Building Skills to Compete in a Changing Economy

Connecticut's Workforce Education Initiative

A Report to the Bureau of Early Childhood, Career and Adult Education Connecticut State Department of Education

Introduction

The Connecticut State Department of Education established the Connecticut Workforce Education Initiative (CWEI) with a two-year federal incentive grant awarded in 2002 under the Workforce Investment Act (WIA). The incentive grant provided an opportunity to advance the delivery of workforce education by local Adult Education programs. The goals of the initiative are to encourage more adult learning in the workplace and to build the capacity of Adult Education programs to provide customized workforce education in partnership with employers. The Connecticut initiative seeks to develop a system for workforce education based on stronger links between Adult Education and its partners in the One-Stop System that responds to a growing need across the state.

Holt, Wexler & Farnam, LLP (HWF) was engaged to assist in compiling, analyzing, and assessing information on the initiative for incorporation into a summary report to document the success of the program and its impact on employees and businesses. The report provides an historical recap of Adult Education's workforce education efforts, culminating in the full model reflected in the Workforce Education Initiative. The assessment also documents system and capacity building efforts at the state and program level.

The report was developed with key contributions from Maureen Wagner, Associate Education Consultant, Bureau of Early Childhood, Career and Adult Education and Melissa Dayton, Trainer, Adult Training and Development Network (ATDN) a program of the Capitol Region Education Council, with data assistance from Ajit Gopalakrishanan, Associate Education Consultant, Bureau of Early Childhood, Career and Adult Education.

"Building Skills to Compete in a Changing Economy" has been prepared to raise the awareness among employers, elected officials, and educators of the pressing need for and clear benefits of workforce education delivered under the Connecticut model, and thereby to generate increased employer and public financial support to continue and expand the initiative.

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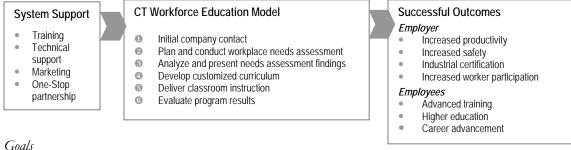
Executive Summary

"An effective workforce development system requires stronger collaboration among education, business and workforce partners." -- National Association of State Workforce Board Chairs

Overview

Connecticut's adult education system has a 20 year history in providing workforce education services to meet the needs of a continually growing knowledge-based economy. An increasing need for a workforce with good technical and communication skills, coupled with a larger influx of non-English speaking persons, has necessitated a collaborative effort to systematize and expand workforce education. The Connecticut Workforce Education Model, utilized by Adult Education programs, involves development of customized curricula for any employer requesting services based upon a multi-step process that includes needs analysis, curriculum development, and on-site instruction.

The Connecticut Workforce Education Initiative was established in 2002 using a portion of funds awarded to Connecticut through a two-year federal incentive grant under the Workforce Investment Act. The purpose of the funding was to systematize workforce development in Connecticut through a collaborative process involving relevant local, regional, and state level partners. The Initiative capitalized on Adult Education's acquired expertise to expand capacity and enhance existing links with the state's workforce development system.



The goals of the Connecticut Workforce Education Initiative were two-fold: 1) enhance the capacity of local adult education programs to provide workforce education, and 2) develop an infrastructure within the workforce development system to improve employer access to workforce education services and providers.

Efficacy of the Model

To determine the perceived and actual value of the model, key informant interviews were conducted with various Adult Education Program Directors and employers who used the workplace education services.

Overall, Adult Education Directors were confident in the model, the training their program providers received and the way in which employers were engaged in a full team process. In particular, educators felt confident entering the workplace to assess the environment and evaluate employees to create customized curricula. Employers lauded the benefits provided by the program, stating that both business production and employee attitude improved.

"Our expectations were to have open communication to (allow for) better understanding that would eliminate frustration on employee and management levels - and they were met!"

-- Claire Mineo, Staples

Holt, Wexler & Farnam, LLP

¹ http://www.nga.org/cda/files/BuildingWorldClassWorkforce.pdf, p. 11 "Building A World Class Workforce," National Association of State Workforce Board Chairs, 2002

- In the two-year effort to expand and systematize the Workforce Education Initiative, a total of 40 employers and an estimated 2,400 of their employees were served by Adult Education programs under the banner of the Initiative.
- Participating employers interviewed for this study reported that the programs delivered at their worksites met or exceeded their expectations and resulted in tangible economic and productivity benefits.
- The Initiative has substantially increased the capacity of Connecticut's Adult Education system to provide workforce education through recruitment of providers, training, technical assistance, and efforts to increase awareness of the services.
- Ongoing discussions with the five Workforce Investment Boards and partners in the One-Stop System have served to build awareness of Connecticut's Adult Education system as a provider of workforce education. ² The number of employer referrals to Adult Education providers has increased as a result.

The Future of Workforce Education

State Department of Education Vision

The vision of the State Department of Education is to develop comprehensive statewide capacity within the adult education system that is fully integrated, sustainable and responsive to the needs of Connecticut's employers and workers.

Recommendations

The following recommendations to strengthen workplace services are based upon the lessons learned, compiled data, workplace evaluations and key informant interviews.

- **Engage in statewide collaboration** with community colleges, Workforce Investment Boards/One-stop centers and employer organizations.
- Enhance communication and marketing efforts through targeted campaigns and partnerships.
- Maximize resources and create a fund development plan that involves the CT Department of Labor, Office for Workforce Competitiveness, and Workforce Investment Boards.
- Increase capacity and impact of the Adult Education program through teacher training and retention efforts, development of an inventory of programs to maximize regional responsiveness and creations of options in curriculum and workplace needs analyses.
- Fully utilize the Connecticut Adult Reporting System to more effectively measure results, to inform continuous improvement of the model and to support fund development by working with the best providers of services to improve methods for capturing qualitative and quantitative data.

The Connecticut Workforce Education Initiative has progressed substantially in the last two years with a modest investment of discretionary funds used to train local programs, otherwise build capacity, and provide small incentives to local programs and employers to participate. Continued investment in the Initiative could increase its positive impact and leverage substantial private investment in workforce skill training by employers.

² The One-Stop system, as outlined in the Workforce Investment Act of 1998, connects employment, education, and training services into a coherent network of resources within which partner organizations provide comprehensive services in a coordinated approach at each service delivery area. Each One-Stop center is designed to provide the information, skills and tools necessary for employment, re-employment or upgrading.

I. Background

A. The Case for Workforce Education

'In the face of globalization, technological change, trade liberalization, deregulation and other external pressures, employee skills are becoming increasingly important. There is a growing body of research supporting the connection between investments in workbased learning and positive bottom-line returns for organizations." US Department of Education³

The gap between the basic skill levels of employees and those needed to maintain competitiveness is widening. According to the National Center for the Study of Adult Learning and Literacy (NCSALL), more than 40 percent of working-age adults in the United States lack the skills and education needed to succeed in family, work, and community life today. 4 More than 50% of high school graduates do not have the basic skills to do their job, and 16% of college graduates do not have adequate skills.⁵ A survey of Chambers of Commerce conducted in November 2001 reveals that 91% of Chamber CEOs surveyed believe employers are most concerned about the lack of skills among job applicants, and 83% indicated a need to upgrade the skills of present workers. Other concerns include employee retention and better job opportunities for low-income, low skilled workers. Concomitantly, the survey indicated that Chamber CEOs estimate that 88% of their members see workforce development as a high priority.6

Basic skills needed in modern business*

- Literacy skills and other important skills
- Attitudes and behaviors that are essential to workplace success and high performance
- Communicating effectively in English
- Understanding and ability to use documents (such as safety instructions, assembly directions, maps)
- Understanding and ability to use numbers by themselves or charts and tables
- Thinking critically and acting logically to solve problems and make decisions
- Using computers, technology, tools and information systems effectively
- Ability to build and work in teams
- Positive attitude toward change
- Willingness and ability to learn for life

*Source: www.workplacebasicskills.com

In Connecticut, the movement toward high tech and high skill jobs and an increasing immigrant population that is unprepared to enter the workforce compound the problem. These immigrants are the source of the small net gain in the workforce in Connecticut as the workforce ages and net migration of U.S. citizens into Connecticut is flat or negative. A report released by the South Central Regional Workforce Investment Board provides a cautionary statement about the potential perils facing the state. According to this 2003 report, Connecticut ranks 47th out of 50 states in population growth. The population in South Central Connecticut increased by only 3.2% due mainly to the influx of new foreign immigrants. The levels of unprepared and unskilled workers are rising, as are the increasing numbers of individuals and families living in poverty.⁷ As highlighted in a 2003 Community Audit for Southwestern Connecticut, 35% of all job openings in that region will require college degrees, while 60% of job growth will be in occupations paying below low-income wages.⁸ However, 16% of adults aged 25 and over in the region do not have a high school diploma, and employers report an ongoing need for workers with basic skills to fill entry level jobs.

³ http://www.work-basedlearning.org/research.cfm

⁴ http://www.ges.harvard.edu/%7Encsall/index.html, National Center for the Study of Adult Learning.

⁵ "Turning Skills into Profit: Economic Benefits of Workplace Education Programs," The Conference Board, Inc., 1999.

⁶ "A Chamber Survey: Spotlight on Workforce Development," Center for Workforce Preparation, An Affiliate of the U.S. Chamber of Commerce, November 2001.

⁷ "Workforce in Peril," State of the Workforce a report from the (Connecticut) South Central Regional Workforce Development Board, 2003.

^{8 &}quot;Community Audit for Southwestern Connecticut," The Workplace, Inc., Southwestern Connecticut's Regional Workforce Development Board, 2003.

The lack of basic skills and English language skills among incumbent workers and new applicants for positions is a serious issue for many employers in Connecticut. Lack of basic skills impedes introduction of new technologies and processes into the workplace and can create safety concerns when workers are unable to read directions and warnings. This concern is supported by the evidence of increased profitability among companies who have invested in workplace education. Workforce education programs work. In a report issued by the Conference Board in 1999, employers report increased profits and other bottom line benefits when their employees gained basic skills enabling them to work more effectively.⁹

The perception exists among employers that our educational institutions are not supplying a sufficient number of graduates to meet the increasing demands of the workplace.¹⁰ Yet with federal and state fiscal constraints, decreasing federal commitment to workforce training, and diminished resources in the state Adult Education system, the problem will continue to escalate if left unchecked. The burden of addressing workplace literacy and basic skills deficits is by default falling to the employer, and forward-looking employers

are looking for cost-effective educational services to help them deal with the issue.

Connecticut's workforce investment system must continue to focus on: a) basic skills training to fill the need for workers in positions requiring short-term on-the-job training, and b) improving links to educational opportunities for workers, to fill the growing need for individuals with post-secondary education or specialty training, and to equip workers to pursue viable career ladders. Recognizing the need for a collaborative effort to respond to the skilled labor force deficit, Connecticut's Adult Education system is responding to this enormous challenge by building workforce education partnerships with employers, employer organizations, and other providers both at the local level and through the state's One-Stop workforce investment system created under the federal Workforce Investment Act of 1998 (WIA).

Economic Benefits of Workforce Education Programs

- Increased output of products & services
- Reduced time per task
- Reduced error rate
- Better health & safety record
- Reduced waste in production
- Increased customer retention
- Increased employee retention
- Improved quality of work
- Better team performance
- Improved capacity to cope with change

Source: Conference Board Report, 1999

B. A Brief History

Connecticut adult education programs have collaborated with businesses to provide workforce education since the mid-1980s, driven by increasingly rapid change in the workplace and employers' demand for onsite basic skills instruction tailored to the needs of their workforce.

When the federal Workforce Investment Act (WIA) passed in 1998, Adult Education was well positioned to meet the emerging system's needs in the workforce development arena. The intent of WIA was to reform Federal job training programs and to create a new comprehensive workforce investment system. One-Stop service delivery, at the hub of the new system, was designed to bring together numerous training, education and employment programs into a single, consumer friendly system within the community. Title I of WIA establishes the structure of the new workforce investment system, while Title II, the Adult Education and Family Literacy Act, legislates the activities of adult education providers. The alignment of the workforce investment system with adult education and family literacy services within the same piece of legislation indicates Congress's desire to build upon existing systems to make services and training more responsive to employer and worker needs. Eight established regional workforce development boards (RWDB) were renamed workforce investment boards and were charged with building this system through partnerships with education and workforce development service providers and employers. (As of July 2003, the number of Boards in Connecticut was reduced to five in order to streamline services and to significantly reduce overhead costs).

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^{9 &}quot;Turning Skills into Profit: Economic Benefits of Workplace Education Programs", The Conference Board, 1999
10 Ibid

In 2002, Connecticut was awarded a two-year federal WIA incentive grant after surpassing WIA performance objectives the previous year. The funds were provided to systematize workforce development in Connecticut through a collaborative process involving all relevant partners. The State Department of Education utilized a portion of these funds to establish a two-year project known as the *Connecticut Workforce Education Initiative*. Implemented between fall 2002 and June 2004, the Initiative represented an opportunity to capitalize on adult education's acquired expertise, expand capacity, and enhance existing links with the state's workforce development system.

Actively supported by the State Department of Education, workforce education expands the reach of Adult Education to serve working adults in their workplaces.¹¹ Skilled workforce education providers based in local Adult Education programs have operated both independently and collaboratively to meet the needs of the business community, playing an important role in Connecticut's economic and workforce development systems. In the past four years, Adult Education has served more than 4,500 employees at over 100 companies and/or unions throughout the state.¹²

Over the years, Department support has taken several forms:

- Sponsorship of a comprehensive three-day training program, presented by the Adult Training and Development Network (ATDN), to provide a systematized process for developing and implementing workforce education programs.¹³
- Integration of workplace-based assessments into the Connecticut Competency System (CCS), adult education's standardized assessment system. In 2000, the Department joined other states in contracting with the Comprehensive Adult Student Assessment System (CASAS) to develop a series of workplace-based assessments that measures student progress in a workplace context and that responds to a need long expressed by the field and employers. Connecticut adult education programs were active participants in the test development process for the Workforce Learning Systems series.
- Fiscal incentives to partner with businesses, in the form of federally funded Program Improvement
 Project (PIP) grants, were designed to provide opportunities for the improvement of educational
 programs and services for adults who lack the level of basic skills and literacy necessary for effective
 citizenship and productive employment. PIP funding is made available under Title II of the
 Workforce Investment Act (WIA).
- Membership of State Department of Education Consultants on regional Workforce Investment Boards and their committees.
- A statewide marketing campaign that highlighted workforce education as a component of the adult education system.
- Sponsorship of an informal users group called "Adult Ed at Work" to provide a forum for programs to share resources, new information and expertise.

C. Creating a System: The Connecticut Workforce Education Initiative

The Department's workforce education efforts have continued to expand and engage an increasing number of partners in response to the growing needs of the business community to remain competitive. Employers

¹¹ Local school boards are mandated by Connecticut General Statute to provide adult education services to eligible citizens in its community. Mandated programs include English as a second language, adult basic education, citizenship and high school completion options. Adult education programs served over 33 thousand students in 2002-2003.

¹² CT State Department of Education, ED-241 End of Year Reports.

¹³ The Adult Training and Development Network (ATDN) is charged by the State Department of Education with providing training and professional development support to Connecticut's adult education programs. ATDN is a program of the Capitol Region Education Council (CREC).

and state leaders recognize that for Connecticut businesses and industry to thrive, they need a workforce with strong skills in communication, reading, writing, math, critical thinking, problem solving, and English language proficiency. Higher literacy skills are also the key to economic security for individuals and families. The Connecticut Workforce Education Initiative (CWEI) was created to further the Connecticut State Board of Education's statement of commitment to quality adult education programs accessible to all Connecticut adults. ¹⁴

In the development of an approach to fulfilling the needs of Connecticut's labor force through the CWEI, the following assumptions were considered.

- Adult education plays a vital role in supporting the learning needs of working adults, providing a
 continuum of service that focuses on pre-employment skills, transition to work, and workforce
 education. Workforce education serves both the individual with his/her need for continuous
 learning and the larger workforce development system.
- Connecticut possesses a strong foundation of workforce education experience to build upon.
 Programs throughout the state have developed relationships with their business communities
 and accumulated expertise in developing and delivering customized workforce education
 programs.
- Workforce education provides an ideal vehicle for reaching learners who might not otherwise enter adult education programs.
- Coordination with Workforce Investment Boards (WIBs) and One-Stop Centers can highlight
 the role of workforce education along the workforce development continuum while providing
 enhanced access to businesses seeking workforce education services. The regional structure of
 the One-Stop system is well suited to capitalizing on existing regional and local partnerships, as
 well as developing new partnerships.
- Workforce education benefits employers, and Connecticut's economy in turn, with increased productivity, increased flexibility to pursue company long-range goals, and enhanced worker confidence, participation and ability to adapt to change.

The goals of the Connecticut Workforce Education Initiative were two-fold: 1) enhance the capacity of local adult education programs to provide workforce education, and 2) develop an infrastructure within the WIA One-Stop system to improve employer access to workforce education services and providers.

Four objectives provided the basic framework for the Initiative. These include:

- 1) Deliver regionalized *CT Workforce Education Model* training for Adult Education programs that identified as direct-service providers, with training stipends to offset programs' costs and ongoing technical assistance;
- 2) Distribute CASAS workplace-based assessments and assist programs with integrating them as an option in student/employee assessment.
- 3) Reinforce modified Memorandum of Understanding with the Workforce Investment Boards to provide training to WIB and One-Stop staff and to formalize a referral system connecting employers and workforce education providers.
- 4) Form an advisory group to provide feedback and guidance on Initiative activities. Stakeholder members represented the One-Stop system, business, education, and labor.

¹⁴ Of the total incentive dollars that came to the state, the State Department of Education received \$324,908.

The State Department of Education implemented this structure utilizing a proven training model (Connecticut Workforce Education Model) and the expertise of experienced workforce education providers to reach a cohort of additional Adult Education programs. The Department presented all Adult Education

programs with the option to be designated a direct-service provider or a cooperating program. Training for direct-service providers was organized regionally to encourage discussion and collaboration among adult education programs, sharing of staff expertise and capacity, systematized referral of businesses, and development of a unified voice to market and deliver services. The emerging system facilitates employer access to services directly from its local Adult Education program or regionally through the One-Stop system.

The Department convened an Advisory Committee to assist in the development and implementation of the WEI. Partners included the Department of Labor, Business representatives, Workforce Development Board staff, and Adult Education Directors. The Advisory Committee now serves in the ongoing capacity of "Experts on Call."

The Initiative's activities and timeline are summarized in the table to the right.

Connecticut Workforce Education Initiative Timeline Year One (2002-2003):

- Initiative startup
- Formation of advisory group
- Statewide training Introduction to CT Workforce Education
 Initiative
- Regional trainings CT Workforce Education Model for directservice providers
- Introduction of CASAS Workforce Learning Systems (WLS) assessments
- Ongoing technical assistance through ATDN

Year Two (2003-2004):

- Reinforce modified Memorandum of Understanding between Adult Education and WIBs
- Regional trainings CT Workforce Education Model
- Distribution and training of CASAS WLS assessments
- Stipend program to support new employer partnerships
- Informational sessions with WIB executive directors, WIB and One-Stop staff, business associations
- Development of marketing kit for state and local use
- Completion of Initiative Summary Report
- Ongoing technical assistance through ATDN

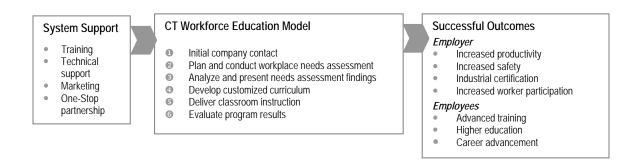
II. The Connecticut Workforce Education Model

The Connecticut Workforce Education Model has two components a) a training and implementation *process* for developing workforce education programs, and b) a statewide *system* of marketing, employer referral, and service delivery that can be accessed through direct contact with local providers or through the One-Stop system.

A. Training and Implementation

A formalized process for developing customized workforce education programs is based on a model originally developed by Valley Regional Adult Education of Shelton. An early leader in workforce education, Valley collaborated in this endeavor with the Comprehensive Adult Student Assessment System (CASAS) and produced and hosted the first training in 1994. In 1995, coordination of the training moved to the Adult Training and Development Network (ATDN) and was updated on a periodic basis. Twenty-two adult education programs participated between 1995 and 2001.

The model features a six-step process for analyzing the needs of the employer and designing a customized curriculum and instructional program that responds to those needs. Through systematic evaluation, the approach is continuously refined based on the input of program stakeholders, i.e., management, union, employees, and the workplace instructor.



The Workforce Education Initiative has provided an opportunity to develop and promote uniform standards of service delivery, make comprehensive improvements to the training for Adult Education program staff, and provide training stipends for the development of worksite education programs with new employers.

Innovations featured in the revised training include team participation, (with programs designating a workplace coordinator and one or more workplace instructors); a modular format that enabled trainees to attend segments relevant to their workplace role; regional training delivery to facilitate cooperation and collaboration among programs; access to new web-based resources (www.crec.org/atdn/workplace) and inclusion of new materials (e.g., marketing, curriculum, instructional resources) developed by workforce education providers throughout the state.

Customization to meet employer needs is at the heart of Connecticut's workforce education model. In contrast to conventional off-the-shelf curricula, workforce education first defines skill gaps in relation to workers' current skill abilities, and then targets instruction to address each specific gap. The model's comprehensive needs assessment process identifies basic skills embedded within critical job tasks and duties; determines employees' existing level of skill proficiency; defines the resulting basic skill gap; and locates other skills gaps along the continuum of workplace skill requirements. The model employs a number of tools for gathering and analyzing the necessary information which include a basic skills inventory, job task analysis, employee appraisal, and linking of basic skills to specific workplace or industrial applications, e.g., ISO 9000, SPC, safety procedures, computerization). The needs assessment process elicits input from all relevant stakeholders, i.e., managers, supervisors, labor, employees, and the workforce education provider.

The needs assessment enables the provider and employer to identify priority skill areas and to create a customized curriculum for instruction. Curriculum planning targets both workers' immediate needs and the company's longer-term goals.

Classroom instruction is delivered onsite at convenient hours, usually just before or after employees' shift times. Programs have been offered as early as 4:00 AM and into the late evening. Employers are encouraged to provide incentives to participate by paying participants for all or, more typically, a portion of the class time. This has boosted participation considerably compared to workplaces where the classes are totally on the employee's time.

The structured evaluation process, involving standard assessments, participant satisfaction surveys, and meetings or interviews to review the process, informs continuous quality improvement.

B. Marketing and Referral

The CT Workforce Education Initiative connects employers with workforce education services at the local, regional, and statewide levels. Locally, workforce education providers conduct marketing and outreach to their local business communities. Providers maintain relationships with Chambers of Commerce, economic development boards, and business associations. At the regional and state levels, the WIA One-Stop system

connects businesses and workforce development services – including workforce education – through the five regional Workforce Investment Boards (WIBs) and affiliated One-Stop Centers. Consultants from the State Department of Education sit on each of the regional WIBs, and several adult education programs have colocated services at their local One-Stop Center.

Efforts to strengthen marketing and outreach have been formalized through a Memorandum of Understanding (MOU) between the State Department of Education and the Workforce Investment Boards. The MOU provides for training all WIB and One-Stop staff in the basic skills challenges in the workplace and the Workforce Education Initiative model and systematizing the referral process to connect employers with workforce education services. The objective is to reinforce workforce education as a critical component in the continuum of workforce development services. During the Initiative, representatives from the State Department of Education and ATDN met with the WIB directors as well as key WIB and One-Stop staff to discuss delivery of workforce education in each Workforce Investment Area and to share strategies for connecting with businesses.

III. Improving the Competitiveness of Connecticut's Employers

A. Impact on Businesses

In the two years of the effort to expand and systematize the Workforce Education Initiative, a total of over 40 employers and an estimated 2,400 employees were served by Adult Education programs under the banner of the Initiative. Other Adult Education providers operating outside the initiative's network served additional employers around the state. Participating employers range from plastics manufacturing to food service, hospitality, agriculture and health care, demonstrating the applicability of the model across most sectors. (Table III-1).

Employers engaged in the Workforce Education Initiative interviewed for this report cite several interrelated objectives for their education programs:

- Increasing productivity through improved basic skills or removing language barriers
- Compliance with health and safety procedures through reduction in literacy and language barriers
- Bridging language barriers between a growing immigrant workforce and supervisors, other workers, and business owners
- Increasing morale and motivation of workers by providing an opportunity to gain skills needed for advancements
- Demonstrating that the employer values the employees and their work

Table III-1 Representative List of Sectors and Companies Participating During 2002-2004						
Agriculture	Manufacturing (cont.)					
Environmental Design	Connecticut Coining					
Kent Horticultural	Corbin Russwin					
Lyman Orchards	CUNO, Inc.					
Education	Cytec Industries					
Wesleyan University	Demetron-Kerr					
Financial Services	Dupont					
Prudential Learning	Durham Manufacturing					
Food Services	Franklin Products					
Atticus/Chabasso Bakery	Imperial Electronic					
Country Pure Foods	Assembly					
Italia Mia	Johnson & Johnson					
McDonald's Corporation	Medical					
Pepperidge Farm	Microboard Processing					
Government	Inc.					
City of Middletown	Nielsen Sessions Quality					
Health	Rolling and Deburring					
1199 Training and	Sikorsky Aircraft Corp.					
Upgrade Fund	Smurfit Stone Container					
Hospital of St. Raphael	State Highway Corp.					
Lawrence and Memorial	U.S. Repeating Arms					
Hospital	U.S. Surgical					
Hospitality	Unilever					
Courtyard by Marriott	Printing / Publishing					
Mohegan Sun	Hartford Courant					
Ramada Plaza	Northeast Graphics					
Residence Inn	Retail					
Water's Edge Resort	Staples					
Manufacturing	Ultimate Service					
Alleghany-Ludlum	Transportation					
Allied Sinterings	CT Transit					
Classic Coil						

Employers asked Adult Education providers to offer a range of educational services in workplace settings to meet these objectives, including basic skills instruction, GED preparation, English as a second language

(ESL), and customized technical training in areas such as computer skills. Increasingly, the central reason for seeking out workplace education providers is the need to address language issues in the workplace. In fact, 14 of the 15 2003-2004 programs supported by stipends were for ESL services.

All of the participating employers interviewed reported that the programs delivered at their worksites met or exceeded their expectations and resulted in tangible economic and productivity benefits. Some of the effects detailed by various respondents include:

- Better workplace teamwork.
- Higher morale, confidence, and self-esteem, especially among speakers of languages other than English.
- Increased ability to understand employee handbook and deal with production-related paperwork.
- Increased and improved communication, which significantly reduces error, lost workdays, and employee/employer frustration.
- Increased production, the combined result of all of the above.

Employers cite many examples of individual workers participating in the programs who are promoted, take leadership positions, and go on to pursue further education or get commercial driving licenses as a result of their newly acquired skills. All employers interviewed expressed strong satisfaction with the program services and the results. While employers felt the programs were cost-effective, their main concern was the difficulty sustaining programs during economic downturns. All those interviewed would highly recommend the program model and their program providers to other employers and expressed a willingness to provide testimonials for the program in marketing efforts.

B. Benefits to Individuals

SDE records indicate that over the last four years, more than 4,500 workers have benefited from the Workforce Education Initiative (Table III-2). The numbers reveal and the interviews with employers confirm

that the number of participants fluctuates with the business cycle. Several enthusiastic employers have had to cut back their level of support in the last two years due to downturns in revenues or to lay-offs occasioned by reduced sales. They all report a desire to reactivate their programs if their business turns around.

Employers and providers report significant gains in employee literacy and effectiveness as a result of the programs offered by their employers. Employers recounted many individual stories of workers who had been stymied by language barriers who went on to get promotions. Others recounted the

Fiscal Year	Participants		
2000-2001	1,246		
2001-2002	998		
2002-2003	1,100		
2003-2004	1,307		
Total	4,651		

"We could see the increase in understanding and improved communication as a result of

the ESL classes. We plan to continue the

program and have recommended it to other

-- Frank Luszcz, Highway Safety

companies."

Corporation

positive impact on worker morale and self-esteem when language or skill barriers were eliminated. Virtually all participants are volunteers coming forward to take advantage of an educational benefit in which typically half their class time is on the clock. Employers report that most employees see the direct connection between their growing basic or language skills and success in their jobs.

Although no systematic data on participant achievement or outcomes is available, programs report using a variety of approaches for assessing learning gains in workplace programs. Each class provides a customized program of instruction and standard assessments are often not adequate for measuring all of the workplace gains of students. Learning gains end up

"The program was important because our workers need to know how to read manuals and complete production-related paperwork to advance.

Participating workers gained confidence—we could see the increase in communication."

-- Karen Richard, Country Pure Foods

being documented through a number of means, including, but not limited to: employee survey, employer informal analysis of performance, documentation of "critical incidents" of improved behavior, improved communication between employer /employee, and employer interest in continuing the program. Program coordinators usually contact the employer after classes finish and ask about the teacher, class, changes in employee language skills and other program outcomes. One of the most active providers reports that employees are usually more interested in softer evaluation criteria than measurable learning gains.

Providers for 497 participants in the math assessment and 1,395 participants in the reading assessment submitted data on pre- and post assessments using the CASAS system. Table III-3 shows that 70% of those assessed in math competencies showed gains and 74% showed gains in reading competencies. Gains of this degree with the relatively brief interventions involved with workplace-based courses are significant.

Table III-3 Change in Scale Score on CASAS Assessment,								
WEI Participants, 2002-2004								
Change in Scale Score	Math	%	Reading	%				
% Making No Gain	149	30%	366	26%				
(0 or less)								
% Making Average	111	22%	345	24%				
Gains (1 to 4 points)								
% Making Significant	237	48%	722	50%				
Gains (5 or more points)								
Total	497	100%	1,433	100%				
Source: State Department of Education, Connecticut Adult Reporting								

System (CARS)

The available data and the reports by both employers and program coordinators suggest that the Workplace Education Initiative programs are wellreceived by the employees who volunteer to participate and that they derive many tangible and intangible benefits in their work and personal lives associated with increased basic, technical, and language skills. In addition to the work-related benefits described above, employers reported that many employees increased

their ability to deal with personal issues such as financial management (i.e., filling out insurance forms and

opening bank accounts).

C. Increased Capacity

In a relatively short time, the Initiative has substantially increased the capacity of Connecticut's Adult Education programs to provide workforce education through recruitment, training, technical assistance, and efforts to increase awareness of the services.

Twenty adult education programs sent teams to one of the three-day trainings and are actively participating in the Initiative (Table III-4). Each team included the program director, a designated workplace coordinator, and workplace instructors. In total, a cadre of 56 workplace coordinators and/or instructors completed the training, which provided the skills and techniques for new workplace providers to deliver workforce education, while offering more experienced programs the opportunity to enhance capacity and train new staff.

Delivered regionally, the trainings fostered dialogue and cooperation among neighboring programs, a goal of the Initiative. Participant evaluations of the trainings were extremely positive.

Ongoing discussions with the five Workforce Investment Boards and their many partners in the One-Stop System have served to build awareness of Connecticut's Adult Education system as a provider of workforce education. As a result of the Workforce Board and One-Stop staff training in the model, the number of employer referrals to Adult Education providers has increased. Table III-4 - Adult **Education Programs** Participating in CWEI, 2004

Berlin

CREC

Danbury / WERACE

EASTCONN

East Hartford

East Haven

Education Connection

Enfield

ERACE

Hamden

Meriden

Middletown

New Haven

New London.

Mew Milford

Norwich

Vernon Regional

Wallingford

Waterbury

Windsor Locks

Continued engagement with One-Stop partners, as well as outreach to the business community, provides important support both to statewide system building and local program marketing efforts.

D. Efficacy of the Model

Adult Education providers and employers alike have indicated that the model is effective and is quite successful at fulfilling the expectations of the employer when implemented in full partnership. Alleviating uncertainties and fears on the part of the employers during the initial conversation is critical. Employers have reported that the model, which emphasizes a team process, works well. Employers cited several particular advantages to the model, which contribute to the economic and productivity benefits cited in Section III.A:

 Customization: The employers like the customized curriculum which is specific to the skill needs of the workplace based on detailed, professional assessment of job tasks and extensive interaction with managers and supervisors. The resulting curriculum increases employee engagement significantly, increases its relevance to the work process, and consequently magnifies the impact on learning and associated productivity and morale gains.

Workforce Education Model 2002-2004

"The greatest help the model has given is the preparation of team members for completing task analysis. Knowing what to say and ask gives confidence to the team."

-- Nancy Davis, Vernon Regional Adult Education

- Flexibility: Employers interviewed stressed that the flexibility of Adult Education providers to meet the schedule, facility, and other requirements of the employer is a major value added feature of the model.
- **Commitment:** The long-term commitment of the Adult Education providers to the services and the level of professionalism were cited by many employers as an important advantage of the program.
- **Cost-effectiveness:** The fees charged by Adult Education programs were cited as very reasonable compared to in-house alternatives or other providers.
- Applicability and Utility of Workplace Assessments: Employers respond positively to the availability of assessments specifically geared toward the workplace environment.

Six of the 20 direct service providers that have participated in the Initiative were interviewed and reported that the Initiative has been successful in its goals of systematizing the service delivery model and building local and regional capacity to deliver it. Providers have appreciated the strides made through the Initiative to document the model and provide a growing array of tools and technical assistance materials to support its implementation. Focusing on how to partner with employers to deliver customized training, the model is well presented in the ATDN materials, with manuals and forms available on CD ROM making it very convenient and user friendly. Providers report that fully trained teams have no problem in implementing the model.

Providers feel that the training in the Workforce Education Model has been effective in helping all levels of staff learn how to plan and implement a workplace program. They want to ensure that the training remains available as staff turns over or as activities expand to involve additional staff.

E. Ease of Replication

The model is designed to create a customized curriculum and process for each workplace. Adaptability of the model is evident in that it has been used successfully in a wide range of venues as found in interviews with employers. Although some providers indicated that the model seems to work best in manufacturing environments, retail and hospitality employers who used the model found it extremely effective and beneficial to both their business and employees.

The model also can be adapted to other opportunities. CREC has used the model with the 1199 Union and Training Upgrade Fund; a Union supported education program that provides basic skills training and employee empowerment with the objective of supporting efforts of nurse aides to advance within the health

care industry. The major difference from the employer-based model is that it focuses specifically on healthcare workers and is fiscally supported (60% of budget) by the Union.

The level of interest in the CWEI Stipend Program in 2003-2004 suggests that there is strong demand for these services in the marketplace, and the development of the model will facilitate expanding services to meet that demand.

Providers agreed that the most expedient way to further and replicate the model would be to 1) promote it as an essential component of Adult Education services and part of the workforce development continuum that advances workforce development, basic skill acquisition, career opportunities and economic development, and 2) to offer training more frequently throughout the state.

IV. Challenges and Lessons Learned

The challenges and lessons learned presented in this section are drawn from interviews with employers, program providers, and Department and ATDN program staff as well as review of the documentation for the initiative.

A. Statewide Collaboration

Challenge: Regional cooperation. With only two years to gain buy-in from Adult Education providers throughout the state, the system did not develop the capacity to provide requested services to employers in all regions. Not every Adult Education program participated in the initiative. ¹⁵ The challenge remains to build a regionally cooperative infrastructure that is trained, connected, and builds upon the updated model. Incomplete coverage of the state leaves employers in some areas with fewer options for providing the basic skills training needed for incumbent workers.

Lesson Learned: Developing regional cooperation and encouraging buy-in from local programs is a continuing process, requiring ongoing communication and dialogue. This includes communication among adult education stakeholders as well as with WIB and One-Stop partners. While efforts have been made to focus attention on the increasing need for workforce education, building adult education capacity, and creating centralized points of access for employers to access services, efforts must continue to bring all parties to the table.

B. Communication Issues

Challenge: Getting the word out to employers. Currently, information dissemination varies by region. Most Adult Education providers conduct mailings that publicize all of their program activities and are not specifically directed to employers who may require workplace education programs. Other methods used are "clips" in newsletters or inclusion in the general adult education brochure. Some programs send out cards with information about the program. Program coordinators and Adult Education Directors also participate in local and regional Chamber of Commerce events in their area; however, many report that these efforts are inadequate.

Conveying the right messages. Employers may not all realize the benefits of workplace education and may be skeptical as to the investment of time and impact it will have on production and employee retention. In fact, employers who participated reported not only an increase in morale, but also in production and in the likelihood of employees feeling that they are a viable part of the workplace.

¹⁵ Financial constraints and/or commitment to other projects impacted program's ability to participant in the Workforce Education Initiative. Those programs that do not provide direct service cooperate with those that do by making appropriate referrals.

Lesson Learned: Messages must be developed and delivered that will address the needs, concerns, and benefits of the program. A better method of communicating and disseminating this information needs to be created to reach all employers, and it should use the venues in which employers seek information on ways to improve their businesses.

C. Resources and Development

Challenge: *Planning, fund development, communication and staffing capacity.* Limited resources and existing methods do not sufficiently address the needs of Connecticut's employers. The challenges outstanding are engaging and reengaging employers, having enough educators in the adult education system to provide the services statewide, and additional dollars to support programming. There is widespread expectation on the part of employers that the educational system should provide financial support for programs that provide basic skills education for CT's workforce. Indeed, with intensive pressure on the bottom line, many businesses do not feel they are in a position to contribute financial support to secure these services, and with a cap on State education dollars, program providers do not have adequate resources to do so.

Marketing the Model and Adult Education: The State Department of Education is currently working with a marketing firm to develop materials for statewide and local use. A planned web site will target the business and workforce development communities, and provide a central point of contact for information about workforce education. A "Marketing 101" package will provide workforce education providers with training and materials that can be adapted for local program use. Given the enthusiasm of current employers and the relatively small number of participants in relation to the number that would benefit, effective implementation of a multi-faceted marketing campaign is critical to the future of the Initiative.

In a recent development, Connecticut's five Workforce Investment Boards have pledged financial support to facilitate ongoing development and maintenance of this marketing program.

Lessons Learned: To ensure the future of Workplace Education, efforts must be made to 1) find fiscal support for programs and stipends, 2) build the cadre of certified/qualified instructors, and 3) maintain ongoing communication about the benefits and outcomes of workforce education.

V. The Ideal Model and Recommendations

A. The Ideal Model

The major components of the ideal CT Workforce Education Model are in place and operational in most regions of the state. Continuing work is required, however, to fully systematize delivery of services and provide businesses with information and easy access to workforce education. The fully realized model will feature:

- A central point of contact for businesses seeking information and services as well as standard referral practices among adult education programs, including those not involved in workforce education;
- Regionalized capacity to deliver a range of workforce education services utilizing pooled expertise, standard in-region referral practices, and continued marketing through the One-Stop system and local business organizations;
- Ongoing capacity building through technical support to providers and continuing collaboration with the workforce development system; and
- Full implementation of CASAS Workplace assessments to enhance classroom instruction and measure participants' learning gains.

B. Recommendations

The following recommendations are based upon the lessons learned, compiled data, workplace evaluations and key informant interviews that if implemented, will strengthen workplace services leading to the ideal model:

1. Statewide Collaboration

- Coordinate the work of local Adult Education providers regionally through the State Department of Education with assistance from ATDN to maximize resources.
- Continue the terms of existing Memorandum of Understanding with Workforce Investment Boards to fully implement the Workforce Education Initiative Model.
- Establish a working relationship with community colleges to collaborate in meeting employer needs and articulate respective niches in providing workplace education.

2. Communication and Marketing

- Consider partnering with private sector organizations to reach out to employers.
- Fully implement the marketing plan with state, regional and local partners to promote the benefits and features of the Workforce Education Initiative.
- Communicate with businesses through human resource departments, human resource organizations such as the Society of Human Resource Managers (SHRM), Connecticut Business and Industry Association, Chambers of Commerce, and business members of the regional Workforce Investment Boards.
- Engage in a targeted campaign that promotes the benefits and highlights of the program via state, regional and local partners.
- Provide for a central point of contact for information and employer engagement.

3. Resources and Development

- Create a fund development plan, which assesses the potential of targeted public and private funding sources and identifies strategies to secure them.
- Generate consistent public and private support by making a strong case for the return on
 investments of the Workforce Education Model. This will require building stronger
 relationships with the Governor's Office for Workforce Competitiveness and also with key
 legislators who can be reached through local Adult Education providers.
- Continue stipends and explore alternate methods for supplementing needed dollars to support workplace programs, for example the recent investments of the Union 1199 Fund.
- Work with the CT Department of Labor, Office for Workforce Competitiveness, and regional Workforce Investment Boards to secure funding with the knowledge that incentives leverage other economic development investments.

4. Increase Capacity and Impact

- Continue to build a cadre of qualified and certified adult education teachers from early/newly
 retired middle and high school teachers in areas such as Math, Science, Computers, English and
 Language skills.
- Develop and maintain the capacity of local programs and address teacher turnover by providing additional training and technical support.

- Conduct workplace needs analysis as a distinct service that could have value independent of the education package.
- Encourage and support regional cooperation, conduct an inventory of capacity and areas of
 expertise throughout Adult Education programs to maximize regional responsiveness to
 employers' needs and capacity building through peer experience sharing. The inventory should
 identify a) capacity to conduct workplace audits on an as-needed basis, and b) capacity to
 conduct employee assessment, experience with particular industry sectors, industry-specific
 curricula, and areas of instructor expertise.

5. Measuring Results

- Work with the best providers of services to develop improved methods for capturing qualitative
 and quantitative data on the outcomes and impact of the Workplace Education programs. Better
 articulation of outcomes would support both marketing and resource development efforts. The
 Department should seek out partners in higher education to conduct studies of the impact of the
 program on both employers and individual employees.
- Fully utilize the Connecticut Adult Reporting System for collecting assessment data and
 evaluations of each work place partnership to inform continuous improvement of the model and
 to support fund development.
- Consider addition of numeric goals to drive program expansion in each workforce investment area.
- Continue to build upon relationships with One-Stop personnel.

VI. Conclusion

During the last two years, the State Department of Education has worked to increase the capacity of adult education providers to serve the learning needs of adults in the workplace and to ensure that adult education is a vital partner in the workforce development system. The Connecticut Workforce Education Initiative has

been effective in harnessing the expertise of existing providers while enhancing the capacity of new providers to build a workplace practice. Significant strides have been made in aligning adult education more closely with the state's workforce development system through strengthened ties with the Workforce Investment Boards, One-Stop personnel and regional business organizations. Through the Department's efforts, allegiances have been forged, services have been delivered and outcomes have been achieved that will continue to move the Workforce Education Initiative toward workforce education services that are fully integrated, sustainable and responsive to the needs of employers and employees.

Benefits of Workplace Education

"There are two major benefits to workplace education, 1) our employees feel that we (the company) believe in them because we are willing to make this investment and 2) happy employees are a lot more productive. We all win!"

-- Lorrie Kiley, US Surgical

These efforts, however, must be sustained in order to institutionalize the gains that have been made and to produce long-term results. The benefits and rewards of workplace education are enormous for both employers and workers. Participating employers have consistently reported their enthusiasm for the program, yet the need for these services far exceeds the services delivered at present due to a lack of employer awareness of the economic benefits of participation and limited capacity of providers to market and deliver the services.

The experience of the Connecticut Workforce Education Initiative over the last two years as documented in this report will assist the Department in defining the choices that will be most beneficial for Connecticut and its employers and citizens: that is to continue in its efforts to build a workforce education system delivered by Connecticut's adult education providers that is second to none.