators, the most important student outcome is successful transition to postsecondary education and careers. However, before most adult learners can make that transition, they must improve their basic skills. The structure of an ACP will always differ from that of a conventional grade-9–14 Career Pathway. The delivery systems of AE and ESL are usually poorly articulated and do not allow the adult learner to transition to postsecondary education and training without extensive remediation. Whereas grade-9–14 Career Pathways give students three or more years of high school to explore careers and acquire soft skills and basic technical skills, the adult learner in an ACP program must usually cover the same territory in one semester. Another key difference has to do with focus. In an ACP system, all levels are knitted together to ensure that each student achieves the requisite skills and a recognized credential with the ability to progress further in the education and training pipeline. Progressing through these levels is not necessarily linear, depending on the skill level of the individual.

Career Ladders and Laddering Curriculum

The ACP concept is founded on an approach to curriculum and career preparation in which the student (who may also be an employee) progresses through a series of steps, like rungs on a ladder. Hence the terms *career ladder* and *ladder curriculum*.

As illustrated in the graphic on the following page, each academic ladder should be aligned with the corresponding career ladder in industry.

A career ladder is a series of steps or occupational levels within a given company or occupation. Employees work their way up career ladders by increasing their knowledge and skills and contributing to the success of the companies for which they work. In most cases, each rung requires a higher level of knowledge and skills than the one(s) below it and rewards the employee with higher pay and/or other benefits. Whether, and how fast, a person advances along a career ladder is determined by his or her ability to meet *standards,* specific requirements as to what the person must know and be able to do before moving up. Some standards are developed locally by individual companies. Others are developed by government agencies, professional associations, or advisory boards that oversee entire industries. In an ACP, cooperating employers—some of whom might normally be competitors—develop a common career ladder that is applied consistently among the ACP students who work for those

employers. (Hinckley et al., *Adult Career Pathways: Providing a Second Chance in Public Education,* CORD, 2011)
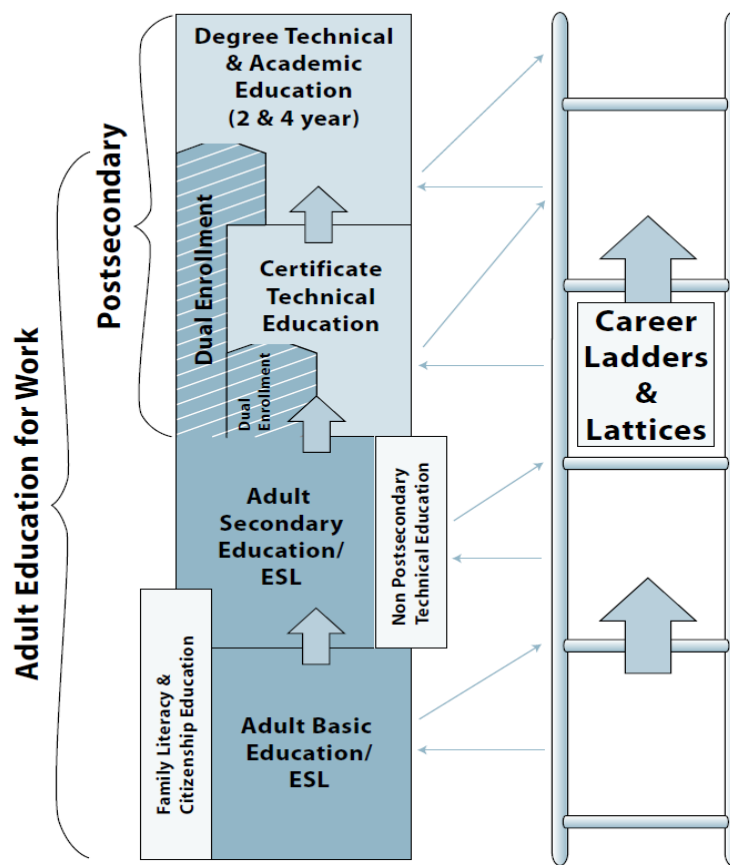
Source: *Guide to Adult Education for Work: Transforming Adult Education to Grow a Skilled Workforce,* National Center on Education and the Economy, 2009
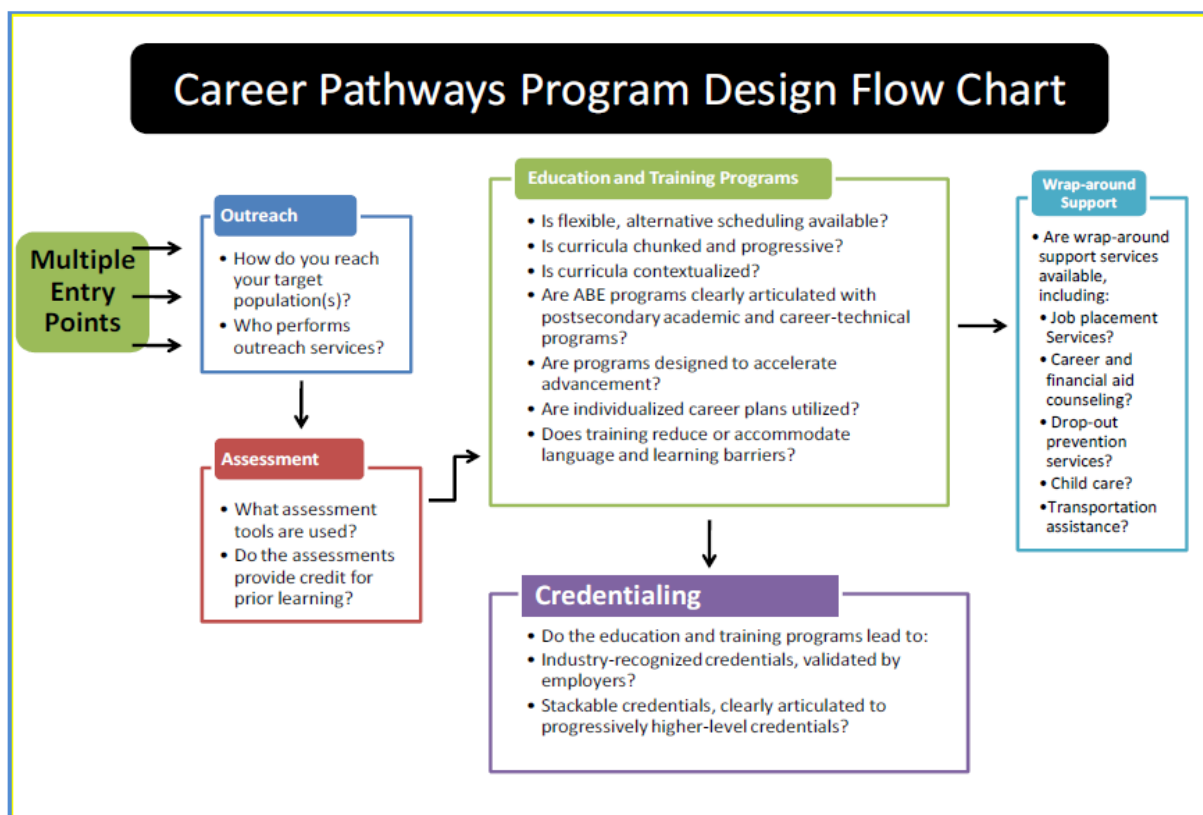
Just as a career ladder denotes a series of job-performance levels, each corresponding to certain knowledge and skills within a given occupational area, a ladder curriculum consists of a series of educational levels that students are expected to attain as they move through their programs. When the programs are career-focused, as is the case with ACP, the knowledge and skills to be mastered through the ladder curriculum should be determined jointly by educators and employers. Employers are uniquely qualified to say what employees in their fields should know and be able to do. By definition, every ACP curriculum advisory committee should include representatives of the employers for whom the ACP students will work. (Hinckley et al., *Adult Career Pathways*)

There is no standard template for creating a ladder curriculum. Because of its flexibility, the ladder curriculum model can be customized for different settings. In some cases, it might not

take the form of a ladder—in which students progress in a strictly linear fashion—but rather a lattice or web, allowing for lateral movement as well. Not all students are able to work through their educational programs sequentially without stopping. Some make lateral moves, exiting their programs to take care of personal needs, work full time, or acquire additional knowledge and skills appropriate to their current levels before progressing to the next levels.
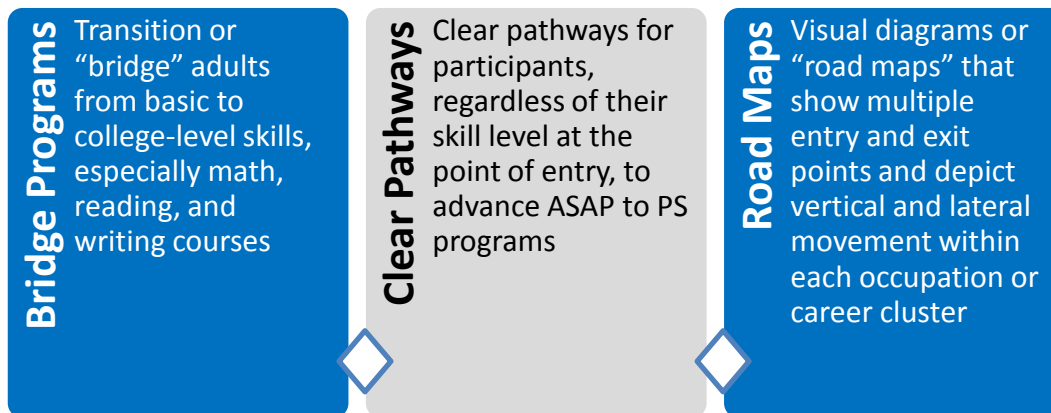
Program Design

Program design involves considerations such as outreach, assessment, and credentialing. The following flowchart, developed by Social Policy Research Associates on behalf of the U.S. Department of Labor, Employment, and Training Administration (August 2011), provides questions that should be asked during the program design process.

Career Pathways Program Design Flow Chart

Multiple Entry Points

Outreach
- How do you reach your target population(s)?
- Who performs outreach services?

Assessment
- What assessment tools are used?
- Do the assessments provide credit for prior learning?

Education and Training Programs
- Is flexible, alternative scheduling available?
- Is curricula chunked and progressive?
- Is curricula contextualized?
- Are ABE programs clearly articulated with postsecondary academic and career-technical programs?
- Are programs designed to accelerate advancement?
- Are individualized career plans utilized?
- Does training reduce or accommodate language and learning barriers?

Credentialing
- Do the education and training programs lead to:
- Industry-recognized credentials, validated by employers?
- Stackable credentials, clearly articulated to progressively higher-level credentials?

Wrap-around Support
- Are wrap-around support services available, including:
- Job placement Services?
- Career and financial aid counseling?
- Drop-out prevention services?
- Child care?
- Transportation assistance?

Every ACP should consist of three design components: (1) The main focus is on transitioning or **bridging** adults from basic to college-level skills, especially math, reading, and writing courses. (2) Every program should provide **clear pathways** for participants, regardless of their skill level at the point of entry. (3) Every program should provide a visual diagram or **road map** that shows multiple entry and exit points and depicts vertical and lateral movement within each occupation or career cluster.

The following figure shows these three components.

| **Bridge Programs** | Transition or "bridge" adults from basic to college-level skills, especially math, reading, and writing courses | **Clear Pathways** | Clear pathways for participants, regardless of their skill level at the point of entry, to advance ASAP to PS programs | **Road Maps** | Visual diagrams or "road maps" that show multiple entry and exit points and depict vertical and lateral movement within each occupation or career cluster |

Chunking

You will sometimes hear the phrase "chunking the curriculum." Chunking involves breaking up a degree program into "chunks" of classes. Completion of each chunk earns in a competency-based certificate recognized by employers.

FORM 3	Use **FORM 3** to weigh the relevant benefits of and barriers to chunking.

Your partnership will begin by identifying industry sector(s) and corresponding occupations for implementation and curriculum development. The credentials associated with these occupations are at the "heart" of that curriculum because they determine the "exit points" where adult learners will enter the workforce.

FORM 4	Use **FORM 4** to inventory the types of credentials associated with the occupations you are considering for implementation.

Many times in a partnership there are many different training providers that provide the associated credentials within an occupation.

FORM 5	Use **FORM 5** to identify the types and titles of the credentials and which training providers issue them.

Bridge Programs

Most AE/ESL learners need a "prep stage" or bridge to transition to postsecondary education or training. Bridge programs ease the transition to postsecondary education by integrating basic skills instruction (or English language instruction) with occupational skills training, and they are suitable for adults who have reading and mathematics skills at or below the tenth-grade level. Well-crafted adult education and ESL bridge programs can reduce or even eliminate the need for developmental education because they are closely aligned with the requirements of postsecondary education. Bridge programs can be developed for students at all levels, although students at the lowest skill levels may need to take several types of bridge programs (including "pre-bridges") before they are ready for postsecondary education.

The essential features of a bridge program are:
Modular curriculum
Connects points on a career ladder
Industry certification articulates with academic degrees
Curriculum is contextualized
Learning assessments are project-based
Specific criteria to enter and exit
Articulates to other bridges and to postsecondary education
Academic support is incorporated into lesson plans
Offers career counseling
Offers non-academic support services as part of the regular schedule

Adapted from *How to Build Bridge Program That Fits into a Career Pathways: A Step-by-Step Guide Based on the Carreras en Salud Program in Chicago*
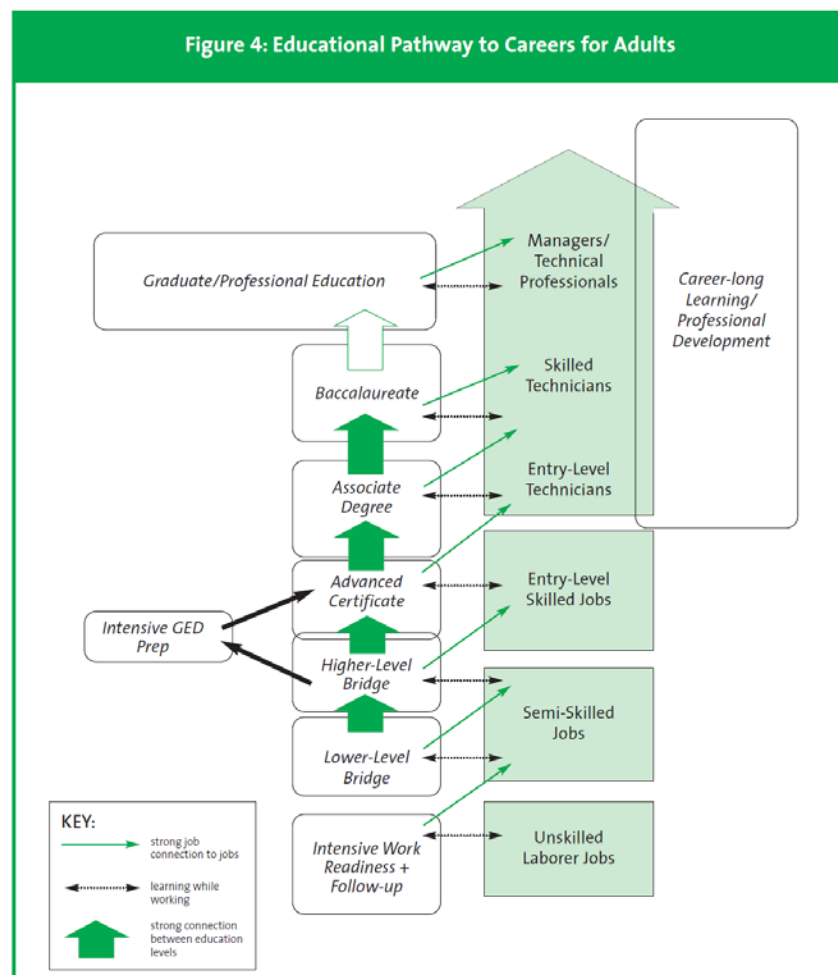
National Snapshot

Following is a national snapshot of the bridge programs represented in the 2010 BridgeConnect survey, a national survey designed to help determine the depth and breadth of bridge programs throughout the country.

- The survey showed that bridge program participants generally have low educational skills when they enter the programs. In fact, 57 percent of the adults served by survey respondents possess educational skills below the tenth-grade level, with 19 percent below the sixth-grade level.

- Bridge programs are structured to meet the needs of adult participants. They offer instruction at times and places that are convenient to working adults, offer a "learning-by-doing" format, and allow students to work at their own pace.

- Most programs are cohort-based, allowing students to progress through their classes together. The average class size is between ten and 19 students; the average program length is 20 weeks.

- By definition, bridge programs have an industry focus. Seventy-five percent of the programs surveyed target allied health. Other occupations or industries served include
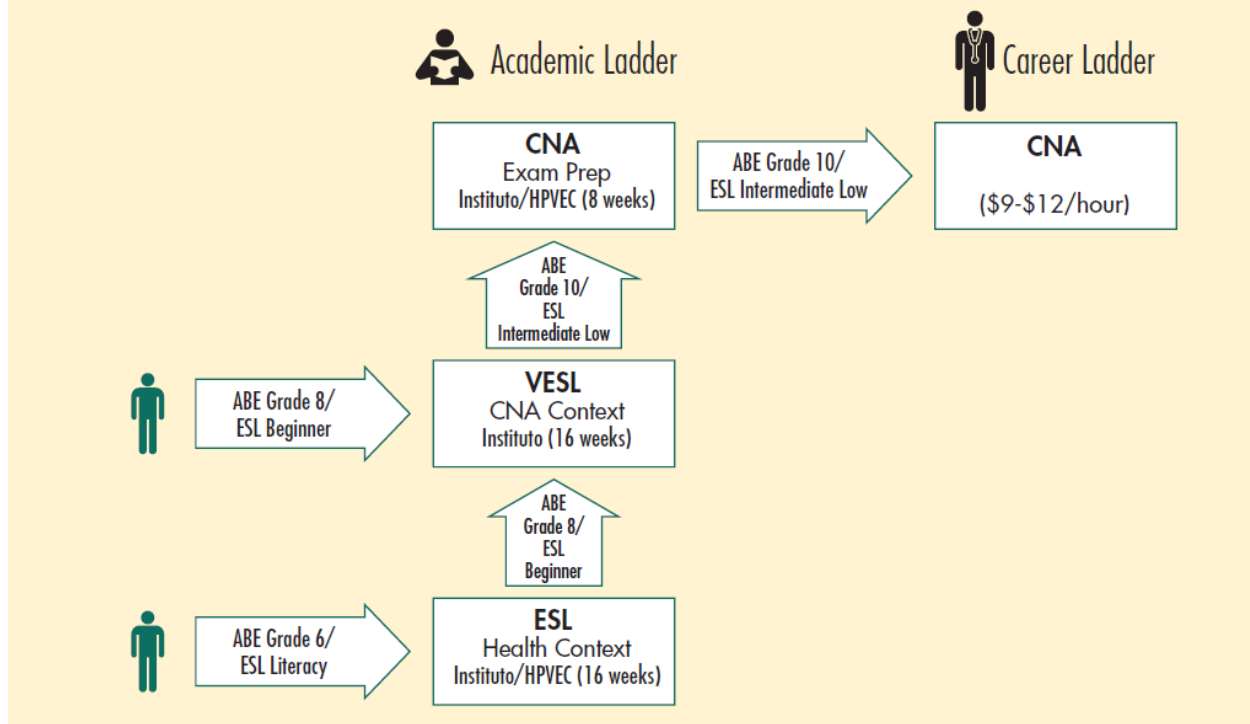
administrative/office technologies, the construction trades, energy, information technology, and manufacturing. (Workforce Strategy Center, *Building a Higher Skilled Workforce: Results and Implications from the BridgeConnect National Survey,* Nov 2010, http://www.workforcestrategy.org/images/pdfs/publications/bridge_connect_report_2010-11.pdf)

Bridge training can be built on existing educational programs that serve low-skilled adults, but these programs should be reconfigured to ensure a connection both to job advancement and to further education. Most bridge programs cannot be purchased "off the shelf" like training curricula or instructional software. Developing a bridge program is a process of adapting existing programs and services or adding new ones to enable the target population to advance to higher levels of education and employment. The particular form and content of a bridge program will depend on both the needs of the individuals to be served and the requirements of the education programs and jobs at the next level.
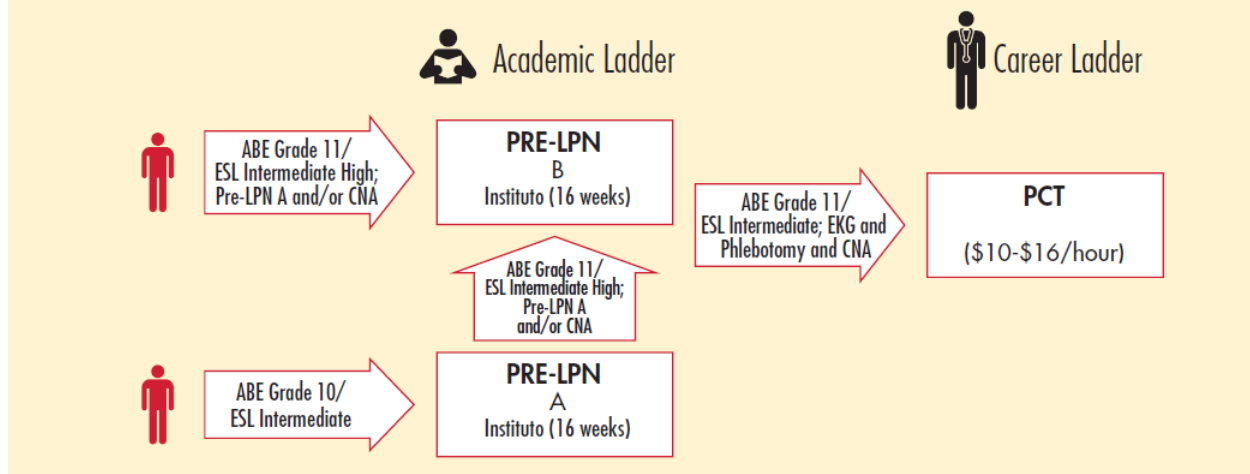

Figure 4: Educational Pathway to Careers for Adults

Source: *Bridges to Careers for Low-Skilled Adults: A Program Development Guide,* Women Employed with Chicago Jobs Council and UIC Great Cities Institute, 2005
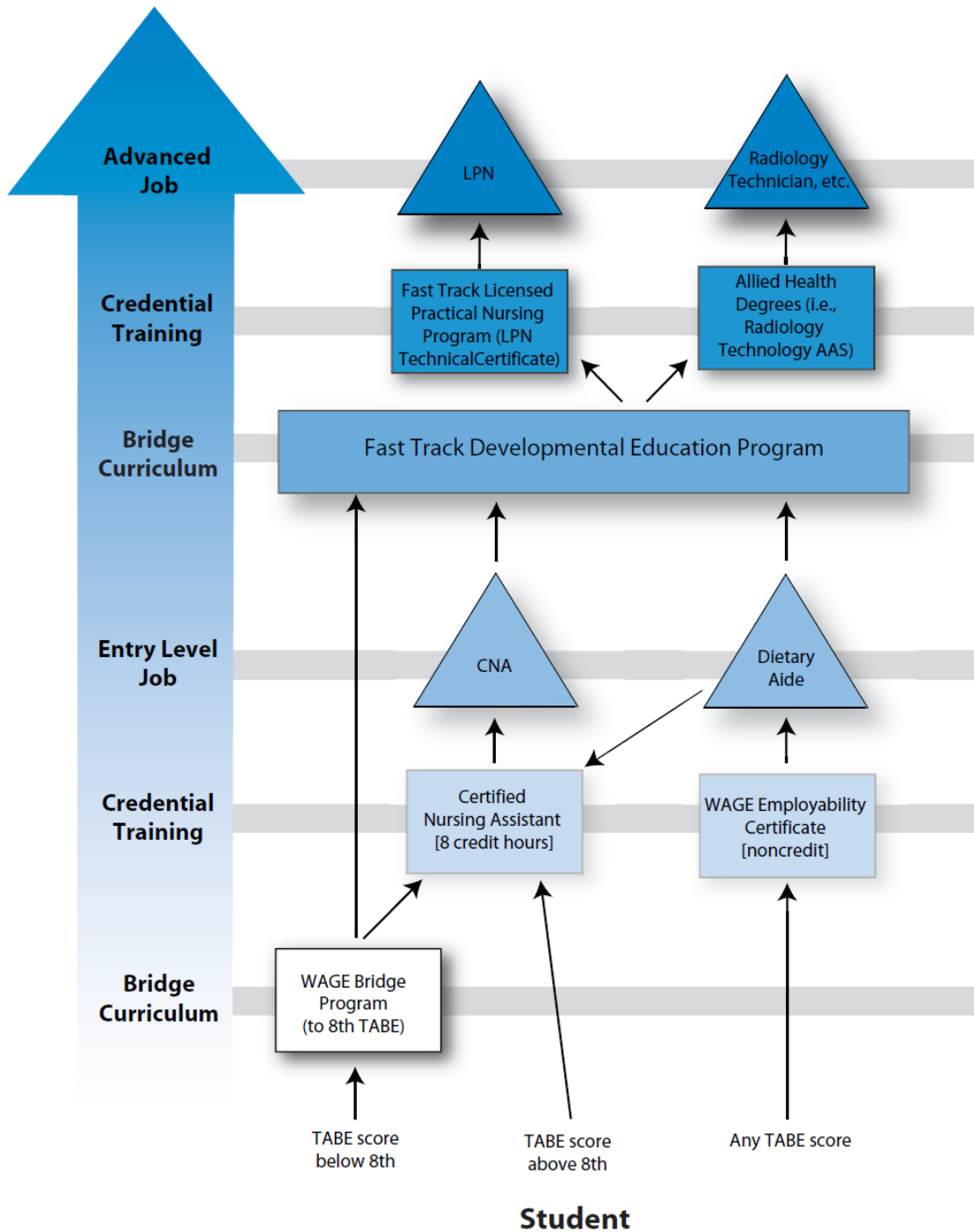
Designing a Bridge Program Involves These Steps
Identify the target population and assess their learning and career goals and barriers to success.
Identify jobs and further education and training programs that would provide opportunities for advancement for the target population and map out the requirements of entry and success in those jobs and educational programs.
Conduct a gap analysis to determine how well existing programs or services prepare members of the target population to enter and succeed in the targeted job and education programs and highlight where individuals are "falling through the cracks."
Redesign existing program components and create new ones to address gaps and create "bridges" to better jobs and higher-level education and training.

Adapted from *Bridges to Careers for Low-Skilled Adults*

FORM 6	Use **FORM 6** to identify strategies and timelines for each of the bridge program design steps.

Flowchart Examples (with Bridges)

Flowchart examples with bridge programs for the adult learner are provided so that you can learn from promising practices from across the nation.

Examples 1A, 1B and 1C
Taken from *How to Build Bridge Programs That Fit into a Career Pathway:*
A Step-by-Step Guide Based on the Carreras en Salud Program in Chicago

THE CARRERAS EN SALUD PATHWAY MODEL

Carreras en Salud Pre-CNA Bridge Flow Chart

Academic Ladder

Career Ladder

CNA
Exam Prep
Instituto/HPVEC (8 weeks)

→ ABE Grade 10/
ESL Intermediate Low →

CNA

($9-$12/hour)

↑ ABE Grade 10/ ESL Intermediate Low

VESL
CNA Context
Instituto (16 weeks)

ABE Grade 8/
ESL Beginner →

↑ ABE Grade 8/ ESL Beginner

ESL
Health Context
Instituto/HPVEC (16 weeks)

ABE Grade 6/
ESL Literacy →

Carreras en Salud Pre-LPN Bridge Flow Chart

Academic Ladder

Career Ladder

ABE Grade 11/
ESL Intermediate High;
Pre-LPN A and/or CNA →

PRE-LPN
B
Instituto (16 weeks)

→ ABE Grade 11/
ESL Intermediate; EKG and
Phlebotomy and CNA →

PCT

($10-$16/hour)

↑ ABE Grade 11/ ESL Intermediate High; Pre-LPN A and/or CNA

ABE Grade 10/
ESL Intermediate →

PRE-LPN
A
Instituto (16 weeks)

Example 2
Taken from the Arkansas Career Pathways Initiative

Example 3

Taken from *Bridges to Careers for Low-skills Adults: A Program Development Guide,*
Women Employed with Chicago Jobs Council and UIC Great Cities Institute
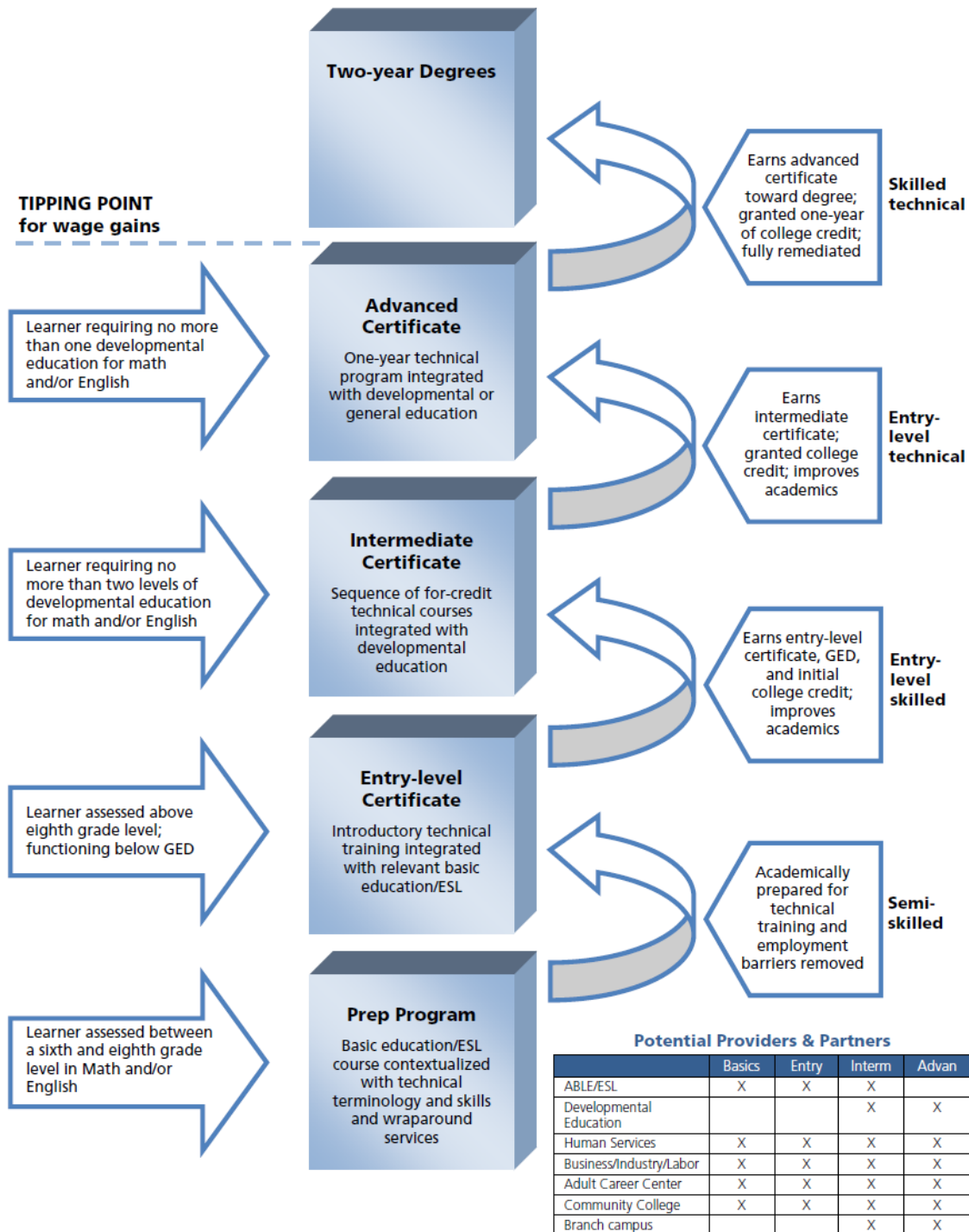

Figure 6: City Colleges of Chicago Workforce Bridge Program
Transportation, Warehousing, and Logistics
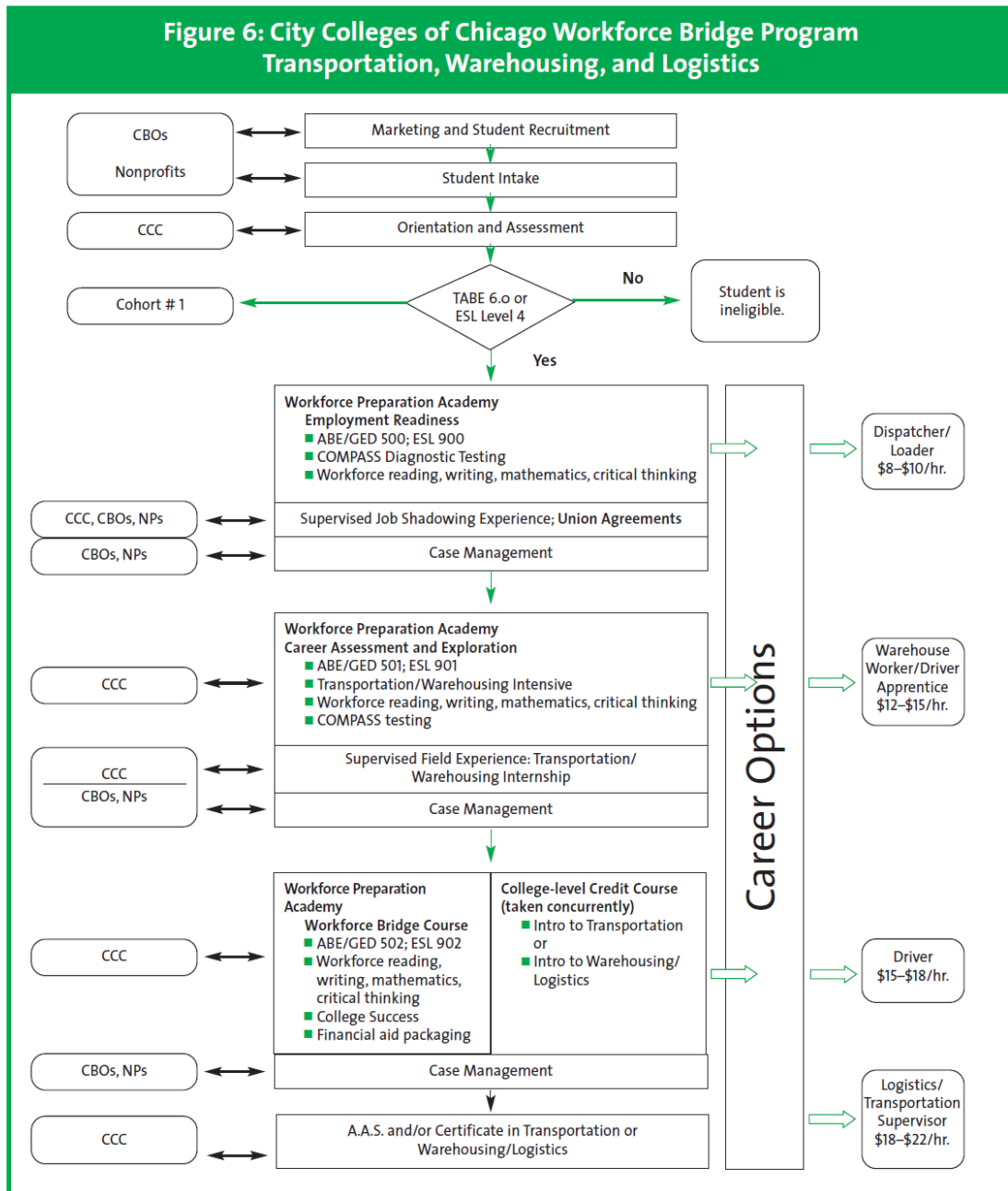
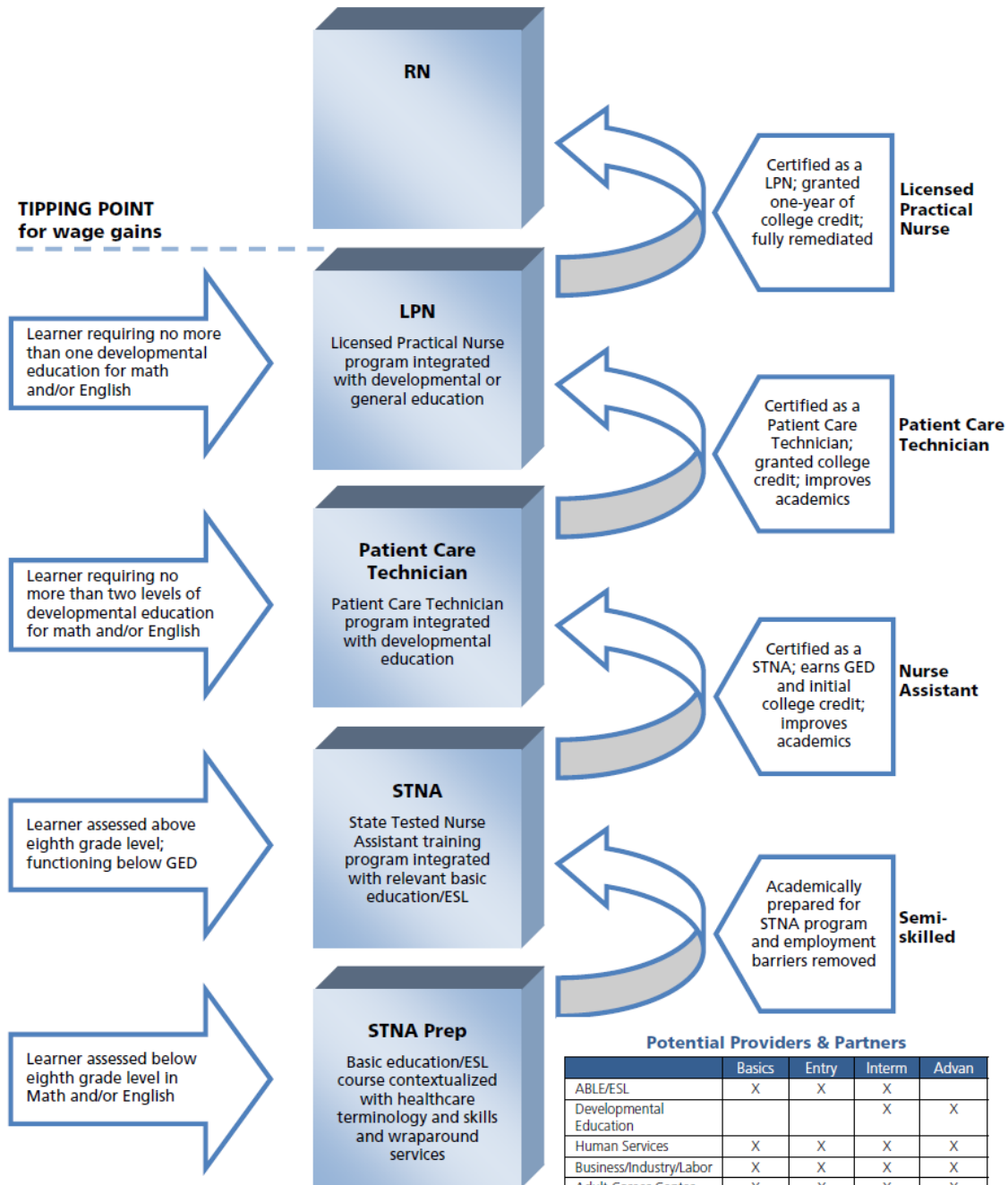**Example 4: Owensboro Community and Technical College**
Taken from *Achieving Ambitious Goals: Case Studies of Scaling-Up Programs
for Advancing Low-Skilled Adults,* May 2011
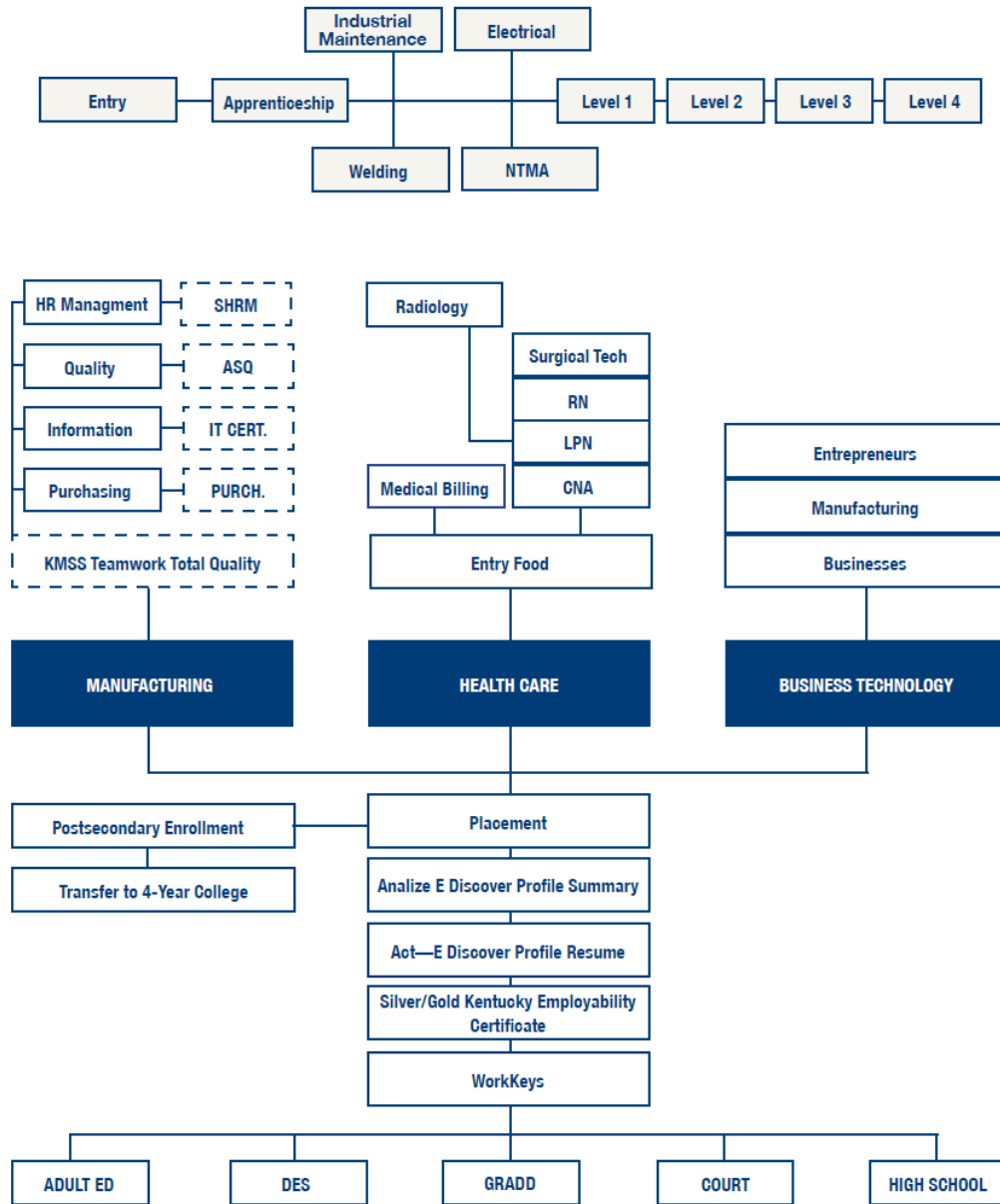
Examples 5A and 5B: Ohio Stackable Certificates
Taken from *Ohio Stackable Certificates: Models for Success,* February 2008

Two-year Degrees

TIPPING POINT
for wage gains

Earns advanced certificate toward degree; granted one-year of college credit; fully remediated

Skilled technical

Learner requiring no more than one developmental education for math and/or English

Advanced Certificate

One-year technical program integrated with developmental or general education

Earns intermediate certificate; granted college credit; improves academics

Entry-level technical

Learner requiring no more than two levels of developmental education for math and/or English

Intermediate Certificate

Sequence of for-credit technical courses integrated with developmental education

Earns entry-level certificate, GED, and initial college credit; improves academics

Entry-level skilled

Learner assessed above eighth grade level; functioning below GED

Entry-level Certificate

Introductory technical training integrated with relevant basic education/ESL

Academically prepared for technical training and employment barriers removed

Semi-skilled

Learner assessed between a sixth and eighth grade level in Math and/or English

Prep Program

Basic education/ESL course contextualized with technical terminology and skills and wraparound services

Potential Providers & Partners

	Basics	Entry	Interm	Advan
ABLE/ESL	X	X	X	
Developmental Education			X	X
Human Services	X	X	X	X
Business/Industry/Labor	X	X	X	X
Adult Career Center	X	X	X	X
Community College	X	X	X	X
Branch campus			X	X

RN

TIPPING POINT
for wage gains

Certified as a LPN; granted one-year of college credit; fully remediated — **Licensed Practical Nurse**

Learner requiring no more than one developmental education for math and/or English

LPN

Licensed Practical Nurse program integrated with developmental or general education

Certified as a Patient Care Technician; granted college credit; improves academics — **Patient Care Technician**

Learner requiring no more than two levels of developmental education for math and/or English

Patient Care Technician

Patient Care Technician program integrated with developmental education

Certified as a STNA; earns GED and initial college credit; improves academics — **Nurse Assistant**

Learner assessed above eighth grade level; functioning below GED

STNA

State Tested Nurse Assistant training program integrated with relevant basic education/ESL

Academically prepared for STNA program and employment barriers removed — **Semi-skilled**

Learner assessed below eighth grade level in Math and/or English

STNA Prep

Basic education/ESL course contextualized with healthcare terminology and skills and wraparound services

Adapted from the Pre-STNA and Plus program, Cuyahoga Community College and the Healthcare Career Pathways program, Pickaway-Ross Career & Technology Center

Potential Providers & Partners

	Basics	Entry	Interm	Advan
ABLE/ESL	X	X	X	
Developmental Education			X	X
Human Services	X	X	X	X
Business/Industry/Labor	X	X	X	X
Adult Career Center	X	X	X	X
Community College	X	X	X	X
Branch campus			X	X

Example 6: Olympic Washington
Taken from *Ohio Stackable Certificates: Models for Success,* February 2008
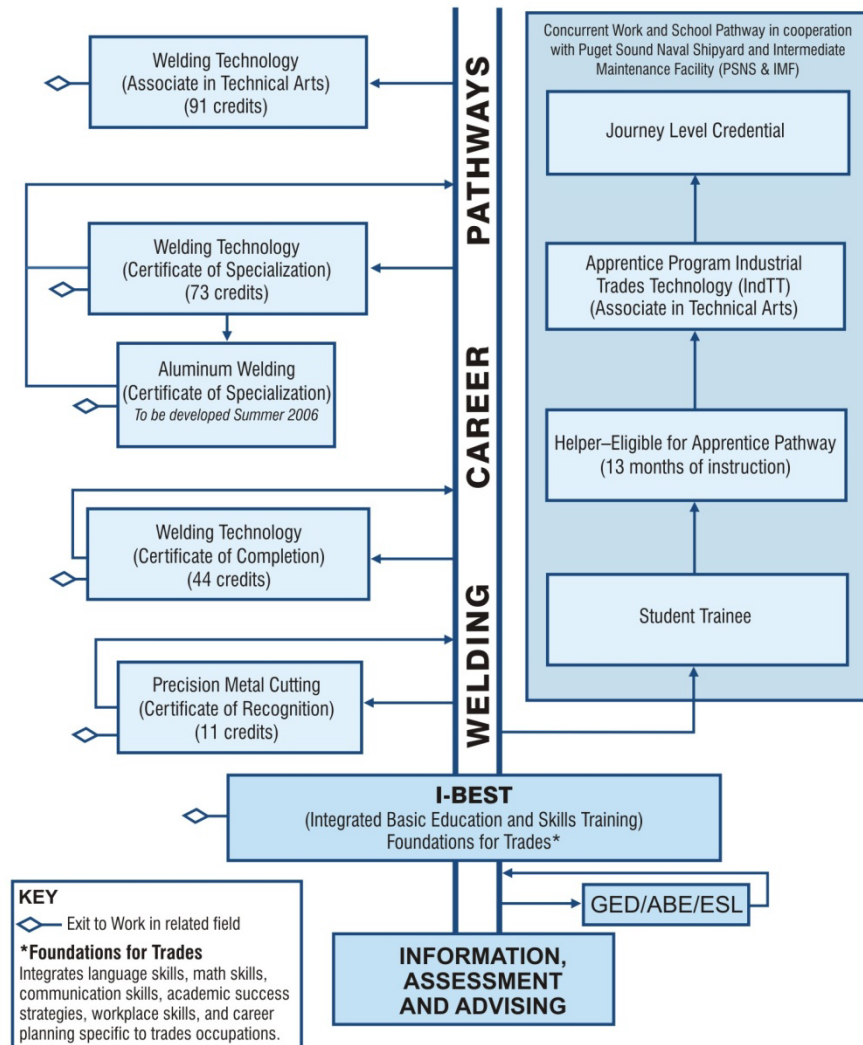
College-level welding program is enhanced with basic skills instruction through:

Foundations for Trades

- 10 credits, counts only as elective
- 10 hours a week, 10 weeks
- Co-taught 50% of time (Adult basic education instructor teaches 100% of class; professional-technical instructor attends 50% of classes)
- Work and college readiness, including study habits, job expectations, etc.
- Removal of barriers to job and school, teaching students crisis management, helping find housing
- Introduction to basic welding concepts, including reading blueprints
- Lab observation of welding tools

Precision Metal Cutting Certificate of Recognition

- 11 credits, counts toward degree
- Two courses: Blueprint Reading (classroom) and Welding (laboratory)
- Technical Curriculum taught by professional-technical instructor
- Adult basic instructor teaches college success strategies, including note-taking and study habits; reviews welding vocabulary; emphasizes on-the-job safety by reviewing how to read dials and gauges properly; blueprint reading; and available for academic tutoring before and/or after class

Example 7: Minnesota FastTrac

Taken from *Strengthening the Skills of Our Current Workforce: Recommendations for Increasing Credential Attainment Among Adults in Minnesota,* 2011

THE FASTTRAC MODEL
FastTRAC helps educationally underprepared adults achieve success in high-demand careers that pay family sustaining wages by integrating basic skills and career and technical education along a pathway from pre-literacy to a postsecondary credential.

POSTSECONDARY CREDENTIAL
Studies suggest that students in programs like FastTRAC are 29 to 35 percent more likely to earn a college credential than students in more traditional programs.

ADDITIONAL SUPPORT FOR ADULT LEARNERS
All along the pathway, support services, career advising, work experiences, and skill assessments are provided by workforce development professionals, employers, community-based organizations, and human services providers.

INTEGRATED ADULT BASIC EDUCATION
Integrated courses developed and taught by Career and Technical Education program faculty and Adult Basic Education instructors.

BRIDGE II
High intermediate basic skills and focused preparation for targeted postsecondary occupational courses in the context of a specific occupational sector.

BRIDGE I
Low intermediate reading, writing, speaking, and math skills taught in the context of a variety of occupational sectors.

BRIDGE PREP
Intentional focus on work by embedding work skills into beginning adult basic education.

Example 8: Wisconsin Rise Model

Taken from *Beyond Basic Skills: State Strategies to Connect Low-Skills Students to an Employer-Valued Postsecondary Education*

ADULT BASIC ED
ENGLISH LANG. LEARNING
WORK READINESS

BRIDGE INSTRUCTION

WTCS EMBEDDED CREDENTIALS

APPLIED ASSOCIATE DEGREE
TECHNICAL DIPLOMA

BACCALAUREATE DEGREE

UNSKILLED JOB

SEMI-SKILLED JOB

ENTRY-LEVEL SKILLED JOB

ENTRY-LEVEL TECHNICIAN

SKILLED TECHNICIAN

MANAGERS & TECHNICAL PROFESSIONALS

APPRENTICESHIP
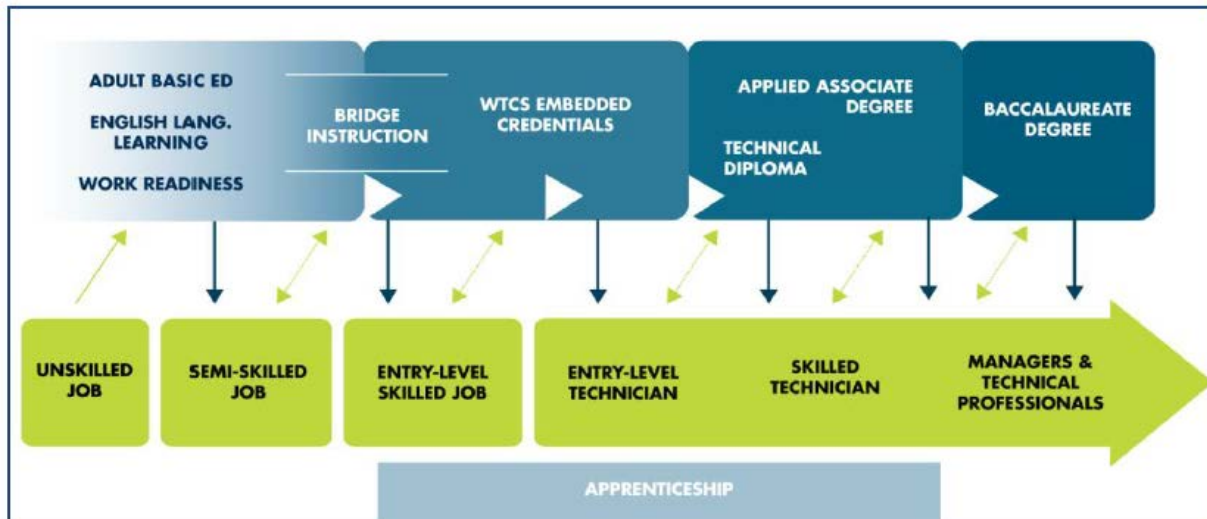
Resources

- *Adult Career Pathways News*—An online collection of instructional resources from the *Designing Instruction for Career Pathways* project. The collection consists of a broad variety of teaching resources—ranging from course outlines to lesson plans and activities—appropriate for AE, ASE, and ELL programs. http://www.acp-sc.org/

- Illinois Online Bridge Directory—The directory presents information about current bridge instruction offered by Illinois' community colleges and adult education providers. Bridge programs listed in this online directory are based on Illinois' Bridge Definition. http://occrl.illinois.edu/projects/shifting_gears/bridge_directory

- *Credential Resource Guide* : The U.S. Department of Labor has developed the "*Credential Resource Guide.*" http://wdr.doleta.gov/directives/attach/TEGL15-10a2.pdf

- *Florida Ready to Work,* an employee credentialing program that tests and scores job skills and work habits. http://www.floridareadytowork.com/

- For other toolkits in the Career Pathways arena, please check out www.ncpn.info

Forms

FORM 1: Adult Education: Moving Towards "New Basics"										
Has your AE moved toward the "New Basics"? Please rate each component below:	Disagree←——————→Agree									
	1	2	3	4	5	6	7	8	9	10
Students and employers are the customers.										
The curriculum includes work-readiness skills, and preparation for postsecondary education is the primary goals										
The content focus includes literacy, numeracy, and English language skills as well as thinking and reasoning skills (*problem solving, team work and following instructions*).										
Basic skills are taught in a work context that stresses good work habits.										
Program goals are driven by the learner's employment goals, the skill requirements for a family-sustaining job, and the entry requirements of postsecondary education and training.										
Most students achieve a high level of basic and workforce readiness skills and are prepared to enter postsecondary education and training and family-sustaining jobs.										

FORM 2: Career Pathways: Possible Candidates for Entry of AE Learner

	Possible Growth *Low-Med-High*	List Possible Occupations	√ Secondary Program Available	√ Postsec Program Available	Candidate for Entry of AE and/or ESL Learner? AE	ESL
Agriculture, Food & Natural Resources						
The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.						
Food Products and Processing Systems						
Plant Systems						
Animal Systems						
Power, Structural & Technical Systems						
Natural Resources Systems						
Environmental Service Systems						
Agribusiness Systems						
Architecture & Construction						
Careers in designing, planning, managing, building and maintaining the built environment.						
Design/Pre-Construction						
Construction						
Maintenance/Operations						
Arts, A/V Technology & Communications						
Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.						
Audio and Video Technology and Film						
Printing Technology						
Visual Arts						
Performing Arts						
Journalism and Broadcasting						
Telecommunications						
Business Management & Administration						
Careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations.						
General Management						
Business Information Management						
Human Resources Management						
Operations Management						
Administrative Support						
Education & Training						
Planning, managing and providing education and training services, and related learning support services.						
Administration and Admin. Support						
Professional Support Services						
Teaching/Training						
Finance						
Planning, services for financial and investment planning, banking, insurance, and business financial management.						
Securities & Investments						
Business Finance						

	Possible Growth *Low-Med-High*	List Possible Occupations	√ Secondary Program Available	√ Postsec Program Available	Candidate for Entry of AE and/or ESL Learner?	
					AE	**ESL**
Accounting						
Insurance						
Banking Services						
Government & Public Administration						
Planning and performing government functions at the local, state and federal levels, including governance, national security, foreign service, planning, revenue and taxation, and regulations.						
Governance						
National Security						
Foreign Service						
Planning						
Revenue and Taxation						
Regulation						
Public Management and Administration						
Health Sciences						
Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.						
Therapeutic Services						
Diagnostic Services						
Health Informatics						
Support Services						
Biotech Research and Development						
Hospitality & Tourism						
Hospitality & Tourism encompasses the management, marketing and operations of restaurants and other food services, lodging, attractions, recreation events and travel related services.						
Restaurants and Food/Beverage Services						
Lodging						
Travel & Tourism						
Recreation, Amusements & Attractions						
Human Services						
Preparing individuals for employment in Career Pathways that relate to families and human needs such as counseling and mental health services, family and community services, personal care, and consumer services.						
Early Childhood Development & Services						
Counseling & Mental Health Services						
Family & Community Services						
Personal Care Services						
Consumer Services						
Information Technology						
Building linkages in IT occupations for entry level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia and systems integration services.						
Network Systems						
Information Support and Services						
Web and Digital Communications						
Programming and Software Development						
Law, Public Safety, Corrections & Security						
Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.						

	Possible Growth *Low-Med-High*	List Possible Occupations	√ Secondary Program Available	√ Postsec Program Available	Candidate for Entry of AE and/or ESL Learner?	
					AE	**ESL**
Correction Services						
Emergency and Fire Mgt Services						
Security & Protective Services						
Law Enforcement Services						
Legal Services						
Manufacturing						
Planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.						
Production						
Mfg Production Process Development						
Maintenance, Installation & Repair						
Quality Assurance						
Logistics & Inventory Control						
Health, Safety and Environ. Assurance						
Marketing						
Planning, managing, and performing marketing activities to reach organizational objectives.						
Marketing Management						
Professional Sales						
Merchandising						
Marketing Communications						
Marketing Research						
Science, Technology, Engineering & Mathematics						
Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.						
Engineering and Technology						
Science and Math						
Transportation, Distribution & Logistics						
Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.						
Transportation Operations						
Logistics Planning and Mgt Services						
Warehousing and Distribution Ctr. Op.						
Facility and Mobile Equipment Maint.						
Transportation Systems/Infrastructure						
Planning, Management and Regulation						
Health, Safety and Environmental Mgt						
Sales and Service						

FORM 3: "Chunking" Discussion Form	
Benefits of Chunking	**Barriers to Chunking**

FORM 4: Credential Checklist									
List Occupations for which the partnership is considering a CP implementation:	**Check all that apply for any credentials associated with occupation:**								
	Industry Recognized	Stackable	Portable	Certificate	AAS Degree	Apprenticeship	License	Other

FORM 5: Credential and Training Provider Crosswalk

Occupation:

Type of Credential a Title of Credential *List the type of credential (e.g. Certificate, Degree, Certification, License, or Apprenticeship)*	Training Provider *List all training providers that provide this certificate.*

Occupation:

Type of Credential & Title of Credential *List the type of credential (e.g. Certificate, Degree, Certification, License, or Apprenticeship)*	Training Provider *List all training providers that provide this certificate.*

Occupation:

Type of Credential & Title of Credential *List the type of credential (e.g. Certificate, Degree, Certification, License, or Apprenticeship)*	Training Provider *List all training providers that provide this certificate.*

FORM 6: Bridge Program Design Steps: Strategies and Timelines

Identify target population to be served and assess their learning and career goals and barriers to success.

Strategies or Activities	Timeline	Person/Group Assigned	Notes

Identify jobs and further education and training programs that would provide opportunities for advancement for the target population and map out the requirements of entry and success in those jobs and educational programs.

Strategies or Activities	Timeline	Person/Group Assigned	Notes

Conduct a gap analysis to determine how well existing programs or services prepare members of the target population to enter and succeed in the targeted job and education programs and highlight where individuals are "falling through the cracks."

Strategies or Activities	Timeline	Person/Group Assigned	Notes

Redesign existing program components and create new ones to address gaps and create "bridges" to better jobs and higher-level education and training.

Strategies or Activities	Timeline	Person/Group Assigned	Notes

Create a program flowchart to carefully review the elements that are in place and determine remaining gaps.

Strategies or Activities	Timeline	Person/Group Assigned	Notes

	Yes	No	Notes
Is the bridge curriculum in modules?			
Does the bridge connect points on a career ladder?	Yes	No	Which?

Industry certification articulates with academic degrees
Curriculum is contextualized
Learning assessments are project-based
Specific criteria to enter and exit
Articulates to other bridges and to post-secondary education
Academic support is incorporated into lesson plans
Offers career counseling
Offers non-academic support services as part of the regular schedule