



Building
Blocks for

Building Skills

An Inventory of Adult Learning Models and Innovations

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Prepared by

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For the U.S. Department of Labor WIRED Initiative

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About CAEL

The Council for Adult and Experiential Learning (CAEL) is a national, non-profit organization whose mission is to expand learning opportunities for adults. CAEL consults with colleges and universities to improve their programs and services for adults, manages tuition assistance and career development programs for employers, consults with employers on how to implement learning programs and policies, and links employers and industries to providers of education and training. Through several initiatives, CAEL advocates and facilitates shifts in policy to support lifelong learning and workforce development.

For over 30 years, CAEL has been the recognized leader both nationally and internationally for advocacy of quality standards in the area of Prior Learning Assessment (PLA) and for adult-centered higher education. Both regional accrediting bodies and policy organizations promoting higher education for adults turn to CAEL for leadership, and CAEL provides consulting and technical assistance to colleges and universities in how to improve their policies and practices.

CAEL now directly serves over 500,000 adult learners who are supported by their employers for education and training by annually administering over \$178 million in tuition assistance benefits on behalf of employers. CAEL hosts an annual conference and numerous training events for professionals in the field of adult learning, leads both national and local demonstration projects that promote lifelong learning, and develops new approaches to serving adult learners through our Adult Learning Focused Institution (ALFI) initiative.

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The number of key components and innovations included in the monograph are many, and most of these are illustrated by examples of real learning initiatives. Rhonda Saad at CAEL doggedly pursued details on those programs and helped in the writing or revision of the profiles.

We at CAEL are grateful to the staff and leadership of the organizations who graciously contributed details for the profiles. Without their pioneering spirit, entrepreneurial excellence, and dedication to adult learners and employers alike, we would have no model programs from which to learn.

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Introduction

The skills of the workforce are an important contributor to the economic vitality of any region, leading economic developers to consider how to connect their efforts to workforce development and help to build the skills of adults generally.

The specific strategic response will certainly vary from region to region, depending on what industries are thriving or emerging in a given region, what their current and future skill needs are, existing education and training capacities, and how important the skills of the workforce are likely to be in attracting and retaining business and industry. Skill needs can require a response as basic as literacy, English as a Second Language (ESL) training, basic math, or functional literacy (such as reading a train or bus schedule). They can require something more specialized, such as learning industry-defined skills to qualify for better paying jobs in a new field or to advance within an industry. Skill needs may require support for individuals pursuing associate's or bachelor's degrees, or high-demand credentials such as those developed in the IT and healthcare fields. Skills needed within the workplace can include knowing how to work as a team, project management, learning how to be a supervisor, or communicating effectively with co-workers and supervisors.

Regardless of the skill needs identified, regional stakeholders and workforce development practitioners do not need to start completely from scratch when designing new programs to meet those needs. They can draw on adult learning research as well as the experience of other practitioners to help design the right adult learning or skill development programs.

This report, produced for the U.S. Department of Labor's Workforce Innovation in Regional Economic Development (WIRED) initiative, presents the key components – or building blocks – of effective adult learning and skill development programs. The building blocks have been identified from existing research on this topic, the experience and networks of the Council for Adult and Experiential Learning (CAEL), as well as documented best practices of practitioners nationwide. The report is intended to be a resource for Workforce Investment Boards, employers, workforce development organizations, or traditional education and training providers who are planning to develop learning initiatives that are linked to the economic needs of a region.

The components of and innovations in exemplary adult learning programs outlined in this report have been highlighted in three different kinds of source material. Some of the components draw on several decades of work in **the adult learning field**, epitomized by the work of academic researchers like Malcolm Knowles (the “father of adult learning”). Other components have been drawn from **research on community college programs** and a growing body of **literature on training low-skilled workers** that is produced by academics, non-profit organizations, philanthropic foundations, the public sector and professional evaluators. Finally, the report includes components drawn from the findings of the **corporate training field**.

WHAT YOU WILL FIND IN THIS REPORT

In this report, along with descriptions of and background for each of the **key components** for adult learning and skill training programs, are **examples of real programs** that have used these building

blocks to achieve their goals. (Many of these programs are from healthcare learning and career advancement programs, largely because the looming staffing shortages in healthcare have led to more experimentation and innovation. These model programs offer lessons that are applicable to other fields.)

In addition, the report discusses some of the most effective and promising **innovations** that various organizations have tried and/or promoted. Innovations are defined here as strategies that are introducing something new or unique in terms of a delivery method, an approach, or a service, in order to achieve greater programmatic impact and outcomes. Unlike the key components, or building blocks, these innovations need not be requirements of an adult learning or skill building program. Rather, regions and practitioners are urged to consider them in order to enhance initiatives and/or achieve selected outcomes.

OVERVIEW OF THE COMPONENTS AND INNOVATIONS

Designing and developing a learning initiative is a multi-step process. In the design model presented here, the first step requires **Need-focused Planning and Analysis**, during which practitioners will clearly define the problem they hope to solve, identify the specific skill needs of a region and its employers, and scan the environment for relevant learning initiatives that are already offered.

The second step in this design model is one in which practitioners flesh out the kind of program they plan to offer, what delivery systems will be used, what learning modules they will offer, and what kind of degree or certificate or other outcome will result. We call this step **Progress- and Success-focused Program Design** because the learning initiative will need to have a format that supports success (both academic and on-the-job) and that motivates the learner to persist and complete discrete steps toward a learning goal.

The third step is **Adult-Centered Implementation**, which provides key components and innovations in the actual delivery of learning experiences. These draw upon a rich history of adult learning theory and practice, in which **Assessment** of skills and competencies takes precedence over “seat time,” **Support Services** provide adults with guidance and assistance in removing various barriers to learning, and the **Teaching-Learning Process** includes a wide range of strategies for instructional delivery that are in sync with the way in which adults best learn.

Finally, the model acknowledges that there are important components of the design process that do not occur in a single step. **Strategic Partnerships** are important throughout the process, as practitioners involve employers, community colleges and other training providers, public sector agencies, trade associations, chambers of commerce and others in the planning, design and implementation of a learning initiative. It is also important that practitioners consider and carry out **Evaluation** components from the very beginning of the initiative. At the start, proper program evaluation requires that practitioners set clear goals and outcomes for a project that will shape and define the data collected throughout the initiative. After the launch of the program, there is not only summative evaluation that looks at important outcomes, but also formative evaluation that feeds important information back to the program in order to realize continuous improvement in both design and implementation.

The individual key components associated with each part of the process are presented within this model below, along with the program innovations closely associated with those components. Figure 1 then shows how the different steps in the model work together and build upon each other.

Step 1: Need-focused Planning and Analysis

Define the problem

Consult labor market information

Determine local employer needs

Assess current offerings/ conduct gap analysis

Identify the target population

Step 2: Progress- and Success-focused Program Design

Use delivery systems and formats that make the learning accessible to the target population

- Innovation: Accelerated learning programs
- Innovation: Online programs

Make the learning sequential, progressive, and competency-based

- Innovation: Bridge programs
- Innovation: Progressive career ladder programs
- Innovation: Apprenticeship programs

Broaden the experience base

- Innovation: Provide internships
- Innovation: Provide transitional jobs

Step 3: Adult-Centered Implementation

Assessment

Provide individual assessment of skills, interests, and learning outcomes

- Innovation: Prior Learning Assessment
- Innovation: Work readiness credential

Student Support

Conduct outreach

Provide advising and other academic support

- Innovation: The use of peers for support and learning
- Innovation: The use of mentors in learning and at work

Provide social support services

Check in and follow up with the student

- Innovation: Retention/Post-placement support

Find ways to ease the financial burden of training and learning

Adult-Centered Teaching-Learning Process

Make it relevant

- Innovation: Incorporate soft skills training into design of the program

Integrate content

Engage the learner as an adult

Draw on the learner's experience

Vary training techniques to appeal to different learning styles

- Innovation: Use of "Blended Learning"

Create a positive learning environment

Be sensitive to cultural differences

Give frequent and immediate feedback

Overarching Program Components

Strategic Partnerships

Involve employers

- Innovation: Sector-based approaches

Expand capacity and close system gaps by working with local partners

- Innovation: Addressing regional economic priorities

Evaluation

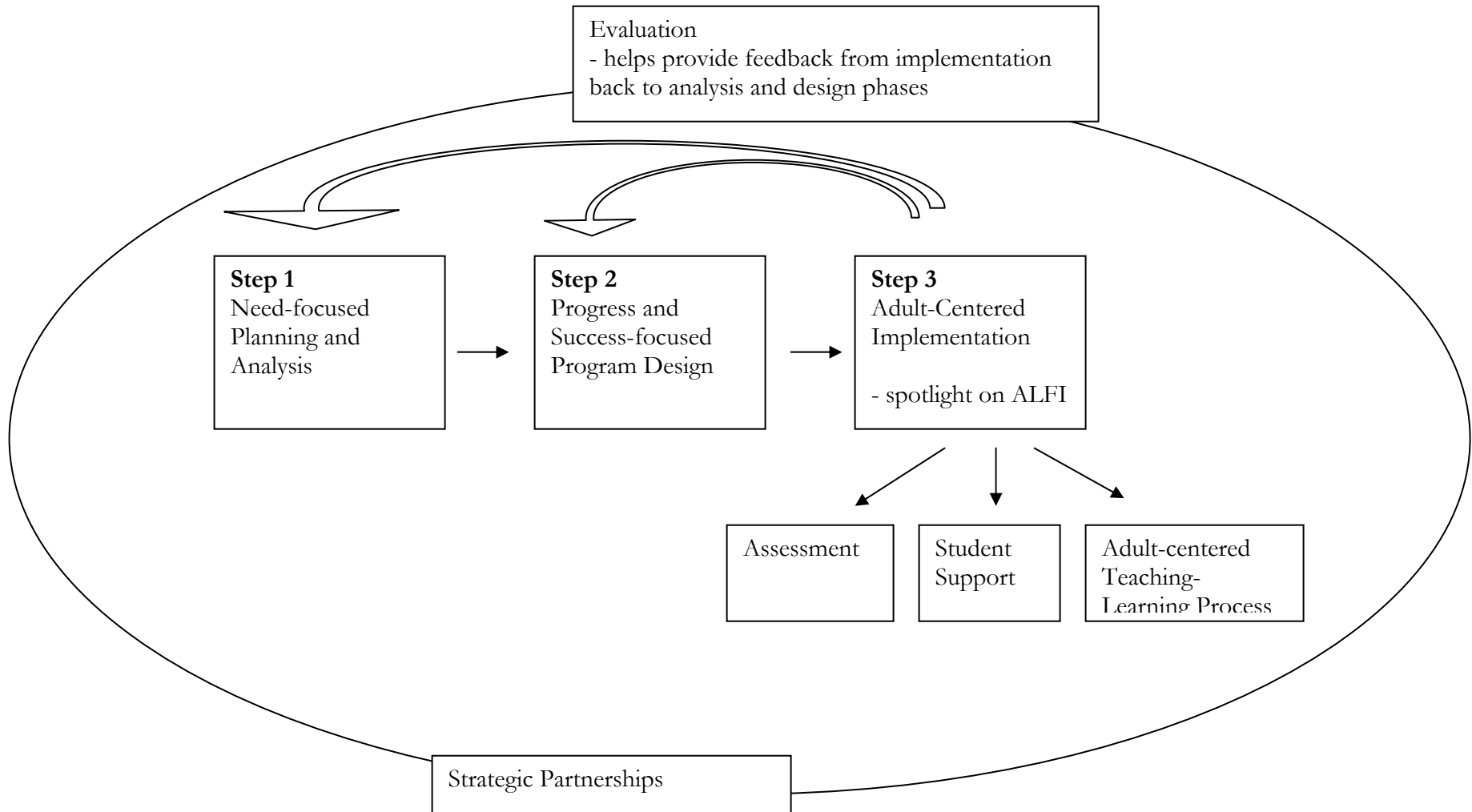
Set clear goals and outcomes

Track basic participation and demographic data

Conduct a formative evaluation

Conduct a summative evaluation

Figure 1. The Building Skills Strategically Design Model



Step 1: Need-focused Planning and Analysis

When planning a cross-country road trip, a traveler does not typically wait until 600 miles into it before asking fellow travelers if they want to come along, looking at a map, checking for weather conditions, and finding out if an old high school buddy can offer a place to sleep. Some planning before a major undertaking is usually helpful, if not critically important.

In this section, we highlight several key components for defining and assessing the steps that need to be taken prior to any other activity in the process:

- **Define the problem**
- **Consult labor market information**
- **Determine local employer needs**
- **Assess current offerings/ conduct gap analysis**
- **Identify the target population**

Three of the key components – Define the Problem, Assess Current Offerings, and Identify the Target Population – are applicable to any adult learning/skill building program. The remaining two – Consult Labor Market Information, and Determine Local Employer Needs – are primarily important when designing a program in workforce development or job training.

Define the problem

The whole point of a learning program is to develop the needed skills or knowledge of an individual or group. Literacy programs are often offered because people are having difficulty getting through their everyday lives: helping children with homework, reading a bus schedule to get to work, understanding a medical bill, and so on. Computer classes – even those offered through community centers or park districts ostensibly “for fun” – are provided because people want to be part of a new trend or because they are recognizing the benefits to using that knowledge in their work or home lives.

Workforce Investment Boards, community colleges and universities, One-Stop Career Centers, and community-based organizations (CBOs) offer skill building and adult learning programs for clear reasons as well. Though it may seem very obvious to program planners, it may be a helpful exercise to take some time at the start of the planning process to define what problem the learning initiative is designed to solve. Are employers leaving the area because they cannot find needed skills in the existing workforce? Is there a need to attract new industries or employers to the region that will require new skills and competencies—and therefore retraining—of the existing workforce? Are employers or potential learners expressing frustration that a certain course, certification, or degree program does not exist? Are current education and training offerings underutilized or oversubscribed? Are adults who enroll in existing programs having difficulty sticking with the

program? After completing the program, are they able to demonstrate and apply the skills that the program was designed to impart?

Once program planners have clearly defined the problem, they will have a better idea of what kind of additional information will be needed. For example, in the early 1990s, San Antonio saw its economy shifting from manufacturing to service jobs. The community was concerned about the fate of so many of its residents who did not have the skills that were required for the new jobs. The problem was clear: there was a skills mismatch in San Antonio. But more information was needed to arrive at a solution. Community organizers talked to residents and local employers to find out more information. They learned that people were interested in gaining skills and training for jobs. They learned that skilled jobs were available in healthcare. And they learned that there was no organization that was providing training to prepare individuals for those healthcare jobs in San Antonio. The now well-known organization Project Quest was subsequently launched to meet this initial need; it has since addressed other training-related problems in the community (Klein-Collins, 2006).

For a learning initiative, therefore, it is important to conduct some additional research to determine the ideal solution to the defined problem.

Consult Labor Market Information

If part of the problem to be solved involves addressing the future employment prospects for a group of people, an important step in the analysis needs to be a focus on labor market information. Before training people for specific jobs, learn the answers to the following questions:

- Is there a demand locally for a particular job or set of jobs?
- Is that demand projected to grow, decline, or stay about the same in the coming years?
- How are those jobs potentially vulnerable to other factors in the local, national or global economy, such as technology advances or offshoring? Similarly, are they vulnerable to likely changes in public policy?

The importance of this step cannot be overstated. It will be wasted effort if the resulting training programs fill jobs with limited shelf-life. The best programs will help participants meet the evolving demands of the local economy, not just short term demands but long term ones as well. A good guide for how to analyze local labor market information is Jobs for the Future's *The Right Jobs: Identifying Career Advancement Opportunities for Low-Skilled Workers* (Goldberger, Lessell, & Biswas, 2005), which you can access online at www.jff.org.

Determine Local Employer Needs

Once it is clear what kinds of jobs are likely to be in demand in the coming years, it is helpful to get some additional information directly from employers about the skills required to perform those jobs. A study of labor market information will provide some basic information and a general direction to pursue, but only the employers themselves can describe what they already provide as on-the-job training as opposed to what they require from job applicants. An education and training initiative

will not be a success if does not cover enough of the material that local employers need, and it will be unnecessarily expensive if it focuses on skills and knowledge that are not needed or required.

Organizational example: Rhode Island Human Resources Investment Council and Rhode Island Manufacturing Extension Services

Organization/Program	Rhode Island Manufacturing Extension Services (RIMES) and Rhode Island Human Resources Investment Council North Kingstown, RI
Program Purpose	To provide workforce development solutions for small-mid sized manufacturing employers to elevate competitiveness and profitability in the Rhode Island area.
Program Description	<p>In partnership with the Rhode Island Human Resources Investment Council (effectively the WIB), RIMES receives state funds that allows them to collect matching federal funds from the US. Department of Commerce/National Institute of Standards and Technology.</p> <p>RIMES' knowledge of and working relationships with state and local workforce development agencies has enabled them to link these local resources to employers who need them. These services include highly-valued funding opportunities that employers can use for incumbent worker training, layoff aversion strategies, etc. RIMES meets regularly with local WIBs in order to learn more about the local economy and to communicate employer needs and feedback.</p> <p>RIMES staff members meet regularly with their employer partners to identify their needs and then they work to connect the employers to the necessary resources. In addition, according to RIMES' Vice President of Operations, Leslie Taito, 11 of the 16 current board members are small-mid sized manufacturing employers. RIMES often uses them as focus groups to further gauge local industry needs. Another strategy includes offering classes (related to process improvement) to their employer partners so that they can learn about current resources available to them through the One-Stop System. Classes in value stream mapping and lean manufacturing are held several times each month.</p>
Progress	<p>Since 1996, RIMES has worked with 600+ manufacturers in a wide variety of industries throughout Rhode Island. According to RIMES' website, some of its clients reported the following successes:</p> <ul style="list-style-type: none"> • RIMES project paid for itself in 3 months • Production increase of at least 15% with no additional resources • Average operational savings of \$2,000 to \$3,000 per month • Productivity increased more than 25% • Employee training that previously took 3-6 months and gave limited product knowledge, now takes several weeks and produces fully cross-trained employees • Immeasurable improvement in morale
Contact Information	<p>Leslie Taito Vice President, Operations 35 Tourgee Street North Kingstown, RI 02852 T: 401.294.3535 ltaito@rimes.org www.rimes.org</p>

Information from Leslie Taito at RIMES, Troppe & Toft, 2004 and RIMES' website.

Organizational Example: Sinclair Community College

Organization/Program	Sinclair Community College Dayton, OH
Program Purpose	To effectively meet local employer training needs and prepare students to enter the local job market.
Program Description	<p>Sinclair Community College's Business Training & Development Group, located at Sinclair's Learning Center, works with employers to create customized, workforce development training programs to meet specific needs and company goals. These non-credit programs offer comprehensive business solutions that attract over 3,000 individuals, companies, and organizations every year. A wide range of expertise is offered in everything from computer training to management development. Facilitators deliver training at the Learning Center facility or at the company's site.</p> <p>Created in 1993, the school's Advanced Integrated Manufacturing (AIM Center) focuses on helping manufacturing companies solve critical path problems, assess training needs in relation to these problems, and provide a customized course offering to meet needs. Like The Learning Center, AIM's programs are non-credit and serve the workforce development needs of local employers. AIM works with approximately 40-50 companies per year, with each partnership lasting between two to four years.</p> <p>Sinclair Community College recognized that skill mismatches between companies and the workforce were a local problem. In order to remedy this problem, the college established numerous partnerships with business and industry that have resulted directly in the development of specialized curriculum that is taken for credit. These vocational courses are tightly tied to industry standards, and the associated degrees have documented learning competencies that were established with the assistance of advisory committees, professional bodies, and employers.</p> <p>In addition, IT@Sinclair, based at Sinclair Community College, addresses the shortage of IT professionals in the region by working with local industry to develop credit and non-credit IT curricula that educate students for rapidly changing IT competencies needed in the workplace. The local IT industry includes approximately 1,100 companies that employ more than 21,000 people in high skill, high wage positions. Focusing on a lifelong learning model, IT@Sinclair develops courses and programs for: high school students via the Miami Valley Tech Prep Consortium, associates degree students, technical and industry certification exams, and professional development initiatives.</p>
Progress	In 2005, Sinclair's faculty and staff directly served over 79,453 individuals in college courses and training solutions.
Contact Information	<p>Karen Stiles, Manager, Corporate Outreach & The Learning Center 1900 Founders Drive, Suite 100 Kettering, Ohio 45420 T: 937.252.9787, x402 http://mvrp.sinclair.edu/</p> <p>Sinclair Community College 444 West Third Street Dayton, OH T: 937-512-3000 www.sinclair.edu</p>

Information from the college's website, from Karen Stiles at Sinclair Community College, and from Flint & Associates, 1999.

Organizational Example: Center for Employment Training

Organization/Program	Center for Employment Training San Jose, CA
Program Purpose	To build a successful service delivery model around the needs of populations with significant employment barriers.
Program Description	CET offers a variety of skills training and education programs of different durations, allowing for a continuous flow of graduates ready for employment. CET has crafted a model that is currently operating in 33 centers in 12 states and the District of Columbia. The CET model is an open entry/open exit classroom training program with strong business involvement and support services. Local employers and business representatives serve on an Industrial Advisory Board that helps to ensure that skills curricula, equipment, materials and training processes are up-to-date and that training is appropriate for the labor market.
Progress	Between July 1, 2002 and April 29, 2004, the 22 CET sites served 7,367 participants. Of the 7,367 participants served, there were 5,352 completers with 3,898 job placements. Of the 3,898 job placements, 80% were job related placements. The average hourly wage rate was \$9.94 and an annualized starting salary of \$24,821. The populations served during this time period were: 30% farm workers of Hispanic origin with an 80% school dropout rate and 75% limited English proficiency. Another 43% were TANF recipients and about 10% were persons with disabilities.
Contact Information	Max Martinez, Director of Communications 701 Vine Street San Jose, CA 95110 T: 408.534.5433 maxm@cet2000.org

Information from Max Martinez of CET and from U.S. Department of Labor, 2004.

See also the WIRE-NET profile in the section on Assessment for a good example of how an organization can get to know more about employer needs

Assess Current Offerings/Conduct Gap Analysis

An important consideration during the Analysis phase is what kinds of programs currently exist that provide the kind of education and training that can fill or partially meet the labor market demand and local employer needs. Part of the Analysis phase should be used to determine where there are gaps in the supply that need to be addressed.

Conversations with employers may be used to answer a number of questions, such as:

- Where do employers currently go when seeking referrals for job openings? Do training programs exist whose graduates can meet the labor need?
- Are these programs producing the number and quality of job candidates to meet the need?

- What does the employer do to further prepare new hires for the positions?

Conversations with education and training providers may be needed to answer further questions, such as:

- What are the skill requirements or other prerequisites for existing programs?
- If current programs are unable to meet the current need, is it due to a lack of available training slots, a lack of capacity within the training provider’s organization or institution, or a lack of training candidates? Is the problem quality, quantity, capacity, or all three? Are the programs accessible to the target population?
- If there is a lack of training slots, is it due to a lack of qualified instructors, a lack of funding, a lack of space, etc.?
- If there is a lack of training candidates, is this due to insufficient basic skills or qualifications of the potential training candidates, insufficient numbers of interested trainees, or lack of outreach or awareness of programs?
- If the capacity of the institution or organization is too limited, is that due to insufficient funding or other constraints?

Women Employed’s *Bridges to Careers for Low-Skilled Adults. A Program Development Guide* (Henle, Jenkins, & Smith 2005) provides some useful worksheets to use when analyzing such needs.

Identify the Target Population

Before designing and developing an education and training program, it is also critical to understand the people who will be the learners – their work history, educational background, English proficiency, communication skills, general literacy skills and any relevant occupational skills they may already have. This kind of information is important for determining what special needs and barriers they may have. For example, the population (or a portion thereof) may be lacking basic skills, they may have a sporadic work history, or they may not have a high school diploma or GED (Massachusetts Association for Community Action, 2004).

Surveys, focus groups and/or individual interviews can help clarify needs and barriers. Questions to guide your discussions may include:

- What are the basic literacy levels of the target population?
- Are there non-native English speakers? If so, what is the range of ESL fluency in the population? Is the population literate in its native language?
- Does the population have basic computer skills?
- What are their short-term and long-term occupational goals? Do they have a career plan? An education plan?
- What is the nature of their work experience? What kinds of jobs have they held in the past?
- What barriers do they face and what support services are needed?

- Do they understand the nature of the work for which they are applying? (Adapted from Henle et al, 2005.)

Resources and Tools for Need-focused Planning and Analysis

- **O*NET.** The Occupational Information Network - O*NET™ database is the nation's primary source of occupational information. The website <http://online.onetcenter.org/> provides information on various occupations, and <http://www.onetcodeconnector.org/> provides assistance in matching job titles to O*NET-SOC codes.
- Goldberger, S., N. Lessell and R. R. Biswas. (2005, September). The right jobs: identifying career advancement opportunities for low-skilled workers. A guide for public and private sector workforce development practitioners. Jobs for the Future. *This guide helps practitioners carry out an analysis of labor market information. It explains what data to use, how to find it, and how to give the data analysis a "reality check" by consulting local employers and asking them directly what their future employment needs are likely to be. See www.jff.org to download a free .pdf version of this report.*
- Henle, T., D. Jenkins and W. Smith. (2005). Bridges to careers for low-skilled adults. A program development guide. Women Employed, Chicago Jobs Council and UIC Great Cities Institute. *This guide provides a number of worksheets to help in identifying job and education requirements, mapping job levels, and conducting a gap analysis.*
- Merzon, Fredda and Bonita Primus Cohen. (2004). The Career Pathways Collaboration Toolkit. CAEL. *This toolkit was designed to help lead organizations connect higher education, local employers, and the local workforce development system around the creation of career pathways in selected industries. It contains guidance and tools on topics such as how to research employer/sector needs and resources. A hard copy of the toolkit is provided as one of the WIRED resources, and a pdf version of it is available at the WIRED resource website.*

Step 2: Progress- and Success-focused Program Design

After conducting the preliminary needs analysis, the next step is the **Design** of the program. There are many ways to define design. In this report, we use the term to describe the process of determining how your learning initiative will be structured and delivered to the learners in order to maximize their success both academically and on-the-job. The design phase is where program staff decides what support services are needed, what content to offer, when to offer it, how to offer it, and how newly-gained competencies will be recognized and rewarded.

Key Components include:

- **Use delivery systems and formats that make the learning accessible to the target population**
 - Innovation: Accelerated learning programs

- Innovation: Online programs
- **Make the learning sequential, progressive and competency-based**
 - Innovation: Bridge programs
 - Innovation: Progressive career ladder programs
 - Innovation: Apprenticeship programs
- **Broaden the experience base**
 - Innovation: Provide internships
 - Innovation: Provide transitional jobs

Use Delivery Systems and Format That Make the Learning Accessible to the Target Population

What was once considered to be an innovation in adult learning is now standard practice at most, if not all, higher education institutions. To increase access to adults and working students, many programs are offered on schedules conducive to a 9-to-5 worker's schedule, for example, in the evenings or on weekends. Even with the many offerings with non-traditional schedules, there are still programs that presume that students are not working full time, such as nursing programs and automotive training (Goldberger et al, 2005).

Offering programs on weekends or evenings may not solve the time problem for every worker – some workers have schedules that can be unpredictable in terms of time of day (e.g. retail) and/or day of the week (e.g. healthcare). District 1199C Training and Upgrading Fund has addressed this problem by making its Learning Center available seven days a week, fourteen hours a day to accommodate the various schedules in healthcare (see organizational example below).

Even when training is offered at a convenient time, sometimes the location of the training can create barriers if transportation is an issue or if the travel time to and from training is more than people can add to already busy schedules. To remove this barrier, some training programs are located at the worksite, if there are enough trainees to make that offering worthwhile to the training provider. Common onsite programs include GED and ESL programs as well as customized training programs, apprenticeship programs, and other career ladder programs.

Another strategy for making learning more accessible is to offer a range of delivery methods for certain courses of study. For example, Macomb Community College's Workforce Development Institute (see <http://www.macomb.edu/wdi/learning.asp>) offers the delivery options of:

- Instructor-led classroom instruction
- On-site or off-site
- e-Learning/Online learning/Web-based learning
- Hands-on labs and situational learning
- Computer based CD-ROM training
- Interactive distance learning
- Blended learning (Online, instructor led, & hands-on)

These options are designed to make learning as accessible as possible, even for people who work unusual or unpredictable hours. Other strategies to consider are **accelerated or compressed learning programs**, in which the curriculum is designed to allow adults to complete the program quickly (Henle et al, 2005). The innovations of Accelerated Learning Programs and Online Learning are described in greater detail below.

Organizational Example: 1199 C Training and Upgrading Fund

Organization/Program	New Faces Program 1199C Training and Upgrade Fund Philadelphia, Pennsylvania
Program Purpose	To create a healthcare career ladder that successfully attracts candidates from non-traditional populations such as the unemployed, immigrants and entry-level workers.
Program Description	The program is designed to take applicants at any employment level and move them into technical and professional positions. Rather than a single ladder, there are multiple pathways in the program. One pathway takes a participant from home health worker to nurse aide, then to Licensed Practical Nurse, Registered Nurse and Baccalaureate nurse. Other educational career ladders include radiology, behavioral health, health information technology, and child care. The Training Fund operates its own Practical Nursing Program and provides a comprehensive range of remedial and preparatory classes. The program's Learning Center is open seven days a week, fourteen hours per day to accommodate the various work shifts in healthcare. The curriculum is grounded in healthcare, using materials and experience from the healthcare setting.
Progress	The 2005 Practical Nursing graduates have had a 100% pass rate on the NCLEX-PN, the state boards. Students can begin with GED, Adult Diploma, or high school refresher programs and work their way all the way through college level classes at the Fund's Learning Center located in the center of Philadelphia. In 2004-2005, 4,127 students attended classes at the Fund's Learning Center or were supported to attend schools and universities throughout the Delaware Valley; in addition, 2,987 students were placed into employment.
Contact Information	Cheryl Feldman, Director 1319 Locust St. Philadelphia, PA 19107 T: 215.568.2220 cfeldman@1199ctraining.org

Information from Cheryl Feldman and from Prince & Mills, 2003.

Innovation: Accelerated Learning Programs

Many adults want to be engaged in learning activities, particularly those that can help them in their careers. However, the time commitment of traditional degree programs can be a considerable barrier for people who work full time. “Accelerated programs” are designed to take less time than

conventional or traditional courses.¹ As of 2003, The Center for the Study of Accelerated Learning had identified 250 colleges and universities with programs specifically identified as accelerated (Wlodkowski, 2003).

In accelerated learning programs – which can include programs for certificates and degrees – course material is presented in less time than in conventional courses. For example, the course may have only twenty hours of class time as opposed to forty-five hours. A course may also be presented in a condensed period of time, such as a sixteen week course presented in a five week period. While critics have expressed concern about the quality of the learning experience and the ability of an accelerated course to cover the material with sufficient rigor, there is evidence that adults in accelerated programs learn “satisfactorily” and on par with the results from conventional course work (Wlodkowski, 2003).

At this time, undergraduate business management programs have attracted the most enrollees compared with other accelerated program offerings, primarily because there is a large adult market for such programs and because the business curriculum is relatively easy to break down into standardized modules (Wlodkowski, 2003). Other types of accelerated offerings include MBA programs. For instance, Regis University offers an “MBA Fast Track program” in which adults can earn an MBA in only 16 months, online (see www.mbaregis.com). Nursing programs are also offered in an accelerated format, most commonly for students who already have undergraduate degrees in other areas. According to the American Association of Colleges of Nursing (2005), 168 accelerated BSN programs are currently offered, with many more in the planning stages.

¹ Readers should be aware that the term “accelerated learning” is not only used for courses that are compressed or shortened. The term is also used for a specific learning methodology that is multidimensional in nature and that places the learner at the center of the experience. This learning methodology has been influenced by movement such as natural learning, the theory of multiple intelligences, learning style research, and collaborative learning (Imel, 2002a). While there can be overlap in the uses of the term, the term can have distinctly different meanings. For the goals and purposes of this report, we are applying the term “accelerated learning” to programs that differ from conventional courses in duration and/or intensity.

Organizational Example: Research College of Nursing

Organization/Program	Accelerated Bachelor of Science in Nursing (BSN) Option Research College of Nursing Kansas City, MO
Program Purpose	To address the time barrier for individuals interested in transitioning to a new career in nursing.
Program Description	Research College of Nursing developed an accelerated one-year BSN curriculum for students with a previous bachelor's degree in a non-nursing field. The program is offered with a web-enhanced format from August to August, and participants are expected to attend full time. The program offers students over 1100 clinical hours. Prerequisites for the program include some liberal arts, science and nursing courses, and the completion of 15 hours of residency at Rockhurst University. Following completion of the one-year program students are eligible to sit for the RN licensure exam (NCLEX-RN).
Contact Information	Leslie Mendenhall mendenhall@researchcollege.edu T: 866.855.0296 or 816.995.2820 Research College of Nursing 2525 E. Meyer Blvd. Kansas City, Missouri 64132.

Information from www.researchcollege.edu.

Innovation: Online Programs

Distance learning has been revolutionized by technological advances, most notably the Internet. Online programs are now commonly offered through colleges and universities, and in many environments, online learning in and of itself is no longer seen as something unusual or innovative. A recent Sloan-C Consortium study found that sixty-three percent of institutions that offer face-to-face undergraduate instruction also offer undergraduate courses online, and nationwide online enrollment increased from 1.98 million in 2004 to 2.35 million in 2005 (Allen & Seaman, 2005).

But even though online delivery of instruction has become more common in recent years, there are still many new uses that practitioners are finding for such strategies. Rio Salado College, for example, has developed a blended learning program for LPN-to-RN students: much of the content is presented in an online format, and the students complete their clinical requirements at healthcare organizations (see <http://www.rio.maricopa.edu/nursing/>). (The Rio Salado program is part of the CAEL nursing career lattice program, offered as an organizational example of career ladder innovations later in this section.) CAEL has worked with business and labor leaders in two other sectors, telecommunications and utilities, to develop industry-specific online degree programs. These programs have been developed with Pace University and Bismarck State College (see example below and www.cael.org/online_alliances.htm).

Online learning requires that students are somewhat disciplined, however, and so this delivery method may be more challenging for some populations.

Organizational Example: Council for Adult and Experiential Learning

Organization/Program	<p>(NACTEL) – National Coalition for Telecommunications Education and Learning, serving the telecommunications industry, and (EPCE) – The Energy Providers Coalition for Education, serving the utilities industry.</p> <p>Council for Adult and Experiential Learning Denver, Colorado</p>
Program Purpose	To develop skills and provide industry-sanctioned career paths for incumbent workers and individuals wishing to enter industries facing shortages of high skill workers and rapidly-changing technologies
Program Description	<p>CAEL's Industry-Led Online Alliances are led by a consortium of industry leaders, both labor and business, and work with selected colleges and universities with online degree and certificate programs. These programs encourage participation in intensive, industry-developed education, delivered in an asynchronous online format via the internet. CAEL has led the development of these international initiatives in two major industry sectors—telecommunications and utilities (both the electric power side of the industry and the nuclear power side).</p> <ul style="list-style-type: none"> • The guiding principle for this work is: “By the Industry – For the Industry.” • Each initiative creates online learning options, aligned with internal training, to address critical employment needs with programs that target both incumbent workers and those new to the industry. • Each is led by a national coalition that includes employers, industry associations, and unions. • Each initiative works closely with leading online institutions of higher education. • With an online learning format, technicians in both industries can continue their education from any place in the country.
Progress	<p>Pace University has offered a NACTEL-sponsored curriculum for eight years. Students can achieve an associate's degree, a bachelor's degree or one of several certificates in telecommunications.</p> <ul style="list-style-type: none"> • More than 2000 students have taken nearly 15,000 courses in Pace NACTEL programs. • These students come from all 50 states, with an average age of 36. • A joint university-industry committee continually updates the curriculum; most recently, NACTEL add a degree emphasis in fiber, networking and emerging telecommunications technologies. <p>Bismarck State College has offered an EPCE-sponsored curriculum for 5 years</p> <ul style="list-style-type: none"> • More than 700 students have taken EPCE-sponsored courses. • To meet industry demand, EPCE now sponsors curriculum content in both Electric Power and Nuclear technologies. • EPCE is now adding new providers to offer an industry-sponsored bachelor's degree.
Contact Information	<p>Susan Kannel CAEL Senior Director for Online Programs T: 303.804.4664 skannel@cael.org http://www.cael.org/online_alliances.htm</p>

Information from Susan Kannel at CAEL.

Organizational Example: Southwest Minnesota Private Industry Council, Inc.

Organization/Program	Bridging Distances in Healthcare & RN Degree Program Southwest Minnesota Private Industry Council, Inc. Marshall, MN
Program Purpose	To educate and train students in rural Minnesota (primarily adult learners) who are committed to their local communities and interested in a nursing career, and to bridge the gap between students in rural communities and healthcare education throughout the state.
Program Description	Bridging Distances in Healthcare (BDH) project was launched in 2002 as a collaborative effort between the workforce investment system, healthcare businesses, economic development agencies and education partners. Each Bridging Distances in Healthcare project is characterized by a local "champion" who establishes and works with an advisory group comprised of representatives from the various stakeholders including the student population. Nursing education is provided through distance learning modalities, such as video tapes, CD-ROMs, and online learning, helping to make education more accessible in the rural areas. Also, clinical experiences, a critical and required component, are provided by local healthcare providers. The program goal for each participant is a 2-year RN degree and state certification. Support services include providing student tuition, adding classrooms to healthcare facilities, collaboration between hospital and college staffs on instruction and mentoring programs and donating supplies and other resources.
Progress	Through the project, 298 students enrolled in the nursing programs, in fourteen sites throughout rural Minnesota. By September 2005, when the project was completed, 220 students had completed training, and 31 were still in progress. Included in this number were 24 students who were supported to complete their Bachelor's or Master's degrees in nursing, selected based on their interest in becoming future nurse educators. In addition, the Bridging Distances in Healthcare initiative expanded to include additional opportunities such as the development of Healthcare Careers Preparatory Academies to help more students get into a healthcare career.
Contact Information	Carol Dombek, Project Manager 129 West Nichols Avenue Montevideo, MN 56265 T: 320-269-5561 cdombek@ngwmail.des.state.mn.us

Information from Carol Dombek of the Southwest Minnesota Private Industry Council, Inc. and U.S. Department of Labor, 2004.

Organizational Example: Marshall Community & Technical College

Organization/Program	Public Library Technology Certificate Program Marshall Community & Technical College Huntington, WV
Program Purpose	To provide individuals without a professional library degree (and sometimes no post-secondary education) with college credits, additional training, and practical skills so they may be able to provide library services to their communities.
Program Description	The program consists of a 33 credit hour certificate and a 66 credit hour major for the Associate of Applied Science (AAS) degree. The content of this program is delivered entirely through the Internet using WebCT VISTA, a course management program. Earning a certificate or associate's degree can provide the on-the-job training and/or the credits to propel a student into a Bachelor of Arts program that is also online. Requirements for the certificate include 18 hours of library science classes and 15 hours of general studies coursework. Requirements for the major include 36 hours of library science and 30 hours of general studies. Examples of Library Science classes include: Public Library Organization and Administration; Public Library Technology; Public Library Cataloging and Technical Services; and Public Library Children's & Young Adult Services. Examples of General studies courses include: Written & Oral Communication; Business Math; Human Relations; and Fundamentals of Computers.
Contact Information	Monica Brooks, Program Coordinator/Associate Dean of Libraries Marshall University 1 John Marshall Drive Huntington, WV 25755 T: 304.696.6613 http://www.marshall.edu/library/plt/default.asp Brooks@marshall.edu

Information from Monica Brooks at Marshall University and the Southern Growth Policies Board website
<http://www.southern.org/ideabank/workforce/selfdirected/printer%20friendly/wv1.shtml>

Make the Learning Sequential, Progressive and Competency-Based

Most learning is sequential, with new skills and knowledge or building on existing skills and knowledge as one progresses. Programs assess where students are and begin the learning process from that point forward. For this reason, courses need to be designed to be progressive, with learning activities structured in a sequence where early lessons lay the foundation for what comes later (Fink, 1999). The amount of time that is spent in a learning activity is not the most important factor – much more important is *what* students learn. Learning programs need to focus on and be designed around the competencies that the students gain, and which are measured through assessment, with subsequent learning building on that base of knowledge.

An emphasis on competencies and progressive modules has allowed for three important innovations in the workforce development field. The first is **bridge or ramp programs**, which are learning programs designed for individuals whose skills do not meet minimum requirements of certain degree or certificate programs. Bridge programs allow learners to start from their current skill level, no matter how low, and develop the basic skills they need to begin the training program that is their ultimate goal. Another strategy used in some degree and certificate programs is the so-called “chunking” of educational programs into smaller modules. Rather than requiring someone to

commit to a two-year, full-time program to reach their goal, the curriculum is divided into more manageable “chunks” so that the learner can work full time while taking steps toward a credential that will help them advance in their careers (Poppe, Strawn, & Martinson, 2004). In many programs, milestones are recognized with certificates and often with pay increases. This innovation then permits the innovation of **career ladder programs**, where one “chunk” of learning leads to an entry-level job and subsequent chunks will lead to a credential needed for further advancement. **Apprenticeship** programs are a variation of career ladder programs, with learning on the job and a progressive schedule of wages based on experience as well as new skills and competencies.

Innovation: Bridge Programs

It is clear to many low skilled workers that the way to get ahead is to earn degrees and credentials in order to qualify for higher paying jobs or for jobs in a new industry career path. Some of the best learning opportunities, however, have entrance requirements that serve as a significant barrier to many. Individuals who have low basic skills (below ninth grade, typically), who do not have a high school diploma or GED, or who do not speak English well, may find themselves unable to enroll in training programs with high requirements. The best solution may not be to send them to a generic GED or ESL program. Instead, bridge programs may be a better alternative.

Bridge programs help provide individual learners with the skills they need to qualify for training, but do so in a targeted way. The curriculum is based on the competencies needed to succeed in a particular postsecondary training program and/or in jobs that lead to career advancement. Content is presented in the context of training for jobs and preparing for employment. The programs furthermore are not drawn out, but rather compressed in a shorter time so that the learners can complete the program quickly and move on to either new jobs or training (Henle et al, 2005).

There can be different levels of bridge programs. Higher level bridge programs lead directly into a job or postsecondary education program, while lower level bridge programs help the lowest-skilled individuals build the skills needed to start the higher level bridge program.

In addition to the examples provided below, Women Employed’s *Bridges to Careers for Low-Skilled Adults: A Program Development Guide* (Henle et al, 2005) offers several additional case studies of model bridge programs.

Organizational Example: San Francisco Works and City College of San Francisco

Name	<p>On-Ramp to Biotech San Francisco Works</p> <p>Bridge to Biotech City College of San Francisco</p>
Program Purpose	To train individuals with little or no scientific background for entry-level positions and ongoing education in the life sciences
Program Description	<p>The On-Ramp to Biotech (created by San Francisco Chamber of Commerce affiliate SFWorks and delivered at City College of San Francisco) is a 10-week program that trains low-income adults with limited or no scientific background for careers and ongoing education in the biosciences. The On-Ramp program includes courses on introduction to laboratory practices and life sciences, laboratory math and professional development. Participants transition seamlessly into City College’s Bridge to Biotech program. On-Ramp participants are offered paid internships in bioscience labs and job placement assistance. The program is a partnership with City College of San Francisco (CCSF) and “urban university,” a non-profit organization that provides professional development coaching.</p> <p>The Bridge to Biotech semester program was created by City College of San Francisco to provide science and math training to under-represented minorities with skill levels between 9th & 12th grade to prepare them for the College’s one- and two-year certificate programs: Biomanufacturing Technician, Biotech Technician, and Stem Cell Technician. "Bridge" students learn in cohorts, completing bioscience biology, math and language courses. After completion of the three integrated courses, student may enroll in the College’s Biotech certificate program.</p>
Progress	<p>Currently over 90% of On-Ramp program graduates are working in bioscience and/or enrolled in further bioscience education (the majority in City College of San Francisco’s Biotech Certificate program).</p> <p>The number of enrollees in City College of San Francisco’s Biotech Certificate Program rose from approximately 20 per year to more than 200 per year as a result of the Bridge to Biotech program.</p>
Contact Information	<p>Lori Lindburg San Francisco Works T: 415.217.5192 llindburg@sffworks.org www.sffworks.org</p>

Information from Lori Lindburg and California Community Colleges, 2006.

Organizational Example: Focus: HOPE

Name	FAST TRACK and First Step Focus: HOPE Detroit, Michigan
Program Purpose	To provide remedial math, reading, and communication skills sufficient for individuals to qualify for succeeding in competency-based training and education programs in a variety of science, technology, engineering and math-related fields, e.g., manufacturing and information technologies, healthcare, and/or other high demand industry-based certifications and 2-4 year post-secondary programs.
Program Description	<p>FAST TRACK is a 7-week bridge program to upgrade the skills of individuals who do not meet the 10th grade math and 9th grade reading level requirements to enter Focus: HOPE's Machinist Training Institute or the 9th grade math and 12th grade reading level requirements to enter Focus: HOPE's Information Technologies Center. Instruction is provided both by teachers and via computer-based modules. Over the seven week program, students often raise their math and reading by two grade levels or more.</p> <p>First Step is a lower level 4-week bridge program designed for students who need additional math instruction to qualify for the Fast Track Program. Students must have a minimum of sixth grade math and eighth grade reading to enroll.</p> <p>In both programs, heavy emphasis is placed on attendance, academics, attitude, and appearance via mentoring/coaching in order to prepare students for the expectations of a professional work environment. Focus: HOPE provides a mandatory drug-free educational environment, life and financial management counseling, and other supportive student services to fully meet the special challenges faced by primarily underrepresented low-income students.</p> <p>Focus: HOPE is actively exploring the possibility of providing additional flexibility in its programming in order to reach more students, accommodate their unique circumstances, and provide a diverse highly-skilled workforce for growing industries, by, for example: offering self-paced web-enabled instruction; distance learning; flexible scheduling; GED and high school diploma preparation; and incumbent worker upskilling.</p>
Progress	More than 80% of enrollees complete their programs. More than 4,700 students have completed from the FAST TRACK program since its inception in 1989. More than 1,300 students have completed First Step since it started in 1997.
Contact Information	Tracy Smith Hall Director of External Affairs Focus: HOPE 1355 Oakman Boulevard Detroit, MI 48238 T: 313.494.4267 hallt@focushope.edu www.focushope.edu

Information from Tracy Smith Hall at Focus: HOPE, the program's website and Rademacher, 2002.

Innovation: Progressive Career Ladder Programs

The “chunking” of degree and credential programs into smaller modules supports the development of career ladder programs (also called “career pathways” or “career advancement” programs). As defined by the Workforce Strategy Center (2002), career ladder programs “focus on high-demand, well-paying employment sectors, such as manufacturing, healthcare or information technology, and have incorporated into one seamless system all the steps—skills training, work experience and upgrade training—needed to prepare an economically and educationally disadvantaged worker for employment in the field and advancement in a career.”

Learning activities can begin prior to employment, in either bridge programs or other learning opportunities that prepare for entry-level jobs. Once established in a job, the individual can then continue learning activities, tackling one “chunk” at a time until earning a credential that can lead to higher-skilled and higher paying positions. These different learning experiences can use both new and existing community college curricula, which allows the individual learner to earn college credit as they proceed through the pathway. It also means that the individual learner may qualify for federal or state student financial aid programs (Poppe et al, 2004).

A good career ladder/pathway program will be able to show learners what their various options are for advancing to higher level jobs as they earn more credentials and gain more work experience. They can see which courses, or combination of courses, lead to which job opportunities. An example of this kind of a “road map” is shown in Figure 1 (reprinted from Poppe et al, 2004) for a career ladder program in microelectronics developed by Portland Community College (PCC) in Portland, Oregon. The box at the top of the page shows the bridge program, followed by the various chunks or modules that can lead to higher level positions.

Figure 2: Portland Community College Career Ladder Program in Microelectronics

Students enter different trainings based on their skill level. Once students complete a training component they can move to the next training, or they can obtain employment and pursue the next level of training later, or they can combine work and training.

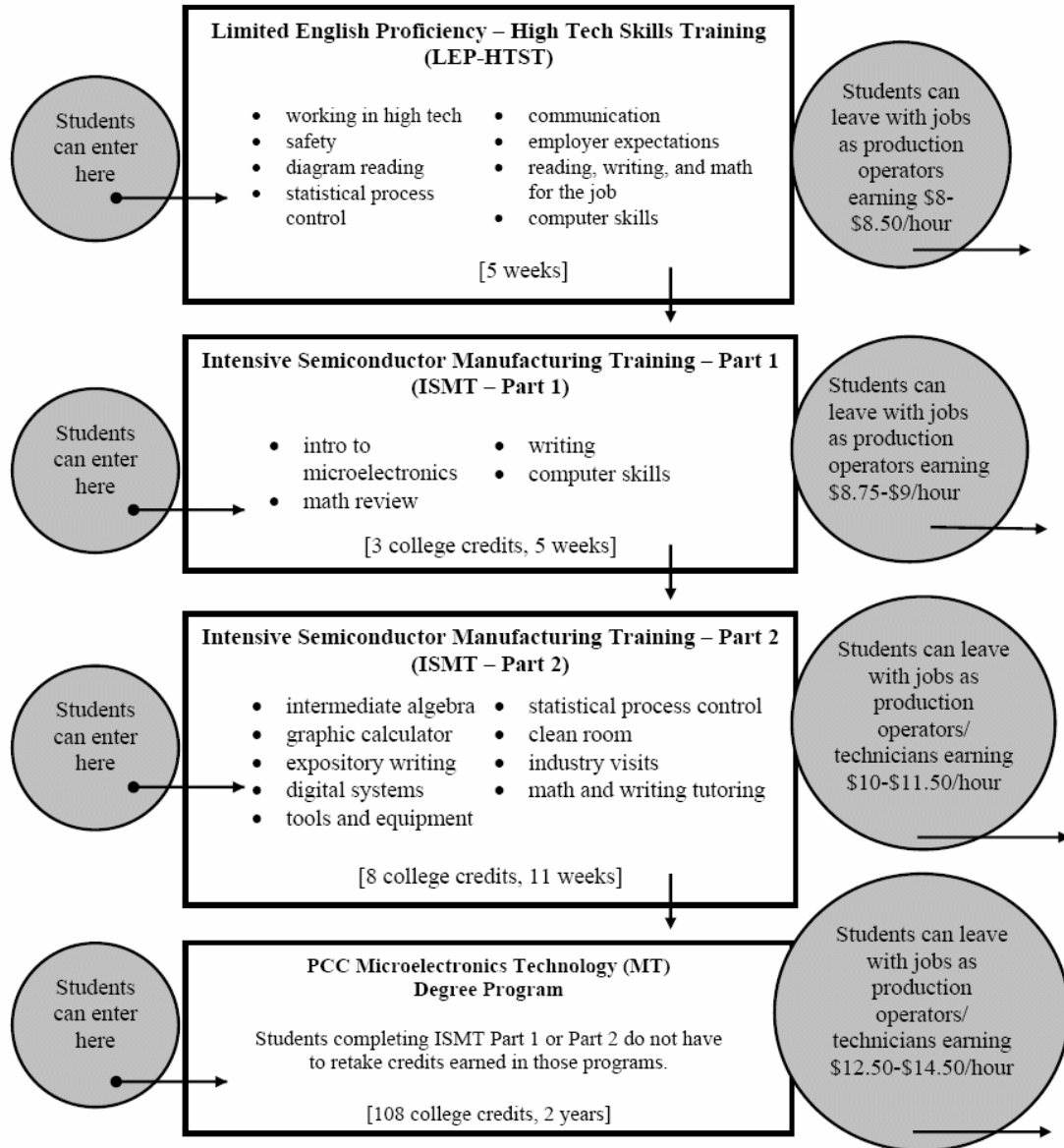
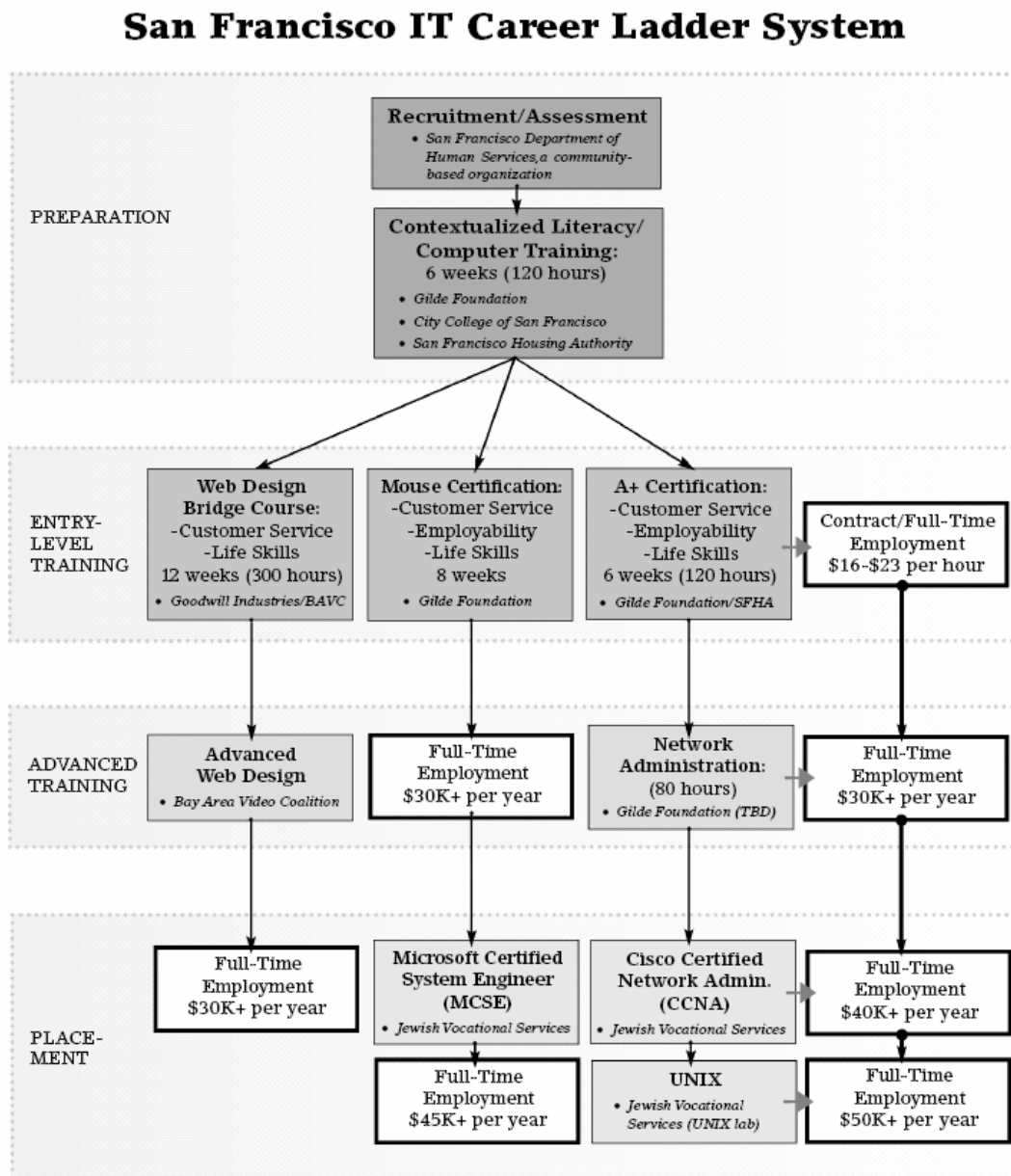


Figure 3 shows a graphic depiction of a career ladder program in Information Technology (reprinted from Workforce Strategy Center, 2002). Like the Portland example, this career ladder has several levels of training, with each level offering a new opportunity for career advancement. This structure provides a tangible incentive for training, which is an important way to keep learners motivated to continue.

Figure 3: San Francisco IT Career Ladder System



Note:
Case Management: community-based organization
Job Retention: community-based organization
Curriculum Development: City College of San Francisco
Instruction: City College of San Francisco

Perhaps more than any other kind of learning program, a good career ladder initiative depends upon identifying the right career path for the program by conducting a thorough assessment of labor market needs and projections during the Analysis phase. The task is not just determining whether there will be long term employability, but also whether the job targets for the early phases of training will provide opportunities to advance in a career and to earn higher wages. The ladders are most often created for a single industry, although new work in cluster development is promising to expand the options available to a worker.

As mentioned earlier, employer involvement is important to the design of any learning initiative, even at its earliest development stage. Once the career path is chosen for the program, continued employer involvement is crucial. Not only should employers be consulted to make sure that the program is designed around skill needs of the local labor market, but employers will need to be close partners in the design, development and implementation of the program as well. They will need to be a part of the curriculum development, they will need to adjust their own internal human resource practices to accommodate career ladders, and they will need to make firm hiring commitments to make the program work (Mills & Prince, 2003; Prince, 2003). At the same time, the program needs to be attractive to the employer. It should be cost-effective, meet a real need that the employer has, and it should be easy to use (Prince, 2003).

Organizational example: Portland Community College and Mt. Hood Community College

Organization/Program	Career Pathways Program Portland Community College and Mt. Hood Community College Portland, Oregon
Program Purpose	To provide career pathways programs for working adults who are likely to “stop in” and “stop out” of a traditional two- or four-year degree program.
Program Description	Portland Community College, in partnership with Mt. Hood Community College, has created modularized career pathways from adult education and workforce development programs to credit-level occupational/technical degree programs. The pathways provide multiple entry, exit and reentry points for a number of programs. The degree programs are broken into modules or “chunks” of courses that are linked to credentials valued by employers. This allows working adults to achieve short-term career goals and advancement while working toward a degree. There are nine professional technical career pathways that prepare low-skilled adults for jobs or further education. Six bridge programs--Institutional Food Service, Health Care, Entry-Level High Tech Skills, Welding, Direct Care Worker, and Office Skills-- are geared toward non-native English speakers. WIA provides some funding for the lower level modules, while students in the professional/technical pathways training can access financial aid since the modules are part of college degree programs. The programs require continual analysis of the local labor market and strong partnerships with employers in order to identify skill needs and modules that are linked to meaningful credentials.
Progress	The career pathways trainings serve 225 to 250 people annually, and approximately 200 students enter internships each year. Two new professional technical and one new “bridge” pathway are under development.

Contact Information	<p>Mt. Hood Community College Steven R. Storla, Ph.D Career Pathways Coordinator (for Non-Native Speaker and Mainstream programs) Adult Basic Skills Department Mt. Hood Community College 26000 SE Stark St. Gresham, OR 97030 T: 503.491.7251 Steven.Storla@mhcc.edu</p> <p>http://www.mhcc.edu/pages/1083.asp</p> <p>Portland Community College Kathleen Kuba Education Coordinator Vocational Trainings for Non-Native English Speakers Portland Community College</p> <p>T: 503.788.6287 kkuba@pcc.edu</p> <p>Portland Community College Laurie Chadwick Education Coordinator for Criminal Justice, Emergency Telecommunicator, Medical Coding, Pharmacy Technician, Phlebotomy, and Professional Development for the Changing World of Work T: 503.788.6233 Laurie.Chadwick@pcc.edu</p> <p>Portland Community College Andrew Roessler Education Coordinator for Accounting/Bookkeeping, Computer Technology Support Specialist, HVAC Installation, Machine Manufacturing, and Retail Management T: 503.788.6271 aroessle@pcc.edu</p> <p>http://www.pcc.edu/services/index.cfm/157.html</p>
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Information from Angelique Kauffman at Mt. Hood CC, and from Liebowitz & Taylor, 2004.

Organizational Example: Broward Workforce Development Board

Organization/ Program	WorkForce One Broward Workforce Development Board Broward County, FL
Program Purpose	To address the area's shortage of trained RNs
Program Description	<p>WorkForce One, together with Broward Community College designed a program to address the RN shortage. The strategy is comprised of three components:</p> <ol style="list-style-type: none"> 1.) RN Refresher Program for unemployed RNs interested in returning to work and working RNs who wish to update their skills (this program is also available nationwide through e-learning modules) <ul style="list-style-type: none"> ▪ 10 college credits earned ▪ 16 week program, two times a year ▪ Training curriculum is computer-based and available 24/7 ▪ After completion of the e-learning modules, students are placed in a paid internship with a hospital partner 2.) LPN – RN Transition Nursing Program for LPNs who want to become RNs <ul style="list-style-type: none"> ▪ 10 college credits earned ▪ Computer based training ▪ Students who complete program are reimbursed by the hospital for school expenses and are guaranteed employment 3.) Nursing Career Exploration Program to attract high school students <ul style="list-style-type: none"> ▪ 9th and 10th graders participate in a summer institute that focuses on career exploration and strengthening basic skills ▪ 11th and 12th graders are given the additional opportunity to “shadow” a professional in the nursing field ▪ Interested students who complete the summer institute are guaranteed priority admission into Broward Community College's nursing or other health science programs
Progress	The enrollment goal for all three components was 550 persons, 150 of which were to be youth. In May 2004, the total enrollment was 593 with 193 youth. 343 LPNs have transitioned to become RNs and at program's end, the project is expected to graduate more than 80% of its enrolled students. Although the grant ended in June 2005, the ETA did fund a multi-million dollar grant to enable the BCC (in collaboration with the Hospital Corporation of America) to continue similar work.
Contact Information	Dr. Anita DeFoe, VP, Quality Assurance Broward Workforce Development Board 3800 Inverrary Blvd., Suite 400 Lauderhill, FL 33319 T: 954-535-2300 x3127 adefoe@wf1broward.com

Information from Dr. Anita DeFoe Broward Workforce Development Board and from U.S. Department of Labor, 2004.

Organizational Example: Skillpoint Alliance

Organization/ Program	Construction Gateway Training Program Skillpoint Alliance (formerly the Capital Area Training Foundation) and Austin Community College Austin, TX
Program Purpose	To create a career ladder program for disadvantaged populations to enter and advance in the building trades.
Program Description	The Construction Gateway Program is a five-week course for unemployed, underemployed or incarcerated individuals. Graduates of the program earn Occupational Safety and Health Administration certification in Construction Safety, American Red Cross certification in First Aid, CPR & AED, nine hours of college credit towards an Associate's Degree in the building trades, 6 months credit towards an Associated Builders & Contractors (ABC) apprenticeship and industry Certificate of Completion from ABC and the Associated General Contractors.
Progress	The program is in its 13 th year and has had more than 900 graduates, and 80 percent of graduates have found jobs or continued their education.
Contact Information	Tom Serafin Skillpoint Alliance T: 512.323.6773, x154 tserafin@skillpointalliance.org www.skillpointalliance.org

Information from Tom Serafin at Skillpoint Alliance and from Skillpoint Alliance website.

For many additional career ladder examples please see the organizational example of District 1199C (in section on “Use Delivery Systems and Format that Make the Learning Accessible”). See also examples described in Workforce Strategies Center, 2002, Merzon & Cohen, 2004, Prince, 2003, and Prince & Mills, 2003.

Innovation: Apprenticeship programs

One innovation that provides a different kind of progressive learning opportunity is the use of apprenticeship models in career advancement/career ladder programs. According to the U.S. Department of Labor, apprentices are employees who receive on-the-job learning, mentoring, and incremental wage increases that are linked to training and job proficiency. (see <http://www.doleta.gov/OA/inbenef.cfm>).

A formal, government-sanctioned apprenticeship program must adhere to a number of standards. For example, the program must include:

- full and fair opportunity to apply for apprenticeship
- a schedule of work processes in which an apprentice is to receive training and experience on the job
- organized instruction designed to provide apprentices with knowledge in technical subjects related to their trade (e.g., a minimum of 144 hours per year is normally considered necessary)
- a progressively increasing schedule of wages
- proper supervision of on-the-job training with adequate facilities to train apprentices
- tracking of apprentice's progress, both in job performances and related instruction

- no discrimination in any phase of selection, employment, or training (www.doleta.gov/OA/characte.cfm)

The standards are then registered with the Bureau of Apprenticeship Training (BAT) or a BAT-recognized State Apprenticeship Council (SAC) or Agency. The BAT can provide guidance and support, and it can authorize a formal, national certification for those who complete the program.

There are many benefits to apprenticeship models. Workers benefit because:

- There is an opportunity to continue training while earning a wage
- There are progressive wage increases over the term of training
- There are nationally (and often internationally) recognized credentials upon completion
- Workers gain skills that are transferable
- After completion, workers have higher earning potential and greater financial security
- There are more opportunities for future training and advancement
- Many programs offer college credit (Chenven, 2004).

Employers, in return, gain skilled workers, reduced turnover, and improved productivity and quality.

Since 2001, the Department of Labor's Office of Apprenticeship Training, Employer and Labor Services (OATELS) has led efforts to expand the apprenticeship model into new areas, particularly in high growth industries such as health care, transportation, advanced manufacturing, and information technology. Examples of these programs are found on the OATELS website, as are links to the standards developed for the registered programs (<http://www.doleta.gov/OA/>).

Organizational Example: Northrop Grumman

Organization/Program	Ship Systems Apprentice Programs Northrop Grumman Pascagoula, MS and Avondale, LA
Program Purpose	How to recruit new entry-level new employees and support their learning and development in the skilled trades once hired.
Program Description	Northrop Grumman “grows its own” workforce through apprentice programs that teach skills related to approximately twenty different trades. Current apprenticeships include: carpenter/joiner; boilermaker; inside & outside machinist; painter; pipewelder; pipefitter; sheetmetal worker; electrician; and welder. Apprentices rotate job assignments to ensure exposure to all areas of their craft and they are overseen by craft supervisors and placed in crews with journeymen serving as mentors. Their supervisors grade their work progress each month which is reported to the training department and becomes part of the apprentices' grades. Employees usually move into management positions once they have successfully completed their apprenticeship program. Program length can vary from 1 year to 4 years depending on the trade. Apprentices work 40 hours each week (on the clock) and attend 144 hours (off the clock) at the local community colleges.
Progress	Currently there are approximately 700 registered apprentices who are paid a starting salary between \$10.48 and \$19.00 an hour.
Contact Information	Dr. Larry E. Crane, Director of Training Northrop Grumman Ship Systems P.O. Box 149 Pascagoula, MS 39568-0149 T: 228.935.5533 http://www.northropgrumman.com/ lecrane@northropgrumman.com

Information from Dr. Larry Crane of Northrop Grumman Ship Systems.

Organizational Example: Council for Adult and Experiential Learning

Name	Healthcare Career Lattice Program Council for Adult and Experiential Learning (CAEL) Philadelphia, Pennsylvania
Program Purpose	To increase the number of Certified Nursing Assistants (CNAs), Licensed Practical Nurses (LPNs), and Registered Nurses (RNs) by establishing a career lattice in healthcare, so that anyone with an interest in a nursing career can enter at a lower, middle or upper rung.
Program Description	<p>CAEL uses the term “lattice” to recognize that careers do not always follow a linear progression. Workers often make lateral moves in their careers, which can be just as important for their career development. To illustrate, a career “ladder” would focus only on the progression of CNAs to LPNs to RNs, while a lattice recognizes that LPN candidates can also be drawn from other branches of the healthcare field (e.g., lab techs) as well as from non-healthcare professions.</p> <p>In the CNA Ladder, apprentices are hired as soon as they enter the program. Candidates come from inside the organization, from high schools, and from publicly-funded One-Stop Career Centers. Training includes 144 hours of clinical and didactic training and 2000 hours of training on the job. There are specialization opportunities in geriatric, dementia, pediatric, and restorative care.</p> <p>In the LPN Ladder, the apprenticeship program draws candidates from within the healthcare system (incumbent workers and advanced CNAs) and from outside (high schools and One-Stop Career Centers).</p> <p>These programs link to an Online LPN to RN Ladder, a web-based online LPN-to-RN program that gives working LPNs flexibility in completing the didactic training, provides articulation with local community colleges to oversee the clinical training, and prepares participants to sit for the NCLEX-RN exam.</p>
Program Description	<p>At the nine pilot sites, the Nursing Career Lattice Program is an employer-driven partnership that includes healthcare facilities, community colleges, the public workforce system, and community organizations.</p> <p>Participating employers expect that the program will contribute to reduced turnover, thereby reducing recruitment costs. The program is also expected to improve the quality of patient care and increase the diversity of the workforce.</p>
Progress	The program was initially carried out in five sites: Houston, Sioux Falls, South Dakota, Chicago, Washington State and Maryland (OATELS, 2006b). Enrollments in the initial pilot sites as of spring, 2006 are: Houston – 135; Sioux Falls – 170; Chicago – 214; Washington – 17; and Maryland – 125. In 2006, the project has rolled out to four new sites: Georgia, Kentucky, Michigan and Virginia.
Contact Information	Phyllis Snyder, Vice President 1608 Walnut Street, Suite 1404 Philadelphia, Pennsylvania 19103 T: 215.731.0191 psnyder@cael.org www.caelhealthcare.org

Information from Phyllis Snyder at CAEL.

Organizational Example: Computing Technology Industry Association (CompTIA)

Name	Computing Technology Industry Association (CompTIA) National Information Technology Apprenticeship System (NITAS)
Program Purpose	To establish a nationwide apprenticeship program for information technology (IT) workers.
Program Description	<p>CompTIA, on behalf of the U.S. Department of Labor, has developed the National Information Technology Apprenticeship System (NITAS), a competency-based apprenticeship methodology that supports credentialing for the career development and advancement of IT workers.</p> <p>CompTIA has developed seven apprentice-able job roles and a web-based system that registers, tracks and manages an apprentice's progress through each apprenticeship. The system creates portable transcripts for IT workers, detailing individual certifications and validated skills.</p>
Progress	<p>CompTIA and NITAS delivers the first competency-based apprenticeship on behalf of OATELS and its 21st Century initiative (http://www.doleta.gov/OA/). Industry endorsed competencies have been developed in the follow apprenticeships:</p> <ul style="list-style-type: none"> • IT Generalist • Project Management • Network Infrastructure and Devices • Information Assurance • Help Desk • Database Services • Application Development
Contact Information	<p>Paul Slomski Pslomski@comptia.org T: 630.678.8317</p>

Information from Paul Slomski at CompTIA.

Broaden the Experience Base

Formal training – training provided in a classroom or online through a well-defined instructional process – is usually the most common way to impart knowledge and develop new skills. Yet informal learning through hands-on experience is often one of the best ways to ensure that the learning is internalized and transferred to real-life or work settings. Where possible, skill building and adult learning programs should try to broaden the experience of the learner by applying the content in a real setting (Keeton, Sheckley, & Griggs, 2002). Simulation or role-playing can be a good first step in applying knowledge, such as what is often used in soft skills training programs (see the innovation described in the section “Make It Relevant”). Other innovative ways to broaden learners’ experience base include field trips to worksites, job shadowing, internships and the use of transitional jobs (Henle et al, 2005).

Innovation: Provide Internships

If a training program is designed to prepare learners for high skilled jobs, a good way to help them see their new skills in action, gain marketable experience, and demonstrate their value to employers is through internships. These short-term work assignments with real employers provide a number of benefits to the learner. Through the internship, learners can:

- Gain industry knowledge that cannot be obtained in the classroom or online
- Gain appreciation for the culture and practices of the industry and its workforce
- Accumulate evidence of their proven abilities in the workplace
- Make contacts in the industry that can be helpful for referrals and providing references
- Build confidence in themselves
- Possibly secure a full time job (Vogt, n.d.)

Internships may not always be necessary for the learner to gain entrée into a new industry or position, but for industries where it helps to have proven experience or insider status, it may be very difficult to gain a job otherwise. Some sector-based training programs that have found it important to include an internship component include those for financial services (see Year Up example, below), as well as automotive and truck technicians and computer support specialists (Goldberger et al, 2005).

Organizational Example: Year Up

Name	Year Up MA, NY, RI and Washington, DC
Program Purpose	Year Up's mission is to close the "opportunity divide" by providing urban young adults with the skills, experience and support that will empower them to reach their potential through professional careers and higher education.
Program Description	Year Up's intensive one-year program serves low-income high school graduates and GED recipients between the ages of 18-24 from urban neighborhoods. Year Up's high expectation, high support program combines marketable job skills, stipends, paid internships (Year Up calls them "apprenticeships"), college credit, a behavior management system and several levels of support to place these young adults on a viable path to economic self-sufficiency. During the first six months, students attend classes at Year Up, learning technical skills that allow them to succeed in entry-level IT positions without a college degree. During the second six months, Year Up students gain experience in paid internships at leading companies such as State Street Corporation, Fidelity Investments and Partners HealthCare. After graduation, students continue to receive support and build their professional networks through Year Up's Alumni Association. Over the next few years, Year Up will create a network of sites, including New York City, with an explicit goal of serving 450 urban young adults annually by 2007.
Progress	In 2006, Year Up will serve more than 300 students in sites in Massachusetts, New York, Rhode Island, and Washington D.C. Its outcomes are strong: 100% placement of qualified students into apprenticeships, 83% student retention; 90% of apprentices meet or exceed partner expectations; 87% of graduates placed in full or part-time positions; and \$15/hr average wage at placement.
Contact Information	<u>Boston</u> 93 Summer St, 5th Floor Boston, MA 02110 T: 617.542.1533 http://www.yearup.org/

Information from Ariel Santos at Year Up-Boston, from Goldberger et al, 2005, and from the Year Up website.

Organizational Example: Bay Area Biotech Consortium

Organization/Program	Career Pathways Project Bay Area Biotech Consortium Alameda and San Mateo Counties, CA
Program Purpose	To provide assistance to dislocated airline workers following September 11 th . These airline layoffs came on the heels of the “dot.com bust” in Silicon Valley. At the same time, the Region faced the need to build pharmaceutical manufacturing capacity in biotechnology as promising new drugs moved into large-scale production. The Region is home to the world's most dynamic biotechnology industry.
Program Description	This pilot program was designed to move unemployed airline workers and others into the new and expanding biotechnology sector. The Career Pathways Project has five components: 1) One-stop services targeted to displaced airline and IT workers in both Alameda and San Mateo Local Workforce Investment Areas supported by both WIA Formula and State Discretionary Funds; 2) an intensive 3-month, 200-hour curriculum to deliver key skills and competencies developed with Genentech, the consortium’s primary employment partner; 3) optional 3-month full-time internships for all graduates of the 200-hour training arranged with Genentech; 4) job placement with Genentech for those participants who successfully completed the internships with the company or placement with our employer partners; and 5) continuous training and placement opportunities available through the Career Pathways Project.
Progress	The Consortium has been successful in training 180 new biotech workers and plans to train 300 more over the next 2 years. The placement rate has exceeded 75 percent in jobs paying upwards of \$35,000. The regional model used in the biotech industry is being considered by others in the pharmaceutical manufacturing business. Plans for sustaining and expanding the Career Pathways Project to include other Local Workforce Areas are underway.
Contact Information	Alameda County Workforce Investment Board Patti Castro, Assistant Director 24100 Amador Street, 6th Floor Hayward, CA 94544 T: 510.259.3843 pcastro@acgov.org www.acgov.org

Information from Patti Castro of Alameda County Workforce Investment Board and from U.S. Department of Labor, 2005.

Innovation: Provide Transitional Jobs

One way to help these individuals gain work experience in a non-threatening environment, while putting newly trained soft skills to work, is to provide them with a transitional job. Transitional jobs provide paid work for the hard-to-employ. These jobs provide a realistic experience of work for the individual, but it is a temporary arrangement. The purpose is for the individual to work long enough to gain the experience and skills needed to find permanent employment (Kirby et al, 2002). Often, the transitional job also provides the individual with additional training to address barriers to employment such as limited English, substance abuse problems or “difficulty with workplace norms” (Strawn and Martinson, 2000, as cited in Kirby et al, 2002).

Transitional jobs can also provide work experience to other disadvantaged populations such as those with criminal records, people with disabilities, people with low educational attainment, and those with other barriers.

Organizational Example: Chrysalis Works

Organization/Program	Chrysalis Works (part of Chrysalis Enterprises) Los Angeles, CA
Purpose of Program	To help economically disadvantaged and homeless individuals become self-sufficient through employment opportunities.
Program Description	<p>Chrysalis Works is the largest street maintenance company in L.A and currently employs more than 500 workers a year providing a variety of services including litter pick-up, sidewalk and gutter sweeping and emptying of trash receptacles.</p> <p>After gaining the work experience, clients will then go back into the job hunting program at Chrysalis and do a self-directed job search except now with a resume, references and the social skill training.</p> <p>Chrysalis Staffing operates like any private staffing agency; providing employers with screened applicants, payroll functions, and insurance coverage. Service areas include general labor, warehouse, customer service, and clerical. Chrysalis staff provides on-going support to the temporary employees who are on an assignment as well as to the customer who places an order with Chrysalis Staffing.</p>
Progress	After working in the transitional jobs for up to six months, Chrysalis workers move on to finding permanent employment outside of Chrysalis Enterprises. Ninety-three percent of the individuals completing Chrysalis's Job Readiness Curriculum secure employment. The average cost of Chrysalis program is \$2,300 per client/year – reduced by 12% in costs from 2003. Nearly 900 individuals each year are employed by Chrysalis Enterprises through its staffing (Chrysalis Staffing) and maintenance (Chrysalis Works) and businesses.
Contact Information	<p>Frank Lagattuta, Executive VP, Chrysalis Enterprises Downtown Los Angeles: 213.895.7525, x 746 Santa Monica: 310.392.4117 Pacoima: 818.834.4357 http://www.chrysalisenterprises.com/ http://www.changelives.org/</p>

Information from Tracey Roden, Frank Lagattuta, and Adlai Wertman of Chrysalis; and from Seavey, 1999.

Organizational Example: Community Jobs

Name	Community Jobs (CJ) Department of Community, Trade and Economic Development (CTED) Olympia, Washington
Purpose of Program	To help Temporary Assistance to Needy Families (TANF) parents overcome barriers and obtain current work history to prepare for permanent unsubsidized employment.
Program Description	Community Jobs provides community-based work and skill-building experience to Temporary Assistance for Needy Families (TANF) parents statewide who face barriers to entering the job market. The Department of Community, Trade and Economic Development (CTED) works with community-based organizations to provide case management and transitional jobs to individual clients. The jobs are provided by “host work sites,” which are typically non-profit organizations, educational institutions, private employers, and government agencies. The clients work 20 hours per week at minimum wage for up to six months.
Progress	Since the CJ Program began in 1997, over 17,555 TANF families have enrolled in CJ and they are currently serving an average of 2200 per year. Of those enrolled, an average of 64% obtain employment. Employment criteria is jobs with a minimum equivalency of 20 hours per week at the State's minimum wage (currently \$7.65).
Contact Information	Diane Klontz, Program Manager T: 360.725.4142 http://www.workfirst.wa.gov/community/jobs.htm dianek@cted.wa.gov

Information from Eva Greenwalt at the Department of Community, Trade and Economic Development.

Organizational Example: Experience Works

Organization/Program	Senior Community Service Employment Program (SCSEP) Experience Works (formerly Green Thumb, Inc.) Arlington, VA (headquarters)
Program Purpose	To provide training and employment to low-income workers age 55 and older and community service to local faith-based and community organizations.
Program Description	Program participants are evaluated and given a customized employment plan, then placed at “host agencies” (primarily community and faith-based organizations). On average, participants train 20 hours per week and are paid minimum wage. In conjunction with the SCSEP, Experience Works provides high-growth occupational skills training for jobs such as home health aide, nurse assistant, and computer operator. On-the-job training is also provided, whereby participating employers receive partial reimbursement for the training costs. Classroom training is made available and is customized according to individual students’ needs.
Progress	In their last program year (2004/2005) the value of services to local communities performed by these workers was more than \$190 million. In the last ten years, more than 55,600 seniors have found employment through this program, in such jobs as teachers’ aides, emergency dispatchers, care providers, and clerical assistants.
Contact Information	Sally Boofer, Vice President of Operations 2200 Clarendon Blvd., Ste. 1000 Arlington, VA 22201 T: 703.522.7272 www.experienceworks.org sally_boofer@experienceworks.org

Information from Sally Boofer and Martin Rome at Experience Works.

Tools and Resources For Program Design

General Curriculum Development

- **Open Source Curriculum.** While program planners can develop customized curriculum for a learning initiative, developing something from the ground up may not be necessary. A great deal of curriculum and textbooks have been made available online and for free. The movement to share course ware was initiated by MIT, whose OpenCourseWare (<http://ocw.mit.edu/>) shares materials for more than 1,250 MIT courses. Other open source curriculum can be found at Utah State University (<http://ocw.usu.edu/>), Tufts University (www.ocw.tufts.edu), and Johns Hopkins School of Public Health (<http://ocw.jhsph.edu/>). For a list of open course ware projects in other countries see <http://ocw.tufts.edu/OtherOCW>.

Online Learning Programs

- Effective Practices for Learning Effectiveness in Online Programs <http://www.sloan-c.org/effective/browse.asp>. *This website provides information on a wide range of practices related to the development of online learning programs.*

Bridge Programs

- Henle, T., D. Jenkins and W. Smith. (2005.) Bridges to careers for low-skilled adults. A program development guide. Women Employed with Chicago Jobs Council and UIC Great Cities Institute. <http://www.womenemployed.org/docs/BridgeGuideFinal.pdf>

Career Ladder Programs

- Prince, H. and J. Mills. (2003, October). Career Ladders: A Guidebook for Workforce Intermediaries. Prepared for Workforce Innovation Networks – WINs. Jobs for the Future. *This guide gives some background information on career ladder programs, provides a step-by-step guide to planning and implementation, and describes numerous examples of different programs nationwide. Also available is a CD-ROM with numerous resources and tools for the practitioner. Many of the resources on the CD-ROM are also available on the Internet.*
- Merzon, F. and B. P. Cohen. (2004.) The Career Pathways Collaboration Toolkit. CAEL. *This toolkit was designed to help lead organizations connect higher education, local employers, and the local workforce development system around the creation of career pathways in selected industries. It contains guidance and tools on topics such as how to form an advisory committee, how to research needs and resources, and how to measure progress. Several examples of career pathways in industries such as healthcare, high tech, and manufacturing are included.*
- Jenkins, D. (2003, October.) Career Pathway Primer and Planning Guide. University of Illinois at Chicago. Prepared for an Oct. 2003 conference on career pathways sponsored by the Kentucky Community and Technical College System and KnowledgeWorks Foundation. Retrieved from <http://www.uic.edu/cuppa/gci/about/bios/documents/CareerPathwayPrimerPlanningGuide%20revised.pdf> on May 24, 2006. *This guide provides several sample career pathways models as well as suggested steps in the planning and implementation of career pathways programs.*
- Council for Adult and Experiential Learning. (2004). How Career Lattices Help Solve Nursing and Other Workforce Shortages in Healthcare. <http://www.cael.org/healthcare.htm> *This guidebook's purpose is to assist healthcare employers, industry alliances, Workforce Investment Boards, One-Stop Career Centers, and higher education providers in developing healthcare career lattices. The guidebook introduces the key components that comprise the model, shares important lessons from CAEL's experiences, and outlines steps for replication.*

Apprenticeship

- USDOL Office of Apprenticeship Training www.doleta.gov/OA/setprgm.cfm
- Office of Apprenticeship Training Employer and Labor Services (2006, February, a) Strengthening our nation's workforce with demand-driven solutions. Registered apprenticeship trends in six industries. U.S. Department of Labor Employment and Training Administration.
- Office of Apprenticeship Training Employer and Labor Services (2006, February, b) Strengthening our nation's workforce with demand-driven solutions. Registered apprenticeship trends in healthcare. U.S. Department of Labor. Employment and Training Administration.
- Office of Apprenticeship Training Employer and Labor Services (2006, February, c) Strengthening our nation's workforce with demand-driven solutions. Registered apprenticeship

trends in information technology. U.S. Department of Labor. Employment and Training Administration.

- Office of Apprenticeship Training Employer and Labor Services (2006, February, d) Strengthening our nation's workforce with demand-driven solutions. Registered apprenticeship trends in advanced manufacturing. U.S. Department of Labor. Employment and Training Administration.

Transitional Jobs

- National Transitional Jobs Network. <http://www.transitionaljobs.net/> *This is a website on transitional jobs that is product of the National Transitional Jobs Network (also known as the Network and the NTJN), a coalition of more than 100 Transitional Jobs programs, policy organizations, and sponsoring organizations. The Network fosters economic opportunity for America's workers by developing new Transitional Jobs programs, building the capacity of existing Transitional Jobs programs, and promoting a national dialogue on job advancement strategies. Heartland Alliance for Human Needs & Human Rights is the host agency for the Network.*

Step 3: Adult-Centered Implementation

When the Design phase is completed, program planners will have a pretty good idea of what the learning initiative is going to look like, how long it will be, what resources are needed, why the initiative is needed and who will likely benefit from it. The next phase is the **Implementation** of the learning initiative, during which participants engage in the learning experience, be it in a classroom or other delivery mechanism.

Effective implementation does not address just instructional activities, but also the other services that are required in order to ensure the success and engagement of the individual participants.

Assessment activities are important at the start of the program for proper placement of the individual in the learning initiative, and to recognize competencies and knowledge that have already been mastered. Assessment is equally important at the end of the program to ensure that the initiative was successful and that the individual has gained new skills and competencies. **Support services** are critical for providing guidance to individuals throughout the process and for helping them remove barriers to their success. The instructional activities themselves are important, and so the third set of Implementation components in this report address how the **Teaching-Learning Process** can draw on the many established lessons of the adult learning field. Components and related innovations for these three implementation activities are provided below.

ASSESSMENT

Individual assessments are important activities at both the start and end of a learning initiative. At the start of a program, assessments can help individuals better define their goals, help place them in the appropriate level of training and even help them earn credits for what they already know through innovations like Prior Learning Assessment (see innovation described below). Using the same skill assessment process both before and after training can verify that the learning initiative was

successful in developing the competencies and knowledge of the individual. This can be important for validating the training itself (Level 2 of the Evaluation process, as described later in the report) and for communicating to prospective employers the skills that an individual could bring to the workplace.

Key Components for Assessment include:

- **Provide individual assessment of skills, interests, and learning outcomes**
 - Innovation: Prior Learning Assessment
 - Innovation: Work readiness credential

Provide Individual Assessment of Skills, Interests, and Learning Outcomes

Assessments are useful at both the start and the end of any learning initiative because they can:

- Help determine the placement of a student within a program
- Determine career and advancement interests and goals
- Determine the student's support service needs
- Determine strengths and weaknesses
- Inform curriculum development and instruction
- Measure learning gains (Henle et al, 2005)

The National Collaborative on Workforce and Disability for Youth, Institute for Educational Leadership has defined four different (yet often overlapping) categories of assessment: educational, vocational, psychological and medical. Educational assessments measure academic performance and cognitive ability. Psychological assessments measure cognitive ability, behavior, and social/emotional health. Vocational assessments measure employment-related interests, goals and values; vocational aptitude (or the ability or potential to learn or perform in order to hold certain jobs or train for those careers). Medical assessments, of course, measure a person's physical or functional capacity to physically perform in certain situations. The table below, reprinted from the NCWDY's guidebook on assessments, *Career planning begins with assessment: A guide for professionals serving youth with educational & career development challenges* (Timmons, Podmostko, Bremer, Lavin & Wills, 2004), provides a useful framework for understanding the purpose of different kinds of assessments.

TABLE 1.3: FORMAL TESTING AREAS

	Major Area of Testing	What is Being Measured	Assessment Instrument Types	Primary Users and Purposes
EDUCATIONAL DOMAIN	Academic Performance or Achievement	Reading Skills Writing Skills Mathematics Skills Spelling Skills	Academic Testing	Used in schools to assess progress of students and by adult education programs and workforce development to determine need or eligibility for program participation and to develop plans.
			Achievement Testing	Used mainly by districts and states to monitor progress of students and as a key part of the education accountability system.
			Curriculum-Based Assessment	Used by schools to determine instructional needs of individuals in relation to established curriculum.
			GED (Writing, Reading, Math, Science, and Social Studies)	Used by workforce development and adult education to gain a high school equivalency credential.
			ACT or SAT	Used by many colleges and universities as part of entrance requirements.
	Cognitive Abilities*	Intelligence	Intelligence Testing (IQ)	Used by schools to measure cognitive abilities such as discrimination, motor behavior, abstract reasoning, etc.
PSYCHOLOGICAL DIAGNOSTIC DOMAIN	Cognitive Abilities*	Neuropsychological Involvement	Neuropsychological Testing	Used by schools and workforce preparation programs to diagnose and to suggest treatment and accommodations in these areas.
		Learning Disabilities	Diagnostic Testing	
	Behavioral Social Emotional	Emotional Behavior	Behavioral Analysis	Used by schools and workforce preparation programs to identify, diagnose, and suggest treatment in behavioral, social, and mental health environments.
		Social Skills	Social Adaptation and Work-Related Behaviors	
		Mental Health	Mental Health Screening and Assessments	
		Chemical Health	Screening for Drug and Alcohol Usage	Used by schools, organizations, and employers to detect the use of drugs or alcohol by participants.
			Chemical Dependency Assessment	Used by schools and others to detect dependency on drugs or alcohol by participants.

TABLE 1.3: FORMAL TESTING AREAS

	Major Area of Testing	What is Being Measured	Assessment Instrument Types	Primary Users and Purposes	
VOCATIONAL AND CAREER DOMAIN	Vocational and Career Interests	Interests, Preferences, Values, and Temperaments	Interest Testing	Used by schools and workforce preparation programs to match an individual's interests and values to employment opportunities.	
			Personality Inventory		
			Career Exploration Experiences		
			Work Values Assessment		
	Job Aptitudes and Skills	Aptitudes	Assessing Potential to Learn and Occupational Abilities	Assessing Potential to Learn and Occupational Abilities	Used by schools and workforce preparation programs to determine an individual's ability to find, perform, and hold specific jobs. Work experiences and other related activities lead to performance reviews to document actual work potential, skills, and needs.
				Situational Work Assessment	
		Work Behaviors	Job Seeking and Keeping Skills Assessment		
				Work Samples	
		Skills	Community-Based or On-the-Job Assessment		
				Community-Based or On-the-Job Assessment	
Occupation Specific Certification	Mastery of Knowledge, Skills, and Abilities in Specific Occupations	Tests or assessment given at the end of apprenticeships, college programs, and other job training programs focused on one specific job or career area, and based on industry-validated skill standards	Used by licensure boards, businesses, apprenticeship programs, and workforce preparation programs (such as community colleges, technical colleges, or workforce development training programs) to issue a credential.		
Physical and Functional Capacities*	Work Capacities	Work Tolerance Physical Capacities Scales, Work Samples, Community-Based Assessments	Work Tolerance Physical Capacities Scales, Work Samples, Community-Based Assessments	Used by workforce preparation programs to determine an individual's ability to handle specific work situations.	
			Assistive Technology	Used by schools and workforce preparation programs to determine an individual's need for and ability to use technology and adaptive equipment.	
			Work Accommodations	Used by workforce preparation programs to determine individual's need for accommodations in training programs or worksites.	
MEDICAL DOMAIN	Physical and Functional Capacities*	The Need for Diagnoses and Medical Therapies	Occupational Therapy Assessment	Used by schools and workforce preparation programs to determine the need for medical intervention, accommodations, and independent living supports and instruction. They are often used to determine eligibility for special education and vocational rehabilitation services and for entitlement programs like Social Security and Medicare.	
			Physical Therapy Assessment		
			Speech and Language Assessment		
			Hearing Assessments		
			Vision Assessments		

*Cognitive abilities and physical/functional capacities each fall under two domains.

From Career planning begins with assessment: A guide for professionals serving youth with educational & career development challenges (Timmons, 2004)

The challenge is determining which assessment, or combination of assessments, is going to collect all of the information that is needed for good educational and career planning, placement of students within the learning initiative, verifying learning outcomes and conferring degrees and credentials that are meaningful.

Important factors to consider include:

- Reliability – the ability of the test to have consistent results over time
- Fairness – or absence of test bias against certain groups of individuals
- Validity – whether the test is measuring what it purports to measure
- Cost
- Time to administer and score
- Qualifications of the test administrator
- Ease of use
- Reporting format – the results should be presented in an understandable way
- Appropriateness to the individual’s cognitive functioning level, reading ability, math ability, and level of career development. (Timmons et al, 2004)

There may be no single assessment that will meet all of your needs, particularly for thorough education and career planning. For example, **ACT’s WorkKeys** has gained popularity because it links job profiling with individual assessment of basic skills, it has been used to assess general employability (see the innovation of Work Readiness Credential below), it provides related curriculum to build the skills, and it is relatively easy to administer (see www.act.org/workkeys). However, it does not assess vocational interests. So for career planning purposes, WorkKeys might be paired with an assessment specifically designed to assess career and vocational interests.

The National Collaborative on Workforce & Disability for Youth’s (NCWDY) guidebook, *Career planning begins with assessment: A guide for professionals serving youth with educational & career development challenges* (Timmons et al, 2004), provides information on a wide range of published assessments available for different purposes, along with information such as about reliability, validity, reporting format, ease of use, target population, and so on. An online version of the guidebook can be downloaded at www.ncwd-youth.info/assets/guides/assessment/AssessGuideComplete.pdf. Some of these assessments may be standard offerings through community colleges.

Organizational Example: WIRE-NET

Organization/Program	WorkSource (formerly the Hire Locally Program) WIRE-Net Cleveland, OH
Program Purpose	To help unemployed and underemployed residents of Northeast Ohio improve employability and gain technical skills to connect them to job opportunities in manufacturing.
Program Description	<p>Created in 1986, WIRE-Net is an economic development agency with a mission to strengthen manufacturing to create healthy communities and fuel economic growth. WIRE-Net provides expertise that is responsive to manufacturing related businesses and their employees and connects leaders to each other and engages them in their communities.</p> <p>Hire Locally, launched in 1989, targeted entry-level operator and laborer jobs in manufacturing. All applicants who came to Hire Locally first completed a 2-hr. or 4-hr. workshop that covered basic employability skills, job-search techniques, and factors that helped in job retention, such as dealing with conflict and learning from criticism. Following the workshop, individual assessment interviews were conducted to determine job readiness in manufacturing and whether or not an applicant had “the personality, drive, and honesty” that appeal to employers. If an applicant faced a significant barrier, such as lack of education, training, childcare, or transportation, he/she was referred to a social services manager and was eligible to return once the problem was addressed. The applicant then worked with an employment specialist to develop an employability plan. For those not ready for manufacturing jobs, a 160-hour Basic Skills in Manufacturing (BSM) course was designed by WIRE-Net and member companies. The course consisted of 20 hours per week of classroom work at a community college and 20 hours per week of on-the-job training at member companies (where each student was “sponsored” and the member company agreed to consider him/her upon completion of the course).</p> <p>Hire Locally was successful because staff got to know employers’ operations and needs by spending time on the shop floor. Staff spent a great deal of time understanding the demands and conditions of particular jobs and plants, and consulting at length with employers about past placements and future needs. Also, employer representatives came to Hire Locally workshops to describe their company, their needs, expectations, and current available openings.</p>
Program Description	Hire Locally was very successful and became a model for sector based workforce development programs. However, changing economic conditions and the resulting market trends led WIRE-Net to revise its programs to meet the needs of the time. WIRE-Net is currently completing a re-engineering of its WorkSource Program that will capture many components of Hire Locally while building in programming to effectively serve increasing numbers of individuals.
Contact Information	Rebecca Kusner WIRE-Net 4855 W. 130th Street, Suite 1 Cleveland, OH 44135-5137 T: 216.588.1440 http://www.wire-net.org/ Rebecca@wire-net.org

Information from Rebecca Kusner at WIRE-Net and from Ma & Proscio, 1999.

Innovation: Prior Learning Assessment

Prior Learning Assessment (PLA) or the Assessment of Prior Learning (APL) are the terms used by colleges to “describe the process of earning college credit from learning acquired through a student’s work, training, volunteer and personal life” (Colvin, 2006). Colleges and universities nationwide have adopted a number of different assessment practices to help students determine what they already know and what they still need to learn through coursework. The process of assessing what students already know from life and work experiences may also involve awarding college credit to that knowledge and competency.

A variety of assessment methods are used at various institutions, depending on the college and/or the subject matter. Assessment methods include:

- Credit by Examination
- Development of a Portfolio of Prior Learning with Artifacts
- Transfer Credit Evaluation
- Training and Certifications Evaluation
- Placement Exams
- Simulations
- Interviews
- Work Sample Evaluation
- Demonstration
- Prepared speeches
- Oral Interviews (Colvin, 2006)

Generally, the awarding of college credit for prior learning is available only to students who are enrolled in a degree or certificate program. The subject areas where PLA has been used include business, English, communications, arts, computer science, social sciences, and education. Often, colleges place a limit on the number of credits that can be earned through PLA. Other practices and policies related to PLA can vary significantly from college to college. There is typically a fee for PLA, but it is often as much as 70% less than tuition fees (Colvin, 2006). The main benefits of PLA are that it:

- Validates the worth of learning that students have achieved on their own
- Identifies what students need to learn in order to achieve their personal, career or academic goals
- Shortens the time necessary to earn a college credential
- Saves tuition by reducing the number of required courses
- Enhances pride and self-esteem for what students have accomplished as learners
- Enhances students’ understanding of learning as a lifelong process (Flint & Associates, 1999)

Innovation: Work Readiness Credential

One common employer complaint in recent years has been that it is very difficult to know whether entry level job candidates can read, write, or communicate well, *even if they have a high school diploma*. To address this problem, there are at least three major approaches underway to develop and advance the use of assessments of “work readiness.” The expectation is that a “Work Readiness Credential” will help job seekers demonstrate their work readiness to employers, help to streamline the hiring process, and help training organizations better understand which skills are valued by employers and required for entry level employment (SRI International, 2005).

Equipped for the Future’s Work Readiness Credential

Equipped for the Future (an initiative of the National Institute for Literacy) has developed a Work Readiness Credential with a partnership of state agencies, business leaders, and national organizations. The skills addressed in the credential include nine communication, interpersonal, problem solving and learning skills, which are assessed by computer in four separate modules:

- Work Readiness Reading Test
- Work Readiness Math Test
- Work Readiness Oral Language Test (assesses Speaking and Listening)
- Work Readiness Situational Judgment Test (assesses five skills: Cooperate with Others, Resolve Conflict and Negotiate, Solve Problems and Make Decisions, Observe Critically, Take Responsibility for Learning)

The Work Readiness Credential project is now housed at the Center for Workforce Preparation (CWP) at the U.S. Chamber of Commerce. As of 2005, five states (Florida, New Jersey, New York, Washington, and Rhode Island) and the District of Columbia had joined the partnership. (SRI International, 2005). More information on the Work Readiness Credential can be found at <http://eff.cls.utk.edu/workreadiness/default.htm>.

ACT’s WorkKeys Work Readiness Credential

A number of states have chosen to use ACT’s WorkKeys as the foundation for a portable work readiness credential. The Louisiana Governor’s Office for the Workforce Commission launched the **Louisiana WorkReady!** Certificate program in 2003, which assesses for skills required in more than 11,000 jobs nationwide. The program awards Gold, Silver and Bronze WorkReady! Certificates to participants based on skill level. More than 6,300 have been issued since the start of the program. More information about the Louisiana initiative can be found on its website, <http://www.laworkforce.net/WorkReady/>. Other state programs include the **Kentucky Employability Certificate** (<http://www.kctcs.edu/workforcenetwork/kec/>), the **Virginia Career Readiness Certificate** (www.crc.virginia.gov), and **Indiana@Work** (<http://www.act.org/workkeys/initiatives/indiana.html>).

CASAS Workforce Skills Certification System

Another effort is the Workforce Skills Certification System (WSCS), which CASAS has developed with an employer advisory group. The WSCS contains a reading/math test, problem solving and critical thinking tests, applied performance tests, and a Certification Assessment Portfolio. While the portfolio is specifically for use with the industries of high-tech and telecommunications, health, and banking, the WSCS itself certifies that students have achieved a set of skill standards that may be used within and across all industries. A handful of states has begun to implement WSCS pilot projects. For more information, visit the CASAS website at <http://www.casas.org/>

Resources for Assessment

Timmons, J., Podmostko, M., Bremer, C., Lavin, D., & Wills, J. (2004). *Career planning begins with assessment: A guide for professionals serving youth with educational & career development challenges*. Washington, D.C.: National Collaborative on Workforce and Disability for Youth, Institute for Educational Leadership. www.ncwd-youth.info/assets/guides/assessment/AssessGuideComplete.pdf

STUDENT SUPPORT

One of the biggest challenges of any adult learning program is that adults may find it very difficult to stay with an education or training program through to its conclusion, particularly if participation in that program is voluntary. The National Center for Education Statistics, for example, has compared the enrollment patterns of traditional-aged students (under age 24) with those of adult learners (over age 24) and has found that adult learners are less likely to be *continuously* enrolled than traditional-aged students² and they are also less likely to re-enroll after dropping out.³ The NCES believes that the reasons for this difference include: greater family and work demands, goals that are “less than degree” (in other words, they may say they want a bachelor’s degree, when actually they want to learn specific skills to advance in their job, for example, and leave after achieving those objectives), and the fact that they have been out of school longer and may therefore be less prepared academically or psychologically to be in school. In addition, affording education and training may be a significant challenge to adults.

² Five percent (5%) of part-time associate’s degree students 24 and over were continuously enrolled, compared with 24% of part-time associate’s degree students under 24. (Source: U.S. Department of Education, National Center for Education Statistics, 1990 Beginning Postsecondary Students Longitudinal Study First Followup)

³ Forty-six percent (46%) of those 24 and older seeking a bachelor’s degree dropout without re-enrolling, compared to 23% of those under 24. (Source: U.S. Department of Education, National Center for Education Statistics, 1989-90 National Postsecondary Student Aid Study)

Because of the many obstacles to adult learner persistence, it is important to support their efforts wherever possible. Key Components for supporting students in their learning efforts include:

- **Conduct outreach**
- **Provide advising and other academic support**
 - Innovation: Use of peer for support and learning
 - Innovation: Use of mentors in learning and at work
- **Provide social support services**
- **Check in and follow up with the student**
 - Innovation: Retention/Post-placement support
- **Find ways to ease the financial burden of training and learning**
 - Innovation: Lifelong Learning Accounts
 - Innovation: Individual Development Accounts

Conduct Outreach

Outreach activities should also be carried out in a way that addresses the time constraints and other barriers facing adults. The outreach and recruitment process should not just be about drumming up interest in the education and training program. In addition to being a marketing activity for the program itself, recruitment activities should also convey the overall benefits of education.

Orientation sessions with groups of individuals can furthermore be useful opportunities to give a wide range of program information that will help students make thoughtful decisions about their participation and to come into the program with realistic goals. Conveying as much information as possible prior to enrollment will help to minimize any misunderstandings about the extent of the commitment required, which will help with retention later in the process (Wonacott, 2001). Also, understanding their own skill levels (as measured during the assessment process) in the context of what is needed for the program will help individual learners understand their own readiness for learning.

Addressing time constraints may mean taking outreach and enrollment activities (including ad campaigns and information sessions) to the places where adults live and work, rather than expecting adult to come to the program's location. Offering program and enrollment information online is also an important outreach strategy (Flint & Associates, 1999).

Provide Advising and Other Academic Support

Many adults know that they want additional training and education, but very few have carefully thought through their education and career goals, the steps they need to take to reach those goals, and the challenges they may face in reaching those goals. Individual advising is an important service to provide adults to help them clarify their goals (or set realistic ones) and map out the steps they will need to take to get there. The advising process often interfaces with assessments, as the results from an assessment battery will help to inform the planning process (Flint & Associates, 1999).

Other academic services such as tutoring, peer groups, mentors, and job placement can also be helpful to ensure learner persistence and success (Wonacott, 2001).

Organizational example: Genesis Health Care Systems, WorkSource, Inc., and Community College Consortia

Organization/Program	Campus on a Campus Genesis Health Care System Agawam, MA
Program Purpose	To launch a viable health care career ladder for entry-level healthcare workers.
Program Description	<p>Genesis Health Care Systems, one of the largest extended care providers in Massachusetts, and WorkSource, Inc., a local employment intermediary are have partnered with local community colleges (Holyoke Community College, Springfield Technical Community College, and the University of Massachusetts) to operate a career advancement program designed to help entry-level workers in CNA, housekeeping, and dietary positions move on to LPN and RN jobs.</p> <p>The partnership provides intensive career counseling and case management to incumbent employees, along with a number of education and training opportunities, including:</p> <ul style="list-style-type: none"> • GED, ESOL, and basic literacy programs • Skills training that helps workers take the next career step, such as CNA training for service employees or geriatric nursing assistant specialist training for CNAs • Pre-college courses, including developmental education, for workers who wish to advance in health care careers but need preparation to qualify for college- level courses • College-level pre-nursing courses that are prerequisites for entry into LPN or RN programs <p>The Massachusetts Long Term Care Foundation offers scholarships and in order to encourage employee participation, Genesis offers tuition assistance package.</p>
Progress	According to WorkSource Partner's website, the Campus on Campus program has developed career action plans for over 240 employees and 60 individuals have enrolled in college courses. In addition approximately 40 CNAs have begun taking prerequisite nursing courses and as of 2006, Genesis has assisted 24 CNA's to become licensed practical nurses.
Contact Information	<p>Genesis Health Care's Learning Resource Center Cindy Freebairn, Career Development Advisor Heritage Hall East 464 Main Street Agawam, MA 01001 T: 413.786.8000, x 266</p> <p>WorkSource Partners One Harvard Street, Suite 200 Brookline, MA 02445 T: 617.232.0330 www.worksourcepartners.com</p>

Information from Cindy Freebairn at Genesis, from Liebowitz & Taylor, 2004, from www.worksourcepartners.com, and from Genesis's marketing materials.

Innovation: The Use of Peers for Support and Learning

An important lesson from adult learning theory and practice is that adult learners often learn more effectively when drawing on the experiences of and support from their peers (Stroot et al, 1998). There are many ways that instructors can use peer interactions, small group activities, and collaborative learning strategies in the classroom to help reinforce learning (Imel, 1998). In addition, there are also design considerations that can make use of peers in order to improve motivation, retention, and overall learning. Two such approaches to consider are cohort groups and peer assisted learning.

Cohort Groups. Learning cohorts are groups of individual learners who take the same series of courses together, following the same path to a common goal. For example, a number of colleges and universities offer cohort degree programs, where the same group of students takes the same series of courses at the same time to earn associate's, bachelor's or even master's and doctoral degrees.

Adult learning research (as summarized in Imel, 2002) has concluded that cohort members experience many benefits from learning as part of a cohort:

- They have positive feelings about their learning experiences
- They report increased critical thinking skills
- They are motivated to learn more
- They have seen a change in their perspective of their own and others' learning

In addition, cohort members often provide each other with emotional and psychological support. A study by the National Center for the Study of Adult Learning and Literacy found that the interpersonal relationships that developed in cohort programs were very important to the participants and made a difference to their academic learning, their emotional and psychological well-being, and to the broadening of their perspectives (Kegan et al, 2001).

Some organizations who have used cohort groups for workforce development and other adult learning programs have found that another benefit is improved *employment* retention of the participants. For example, the University of Chicago Hospitals (UCH) used cohort groups in its company-sponsored nursing programs. Two years after degree completion, UCH found that there was 90% retention of employees who had studied in cohort groups compared to only 50% retention for employees completing their degrees independently. Then-Chief Learning Officer Judy Schueler believed that the cohorts helped to provide individual workers with a network or community of support that helped to tie the workers to the organization (Klein-Collins, 2004).

Cohort programs can be challenging to implement, however, because all students need to attend at the same time, and it may be difficult to serve students with a wide range of needs (Henle et al, 2005).

Peer Assisted Learning/Supplemental Instruction. Another way to use peers to support learning is to formally acknowledge peer leaders and give them responsibilities for assisting learners.

Tutoring is one way to do this. Another is to establish “peer assisted learning” groups, where more than one learner meets with a peer instructor. Also called “supplemental instruction,” this system provides an environment where learners can ask questions about the material they are learning in their classes, with a peer providing the answers. One U.S. Department of Education study (1996) found that supplemental instruction with peers resulted in higher grades for the students participating, and another U.S. Department of Education study (1993) found that attrition also declined.

Organizational example: Community College of Denver

Organization/Program	CNA-to-LPN Career Ladder Community College of Denver Denver, Colorado
Program Purpose	To help low-skilled CNAs qualify for LPN training programs in a short period of time.
Program Description	The Community College of Denver, with funding from the Mayor’s Office of Workforce Development, has developed a bridge program that shortens the amount of time needed for low-skilled CNAs to qualify for LPN training. The lower skilled adults can complete the bridge program in 24 weeks, while higher skilled CNAs can complete the program in as little as 8 weeks. The strategies used include: <ul style="list-style-type: none"> • Intensive, accelerated learning • A cohort model to provide strong peer support • Contextualized learning that uses health care as a context for learning reading, writing and math skills • Case management
Progress	The program began in 2002 with one cohort of 20 students. Since then, 15 additional cohorts have been added. As of 2006, seven cohorts have completed, eight are currently ongoing, and one has moved to another school. Sixty-seven percent (67%) of the 212 total students who have gone through the program have either earned their LPN diplomas or are still enrolled.
Contact Information	Community College of Denver Department of Nursing 1070 Alton Way Denver, CO 80230 T: 303.365.8300, x8394 www.ccd.edu/program.aspx?CID=170 Jo Ann Kennedy, Program Coordinator

Information from Jo Ann Kennedy at the Community College of Denver, and from Liebowitz & Taylor, 2004.

Innovation: The Use of Mentors in Learning and at Work

Mentors have been used in both learning environments and worksites to help participants and new workers one-on-one with any challenges they may face as they pursue their education and career goals.

Research has demonstrated the many benefits of mentoring. It can help promote cognitive development and intentional learning – such as when a new employee learns from a peer or mentor about the unwritten rules of corporate culture, or gains a clearer understanding of employer expectations, or understands better how to pursue promotions or additional responsibilities. Mentoring can contribute to psychosocial development by providing friendship, affirmation, modeling, counseling and support – in general, a feeling of interconnectedness with someone that helps when adjusting to new challenges and new roles. The mentor can also help ask important questions that lead to self-reflection and personal growth. Other psychosocial benefits include higher self-confidence, self-efficacy, self-assurance, and a better understanding of how to handle work-life issues (Mott, 2002; Ellinger, 2002; Prince, 2003)

Employers can also benefit from the mentoring relationship. One study of mentoring provided to welfare-to-work participants found that mentoring had a major impact on reducing turnover, improving productivity and predicting employee promotions (Prince, 2003).

Organizational Example: Good Samaritan Society

Name	CNA-to-LPN Program Good Samaritan Society Sioux Falls, SD (headquarters)
Program Purpose	To ensure the development and skill building of new Certified Nursing Assistants (CNAs).
Program Description	As part of a larger effort to build a multi-tiered nursing career lattice, this multi-site, long term care organization has worked with CAEL to develop a CNA apprenticeship program (funded in part through a grant from the U.S. Department of Labor). A mentoring component allows experienced CNAs to gain supervisory and coaching skills while helping to build the confidence and skill level of new CNA apprentices.
Progress	The program has enrolled 170 apprentices from 16 facilities in 10 states; 80 of these have enrolled in or completed Mentor training. After the implementation of the training, the retention rate among CNAs is 72% (as compared to Good Samaritan's overall retention rate of 51%.)
Contact Information	<p>Neal Eddy Vice President for Learning and Strategy Integration The Evangelical Lutheran Good Samaritan Society 4800 W. 57th Street P.O. Box 5038 Sioux Falls, SD 57117-5038 Neddy@good-sam.com T: 605.362.3122</p> <p>Bonnie Henningson Project Manager, Career Lattice The Evangelical Lutheran Good Samaritan Society 4800 West 57th Street Sioux Falls, SD 57117-5038 bhenning@good-sam.com T. 605.362.2214</p>

Information from Diana Bamford-Rees at CAEL.

Organizational Example: Community Education Project, Holyoke Community College and Juntos

Name	ABE-to-College Transition Program Community Education Project (CEP) Holyoke, MA
Program Purpose	To support the transition of Adult Basic Education (ABE) students to college degree programs
Program Description	<p>The ABE-to-College Transition Program is a joint venture between JUNTOS, a collaborative of adult basic education providers in downtown Holyoke and Holyoke Community College. The lead grant agency for the ABE-to-College Transition Program is the Community Education Project, an adult and popular education center serving the Latino/a community of Holyoke.</p> <p>The ABE-to-College Transition Program has three components: the Transition class, the Mentor Program and individualized counseling for ABE students who want to start college. The College Transition class serves 12 students per session and has three cycles, fall, spring and summer. The class meets at Holyoke Community College and the curriculum revolves around college orientation and readiness. Students focus on improving their academic skills in reading, writing, and math. Students also learn computer skills and receive guidance on possible career interests.</p> <p>The College Transition Mentor Program recruits, hires and trains current Holyoke Community College students to be mentors for incoming students enrolled in the College Transition class. The majority of mentors are students who themselves came from ABE classes and have the experience and understanding necessary to provide crucial support for incoming students. Mentors serve as classroom assistants in the College Transition class and provide individual support for students who are in the matriculation process. Finally, they work with the Mentor Coordinator in the process of recruiting new students as well as planning and organizing community building events.</p>
Progress	As of 2006, over 90 students have graduated over from the CEP and the majority of these students have matriculated to college.
Contact Information	<p>ABE-to-College Transition Program Community Education Project 317 Main Street Holyoke, MA 01040 T: 413.538.5770</p> <p>Holyoke Community College 303 Homestead Ave. Holyoke, MA T: 413.538.7000 http://www.hcc.edu</p>

Information from staff at Community Education Project, www.collegetransition.org and <http://www.hcc.edu>.

Provide Social Support Services

Learners are vulnerable to a number of possible crises that can derail their efforts to stay in an adult learning or training program. Some of the most common challenges facing all adult learners have to do with their personal lives, such as the demands of work, the demands of family including the need

for child care, secure and good quality housing, or reliable transportation. Low-income individuals are particularly vulnerable because they do not have enough income, assets, stability and reliable relationships to create a safety net (DCHD, MassCAP, & Commonwealth Corporation, 2003).

There are a number of ways to approach the provision of support services:

1. **Do It Yourself.** Some organizations attempt to provide comprehensive, or “wrap around” services, largely on their own. The Instituto del Progreso Latino, for example, provides family literacy, after-school programs, voter registration, citizenship preparation, job search, counseling and child care at the center (Chenven, 2004). Providing such a broad range of services can be difficult when your primary organizational focus is training and skill development.
2. **Establish Peer Support.** Another model is to develop a system for the learners to help each other. The STEP program in San Francisco hired “multi-lingual rank-and-file” workers to provide support services to the program participants. This model helps the learners feel more at ease while giving them access to someone who can help them through their challenges (Chenven, 2004).
3. **Establish Partnerships for Support Services.** Rather than providing everything in-house, many organizations establish partnerships with social service agencies and other organizations who can provide the social supports that learners might need. In a 2002 study of job training and microenterprise organizations funded by the Levi Strauss Foundation, all of the interviewed organizations reported that they had established systems for referring clients for social service assistance. These organizations had found that developing relationships with social service organizations for the purposes of referrals is a much more efficient and effective strategy than trying to meet every social need internally (Klein-Collins, 2002).

Some colleges and other training providers combine the different approaches in order to best meet the needs of the program participants. Project Quest, for example, not only provides support for direct training activities, but also helps to subsidize transportation expenses to and from school. The organization then uses case managers to work directly with participants and help to address any problems that could keep the participants from completing the training program. Case managers leverage whatever resources they can to obtain the needed support services (Rademacher, 2002). The College of New Rochelle, profiled below, also utilizes multiple strategies to provide a wide range of support services to its students.

Organizational Example: College of New Rochelle

Organization/Program	College of New Rochelle, School for New Resources New Rochelle, NY
Program Purpose	To design an educational model that addresses the needs of adults returning to school and provides a flexible and supportive environment in which to learn.
Program Description	Established in 1972, the School for New Resources offers Bachelor of Arts degrees designed specifically for adult learners. The School for New Resources looks to provide early intervention in areas that may impede an adult student's progress. Initial barriers to returning to school are identified and the School assists adult students with: childcare needs; indirect educational costs; stress reduction; and the financial aid process. In addition, the school assumes an advocacy role on behalf of adult students with local social service agencies. The school provides a variety of different support-related activities including bereavement and mediation sessions, academic and personal improvement workshops, support groups for women and men, stress reduction workshops, and job fairs are offered to students. In order to support the students who were unable to pass the skills assessment test for enrollment, the school created the ACCESS Center (Adult Career Counseling, Education, and Support Services) which provides free college preparatory courses for students who need help developing college-level reading, writing, and math skills, vocabulary development, time management and typing. Once enrolled, every new student must begin their <i>Transitional Semester</i> which consists of two courses, "Experience, Learning, and Identity" and "Translating Experience into Essay." These courses are designed for adult learners to assess and develop academic skills based on experiential learning acquired throughout their working career.
Progress	With a student body of more than 4,700, in the nearly 30 years since its founding, the School of New Resources has graduated more than 11,000 men and women.
Contact Information	School of New Resources The College of New Rochelle Newman Hall New Rochelle, New York 10805 http://www.cnr.edu/academics/snr-index.html

Information from the college's website and from Flint & Associates, 1999.

Check In and Follow Up with the Student

One of the most important strategies for improving retention in an adult learning program is to make sure that the learner receives a lot of individual attention, from both the instructor and a counselor/case manager. Reaching out to the individual learner early and often will help to sustain the motivation of that learner (Wonacott, 2001). For programs with the goal of employment placement, it may be particularly important to continue case management and other support for a period of time following job placement.

Organizational example: Capital IDEA

Organization/Program	Capital IDEA Austin and Round Rock, Texas
Program Purpose	To enable underemployed and underemployed adults to attend college full time, in preparation for high-value, high-demand occupations.
Program Description	<p>A partnership between the non-profit organization Capital IDEA, Austin Community College, and local workforce investment boards provides long-term counseling, education, and support services to adults with family responsibilities and reading levels as low as fifth grade.</p> <p>The program pays for tuition, fees, books, child care, case management, emergency assistance, and transportation. It also provides counseling, mentoring, tutoring, and job search and post-placement support. Throughout the program, participants meet weekly with their peers and a career counselor, with a focus on case management, mutual support, counseling, study skills, financial management, parenting skills, and problem solving and critical thinking skills. These meetings are a primary strategy to support retention and persistence.</p>
Progress	Program graduates who entered employment in 2005 were earning an average of \$29,744 a year, almost triple their average pre-program earnings of \$11,491. Participants also graduate at nearly twice the rate of Austin Community College students who do not receive the supports the program provides.
Contact Information	Steven Jackobs Executive Director Capital IDEA P.O. Box 1784 Austin, TX 78767 sjackobs@capitalidea.org T: 512.457.8610, x110

Information from Steven Jackobs at Capital IDEA, and from Liebowitz & Taylor, 2004.

Organizational Example: Community Action, Inc

Organization/Program	Certified Nurse Aide Training Program Community Action, Inc. Haverhill, MA
Program Purpose	To meet the training needs and the skills requirements of the Long Term Care industry.
Program Description	<p>This program serves low income adults who have poor/no work history, may be deficient in basic reading and math skills, or have low English proficiency levels.</p> <p>The current program is a twelve week/ 30 hours/week program with a staff of two RNs and a Program Counselor. This program offers the traditional Red Cross training in Certified Nurse Aide as well as Home Health Aide, Care of Alzheimer patients, First Aide and CPR. The basic three-week Red Cross training curriculum is combined with nine weeks of basic and soft skills training in order to reach those who are not prepared for the core CNA training.</p> <p>The program operates with three staff: a registered nurse (RN), who delivers the hard skills training; a Coordinator/Instructor, also an RN, who reinforces the hard skills training while delivering employability/soft skills training; and a Program Counselor, who assesses each client for needs and then works with them to develop plans of action to overcome barriers. In addition, the Program Counselor works with the instructors, the client, and employers on job placement.</p> <p>The Program Counselor works with about 12-15 students per 12- week training cycle three times annually (36 students average over the year). Weeks one and two of the training are considered "crisis weeks," in which the case manager works individually with students to overcome challenges that arise from making the transition to a 30 hour training program. A newly added component of the program, the Rental Assistance Program, (RAP) provides rental assistance to newly employed CNAs for up to one year after training completion. Because the funds for this are limited, not all students participate in this. But for those with the most serious barriers to employment this extra support during these early months further adds to their chances of success. Those who have participated in the RAP program gradually increase their portion of their rent as work and life stabilize until they no longer need this support.</p>
Progress	Since its beginning, 322 students have enrolled in the C.N.A. Program. To date, 92%, or 295 students have successfully completed the training program. Of those completing the program, 85% have been placed in training related jobs. Placement rate based on enrollment is 80%. Two students have applied for further training to become LPNs and several have begun the climb up the C.N.A. career ladder and gained additional job responsibilities. A few students have gone on further and have graduated as RNs. During calendar year 2005, 42 students enrolled, 40 completed (95% completion rate). Of these 34 were placed at an average of \$10.79 per hour.
Contact Information	Nancy Tariot Community Action, Inc. 145 Essex Street Haverhill, MA 01832 T: 978.373.1971 http://www.communityactioninc.org/ ntariot@communityactioninc.org

Information from Nancy Tariot at Community Action, Inc. and from DHCD, 2003.

Innovation: Retention/Post-placement Support

Retention strategies during training are important for seeing the learner through to the completion of the learning program. If the learning program is part of an employment or career advancement initiative, however, long-term success will be greatly improved if additional support is provided after the person is placed in a work setting. An MDRC report (Miller, Molina, Grossman, & Golanka, 2004) discusses three strategies for post-placement support:

- Enhanced approaches to post-employment case management
- Working with employers to improve job retention
- Offering additional retention services to fill in gaps (for example, emergency child care, financial literacy education, help with saving toward home ownership or other assets, and transportation services)

These strategies, either alone or in combination, help individuals deal with short-term personal crises, long-term problem solving, and problems that arise on the job.

Organizational Example: Connectinc

Organization/Program	Work Central Call Center Program Connectinc Rocky Mount, NC
Program Purpose	To serve families whose quality of life and economic security are threatened by employment-related circumstances in eastern rural North Carolina. In the last two years, textile and manufacturing plant closings in favor of overseas operations have added to the challenge as formerly successful workers are displaced.
Program Description	<p>Connectinc was incorporated in North Carolina in 2002 and it is the parent organization for a variety of technology-supported call-center programs that provide a network of economic and social support services for struggling families, connecting them with opportunities for education, employment, job retention, and asset-building. Relying on sophisticated electronic communications and case management technology, The Call Center provides case management services to low-income workers via the telephone through a partnership with public and private organizations. The center's case management software automatically schedules outreach and follow-up calls for case managers. The case managers use these calls to connect individuals with support service needs, provide guidance on how to handle issues in the workplace, and encourage individuals to pursue additional training and education that can lead to higher paying jobs. In addition to these outgoing calls, there is also a system for handling incoming calls via a toll-free number. If case managers are unable to reach someone by phone, the system automatically sends mail correspondents to congratulate individuals who reach their goals and reminds them of services and programs such as the EITC.</p> <p>All services rely on two extremely adaptable software packages—a case management system and a geographic resource mapping system—known as <i>Connect Software</i>. Interested organizations can buy the case management package (along with technical support and space on the Connectinc server, if desired) for application to their own case management needs.</p>
Progress	<p>After five years' experience, Work Central has:</p> <ul style="list-style-type: none"> • Tripled the number of enrolled counties, from 6 to 18 • Seen job placements for an average of about 225 customers each quarter • Helped customers add \$95 million in annualized wages to their local economies. <p>Besides the advantages for Connectinc customers, Connectinc brings economic benefits to the community and innovation to the field of human services. More than 6400 successful Work Central customers to date have contributed \$81 million to the economic health of the eighteen counties that have participated.</p>
Contact Information	<p>Connectinc. Jackie Savage, President T: 252.442.3467 http://www.connectinc.org/index.html Jackie.Savage@connectinc.org</p>

Information from Jackie Savage at ConnectInc.

Organizational Example: SEEDCO's

Name	EarnBenefits® SEEDCO Ney York City, NY
Program Purpose	<i>EarnBenefits</i> is a three-tiered service delivery strategy for helping low-wage workers access income-enhancing benefits and work supports to move them toward long-term labor force attachment and economic self-sufficiency.
Program Description	<p><i>EarnBenefits</i> services include:</p> <ul style="list-style-type: none"> • Marketing and outreach to educate workers about government-sponsored and private work supports using the public website www.earnbenefits.org • Eligibility screening and facilitated access through which they centralize and streamline access to multiple benefits using a web-based technology tool, EarnBenefits Online (EBO) • Benefits management to engage low-wage families over time to ensure that benefit access leads to continuous employment and economic well-being. <p><i>EarnBenefits</i> provides access to healthcare, childcare, income support and housing benefits as well as to tax credits and financial services. <i>EarnBenefits</i> services are delivered in venues that are accessible to a broad range of low-wage workers including employer worksites, community-based organizations (CBOs) in neighborhoods of need, WIA One Stop Career Centers, childcare centers, and community colleges. <i>EarnBenefits</i> is currently operating in New York City (NY), Memphis (TN), and Atlanta (GA). In 2006 new sites will open in Baltimore (MD) and Buffalo (NY).</p>
Progress	Since 2004, <i>EarnBenefits</i> has screened over 11,000 low-wage workers for benefits and verified that over 4,500 received at least one benefit. The value of these benefits is over \$5,360,000.
Contact Information	<p>Chauncy Lennon Vice President for Asset Building Seedco 915 Broadway, 17th Floor New York, NY 10010 T: 212.204.1332 clennon@seedco.org</p> <p>www.earnbenefits.org www.seedco.org</p>

Information from Chauncy Lennon at Seedco.

Organizational Example: Paraprofessional Health Care Institute and Home Care Associates of Philadelphia

Organization/Program	Paraprofessional Health Care Institute (PHI) and Home Care Associates of Philadelphia(HCA) Philadelphia, PA
Program Purpose	To increase the number of skilled health care paraprofessionals - home health aides, certified nursing assistants, and caregivers in the Philadelphia area
Program Description	The PHI and HCA have partnered to provide a four-week training program to attract individuals to field. Program participants receive an hourly wage and a benefits package. Additional benefits including shift supplements, paid travel time, earned leave benefits, attendance bonuses, full employer-paid health insurance, a company sponsored pager, and transportation subsidies are provided in order to encourage participant retention. While the starting wage for home health aides is \$7.50 per hour, once the full benefits are factored in, total cash value is over \$13.00 per hour. Also, aides are eligible to receive raises on an annual basis. Because HCA is a worker-owned company, home health aides enjoy a share of the company's end-of-the-year profits. In the last three years, worker owners have received at total of \$1800 per worker in dividends.
Progress	HCA far exceeds average aide retention rates as reported in a recent national survey of home care companies. Sixty percent of HCA'S workers have been employed more than one year, as compared to a national average of 28 percent. Thirty-four percent of HCA's workers have been employed over two years, as compared to a national average of six percent
Contact Information	Peggy Powell, Director of Workforce Strategies Paraprofessional Health Care Institute (PHI) 349 East 149th Street, Suite 401 Bronx, New York 10451 T: 718.402.7766 Karen Kulp, President Home Care Associates of Philadelphia 1315 Walnut Street, Suite 832 Philadelphia, PA 19107 T: 267.238.3213

Information from Karen Kulp of Home Care Associates.

Find Ways to Ease the Financial Burden of Training and Learning

A final concern for anyone interested in developing learning initiatives is how to fund them. Federal resources for adult education and for workforce training have significantly diminished in recent years, and so practitioners and workforce development partnerships have had to be creative in their financing strategies, often drawing from a number of different funding streams to support innovative and results-oriented programs. (WRTP, an organization profiled earlier in this report, is well-known for its ability to combine and leverage different funding streams.)

- **Public sector** – Although the dollar totals are largely inadequate to meet the growing need, the public sector still offers considerable resources for workforce development and adult education. Some sources of information on this support include:
 - Gruber, David. (2004, November). *Using Resources Effectively: An Overview of Funding Sources for Workforce Development Initiatives*, by David Gruber, Workforce Strategy Center, Retrieved May 2, 2006 from http://www.workforcestrategy.org/publications/WSC_UsingResources.pdf
 - Klein-Collins, Rebecca. (2006, April). *There's no place like home: a look at local support for workforce intermediaries*. Retrieved May 2, 2006 from <http://www.cael.org/pdf/LocalSupportforWorkforceIntermediaries.pdf>
 - National Adult Education Professional Development (n.d.). Sources of federal funds for adult education and family literacy. <http://www.naepdc.org/resources/CFS.html>

- **Employers and Individuals** – Those who are able to develop programs that demonstrate real value (or even a return on investment – see section on Evaluation) to employers may find that they are able to charge fees for the training that is provided for incumbent workers and/or job seekers. Similarly, if programs are able to show that individuals will be able to complete the program with little difficulty and that the result will be opportunities for career advancements, individuals may also be willing to commit their own resources to pay for the program.

- **Combined Resources** – In addition to the above resources, some practitioners are testing new mechanisms that leverage multiple sources of funding at once. Two models already in the field are Lifelong Learning Accounts (LiLAs) and Individual Development Accounts (IDAs). LiLAs are matched savings accounts for education and training that are employer-based. As designed by CAEL, match dollars for LiLAs are leveraged from the private sector, with philanthropic or public sector resources used as a third-party match when possible. CAEL currently has three LiLA demonstration sites and is working with several states on developing and implementing state-level LiLA programs (for more information, see www.cael.org/lilas.htm). IDAs are matched savings accounts for low-income families to save and build assets, with the ultimate goal being the purchasing of a first home, paying for postsecondary education or starting a small business (see Corporation for Enterprise Development, www.cfed.org for more information on IDAs).

Organizational example: WorkSource (the Jacksonville area Workforce Investment Board)

Organization/Program	WorkSource Florida Jacksonville, FL
Program Purpose	To assess the workforce needs of businesses before those needs become critical and to assess the optimal way to meet those needs.
Program Description	WorkSource staffs the workforce investment board and oversees service delivery through the One Stop Career Centers of Northeast Florida. WorkSource takes a longer-term view and develops an “income growth strategy” for the job seeker. WorkSource established a “self-sufficiency wage” of \$23/hr. for the region, allowing the use of WIA adult funding for incumbent worker training. WorkSource pays 35% of the costs for employed worker training, and the employer pays the other 65%.
Progress	2004-2005 training placements totaled 2,978 (48% of which were in the manufacturing industry).
Contact Information	Candace Moody, Director 215 N. Market Street, Ste. 300 Jacksonville, FL 32202 904.798.9229, x2201 www.worksourcefl.com cmoody@worksourcefl.com

Information from Candace Moody at WorkSource, and from Troppe & Toft, 2004.

Resources for Student Support

Case Management/Retention

- Case Management and Retention Guidebook, by Seattle Jobs Initiative, 2002

Mentoring

- Mentor/National Mentoring Partnership (2005). **How to build a successful mentoring program using the elements of effective practice: A step-by-step tool kit for program managers (2nd Edition)**. Alexandria, VA: Author.
http://www.mentoring.org/DownloadFiles/Mentor%20Tool%20Kit_full.pdf This toolkit provides guidance on effective strategies to use when developing youth mentoring programs.
- How to set up a workplace mentoring program (Center on Wisconsin Strategy, 2003)
- Vermont Mentoring Partnership. <http://www.vtmentoring.org/library.shtml>
- Peer Systems Consulting Group, Inc. Peer Resources Documents Archive. [this site requires membership]. <http://www.mentors.ca/Docs.html>
- Mentors Forum – homepage for the British Mentors Forum <http://www.mentorsforum.co.uk/>
- International Mentoring Association. <http://www.mentoring-association.org/>

ADULT-CENTERED TEACHING-LEARNING PROCESS

Various reviews of adult learning theory (Imel, 1988; Zemke & Zemke, 1984) provide a summary of what researchers have learned in the past about how adults learn:

- **Adults can learn throughout their lives and benefit from having a broad experience** that helps them perceive, process, and use information and provide a foundation for gaining additional knowledge.
- **Adults need to be able to integrate new ideas with what they already know.** Information that has little “conceptual overlap” with what is already known may be acquired slowly.
- **Adults learn what they consider to be important.** They work harder and perform better when educational experience provide what they value, but what they value depends upon their individual goals.
- **Adults want to see the relevance of learning to their lives and their careers.** They prefer single concept courses that apply basic concepts to real-life situations and relevant problems.
- **Adults are often time-conscious learners.** Most want to meet their educational goals as directly, quickly, and efficiently as possible.
- **Adults usually – but not always – need to be given autonomy and independence in the learning process.** Compared with children, adults have developed an independent view of self, so they generally want to be treated as if they were responsible individuals with the capacity to set their own course. When possible (and this may not apply to individual learners who are lacking very basic academic and study skills), instruction should be designed in a way that allows adults to retain as much autonomy as possible. Some adults may need additional assistance in making the transition from a teacher-centered learning to self-directed learning activities.

These lessons are very important for the process of carrying out the instruction, what this report refers to as the Teaching-Learning process. Drawing on those lessons, Key Components include:

- **Make it relevant**
- **Integrate content**
- **Engage the learner as an adult**
- **Draw on the learner’s experience**
- **Vary training techniques to appeal to different learning styles**
 - Innovation: Use of “Blended Learning”
- **Create a positive learning environment**
- **Be sensitive to cultural differences**
- **Give frequent and immediate feedback**

Throughout this section, the report offers practical tips to carry out these key components. The tips are from a useful trainer’s guide published by the National Highway Institute called, *Circle of Learning*, which can be found online at

<http://www.nhi.fhwa.dot.gov/downloads/freebees/744/RM%20The%20Circle%20of%20Learning.pdf>.

Make It Relevant

There is nothing more frustrating to adults than sitting in a class and wondering what the assignment or the lesson has to do with real life. Adults value their time and they want to get the most out of their learning experiences. Adult learning researcher Susan Imel (1982) has noted that adults generally opt to engage in a learning opportunity when they are motivated “by the need to acquire a new skill or make a decision.” Instruction needs to be very practical, focusing on exactly how a given lesson will be useful to them on the job (Lieb, 1991). Morris T. Keeton (2002), CAEL’s founder and first president, has highlighted the importance of practical lessons in his list of eight principles to achieve effectiveness and efficiency in learning. He recommends using “genuine problems to arouse motivation and enhance learning.”

Adult learning researchers are not alone in the recommendation of “making it real.” The website www.workforceadvantage.org (a resource that is the result of a joint collaboration by the Initiative for a Competitive Inner City) has noted that the most successful training programs give students a chance to experience the work firsthand and use real-work scenarios as an important training tool.

The website notes that “Employees have a chance to test the waters of a job before they go it alone, and company trainers have the opportunity to evaluate the employees’ performance and make necessary changes.” A perfect example of a training program that uses real work situations to develop workplace skills and competencies is the Training, Inc. program, profiled as part of the “Incorporate Soft Skills” innovation, below. Training, Inc.’s work simulation provides the learners with the opportunity to see what it is like to in a real job setting, working with other people and on real assignments with firm deadlines. Another strategy that employers often use to make training as relevant as possible is on-the-job training (see Asian Neighborhood Design example, below).

Organizational Example: Asian Neighborhood Design

Name	Asian Neighborhood Design (AND) San Francisco, California
Program Purpose	To train disadvantaged young adults for a career in the skilled trades by teaching them both soft and hard skills.
Program Description	The first two weeks of the fourteen-week training are spent learning “effective life skills.” The topics include: anger management, effective communication on the job, sexual harassment, relapse prevention, self-esteem, time management, etc. The next couple of weeks are spent teaching participants construction math and how to read a tape measure. Weeks four through fourteen are spent learning about the skilled trades and practicing the specific craft and doing volunteering work for organizations such as Habitat for Humanity and other non-profits who use skilled trades people. At the end of the fourteen-week program, the Trainees are then placed into union jobs, or enter a respective apprenticeship with the various trades.
Progress	By providing real work experiences, the organization is giving trainee experience on the job, a sense of what it will be like, and opportunities to practice soft skills. According to the organization’s website, “More than 100 low-income or unemployed people receive job training services each year.”
Contact Information	Jamie Brewster, Site Manager 2345 Harrison Street San Francisco, CA 94110 T: 415.648.7070 http://www.andnet.org/ jbrewster@andnet.org

Information from Jamie Brewster of Asian Neighborhood Design and Rademacher, 2002.

Innovation: Incorporate Soft Skills Training Into Design of the Program

Even if the learners in the training or skill building program know the job-related skills inside and out, they will not last long in any job if they cannot get to work on time, work well with others, and show some initiative on the job. “Soft skills” can be as important, if not more important, than job related skills. There are many definitions of what soft skills are. Various lists include self-discipline, work ethic, the ability to work as a team, the ability to plan ahead, courtesy, reliability, and so on. Four overarching categories of soft skills are:

1. Problem solving and other cognitive skills
2. Oral communication skills
3. Personal qualities and work ethic
4. Interpersonal and teamwork skills (Conrad & Leigh, 1999)

A number of training programs have been successful at addressing soft skill training needs as part of their approach to skill development and training for adults. Some examples for how to implement soft skills training include:

- Employ teachers and peer counselors whose backgrounds are similar to those of the trainees
- Make use of job coaches or mentors – people who offer support and feedback to newly hired workers and give them advice on work related problems and other issues.
- Integrate soft skills training into every element of the curriculum.
- Create work or work-like tasks and establish teams to complete them.
- Put trainees in the employer’s role from time to time, so that by managing they can learn to be managed.
- Establish the discipline of the workplace in all aspects of the program.
- Recreate the physical environment of work to the fullest extent possible.
- Give participants lots of opportunities to get to know successful people. (Conrad & Leigh, 1999; Houghton & Procsio, 2001)

The description of the WIRE-Net Hire Locally Program provided earlier (see section on Assessment) provides one example of an organization that assesses for soft skills prior to job placement. Training, Inc. (profiled below) provides an example of an organization that integrates soft skills training into its job training curriculum. STRIVE provides an example of a more targeted approach to soft skills training.

Organizational Example: Training, Inc.

Organization/Program	Training, Inc. Boston, Chicago, Indianapolis, Newark, and Pittsburgh; new sites opening in Tampa and Racine, WI
Program Purpose	To create work-based training and employer partnerships that will help low-income individuals develop the job skills, life skills and confidence to succeed in living wage-employment.
Program Description	<p>Training Inc. is a network of programs that started in Chicago in 1975 and now has a national office in Indianapolis. The programs serve an urban population including individuals who are unemployed and underemployed, minority populations, immigrants, refugees, persons with disabilities, veterans, ex-offenders, etc. The training programs last three to four months, running 30-35 hours/week.</p> <p>Operating under the core principle of simulating the workplace, the programs use work-based projects to develop skills in business communication, keyboarding, customer service/receptionist, Microsoft Office skills, etc. These simulations also help the participants with soft skills such as teamwork/cooperation and staying calm in stressful situations.</p> <p>Training, Inc. has relationships with various service providers for referrals and they rely on over one hundred business and community volunteers to review resumes, do mock interviews, make class presentations about the workplace, conduct workshops, etc. They partner with over 500 employers who provide job opportunities as well as assistance in developing industry-driven training curricula. Staff members include job developers and trainers who also serve as “trainee supervisors.” Just as employees in the real workplace do not have case managers, trainees at Training, Inc. work with their staff supervisors in a problem-solving process to assess their support service needs and to focus on issues that keep them from being “work ready”.</p>
Progress	In 2004, the national average for job placement in programs was 85% of graduates, with 80% of employed graduates still working after one year. The average starting wage ranged by location from \$20,000 to \$28,000 annually.
Contact Information	<p>Martha Miles, Director Training, Inc. National Association 333 North Pennsylvania, Suite 900 Indianapolis, IN 46204 T: 317.264.6740 http://www.traininginc.org mmiles@traininginc.org</p>

Information from Martha Miles of Training, Inc. and Elsa Bengel of YMCA Education and Training. Information also from DHCD, 2003 and Houghton & Procsio, 2001.

Organizational Example: STRIVE, Inc.

Name	STRIVE Headquartered in New York, N.Y. with affiliate sites in 20 cities nationwide, and overseas locations in London, Ireland, Scotland, and Israel.
Purpose of Program	To prepare disadvantaged and hard-to-employ individuals for jobs
Program Description	STRIVE (Support and Training Result in Valuable Employees) is comprised of a network of national and international community-based organizations which utilize a successful job training and placement model for people with little or no work experience. This innovative model combines a short, intense period of attitude training—the soft skills needed to survive and excel in any workplace—job search techniques, rapid placement, and long-term follow-up. STRIVE's signature program is an intensive 3 to 4-week workshop that focuses on workplace behaviors and attitudes. Using a simulated workplace environment, participants learn how to dress and speak appropriately, follow instructions, accept criticism, and function as team members. The core training is short by design, and the goal is to help individuals make the adjustments needed to become employed as quickly as possible.
Progress	Over the last twenty years (1985-2005), the STRIVE Affiliate Network has achieved the following: <ul style="list-style-type: none"> • STRIVE has placed more than 33,000 hard-to-employ individuals (70 percent of its graduates) in jobs. • Seventy percent of the workers STRIVE places remain employed after 1 year. • 2005 STRIVE graduated more than 4,000 individuals from its job-readiness training program and placed more than 3,000 individuals in unsubsidized jobs.
Contact Information	Jose Adorno, Director of Affiliate Services 240 East 123rd Street, Third Floor New York, NY 10035–2038 T: 212.360.1100 www.strivenational.org jadorno@strivenational.org

Information from Aziz Kehkan of STRIVE and from U.S. Department of Housing and Urban Development, 2003.

Integrate Content

One of the benefits of programs like Asian Neighborhood Design and Training, Inc. (see profiles, above) is that by making the training relevant, they are able to tackle a number of different kinds of skill needs at once. Research has shown that programs are more effective when they integrate content as opposed to presenting the different content separately (Moran & Petsod, 2003). But it is not only on-the-job training programs that should attempt this kind of integration. Other training programs also need to tackle multiple needs: soft skills, technical/job skills, basic math or reading, safety or English as a Second Language.

When working with people with limited English skills, for example, it can be useful to integrate language training and cultural adaptation with vocational skill building (these programs are often

called Vocational ESL, or VESL programs). This can be helpful for immigrants who need to improve their job and language skills but do not have the time to take separate classes because of the need to support their families. The integration of language and skill training can take place prior to employment or post employment. Pre-employment VESL programs utilize instructional methods such as group discussion, scenarios and mock interviews, language practice and technical vocabulary – practical applications of language – rather than the typical focus on grammar (see Milwaukee HIRE Center example, below). Incumbent worker VESL programs, on the other hand, work with people who are already employed, providing training in language skills and vocabulary that is specifically needed for the existing employer (see Instituto del Progreso Latino example, below) (Chenven, 2004).

Other examples of integrated content include:

- Employability skills with core services such as job readiness, resume writing, and interviewing techniques
- Career awareness/career counseling with core instructional services
- Industry-related content with ABE or ESL
- Employability skills with ABE or ESL (Massachusetts Department of Education, 2004).

Organizational example: Tacoma Community College

Organization/Program	Merged ABE, ESL and Workforce programs Tacoma Community College Tacoma, Washington
Program Purpose	To help individuals with low literacy skills access job training and career pathways programs
Program Description	In an effort to be more deliberate in combining adult literacy and job training, college leaders developed a model that integrates contextualized Adult Basic education (ABE) or English as a Second Language (ESL) with technical training and career pathways. For example, for the early childhood education pathway, the college recruited low-paid assistants with limited English ability from local child care centers for a program that integrates ESL and ABE with introductory early childhood education. At the end of the course, completers can receive nine hours of credit towards a degree along with a certificate that earns them higher wages at local child care centers.
Progress	The college is working on implementing additional career tracks to include an enhancement to the current early childhood education track as well as office professional technologies and accounting options.
Contact Information	Kim Ward, Director of Adult Basic Skills Tacoma Community College – Adult Basic Skills Program 6501 South 19 th Tacoma, WA 98466 T: 253.566.6048 www.tacomacc.edu/academics/adultbasicskills.aspx

Information from Kiim Ward of Tacoma C.C., and from Liebowitz & Taylor, 2004.

Organizational Example: Milwaukee HIRE Center

Name	Milwaukee Spanish Track Project (formerly called the Milwaukee Tech Track Project) Milwaukee HIRE Center Milwaukee, WI
Program Purpose	To train Spanish-speaking workers for jobs in computer numerically controlled machining (CNC) and Industrial Maintenance Mechanics (IMM).
Program Description	The HIRE (Help In Re-Employment) Center functions as a satellite One Stop for dislocated workers in Milwaukee. The Tech Track Project is a 16-19-week bilingual training program that provides skills instruction in Spanish, while also teaching vocational English that will help the workers succeed in the job. Transportation and childcare services are provided to needy program participants.
Progress	The program has a completion rate of 87%. Ninety-one percent of those who completed training entered employment, with 91 percent still employed 90 days after hire. Workers placed in CNC jobs made an average of \$10.53 an hour. Those in IMM jobs made an average of \$11.77 an hour.
Contact Information	Alba Baltodano, HIRE Center Manager Roger Hinkle, Project Director, Milwaukee Spanish Track Project 816 West National Ave. Milwaukee, WI 53204 T: 414.385.6920 http://www.milwjobs.com/adult_hire.php abaltoda@milwjobs.com

Information from Alba Baltodano and Roger Hinkle of the HIRE Center.

Organizational Example: Instituto del Progreso Latino

Name	Instituto del Progreso Latino Chicago, IL
Program Purpose	To aid the unemployed or underemployed Latinos in the Chicagoland area gain marketable work readiness skills and increased wages.
Program Description	<p>Instituto del Progreso Latino offers a variety of different education and workplace training programs, including:</p> <ul style="list-style-type: none"> • Manufacturing Works: Chicago's Workforce Center for Manufacturing – one of Chicago's two new sector centers • Career Resource Centers – located in three different Latino communities and with bilingual staff and materials “en Espanol” in order to increase accessibility of mostly Latino residents to Workforce Investment Act and TANF job information and placement assistance. • Chicago Manufacturing and Computer Technology Bridge Programs - successfully trained and placed over 600 low income residents in good paying career path jobs. • Carreras en Salud – a career pathways program bridging limited English proficient individuals into Certified Nursing Assistant and Licensed Practical Nursing <p>In addition, Instituto offers area employers customized training including: basic skills training; technical training (GD&T, print reading, preventative maintenance; quality assurance; ISO/QS 9000 training for shop floor workers); vocational English as a second language; job related writing and English; safety issues; and business practices.</p> <p>The curriculum developer spends time at the workplace observing the jobs that the workers do, their interactions with each other, and the written materials they work with each day. Based on those observations, the developer produces a customized curriculum for each employer. The curriculum focuses on job-related conversational skills, technical vocabulary, job-related reading that might be needed, and English words or phrases that would be helpful to workers for resolving programs and getting the work done. (from Chenven, 2004)</p>
Progress	In 2005, the workforce services department served over 5,000 participants.
Contact Information	Tom Dubois, Workforce Development Director 2570 S. Blue Island Ave. Chicago, IL 60608 T: 773.890.0055 x129 http://www.idpl.org/

Information from Mirna T. García of Instituto del Progreso Latino, from www.idpl.org and from Chenven, 2004.

Organizational Example: San Francisco Department of Human Services

Name	VESL Immersion Program (VIP) A collaboration among the City of San Francisco Department of Human Services (DHS), the Private Industry Council (PIC), Catholic Charities, Arriba Juntos, and the City College of San Francisco (CCSF) San Francisco, California
Program Purpose	To help welfare recipients with limited English skills to improve vocational English through intensive vocational and workplace language immersion.
Program Description	<p>VIP serves limited English proficient (beginning ESL students, levels 1-4) CalWORKs and PAES participants to acquire vocational English and workplace culture skills quickly in order to obtain and advance in employment. By combining the teaching of ESL with lessons on workplace terminology, culture, job search, soft skills and safety, the VIP program prepares its students to be successful at work. The program includes:</p> <ul style="list-style-type: none"> • 18 week, intensive, ESL, VESL and CALL (Computer Assisted Language Learning) 20 or 30 hours per week for levels 1, 2, 3 and 4. • 18 week VESL including some computer skills as needed for the job search, 10 hours per week, combined with subsidized work experience through the Community Jobs Program (CJP) for level 5/6. • The Vocational ESL component focuses on the language, functions and cultural understanding necessary to be successful in the job search and at work and on customer service skills. • Students work in teams to perform duties including recording and faxing daily attendance, photocopying, answering the telephone, taking messages, conducting surveys and charting results. <p>DHS provides student referrals, career counseling, coordination, and long-term case management; CCSF provides training, curriculum development and language assessment; community-based partners provide classroom facilities, case management, and job placement.</p>
Progress	<p>Enrollments for the 7/04-6/05 class totaled 193 and 92% of those students completed the training. Also, 81% reported an increase of one or more ESL level.</p> <p>Note: The enrollment numbers reflect total number of students enrolled for 3 continuous sessions, not number of different people enrolled, i.e., one student who goes to VIP for all 3 sessions will be counted 3 times. The enrollment for each session is between 70 and 80.</p>
Contact Information	<p>Lynn Levey, VIP Coordinator T: 415.558.1370, Lynn.Levey@sfgov.org</p> <p>Auda Okutani, Arriba Juntos T: 415.487.3247, aokutani@arribajuntos.org</p> <p>Denise McCarthy, City College of San Francisco VESL Coordinator T: 415.241.2278, dmccarth@ccsf.edu</p> <p>Gerry Souzis, Catholic Charities T: 415.972.1307, gsouzis@cccyo.org</p>

Information from Auda Okutani of Arriba Juntos, Lynn Levey of the City of San Francisco, and Moran & Petsod, 2003.

Engage the Learner as an Adult

An important thing to remember as you begin to implement your program is that the people you are training are not children – they are adults. In most aspects of their lives, they are used to making decisions, planning their day, and deciding what is important and what is not. Adults will therefore appreciate some freedom in a training program to direct themselves and to be involved in the learning process (Lieb, 1991). The learning or training program needs to recognize them as adults and give them a role to play in the planning and direction of the program.

Researchers have suggested a number of ways to engage the learner as an adult:

- **Collaborate on the setting of clear goals for the program.** Adults need to know what they will be doing and what they can hope to achieve. For that reason, it is important to convey the purpose and objectives of the training at the start of the program. If possible, involve the learners in the setting of these goals and enlist their help throughout the program as you refine and update the goals and plans for the training. (See also Tips for Making Benefits Clear in box below).
- **Establish adult-to-adult rapport.** Rather than establishing a clear hierarchy of power, with the instructor as the one in charge, address the learners as equals, be accessible to them, and share authority. Create an environment of mutual respect. Also, rather than addressing a class who are all facing the front of the room, use more informal arrangements such as circles or other arrangements that allow the participants to see each other.
- **Create a participatory environment.** Just as you encouraged collaboration during the planning and setting of goals, try also to encourage collaboration during all parts of the learning process. This helps the participants assume responsibility for their own learning. Where possible, let them serve as instructional resources and solicit their feedback and suggestions on a regular basis. It can be helpful to offer different options for assignments, so that learners can choose the methods and materials that are best suited to their interests and learning styles.
- **Encourage self-direction.** Adult learning should encourage adults to become more self-directed. This is going beyond mere collaboration by giving adults the authority to set their own individual goals for learning and planning strategies for achieving their goals. Not every training situation is conducive to self-direction, and some adults may be better able to handle this than others. But those who are able to be more self-directed are more empowered to direct other parts of their lives as well, rather than seeing themselves as only reacting to situations that are outside of their control (Lieb, 1991; Keeton et al, 2002; Imel, 1988; Imel, 1998, Brookfield, 1986) (see also Tips for Encouraging Self-Direction, in box below).

Tips for Making the Benefits Clear to the Learner

- Compare the relationship between the goals of the training session and the goals of the students and the sponsoring agency/organization.
- Provide students with a clear understanding of the learning objectives.
- Inform students how learning will translate into success in their daily lives or work.
- At the beginning of the session, ask students, “What do you want to get out of this course?” List their responses on a flip chart and post them on the wall. Revisit the list throughout the training, and again at the end of the class. Check off each expectation that they have met.
- Provide students with self-evaluation techniques such as simulation exercises, observing role models of superior performance, group teachback (i.e., peer learning), and role-play.
- As you set up group activities, consider the following techniques:
 - Provide students with two, three, or even four activities and let students choose among them. This gives students an opportunity to select an activity that produces the best results.
 - Relate the course material to the students’ personal and professional life experiences. Ask “how” questions such as “How will you use this at work?” or “How do you see this helping you in your job?”
- As an end-of-the-course summary, ask students, “What actions are you going to take next?” “What did you learn?” “How are you going to put your learning into practice?” (National Highway Institute, 2000)

Tips for Encouraging Self-Direction

Develop training materials that allow creativity and learning reinforcement.

- When introducing a new topic, ask students to list five things they know about the topic and five things they want to learn.
- Avoid demonstrating solutions; instead, stress student participation in problem solving.
- Ask students to write on the inside of the title page of their training manuals “action ideas” they want to remember after the training is over.
- Make the classroom experience match real-world conditions by using role-playing, simulations, case studies, field trips, and discussions with peers.
- Regardless of media, straightforward how-to is the preferred content orientation when beginning a learning project.
- Provide more time for learning new psychomotor tasks. Adults tend to compensate for needing more time by being more accurate and making fewer trial-and-error ventures. (National Highway Institute, 2000)

Draw on the Learner’s Experience

Because adult learners are older, they have a great deal of experience – whether from work, from family responsibilities, or from previous education. In order to make learning relevant while also

engaging the learner as an adult, it can be helpful to connect the learning as much as possible to this existing knowledge and experience base (Lieb, 1991; Imel, 1998). Similar in many ways to the idea of making the training relevant to future work responsibilities, drawing on experience means that instruction will focus on the actual experiences and problems of the learners, and require that the individual reflect on how the new lessons have a direct relevance to their lives. Drawing on experience also requires integrating different academic skills and using different skills together in ways that are meaningful to the student. (Keeton et al, 2002).

Tips for Drawing on Adult Learners' Experience

- Use an icebreaker at the beginning of the session. Not only will it allow students to get to know each other, it will allow you to learn more about your students' backgrounds and/or experiences.
- Maintain your role as a facilitator; avoid preaching, lecturing, or injecting your own thinking.
- Do not top off discussions and reports with your own opinions.
- Let students share their knowledge and feel a sense of accomplishment through their own contributions.
- Use techniques such as problem-solving activities, group-centered discussions, roleplaying, and critical-incident processes (e.g., analyzing what works and what does not work).
- Use case studies. Have students break into teams and create a case study for another team to solve. This exercise allows students to:
 - Share knowledge;
 - Gain a sense of ownership of the learning situation;
 - Network among their peers; and
 - Face real-life situations.
- Avoid questions that require a simple yes or no answer. Use open-ended questions to draw out relevant student knowledge and experience.
- Maintain an environment that is relaxed and cheerful. Periodically reward students for trying and succeeding, and for taking risks that do not work out. (National Highway Institute, 2000).

Vary Training Techniques to Appeal to Different Learning Styles

As you develop course materials and plan the details of the program's implementation, an important consideration is the delivery of the training and the techniques you will use with the learners. People learn in different ways. Some are more **Visual** learners who need to see or watch; these learners do well with transparencies, flip charts, demonstrations, videos and Power Point presentations.

Auditory learners do best when listening or speaking; for them, lectures, group discussions and brainstorming are effective methods. **Tactile/Kinesthetic** learners need to experience something and do it themselves in order to learn something well. These people learn best through role-playing, simulation, and practice demonstrations (National Highway Institute, 2000). This categorization of learning styles is called the VAK model. Other learning style models include David Kolb's Learning Style Inventory and Peter Honey and Alan Mumford's theory, which both describe four learning types: Activist, Reflector, Theorist and Pragmatist. Other models include the Myers-Briggs Type Indicator (MBTI), which identifies sixteen personality types and learning styles associated with these types, and Howard Gardner's Multiple Intelligences theory (for a good summary of learning styles,

see Indiana State University's Center for Teaching and Learning website at <http://www.indstate.edu/cirt/>).

There are instruments and questionnaires on the market associated with each of these different learning style theories that can assess what kind of learner each individual is. These instruments can be helpful in giving adult learners some understanding about how they learn best, and the results can also help give the instructor information that can guide lesson and activity planning for a group. However, it would be time and cost prohibitive, not to mention cumbersome for large groups, to assess each individual adult learner and then customize lessons for each learner based on learning style.

A more practical approach is to be sensitive to the different learning styles that the learners may have and to vary training techniques and delivery methods to ensure that different needs are met. This means to use a mix of visual aids and presentations; group discussions; and simulation or other hands-on activities.

It may also be helpful to find ways to use small groups to facilitate learning. Susan Imel (1998) asserts that small groups in adult literacy programs promote teamwork and encourage cooperation and a participatory environment for learning. In addition, small groups help to provide peer support for learning and can more accurately reflect the context in which adults will use their skills later (Imel, Kerka, and Pritz 1994 as cited by Imel, 1998).

Tips for Using Small Groups

Divide the class into small groups of five or six students.

- Provide any necessary supplemental material, such as reference manuals, graphs, or checklists.
- Establish any ground rules you may have for the exercise. Instruct each group to designate a spokesperson who will write the group's methodology on the flip chart. Make sure the spokesperson solicits input from all members.
- Introduce the discussion period and the topic for the exercise. Then, pose the first open-ended question. For example: "Let's take the next 15 minutes and discuss the best way to monitor the construction of highway pavement. The monitoring process can start with a Communication and Planning meeting. What do you think of this approach?"
- Ensure that you and your co-instructor move about the room, answer any questions, and provide a positive presence. You may pose other support questions at this time.
- At the end of the discussion period, ask the designated group representatives to present their answers on a flip chart. Give them flip chart paper beforehand. This saves time.
- Lead a discussion to summarize all points. (National Highway Institute, 2000)

Innovation: Use of Blended Learning

Many corporate trainers, colleges and universities have begun to use the term "**Blended Learning**" for what is essentially a combination of technology, classroom, self-paced and group learning.

Allison Rossett and Rebecca Vaughn Frazee define it as integrating “seemingly opposite approaches” such as formal and informal learning, face-to-face and online experiences, and directed paths and reliance on self-direction (Rossett, 2006). It allows employers to combine different kinds of training methods in order to minimize time away from work and reinforce learning for the benefit of different learning styles in the workforce. Other benefits include:

- the strengthening of the transfer of knowledge to the workplace because the various delivery methods encourage learners and organizations to “find, store, stir, and share what they know” (Rossett, 2006)
- the reduction of conventional expenses such as materials and instructors as well as time away from the office (Snipes, 2005)
- improved cost effectiveness and productivity (Rossett, 2006)

Organizational Example: University of North Carolina Health Care System

Name	University of North Carolina Health Care System (UNC HCS) Chapel Hill, NC
Program Purpose	Provide training to more than 5,000 UNC health care employees who have very busy schedules
Program Description	The UNC HCS consists of two healthcare facilities, Rex Healthcare in Raleigh and UNC Hospitals in Chapel Hill, and provides comprehensive healthcare services including physician practices, laboratories, home health and hospice services. The University of North Carolina Health Care System uses a Learning Management System (LMS) to produce a training suite for its thousands of employees across a wide range of competencies and skill sets. More than 600 traditional classroom-based, computer-based and online programs from Antidepressant Use in the Elderly to Zoll Medical Corporate’s Defibrillator have been blended together to produce a customized program for its diverse users. It provides a great way to give employees access to the latest information and it has standardized training across the health system; so that employees and medical staff have one place to complete online courses, view class schedules for self-enrolment or cancellation, maintain their own learning plan and track completion of requirements on their personal transcript.
Progress	Since implementation, the 1,700 nurses and 1,800 physicians and resident staff at UNC Health Care reduced the time they previously spent enrolling and participating in courses by 60 percent. Overall success has varied by department.
Contact Information	101 Manning Drive, 6002 East Wing Chapel Hill, NC 27514 T: 919.966.1234 www.unchealthcare.org/

Information from Summerfield, 2005.

Create a Positive Learning Environment

Because your clients are adults, chances are they may not have been in a classroom setting for a long time. And, if they have limited basic skills and/or low educational attainments, they are also likely to

have had associations with the idea of “school.” Being in a classroom setting can ignite feelings of inadequacy, frustration, and anxiety. In order for these individuals to succeed in a new learning experience, therefore, instructors will need to make an effort to create a different kind of learning environment – one that helps to ease anxieties and that helps to build the confidence of each learner.

Tips for Creating a Positive Learning Environment

- Provide a climate of cooperation rather than competition.
- Acknowledge effort as well as achievement. Avoid using “win-lose” contests and exercises.
- Never punish or ridicule a student for taking a risk that did not work out. Emphasize rewards for effective behavior rather than punishment for ineffective performance.
- Provide a comfortable learning environment. Consider the following classroom setting:
 - Ample lighting
 - Good acoustics
 - Adequate ventilation
 - Access to refreshments
 - Frequent breaks—one 10-minute break every hour vs. one 20-minute break every two hours
- If you are providing refreshments in the classroom, allow the students to get their refreshments quietly.
- Have music playing in your class pre-session. Music involves the sense of hearing, and the more senses involved, the more learning retention.
- Students need to feel that they are respected. You can create this impression by doing the following:
 - Greeting every student personally
 - Providing name tags or name tents and wearing one yourself
 - Calling students by name
 - Giving students an opportunity to ask questions
 - Providing an opportunity for students to practice what they are learning
- Create a fun environment. Keep an open mind and stimulate discussions. This will increase the students’ willingness to take risks and try new things.
- When facilitating role-playing, use the terms “practice activity” or “practice session.” These terms are less threatening. (National Highway Institute, 2000)

Be Sensitive to Cultural Differences

As the United States becomes increasingly diverse, and as its economy becomes increasingly global, it will be important to understand how culturally-defined behaviors and attitudes can affect both the workplace and learning environments. The term “cultural competence” is sometimes used to describe a condition where we acknowledge cultural differences and challenges and find ways to accommodate them, rather than being firmly entrenched in one system of beliefs or identities. As noted on a special website on “Cultural Competence” managed by the Annie E. Casey Foundation (<http://www.aecf.org/initiatives/fes/jobs/jobsandrace.htm>), the goal is “not for either side to give up what it values most, but for all sides to search for a common ground. Culturally competent

workers can observe important elements of the employer culture while maintaining personal identity; employers are able to accommodate ethnic diversity while maintaining and enhancing productivity.” Recognizing cultural or other personal barriers and doing something to minimize those barriers are ways that effective organizations survive and help their clients thrive (Klein-Collins, 2002). Some tips for working with non-native English speakers are provided in the box below.

Tips for Developing Sensitivity to a Multicultural Environment

- Use short words and sentences. As a general rule, it is better to use simple English that everyone understands.
- Use active verbs and concrete nouns. Research indicates that approximately 78 percent of the English language as it is used in daily life is composed of sentences in the active voice using concrete nouns.
- Break the material into manageable chunks that students can process more easily and efficiently.
- If you are a fast speaker, pause at the end of sentences, not in the middle. When you pause at the end of each sentence, students have more time to consider what you say.
- Illustrate general statements with specific examples related to the students’ specific situations. To accomplish this, you will need to identify the students’ backgrounds as much as possible before the course begins.
- Do not use slang or jargon. Non-native English speakers, as well as trainees from different areas of our own country, very rarely possess an up-to-date knowledge of our local slang or jargon. You need to ensure that everyone understands the precise meaning of words used in your message. For instance the verb “to get” can have at least 5 meanings (buy, borrow, steal, rent, retrieve), and the word “right” has 27 different meanings. The word “should” carries multiple connotations, such as: moral obligation, expectation, social obligation, or advice. (National Highway Institute, 2000)

The following are some examples of how steps taken by employers, workforce development practitioners, and educators demonstrate steps toward successful integration of different cultures and population groups:

- **Addressing Language and Cultural Barriers in the Recruitment Process.** Organizations who wish to recruit individuals from specific ethnic groups do so by producing bilingual marketing materials, advertising in ethnic newspapers, and participating in cultural events (Annie E. Casey, n.d.a).
- **Overcoming Cultural Barriers to Requesting Assistance.** The Seattle Jobs Initiative noticed that one of its referral agencies, the Asian Counseling and Referral service, spent less than other groups. The suspicion was that some groups have a cultural aversion to asking for help. (Fleischer, 2001). Recognizing this as a cultural barrier can lead organizations like SJI to be more proactive with certain groups, rather than just responding to the “squeaky wheels.”
- **Addressing Language and Culture Barriers in the Workplace:** Employers with lots of customers and employees with diverse ethnic backgrounds show cultural competence when arranging for on-site English classes or when they hire bilingual supervisors or customer service representatives to assist with communication. (Annie E. Casey, n.d.a). Training programs such as

the San Francisco VESL Immersion program teach workplace culture along with language (see the organizational example in the section on Integrate Content).

Organizational Example: International Institute of Boston

Organization/Program	Hospitality Training (HTP) International Institute of Boston (IIB) Boston, MA
Program Purpose	To help immigrants and refugees begin a career in the hotel and hospitality industry.
Program Description	<p>IIB helps immigrants to the United States achieve self-sufficiency and adjustment to a new country, in the form of English and literacy classes, resettlement for refugees, citizenship education, economic development assistance, job counseling, training and placement, legal aid, and social services.</p> <p>HTP targets immigrants and refugees who have limited English skills and/or lack transferable skills to enter employment and works with them to heighten their awareness to their reactions that might be triggered by their own cultural backgrounds. For example, direct eye contact and constant smiling is often perceived to be rude in many cultures and might even be seen as a sign of anger, while in the United States this is how we show friendliness and honesty. Another example can be taken from the Vietnamese community where hotels in the recent past were often synonymous with brothels. The HTP program has successfully worked with an agency that directly supports the Vietnamese community to change this perception. The Hotel Career Center also works to help educate the employers about employee cultural perceptions and orientation.</p> <p>HTP works with clients not necessarily to change behaviors but to blend their own sense of politeness to fit with the hospitality culture. This often results in a uniquely old fashioned type of customer service that is very formal and suits many of Boston's hotels. Participants receive skills training which includes four weeks of classroom instruction combined with two weeks of hands-on job shadowing as well as job placement upon graduation and post-placement services including case management, referral services, counseling and individualized support for job retention and future job upgrade. The classroom instruction orients the students to the hospitality industry and focuses on customer service skills, workplace communication, and job seeking skills.</p>
Progress	The goal of the program is for clients to obtain jobs that provide a sustainable living wage with benefits to attain job retention and then to work towards promotion.
Contact Information	<p>IIB Martha Goldberg Hotel Career Center Manager One Milk Street Boston, MA 02109 T: (617)695-9990 http://www.iiboston.org</p>

Information from Aviva Shore of IIB and from DHCD, 2003.

Organizational Example: PlastiComm Communications

Organization/Program	PlastiComm Communications Denver, CO
Program Purpose	How to create and retain a productive, motivated and competitive workforce.
Program Description	<p>All new PlastiComm employees spend their first 90 days teaming up with supervisors who provide one-on-one, on the job training and cross-training. The company partners with other telecommunications partners in order to train the new employees in the telecommunications installation process. Another partner, Rocky Mountain SER interviews applicants, tests for aptitude, and provides six to eight weeks of pre-employment training for prospective PlastiComm employees. They also provide counseling and advising services to the newly hired employees to help ensure a smooth transition.</p> <p>An internal career ladder is also in place. PlastiComm's entry-level employees work in the warehouse where they fill orders for cable distribution. Promotion to assembly positions and advanced assembly positions are the next two rungs on the career ladder. Testing and inspection positions and then finally supervisory positions complete the ladder.</p> <p>Spanish and Vietnamese are the dominant languages among the non-English speaking employees. In order to address this challenge, PlastiComm hires bilingual supervisors who are instrumental in facilitating communication between the organization and its employees and also conducting the on the job training. Supervisors attend a six-week training (1-2 hours per day, 1 day a week) where they work from the Piton Foundation's "Managing to Work it Out" curricula to address cultural issues, improve communication, and motivate entry-level immigrant workers.</p>
Progress	PlastiComm reported that the yearly turnover is 5 percent.
Contact Information	Dan Montoya, Vice President of Operations 1500 W. 47th Ave. Denver CO, 80211 T: 303.433.2333 http://www.plasticomm.com dmontoya@plasticomm.com

Information from Dan Montoya of PlastiComm and from www.workforceadvantage.org.

Give Frequent and Immediate Feedback

An important part of an adult learning or skill building program is making sure that the learners receive regular feedback on how they are doing. This can be particularly important when engaged in higher level learning (such as problem solving, decision making, critical thinking, and creative thinking) or learning activities that are experience-based (where students learn by doing) (Fink, 1999). Frequent feedback can provide encouragement while also letting the students know if they are performing the way they should. The feedback should not only be frequent – either weekly or daily – but also immediate. It should be given during the same class or at the next session to have maximum effect.

Tips for Giving Feedback

During the activity, walk around the room and comment on what students are doing. They need to know that you are interested.

- Use body language to show approval (for example, smile or shake your head when someone has responded to a question).
- Encourage applause when a person or group has made a presentation.
- Write notes and comments on written work completed during the session.
- Stop students as they are leaving or walking down the hall during a break and offer feedback; even a word or two will suffice.
- Do not wait to give feedback. Give it as soon as possible, either during or after a particular event. For example, the representative from Group A has just presented the solution to a problem-solving exercise. You respond by saying, "Outstanding! That was very good! Let's hear it for Mark and Group A." Lead the applause. (National Highway Institute, 2000)

Resources for Adult-Centered Teaching-Learning Process

Brookfield, S. (1986). *Understanding and facilitating adult learning: a comprehensive analysis of principles and effective practices*. San Francisco: Jossey-Bass, 1986.

Chenven, L. (2004, May.) Getting to work: a report on how workers with limited English skills can prepare for good jobs. AFL-CIO Working for America Institute.

Davis, D. C. (1997.) Adult education at work. A collaborative resource addressing the changing world of work and learning. Division of Adult and Community Education, Department of Education, State of Tennessee.

Keeton, M. T., B. G. Sheckley and J. K. Griggs. 2002. *Effectiveness and efficiency in higher education for adults. A guide for fostering learning*. The Council for Adult and Experiential Learning. Dubuque, Iowa: Kendall/Hunt Publishing Company.

Knowles, M. S. (2005). *The adult learner, sixth edition : the definitive classic in adult education and human resource development*. Burlington, MA: Elsevier.

National Highway Institute. (2000) The Circle of Learning. Federal Highway Administration Publication No. FHWA-NHI-00-047. Retrieved April 10, 2006 from <http://www.nhi.fhwa.dot.gov/downloads/freebees/744/RM%20The%20Circle%20of%20Learning.pdf>.

Profile: Adult Learning Focused Institutions

ADULT LEARNING FOCUSED INSTITUTIONS

Many of the components in this Implementation section are featured in CAEL's Principles of Effectiveness for Serving Adult Learners. These principles are the foundation of CAEL's Adult Learning Focused Institution (ALFI) initiative, which provides tools and resources to higher education institutions to help them adapt their practices to better serve adult learners. The College of New Rochelle and Sinclair Community College (profiled earlier in this report) are two institutions that were raised up as best practice institutions in the 1999 CAEL/APQC benchmarking study for the ALFI initiative.

Publications and Resources Related to the ALFI Initiative

- Flint, T. A. & Associates. (1999). **Best Practices in Adult Learning: A CAEL/APQC Benchmarking Study**. CAEL. Dubuque, IA: Kendall/Hunt Publishing Company This book reports on a year-long study to find and document some of the innovative ways colleges and universities serve adult learners. An executive summary is available free of charge at www.cael.org.
- Flint, T. A. & Associates. (2000). **Serving Adult Learners in Higher Education: Principles of Effectiveness: An Executive Summary**. CAEL. The principles themselves are described in this summary, available free of charge at www.cael.org.
- Flint, T.A., Zakos, P., & Frey, R. (2002). **Best Practices in Adult Learning: A Self-Evaluation Workbook for Colleges and Universities** - CAEL. Dubuque, IA: Kendall/Hunt Publishing Company This workbook provides an informal means to assess how well an institution observes the Principles. The workbook offers detailed descriptions of policies, procedures and outcomes that exemplify an Adult Learning Focused Institution. Itemized worksheets for each of the Principles contain performance indicators that may indicate success, and dozens of examples of the Principles in practices are shown. Available through www.cael.org.
- **The ALFI Assessment Toolkit:** The Toolkit offers colleges and universities a formal assessment of adult learner programs. The Toolkit is comprised of two assessments that provide concrete measures on adult learners' perception of their experience as compared to faculty and administration's perception of its programming. The first tool is an Institutional Self-Assessment Survey (ISAS) that is designed to assess a wide range of activities, policies and practices at institutions, from outreach to financial aid to instructional delivery. The second tool, the Adult Learner Inventory (ALI), probes adult learners' experiences to examine how important and how satisfying a college or university's programs and practices are to them. Together, the Institutional Self-Assessment Survey and the Adult Learner Inventory provide institutions with information to guide decision-making activities for improving adult learner services and program quality, with the ultimate goal of boosting access and retention. To order a toolkit, go to www.cael.org/alfi/isas_order.html. For more information, contact Diana Bamford-Rees, Associate Vice President at CAEL, 215.731.7169.

Overarching Program Components

Up to this point, the report has discussed program components as they would appear chronologically in the process of creating a learning initiative. It is important to keep in mind that

there are some activities that will be important to carry out throughout the analysis, design, and implementation process. One is to engage in **Strategic Partnerships**, particularly with employers and education and training providers. The other is **Evaluation**, a critical part of any initiative, and one that practitioners must address from the start to the end of the initiative.

STRATEGIC PARTNERSHIPS

As is probably clear from the scope of this report, providing skill training and adult learning programs is not simple. It involves a great deal of work and expertise in order to cover all the required elements well. Many practitioners have succeeded in offering high quality learning and skill building initiatives for adults because they have become adept at developing and maintaining strategic partnerships with a variety of different providers and stakeholders, including employers, to ensure positive outcomes. The partnerships arise in part from the acknowledgement that one single organization cannot provide all of the various services and expertise that is needed for learning programs, especially programs that are complex in design and ambitious in their goals (DHCD, 2003, Massachusetts Association for Community Action, 2004).

Key Components include:

- **Involve employers**
 - Innovation: Sector-based approaches
- **Expand capacity and close system gaps by working with local partners**
 - Innovation: Addressing regional economic priorities

Involve Employers

In the Analysis stage, we noted the importance of conferring with employers on current and projected labor demand, to ensure that the type of job training to be developed is indeed meeting a real, persistent, or emerging need. The role of employers does not stop there. During the design stage, it is important for employer input to continue to drive the process because if they are not ultimately pleased with the results of the education and training program, they will not hire any of its graduates.

The degree of the involvement of employers can vary greatly, depending on their availability, attention span, or the extent of their need or interest. In some cases, program staff will confer with employers and their subject matter experts on specific skill needs of different jobs. These programs subsequently design the training and prepare the trainees without significant additional involvement of the employer. In other cases, employers take a much more active role and are involved at every step of the design and development of curriculum. They work with the program on the development of the skill profile, endorse the training design, articulate candidate screening processes, and work closely with the program to manage the flow of applicants and the interview process. As a result, the program participants may receive an advantage over other job candidates in the hiring process.

A challenge can be to find the right balance of employer involvement – enough so that an employer will develop confidence that the training program will meet their needs, but not so much that the training program is too customized to any one employer or type of employer. The Massachusetts BEST program, for example, learned the difficulties of developing a training program to meet multiple employers in the same industry. Because of resource constraints, smaller firms could not attend as many curriculum design meetings as could larger firms, with the result being that many smaller firms backed out of the initiative entirely. The smaller employers felt that the training would not meet their needs the way it would the needs of larger employers (FutureWorks, 2004). The danger is in then needing to customize training programs for specific employers, rather than keeping it general enough to serve the needs of a broader range of employers, such as those in a given industry sector.

Organizational Example: Georgia Department of Technical and Adult Education

Name	Georgia’s Certified Manufacturing Specialist Program Georgia Department of Technical and Adult Education Atlanta, GA
Program Purpose	To develop a standard pre-employment program to help prepare candidates for entry-level jobs in manufacturing
Program Description	<p>The Georgia Department of Technical/Adult Education (DTAE) convened a series of focus group meetings with manufacturers. The employers were asked whether it would be feasible to identify a common set of “threshold skills” that are required of any new entry-level worker. This set of skills could then guide a training program for jobseekers. The employers loved the idea, and many started to work together on the design of the program.</p> <p>The program now provides a wide range of education and training opportunities to its CMS students, including Introduction to Manufacturing, Introduction to Business Principles, Quality and Productivity, Basic Manufacturing Skills, Manufacturing Skills, Computers and Automation Principles, and Workplace Skills.</p>
Progress	The Certified Manufacturing Specialist Program (CMS) began in 1997. In the first two years, the program enrolled more than 3,000 individuals. As of April 2004, the number of participants certified totaled 6,233. The DTAE has also launched similar initiatives for customer service jobs and warehousing and distribution jobs.
Contact Information	DTAE’s Quick Start Program 75 Fifth Street NW, Suite 400 Atlanta, Georgia 30308 T: 404.253.2800 http://www.georgiaquickstart.org/econdev/cms.html

Information from Bosworth, 2003 and from the program’s website.

Organizational Example: Wisconsin Regional Training Partnership

Name	Wisconsin Regional Training Partnership (WRTP) Customized Training Program Milwaukee, Wisconsin
Program Purpose	To develop occupational skills training that prepares participants for careers in the construction, health care, manufacturing and service sectors.
Program Description	WRTP succeeded in obtaining upfront commitments from employers and unions to recruit, retain, and develop program participants by enabling them to define the skill requirements for their industries, to define the content of training certificate programs, and to approve the training providers, such as technical colleges and apprenticeship programs. Part of WRTP's appeal to employers is the organization's understanding of how to leverage a full array of public sector funding for workforce development and other industry needs.
Progress	According to the WRTP's Annual Report, "by the end of 2004, they had placed the 2,124 th community resident" (80% of whom were people of color). They earned an average starting wage of \$11 per hour plus health care and other benefits and retention rates for the first twelve months of employment exceeded 70%. In addition, they increased their average annual wages by 165% to \$23,000 on their first year on the job. According to the <i>Milwaukee Journal Sentinel</i> , by the end of 2005, WRTP had placed more than 2,500 community residents (Dresang, 2006).
Contact Information	Eric Parker Wisconsin Regional Training Partnership 532 East Capitol Drive Milwaukee, WI 53212 T: 414.217.3158 eparker@wrtp.org http://www.wrtp.org

Information from Eric Parker at WRTP, from Wisconsin Regional Training Partnership, 2004, and from Dresang, 2006.

Organizational Example: Eastern Connecticut Workforce Investment Board

Organization/Program	Eastern Connecticut Workforce Investment Board Franklin, CT
Program Purpose	To address the labor skills shortage created by the area's major bioscience/technology company's (Pfizer) \$600 million dollars expansion project including building a clinical studies facility which forecasted over 2,000 new hires to participate in clinical drug trials research.
Program Description	In 2000, a group of employers, educators, industry leaders, economic development agencies and local, state and regional government officials was convened to design a training program for 200 Clinical Data Managers for the new facility. The group's efforts resulted in the creation of the Clinical Data Manager Training Program, a 30 hr. course taught and developed by industry experts and instructors from local institutions of higher education. The course content included an interactive multimedia curriculum to create real work scenarios that develop industry-defined skill competencies. The curriculum was certified by the Society of Clinical Data Managers. Clinical Data Manager Training Program participants could access the One-Stop Career Center to receive soft-skill training and job search skills training.
Progress	According to the U.S. Department of Labor's 2004 <i>ETA Recognition of Excellence</i> report, "The program has enrolled 105 participants. Of the 105 trainees, 76 participants have completed the program. Of the 76 who completed the training, 58 trainees, or 76%, have secured jobs and 12, or 15%, are in% were placed into internships. In addition, 45 persons or 59% have received promotions. The average wage per hour is \$25.58. Also, a patent is being sought for its content and industry is interested in purchasing this Clinical Data Manager Training Program. An area community college now offers a 2-year degree for Clinical Data Managers."
Contact Information	Carol LaBelle, Director of Programs Eastern Connecticut Workforce Investment Board 108 New Park Avenue Franklin, CT 06254 T: 860.859.4100 www.ewib.org labellec@snet.net

Information from Carol LaBelle at ECWIB and from U.S. Department of Labor, 2004.

Innovation: Sector-Based Approaches

Many employment training initiatives have achieved the greatest success by adopting a sector-specific focus for their work. These programs get to know one industry well, and by doing so, they are better able to help various populations overcome barriers to getting jobs in those industries. Mark Elliott and Elizabeth King (1999) wrote that, "A single-industry focus enables organizations to become knowledgeable about the industry, develop strong long-term relationships with its key institutions, and become players in policy debates affecting the sector." Furthermore, by getting to know one industry well, practitioners can better anticipate changes in the demand for labor and adapt to those changes quickly and effectively.

These approaches often require long time commitments and increasingly involve attention to the development of career ladder programs, where those in entry level jobs can see clear pathways to

higher-skilled, higher-paying jobs (Marano, 2003). (Please see also the Innovation on Career Ladder Initiatives described earlier in this report.) The results of these programs have been impressive so far. In a 2002 report, for example, Ida Rademacher found that participants in sectoral programs were able to improve their position in the labor market significantly, particularly with respect to earnings. Median earnings rose from a baseline of \$8,580 to \$14,040 one year after training and to \$17,732 two years after training (Rademacher, 2002).

There are risks to this approach. First, because the sector members likely communicate regularly with each other, word spreads quickly about both successes and failures. If you perform well for a sector, you will become known for your expertise in serving that sector. But just as easily, your organization's name can quickly become associated with poor performance. Second, by becoming immersed in a single industry, your fate is tied to the fate of that industry. If they fall into an economic slump and see waves of downsizing, the prospects for training new entrants to those sectors will become slim (Elliott & King, 1999).

Organizational Example: El Camino College, Oregon Institute of Technology, Wichita Area Technical College, Purdue University, and the Society of Manufacturing Engineers (SME)

Organization/Program	Advanced Aerospace Manufacturing Education Project El Camino College et al Various locations
Program Purpose	Developing curricula to meet the needs of aerospace manufacturing for technicians and engineers
Program Description	<p>Researchers from four higher education institutions are working together to assess the current and future needs of aerospace manufacturing for technicians and engineers, assess current educational offerings for two-year programs, and develop curricula to address any unmet needs. Aerospace manufacturing suppliers are supporting the project by allowing the researchers access to topic experts and entry-level engineers and technicians. The resulting curriculum will be shared with other higher education institutions.</p> <p>The researchers from the participating institutions are also working with the Society of Manufacturing Engineers (SME) in the development of an SME Certified Aerospace Manufacturing Engineer exam.</p>
Progress	This project is a recent recipient of a grant from the National Science Foundation's Advanced Technology Centers programs. The ATE program is focused on meeting the educational needs of technicians in high technology fields. Grants are awarded to partnerships between academic institutions and employers to promote improvement in the education of science and engineering programs at the undergraduate and secondary school levels.
Contact Information	Ronald Way rway@elcamino.edu (Principal Investigator) El Camino College 16007 Crenshaw Blvd Torrance, CA 90506 T: 213.532.3670

Information from www.nsf.gov

Organizational Example: PROMISE Project

Organization/Program	Academy for Practical Nursing and Health Occupations PROMISE Project Palm Beach County, FL
Program Purpose	To address the shortage of health care workers in the Palm Beach area, and to help the underemployed and underserved residents of Palm Beach County to embrace a career in the health care field.
Program Description	In 2001, local leaders from employment, education, and economic development programs collaborated to form the PROMISE Project, which stands for Preventing Recidivism with Opportunities, Mandates, and Initiatives for Successful Employment. Students' entry level needs are determined using the TABE assessment. Opportunities for various health care career pathways include: Certified Nursing Assistant; Patient Care Assistant; Patient Care Technician; Medical Assistant; Pharmacy Technician; and LPN. The customized training curriculum includes life-management, professional decorum, work-readiness and as well as special technical training. In addition, fees for state and national certification tests are included. Incumbent worker training was introduced to help update the skills of those already working in healthcare.
Progress	According to the U.S. Department of Labor's 2005 report, <i>ETA Recognition of Excellence</i> , "100 percent of program participants completed their curriculum. Recently, community leaders have recognized the renewed vitality of the healthcare industry in Palm Beach County and proposed initiatives which would introduce a state-of-the-art bio-medical industrial park, introduce a new research hospital, expand the county's open heart surgery capability, and expand cancer treatment options within the county." While the grant ended in 2005, most of the PROMISE Project's core competencies have been replicated and integrated into the Academy's various adult and youth programs.
Contact Information	Lois Gackenheimer, Director Academy for Practical Nursing and Health Occupations 5154 Okeechobee Boulevard Suite 201 West Palm Beach, FL 33417 T: 561.683.1400 www.apnho.com

Information from Lois Gackenheimer of the Academy for Practical Nursing and Health Occupations and from U.S. Department of Labor, 2005.

Organizational Example: Guadalupe Centers, Inc.

Organization/Program	Culinary Arts Institute Guadalupe Centers, Inc. Kansas City, MO
Program Purpose	To improve the quality of life for the Latino population and urban core of the Kansas City metropolitan area by increasing job opportunities to the residents and decreasing long-term vacancies in the local culinary industry.
Program Description	The Culinary Arts Institute has three main requirements: that an individual be 18 years or older, able to work legally in the United States, committed to working in the culinary industry for at least 6 months, and be a resident of the state of Missouri. The twelve-week training program consists of three parts: 1) In the first three weeks, Associates complete the ServSafe certificate training (an industry-based certification offered through the National Restaurant Association). The program administers the training and tests and the Association grades the tests and issues the certificates. 2) The heart of the training is the next several weeks, in which Associates engage in food preparation training and learn classic cooking techniques. This consists mostly of learning through teamwork in their instructional kitchen; at that point there is very little classroom training. Upon completion of the training, the Associates will have mastered certain competencies such as breakfast preparation; cooking of meats and vegetables; utilization of commercial cooking equipment; chopping and cutting of vegetables; salad and sandwich preparation; identification of acceptable food products such as meat, fish, poultry and vegetables; and other competencies pertinent to Preparatory Cook duties. 3) During the last few days of the program, Associates engage in life skills training, in which they learn ways to find and keep jobs. All training occurs four days per week for four hours each day. At the end of training is a graduation ceremony.
Progress	Since 2000, the year it was launched, the program has trained 692 Associates and placed 418 (60% placement rate). Hourly placement salaries range from \$7 to \$13, with an average of \$9 (this is above the placement wage goal).
Contact Information	Sonia Lona, Case Manager for Culinary Arts 1015 Avenida Cesar E. Chavez Kansas City, MO 64108 T: 816.421.1015 http://www.guadalupecenters.org/ slona@guadalupecenters.org

Information from Sonia Lona of Guadalupe Centers and from DCHD et al, 2003.

Expand Capacity and Close System Gaps by Working with Local Partners

Partnerships are also important for addressing any gaps in the current system of education and training. Building a strong pipeline of skilled workers requires a system whose various components are seamlessly connected. A study of six states by the National Governors Association found that some of the most common gaps were between the secondary and postsecondary systems, between education and workforce programs, and between these programs and the skill demands of the workplace (Simon & Hoffman, 2004). Partnerships among the various stakeholders and key player can help to create stronger connections that allow for better transitions from one provide to the next and that better meet the needs of employers.

Women Employed's *Bridges to Careers for Low-Skilled Adults: A Program Development Guide* (Henle et al, 2005) provides a matrix of the different kinds of partners and their possible roles:

ORGANIZATION	POTENTIAL ROLES
Adult education programs (community colleges, community-based organizations, public school system)	Techniques for teaching lower-skill adults; Basic literacy, math, and computer skills training; English as a Second Language (ESL); Assessment tools
Community-Based Organizations	Marketing and recruitment; Case management; Support services and support services navigation; Work readiness and job placement; Vocational and occupational skills; ESL and vocational ESL; Adult education (reading, writing, and math); Computer skills; Job training
Community Colleges <ul style="list-style-type: none"> ■ Career Services ■ Continuing Education/Workforce Development ■ Corporate Training ■ Degree and Credit Departments ■ Developmental Education ■ Financial Aid 	<p>Orientation to postsecondary education; Interest and capacity assessments; Educational and career advising; Support service navigation</p> <p>Sector-specific occupational programs; Specific courses that may be adapted to the bridge program framework, e.g., computer applications, customer service basics</p> <p>Capacity to customize training for specific employers and industries; Employer connections; Adjunct faculty and trainers</p> <p>Associate and Applied Associate degree programs; Occupational certificates, licenses, and other industry-recognized credentials</p> <p>Basic literacy and math skills</p> <p>Information and application assistance</p>
Employer Associations (Chambers of Commerce) and Industry Associations	Program review and feedback; Industry and career ladder information; Skill information; Labor market data; Marketing ; Employer recruitment and coordination
Employers	Skills identification; Job advancement information and requirements; Program review and feedback; Jobs, internships, and project learning; Instructors, role models, mentors; Referrals to program; Training facilities, equipment; Workplace-based incumbent worker training; Funding (tuition reimbursement, etc.)
Labor Unions	Identification of competencies and industry information; Employer outreach; Program review and feedback; Referrals to program; Skills training; Apprenticeships; Certifications; Funding
One-Stop Career Centers	Job search skills; Job information; Training vouchers
Social Service Agencies	Support services; Case management; Financial assistance (e.g., food stamps, dependent care, transportation); Referrals
State Agencies	Labor market information and analysis; Economic and workforce trend analysis; Identification of target industries; Connection to employers; Resource development and allocation; Evaluation
Universities	Labor market information and analysis; Curriculum and instructional design; Evaluation and continuous improvement
Workforce Boards	Identifying sectors of importance to regional economy; Mapping job requirements and advancement paths; Planning and budgeting; Policy development
Workforce Intermediaries	Program design assistance; Best practice models; Advocacy; Resource development; Conducting focus groups; Evaluation

Reprinted from Henle et al, 2005.

Curriculum development is one activity where recruiting partners can add real value. Developing curriculum requires planning, knowledge about the content and about learning methodologies, incorporation of evaluation methods, and continuous improvement based on what is learned from the evaluation. Colleges and universities have considerable expertise in curriculum development, and so partnerships with these educational institutions often are advisable. Though you can develop a

curriculum on your own with the input of employers, and though this may be effective for the adult learners that you are serving, developing partnerships with community colleges and universities as you are creating your program will give the learners a great number of options. The institutions can design the curriculum so that it provides the learner with college credit, and they can help to link trainees with degree-granting programs after they complete the initial skill building program. This will encourage low-skilled workers to continue to work towards the credentials they will need for further career advancement.

Organizational Example: California Manufacturing Technology Consulting

Organization/Program	California Manufacturing Technology Consulting (CMTC) Torrance, CA
Program Purpose	To ensure that the 80,000 manufacturers and distributors in California are able to maintain competitiveness by providing cutting edge techniques to improve production quality and efficiency, as well as leverage their industry expertise to train the workforce to implement a cycle of continuous improvement.
Program Description	<p>Established in 1992, CMTC provides consulting services to Southern California's small and mid-sized manufacturing firms. In one case, CMTC provided technical assistance and leveraged resources of a defense manufacturer, a training provider, and the State of California to retain jobs. CMTC and the training provider helped the manufacturer train the workers on Lean Enterprise techniques and applying those techniques to the manufacturing process. State of California's Employment Training Panel funding was used to offset the cost of training to the manufacturer. As a result, the company was able to reduce its manufacturing costs and improve its customer order-to-delivery time.</p> <p>Another example involved a large biomedical manufacturer, an industry association, a local community college, and a local Workforce Investment Board to develop curriculum and provide workforce training for both incumbent workers and new hires. The cost to deliver this program was offset by a combination of Workforce Investment Act and California Employment Training Panel funds.</p>
Progress	<p>CMTC has provided customized services for thousands manufacturers and distributors since its inception, and over the last four years has trained an average 1,736 employees per year. According to the U.S. Department of Commerce, CMTC's average annual impact (over the past four years) is as follows:</p> <ul style="list-style-type: none"> ▪ Clients reported a sales increase and retention of \$295 m ▪ Clients increased their investment in their companies by \$51 m ▪ Clients reduced cost by \$39 m ▪ 2,327 high paying manufacturing jobs were created and retained
Contact Information	<p>Chris Allen, Director of Marketing & Public Affairs 690 Knox Street Torrance, CA 90502 T: 310.263.3060 http://www.cmtc.com/ callen@cmtc.com</p>

Information from Chris Allen at CMTC and from Troppe, 2004.

Organizational Example: Pillowtex Corporation and the Rowan-Cabarrus Community College

Organization/Program	The Pillowtex Project Rowan-Cabarrus Community College Rowan and Cabarrus Counties, NC
Program Purpose	The state of North Carolina faced an unprecedented challenge when 4,790 jobs were lost as a result of the Pillowtex Corporation closing its doors. Rowan-Cabarrus Community College played a critical role in providing basic skill training and vocational training to 3,984 of the dislocated workers (45 percent of whom lacked a high school degree) who were in their service area.
Program Description	For 18 months following the downsizing, college educators worked onsite at a closed plant where they conducted workshops in stress management, test anxiety, and GED preparation. Information and placement testing to help dislocated workers enroll in college was also provided. New short-term training programs helped dislocated workers enter high growth jobs in the health occupation cluster quickly. Among the many partnerships formed, the college worked with the public schools to share space in the evenings and summer months for off-campus offerings in ESL and short-term construction and masonry programs. Local schools hosted job-seeking skills workshops, and a literacy council was reactivated. GED and Adult Basic Education classes were held at area churches. College officials translated outreach materials into Spanish and Laotian. Clothing closets helped students dress for job interviews. Cosmetology students provided free manicures and haircuts to dislocated workers as part of their job preparation. The Small Business Center developed programs in entrepreneurial training. Capacities were increased in all courses, allowing more dislocated workers to benefit from college instruction.
Progress	The college established an accountability model with a computerized database and tracking system to identify outcomes of clients enrolled at the college. College enrolled 49% of the NEG-eligible clients in the college's service area. Direct services were provided to 92% of these clients. 245 finished their GED. 449 enrolled in HRD and short-term occupational extension programs. 230 students have graduated from the college to date and another 226 are expected to complete programs of study by December 2006.
Contact Information	Jeanie Moore, VP, Continuing Education Rowan-Cabarrus Community College P.O. Box 1595 Salisbury, NC 28145 T: 704.637.0760, x278 moorej@rowancabarrus.edu

Information from Jeanie Moore at Rowan-Cabarrus Community College and from U.S. Department of Labor, 2005.

Innovation: Addressing Regional Economic Priorities

One important innovation in recent years has been the strengthening of links between economic development and workforce development activities. Some state governments have taken a lead role in aligning these activities at the state level in order to respond to the pressures brought by an increasingly global economy and the need to ensure that local employers are satisfied with the skill levels of the local workforce (Biswas, Mills, & Prince, 2005).

More and more, however, this alignment between economic development and workforce development is taking place at the regional level, which has been encouraged by the federal government as evidenced through the Workforce Innovation in Regional Economic Development (WIRED) initiative.

Regions awarded grants under the WIRED program are likely familiar with many examples of regional alignment of economic and workforce development activities. Additional examples from the literature are provided below.

Organizational Example: Memphis Area Chamber of Commerce and Memphis Office of Planning and Development

Name	Memphis 2005 Memphis Regional Chamber and Memphis Office of Planning and Development Memphis, TN
Program Purpose	To create and sustain a skilled workforce so that the Memphis-area business community can remain globally competitive while providing jobs for local residents.
Program Description	<p>The Memphis Regional Chamber and the Memphis Office of Planning and Development worked together to create Memphis 2005, a \$15 million, 10-year economic development plan for the Memphis/Shelby County Metropolitan Statistical Area, with workforce development as one of four main goals. It was designed to improve business recruitment, minority business development, workforce development, and physical infrastructure.</p> <p>The chamber and the city’s Office of Planning and Development convened local businesses to discuss the link between the companies’ business interests and workforce development. The chamber then recruited more than 300 employers in a new partnership for ongoing discussions about workforce development needs. The partnership identified seven industries for which to develop industry-specific training through local high schools and community colleges. (Jobs for the Future, 2001)</p>
Progress	<p>At the end of the 10-year initiative in 2005, Memphis2005 reports:</p> <ul style="list-style-type: none"> • Over \$13 billion in private capital investments (the most in Tennessee) in the metro region. • A drop in poverty rates of more than two percentage points (12,000 people), a decrease greater than the national average. • Steady growth in per capita income, surpassing the national average for the first time. • Average wages per job of more than \$37,800, which is higher than earnings in peer cities Birmingham, Louisville, and Nashville.
Contact Information	<p>Melissa Rivers Memphis Regional Chamber 22 N. Front, Suite 200 Memphis, TN 38103 T: 901.543.3500 www.memphischamber.com</p>

Information from Jean Reid and Larry Henson at the Memphis Regional Chamber and from Jobs for the Future, 2001.

Organizational Example: Washington State Skill Panels

Name	Industry Skill Panels Washington State
Program Purpose	Industry skill panels continuously examine the workforce needs of the industries they serve. Panels recommend new, modernized training programs where none existed before and demand more training capacity when there are not enough graduates to go around. In addition to pushing for policy change, they support economic development initiatives aimed at building industry competitiveness.
Program Description	<p>The state created over 40 Skill Panels, which are regionally-focused, public-private partnerships among public sector, labor, education and business representatives from target industries. The panels broker training services that are designed to the specific needs of local industry. The partnerships allow for the various stakeholders to share important knowledge and to take joint responsibilities for making policy recommendations that have a positive impact on the region's competitiveness.</p> <p>Members of the panels typically include 15 to 20 business representatives of a particular industry. These representatives are decision-makers within their companies, for example, chief executive officers, chief financial officers, human resource directors, plant managers, supervisors.</p>
Progress	<p>As of 2001, Industry Skill Panels have:</p> <ul style="list-style-type: none"> • Contributed to curriculum development for customized training benefiting at least 4,000 workers in the health care, information technology, construction, manufacturing, and agriculture/food processing clusters including • Initiated labor-management committees to create the nation's first four health care apprenticeships • Developed a construction industry career ladder • Created new upgrade training options, such as LPN to RN, using distance learning programs • Created a free online internship system (Internmatch) in IT • Supported two construction apprenticeship demonstration projects • Created Vocational ESL curricula for construction and health care workers.
Contact Information	<p>Workforce Training and Education Coordinating Board 128 10th Avenue SW P.O. Box 43105 Olympia, WA 98504-3105 T: 360.753.5662 http://www.wtb.wa.gov/IndustrySkillPanel.asp</p> <p style="text-align: right;">T:</p>

Information from Biswas et al, 2005 and from the Industry Skill Panel website.

Organizational Example: North Central Indiana Workforce Investment Board aka Workforce Development Strategies, Inc.

Name	North Central Indiana Workforce Investment Board/ Workforce Development Strategies, Inc. (WDSI)
Purpose of Program	To develop and coordinate regional economic development strategies.
Program Description	The WDSI (the non-profit organization that evolved from the Workforce Investment Board) created its own Economic Development Committee whose members included the economic development directors of the six counties in and around Indianapolis. This committee developed a Comprehensive Economic Development Strategy (CEDS) funded in part by the U.S. Department of Commerce's Economic Development Administration. This resulted in the creation of an Economic Development District (EDD). This has allowed the WDSI to oversee multiple funding streams and to coordinate the programs associated with that funding. The WDSI can then explore more creative connections between workforce and economic development (Troppe & Toft, 2004). For example, the EDC and the WDSI pooled resources to purchase a business retention software system that will track business trends for employers in the area. This database delivers a comprehensive analysis of company-specific and aggregate industry metrics that will enable workforce development and economic development professionals to identify and provide services for a wide range of employers including those experiencing layoffs as well as growth. Other WDSI initiatives include the Healthcare Alliance which addresses the industry's regional workforce development needs, and the Mature Worker Taskforce – the 60 Plus Success Project which develops recommendations for transition strategies for mature workers as well as employer strategies for how to deal with issues arising from their mature workers preparing for retirement.
Progress	WDSI recently released their 2005 update of the Self-Sufficiency Guide for North Central Indiana: <i>A Guide for Policy Makers and Practitioners</i> .
Contact Information	Workforce Development Strategies, Inc. 1200 Kitty Hawk, Suite 208 Peru, IN 46970 T: 765.689.9950 http://www.wdsi.org/

From Troppe & Toft, 2004 and Workforce Development Strategies, Inc., 2005.

Organizational Example: San Juan College and the School of Energy

Organization/Program	School of Energy (Formally The Regional Energy Training Center) San Juan College Farmington, NM
Program Purpose	Identify and develop ways to collaborate with employers to address the labor and skills needs of the oil and gas industry.
Program Description	<p>This five-state regional training initiative included New Mexico, Arizona, Utah, Colorado, and Wyoming and offers training, licenses, and certification related to oilfield services that support oil & natural gas production through three regionally dispersed training facilities, which are located in northern New Mexico. The project works with other community colleges in the region to assist in building their capacity to serve oil and gas employers.</p> <p>The project's primary goals were: (1) the creation of a regional training center responsive to the critical skill and labor needs of the energy industry, particularly oil and gas producers and the oilfield service companies and suppliers that support exploration and production activities; (2) the provision of training for incumbent workers needing certifications or new skills for advancement; and (3) training for dislocated workers seeking re-entry to the labor pool, and unemployed individuals needing skills to obtain entry-level jobs with career potential. The project placed particular emphasis on providing learning opportunities for the region's large Native American and Hispanic population.</p>
Progress	The project was initially expected to serve 400 Workforce Investment Act (WIA) participants referred from One-Stop Career Centers. Through December 2004, the project trained 598 unemployed and dislocated workers, more than 90 percent of whom went directly to unsubsidized employment under the High Growth Job Training Initiative. To date, these centers have been successful in providing training for over 5,600 unemployed, dislocated, and incumbent workers and new hires.
Contact Information	Randy Pacheco, Dean School of Energy San Juan College 4601 College Boulevard Farmington, NM 87402 T: 505.327.5705 pachecor@sanjuancollege.edu

Information from Randy Pacheco at San Juan College and from U.S. Department of Labor, 2005.

Tools and Resources for Strategic Partnerships

Duke, A., K. Martinson and J. Strawn. (2006, April). Wising up: how government can partner with business to increase skills and advance low-wage workers. Center for Law and Social Policy. http://www.clasp.org/publications/wise_up_2006.pdf

Council for Adult and Experiential Learning (2003, April). *Increasing opportunities for at-risk workers: educational partnerships between community colleges and employers*. A project conducted by CAEL and sponsored by the Ford Foundation. A joint publication of CAEL and SHEEO.

http://www.cael.org/pdf/publication_pdf/Increasing%20Opportunities%20for%20At-Risk%20Workers.pdf

EVALUATION

When done well, evaluation is an integral part of the program from the beginning to the end.

Information from the Analysis phase will help program planners **Set Clear Goals and Outcomes**, which will, in turn, dictate the systems and processes needed to **Track Basic Participation and Demographic Data**.

Once the initiative is underway, there are two types of evaluation: formative and summative. **Formative evaluation** is the process that takes a close look at how the program is implemented in order for there to be continuous improvement in the program's design, development and implementation. This is often very helpful if there are multiple iterations of a program prior to its final implementation. **Summative evaluation**, on the other hand, typically occurs after the final version of instruction is implemented and is focused on assessing the overall effectiveness of a program and whether it lived up to expectations (Braxton, Bronico, & Looms, 2006). The information from a summative evaluation is important when you need to make a case for a program's continued funding and to contribute to the field's understanding of best practices. Programs with good summative results stand the best chance to attract funding and to invite replication.

Key Components include:

- **Set clear goals and outcomes**
- **Track basic participation and demographic data**
- **Conduct a formative evaluation**
- **Conduct a summative evaluation**

Set Clear Goals and Outcomes

During the initial stages of analysis, one important task was to define the problem. The corollary to that task is to define the desired outcome. What is it you want your education and training program to achieve, not just for the organization but also for the individual learner and/or the employer?

One reason that setting clear goals and outcomes is important is because those goals will drive the design of the program. If a desired outcome is for 50 extremely low-skill workers to qualify for training that requires 12th grade proficiency in math and reading, that needs to be defined prior to the design phase. For example, if a goal of the program is for the graduates to be able to read blueprints, activities in the design and development phases will ensure that the curriculum focuses

on the mastery of these skills. This example seems obvious, but it illustrates the importance of having some goals clearly spelled out from the onset of an education and training initiative.

Second, a focus on setting some clearly-defined goals can also be helpful to the individual learners. One finding from research on adult learning is that adults are more goal-oriented than traditional-age students (Lieb, 1991). They have clearly-defined goals for themselves, and they want to be able to see clearly how an education and training program will help them reach those goals. (During implementation, it will be important to make the goals and objectives of the learning program clear to the worker/learner.)

Setting clear goals also has a third purpose which is to guide the design of the evaluation. Goals will define what it is that needs to be measured and tracked so that it will be possible to learn what the true impact of the program or learning initiative is.

Track Basic Participation and Demographic Data

For general understanding of the program's effectiveness and impact, it will be important to track both basic participation data as well as the demographic data of the participants. You will need to establish systems for collecting and tracking this data prior to program implementation. Securing the informed consent of each participant to be part of an evaluation is a recommended part of the process.

Demographic data to collect might include:

- Age
- Gender
- Race/Ethnicity
- Education
- Recent work history
- Native language
- Disability
- Education and career goals
- Tested basic skill levels at program start (Henle et al, 2005)

Data to collect on participation might include:

- Start date
- End date
- Completion information (did they complete the program? Did they earn a degree or certificate?)
- Tested skills at completion
- Credentials or certifications earned
- Employment/job placement status after program completion (where relevant) (adapted from Henle et al, 2005)

- Job retention at 30, 60, 90 days post-placement
- Wage change

Conduct a Formative Evaluation

Conducting a formative evaluation is kind of like keeping track of your vital signs during the running of a marathon. Much like a runner whose pulse is beating too fast would adjust the pace or breathing, so too would a training administrator monitor preliminary data from the program and feedback from participants to see if there are any early signs of problems in implementation or general design. If any problems come to light – such as feedback that the material covered is too much or too little, that it is not relevant to the work, or that the scheduling is not conducive to the target population’s workday – the administrator can make changes necessary to improve the effectiveness of the program.

One good way to take the “pulse” of a program is to interview or survey participants, employers, instructors, and staff at several key points in the program to determine what is working and what is not. An important part of this strategy is including interviews with people who drop out of the program to find out why they are leaving and what might be done to prevent others from doing the same. Conversely, it is important to follow up with people who have completed the program along with their employers to determine whether the education and training had value and how it might be improved.

Those “soft data” approaches can be supplemented by a close look at “hard data” such as participant retention and completion, skills gains, job placement rates and wage levels and so on, comparing the performance of a program over time (Henle et al, 2005).

Conduct a Summative Evaluation

To determine the effectiveness of a program after implementation, it is useful to follow a framework initially developed by Donald L. Kirkpatrick and revised by Jack J. Phillips. The framework outlines five levels of evaluation, each of which builds on information from the previous level:

Level 1: Reaction and Planned Action

Reaction is essentially what the target population thinks of the program. Planned Action is what the target population plans to do with the new learning. Level 1 evaluations are generally conducted using surveys, interviews, course evaluation forms, and feedback forms (Kirkpatrick, 1994; National Highway Institute, 2000). While Level 1 evaluations are important for the summative evaluation, they are also often used in formative evaluations for continuous improvement of the program.

Level 2: Learning

Level 2 evaluations involve measuring how much was learned between the start of the program and the end of the program. This typically involves pre-tests and post-tests. Pre-tests may be part of a program’s initial assessment process (Kirkpatrick, 1994), and they may be part of the demographic

data collected prior to the start of the program. Post-tests are typically the same as the pre-test in order to measure the learning gains. Post-test results help to determine whether a program participant is ready to move on to further education and training or to higher level employment (See the description of the Work Readiness Credential as an example of an innovation based on a standards-based post-test.)

Level 3: Application

While the first two evaluation levels were concerned with how the training affected the individual, the next level goes beyond the individual to measure the extent to which the skill gains result in improved performance or behavior in the workplace. The question asked is whether the training participant was able to apply their new knowledge in a work setting (similarly, a Level 3 evaluation for a non-vocational ESL program might measure the extent to which the student could use English in a real-life setting.) (Kirkpatrick, 1994).

Level 4: Impact

Level 4 measures whether a workforce training program had an impact on business performance. Typical objective measures include cost savings, output increases, turnover decrease, time savings or quality improvements. Subjective measures might include customer satisfaction, employee satisfaction, customer retention, response time to customers, reduction in re-work and so on. This can be a very important evaluation level for employers, but it is also – with Level 5 – the most difficult to carry out because it can be extraordinarily difficult to isolate the effects of the training alone on certain business metrics. Employers often implement more than one improvement strategy at a time (Winfrey, 1999; Kirkpatrick, 1994).

Level 5: Return on Investment (ROI)

The final level is the major contribution from Jack Phillips. It attempts to capture the true monetary value of the program by comparing the monetary benefits with the actual costs of administering the program. This, too, can be very difficult to administer, but it is critically important for showing employers the strategic, bottom-line importance of training and workforce development (Phillips, 2003).

With each successive evaluation level, the information gained is of greater value, but it also becomes more difficult to obtain. A Level 1 evaluation might only use a course evaluation form, while Level 5 might require a number of different data tracking systems to be in place prior to, during, and after training as well as the ability to isolate the training impact from other system improvements or changes in HR practices.

Although Level 4 or 5 evaluations may seem out of reach because of their complexity and cost, they have been successfully carried out by workforce development organizations. Some, such as San Francisco Works and partners of the Aspen Institute, have measured the impact of their training programs on business clients (Level 4); others, such as Valley Initiative for Development and Advancement (VIDA) and Twin Cities Rise!, have measured the ROI for local governments who have invested in training (Level 5):

- **San Francisco Works** conducted a Level 4 analysis of five employers and found that the employers gained several benefits from training, including an expanded applicant pool, reduced training costs, increased tax credits, increased productivity, higher employee retention, and enhanced community and brand reputation (Marquardt & Feeley, 2005).
- The **Aspen Institute** recently reported that in healthcare, one workforce development organization showed through data that patients were more satisfied by aides it trained than by aides of other providers, while another program's entry-level placements were about as likely or more likely than traditional hires to demonstrate soft skills which results in time and cost savings for the employer. Similarly, workforce development organizations in manufacturing showed that their programs reaped the following benefits: higher employee retention rates, greater supervisor ratings on job performance, and improvements in scrap, on-time delivery and efficiency rates (Aspen Institute, 2005).
- Recent analysis from **VIDA** shows that the city of McAllen's investment of \$2.4 million in employment training has resulted in more than \$5 million in benefits to the city (increased sales tax, property tax and other fees), for a return on their investment of 211% (Valley Initiative for Development and Advancement, 2005).
- **Twin Cities RISE!** receives support from the State of Minnesota through a pay-for-performance contract. Through an analysis of benefits to the state – including savings as a result of a reduction in public assistance, a reduction in incarceration and sentencing costs, and an increase in tax revenue to the State of Minnesota as a result of higher incomes – Twin Cities RISE! has calculated that the State has already received a 20% return on its investment, with the return potentially reaching 300% or more as graduates continue to work and pay taxes. (See website at <http://www.twincitiesrise.org/Results.asp?Content=BenefitsCommunity>.)

Resources and Tools for Evaluation

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ROI Institute. <http://www.roiinstitute.net/websites/ROIInstitute/ROIInstitute/> *This website is a resource for research, training, and networking for practitioners of the Phillips ROI Methodology™.* The website provides information about ROI certification opportunities, including online training.

Conclusion

Creating adult education and skill building programs as strategic responses to economic development needs is a complex undertaking. As is clear from this report, there are numerous steps to take and issues to consider to ensure that the program produces the desired results.

There are likely experts who would disagree with our list of key components. The literature from the fields of adult learning, workforce development and corporate training is rich with additional details, recommendations and suggestions for programmatic innovations beyond what is presented here. This list, however, provides a good starting point for regional stakeholders unfamiliar with these fields. We hope that more experienced workforce development partnerships may find this report a useful resource in their work as well.

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