Connecticut Career Ladders:

Healthcare, Early Child Care, and Information Technology—Piloting strategies to address workforce shortage areas

2009 Legislative Report
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Introduction

Overview of Enabling Legislation

Public Act 03-142, An Act Concerning Career Ladder Programs was enacted in June 2003 establishing a Connecticut Career Ladder Advisory Committee (CCLAC). The Committee was charged with developing a three year plan for the creation or enhancement of career ladder programs for occupations with projected workforce shortages for the next five years and to report to committees of the General Assembly having cognizance of matter related to higher education and employment advancement.

Committee’s Membership and Activities

The CCLAC, chaired by the Office for Workforce Competitiveness and the Permanent Commission on the Status of Women, is comprised of required members including: the Commissioners of Education, Higher Education, Public Health and Labor or their designees as well as workforce development representatives, including those with expertise on training for women as well as health care, early childhood education and information technology, employer representatives for these industries, and a labor market analyst from the Connecticut Department of Labor. The Committee is staffed by the Connecticut Women’s Education and Legal Fund (CWEALF).

Career Areas Explored

The CCLAC was charged to explore the areas of health care, early childhood education, and information technology. Experts in the fields were called on to make presentations outlining the current shortages in the industries, challenges to recruiting and retaining workers, and possible strategies for creating career ladders in these fields. Presenters drew upon years of experience in analyzing the labor market needs of employers in these areas as well as the education and training needs of possible workers. They offered information on models that have been proposed or implemented in this and other states and the experiences of those initiatives. They provided valuable insights, offered a wealth of information and raised concerns as the CCLAC considered proposals for the three-year plan. In February 2003, the CCLAC presented the plan to the state legislature outlining the challenges to creating and expanding career ladders in these workforce shortages areas and offered potential solutions to address these issues.

Based on those recommended solutions, over the last five years the CCLAC has granted over $1 million to support pilot activities with youth and adults to expand awareness of career ladder opportunities in health care, early care and education and technology fields and help to address career advancement challenges for current and future workers in these fields.

These pilot projects have provided valuable lessons on what academic and personal supports youth and adults need to pursue employment and career advancement. They have developed new courses needed by workers and employers; improved workplace culture in long-term care facilities; and helped entry level workers take their first steps toward college degrees. Lessons learned from these pilot initiatives have led to new efforts and leveraged other funders. This report provides a summary of projects funded to date and makes recommendations for future career ladder investment and initiatives.
Health Care

Over the past five years, the Career Ladder Advisory Committee has supported pilot projects designed to address obstacles to creating/pursuing career ladders in the health care field. Projects have focused on the transition to college for entry level health care workers, improving career pathways, expanding career awareness, better preparing current and future nurses for their roles in hospitals and improving workplace cultures to support recruitment and retention of health care workers.

Pilot Initiative: Bridges to Health Care Careers Program

The pilot program was designed to provide a 'bridge' for certified nurse aides (CNAs) to prepare them for continued study in a more advanced allied health field. The pilot was guided by an oversight committee comprised of Capital Workforce Partners (CWP), Capital Region Education Council (CREC), the 1199 Training and Upgrading Fund and Capital Community College.

Twenty-eight (28) students were chosen for the first pilot cohort in January 2005. As of the spring semester 2008, 9 students were enrolled in credit courses at Capital Community College and one student completed her licensed practical nurse (LPN) program.

Intensive case management has enabled the students to expand their interests and possible career advancement in health care careers. Students need assistance in managing school, work and family obligations. The case manager worked with the students to provide counseling, direction and tracking and continued for an additional year once students have completed the pilot. The Annie E. Casey Foundation provided additional tuition support for the first and second cohorts.

After the successful first round of activity, the pilot program was replicated, with 24 nurse aides in cohort two. Eighteen students completed the program (75%). As of June 2008, 9 members of cohort two were still enrolled at Capital Community College taking pre-requisite courses for degree programs and an additional student completed a medical billing and coding home study course. Additionally, two students from cohort one and two students from cohort two, after taking part in entrance test tutoring provided through the Bridges Program, were accepted into a local LPN program.

Through meetings with the College President and senior staff officials, the Academic Dean agreed to accept the third cohort of Bridges students into the college as a Learning Community, which, as seen in the literature - fosters a greater sense of community among learners, promotes greater retention and achievement for students, and revitalizes the teaching experience for faculty members. Since these are the qualities attributed to the Bridges program, it was agreed that this was a welcomed and appropriate decision. This decision to move the program to the academic side of the college enabled the students to become eligible for Pell grants, which satisfied the cost of their courses and books. A final year of career ladder grant funding was made available to retain the case manager.

Under this new model, fifteen students were admitted into cohort three in the fall of 2007. A significant modification was implemented in the eligibility standards of the program for this cohort. These individuals were accepted based on higher levels of English and math scores compared to previous cohorts. Most exhibited academic skill levels - still in the developmental areas as designed by the program, but well above the adult basic education levels exhibited by previous cohorts. Thirteen students completed the program in the summer of 2008 and 11 went on to enroll in fall classes at the college.
A fourth cohort of students was recruited in the fall of 2008 to the learning community. Twenty-one (21) students were enrolled after completion of a summer refresher course in math and English. Because no additional resources were identified, this cohort is not supported by a case manager and is instead making use of the support services available through the college. Capital Community College has agreed to continue tracking these students and those from prior cohorts to monitor the impact of the project.

Overall, the students in all four cohorts were motivated to advance in their careers and dedicated themselves to their coursework. They were challenged by the pressures to support their families, often working more than 40 hours per week, and to complete their education. With support from the project, they learned a variety of techniques to balance their time and resources which will support them throughout their academic and personal lives.

Capital Workforce Partners (CWP) used the experience from the Bridges Program to leverage nearly $1 million in federal grants to develop an employer-based education program for nurse aides. CWP has developed a healthcare focused partnerships with CREC, Vernon Adult Education program, 1199 Training & Upgrading Fund, long term care associations, and community colleges in their region to provide CNA career advancement and basic skills education. The purpose is to engage long-term care employers in establishing educational plans from a menu of services they have identified with their front line employees to better prepare them for potential higher level health career opportunities. CWP is sponsoring the delivery of onsite adult basic education programs for employees’ interested in future advanced careers in the health professions. Through a U.S. Department of Labor (USDOL) High Growth Job Training Initiative grant of $506,000, CWP provides adult education instruction to eight long-term care sites and includes leadership/clinical specialization career tracks through instruction provided by the community colleges in the region.

CWP was also awarded a Robert Wood Johnson/Jobs to Careers grant for $425,000 that allows for expansion of the USDOL grant to include 2 additional work sites during the 3 year grant period, culture change activities, and work-based learning. The program provides an on-site, incumbent worker training program targeted at CNAs, and incorporates work-based learning within clinical specialty tracks offered by area community colleges through a Seminar Institute. The program also assists participating sites to create a framework for organizational change and institutionalization of work-based learning through culture change activities.
**Pilot Initiative: Higher Education Health & Education Initiative**

The state legislature allocated resources to the Department of Higher Education in each of the two years of the biennial budget to support investments in allied health, nursing and education programs in the state’s colleges and universities. These resources are being combined in a unified Request for Proposals with those allocated to the Department of Public Health and career ladder resources at the Office for Workforce Competitiveness to promote programs that alleviate workforce shortages in these areas. The CT Women’s Education and Legal Fund monitored the first round of 13 grants (12 grantees) and provided technical assistance and guidance during project implementation. First round grantees included:

- Albertus Magnus College
- Eastern AHEC
- Eastern CT Workforce Investment Board
- Gateway Community College
- Goodwin College
- Manchester Community College
- Northwestern CT Community College
- Quinnipiac University
- Southern CT State University
- St. Joseph’s College
- University of Connecticut
- University of Hartford
- Waterbury Hospital

A second round of grants has been awarded in December 2008 to 10 public and private educational institutions in the state. Both rounds of grants were awarded for youth and adult programming which expands the pipeline of interested and qualified students in nursing, allied health and education. Second round grantees include:

- Fairfield University
- Goodwin College
- Naugatuck Valley Community College
- Northwestern CT Community College
- Sacred Heart University
- St. Vincent's College
- Three Rivers Community College
- University of Connecticut
- University of Connecticut Health Center/AHEC
- University of Hartford
**Pilot Initiative: Culture Change in Long-term Care**

In an effort to improve the workplace environment for those in health care professions, the CCLAC contracted with B&F Consulting, national experts in culture change, to facilitate two initiatives with long-term care facilities.

**First Pilot Initiative**

The first project involved working closely with two long-term care facilities; one union and one non-union home. This project had three inter-related goals for the participating long-term care facilities:

1. to improve the workplace culture so that each home is a better place to work;
2. to improve the care-giving culture so that each home is a better place to live;
3. to improve opportunity for front-line staff at each home by instituting a career ladder opportunity with additional responsibility, expertise and higher wages.

The consultants worked with Mansfield Nursing and Rehabilitation Center in Mansfield, and St. Camillus Home in Stamford. Mansfield staff implemented a few innovations that responded to residents' individual needs and made work easier for staff. They were able to do so in areas that facilitated collaboration across departments and/or shifts, and between upper management and front-line staff.

At St. Camillus, the consultants laid a lot of groundwork to improve the staffs' relationships with supervisors and upper management. Because this is a union facility, they engaged the union representative in the process. Staff was receptive to the idea of individualizing care and hopeful about improving relationships with supervisors and management.

The pervasive nursing home culture puts institutional rhythms and efficiencies over individual patient preferences, and puts hierarchical decision-making over participatory processes. As the consultants worked with the upper management at each home, they took them through a change in culture and a change in perspective.

The second phase of the project involved creating internal career ladders for entry-level employees. At Mansfield, the existing career ladder process within the building was a team leader program. This program existed on paper but hadn't been examined, updated or supported for a long time. The consultants met with the current team leaders and management to examine the program and provide training for team leaders that Mansfield could use in the future. Because of the project, the team leaders are comfortable in their roles and have the support they need from each other, their supervisors, and management to function effectively.

At St. Camillus, there was recognition that English language skills were critical to the success of their entry-level employees. St. Camillus management estimated about 70 individuals were non-native English speakers. When given information about ESL classes, 55 employees expressed interest in the program. Forty-one (41) students had their high school diploma or GED but only 16 from the United States and six (6) have college degrees from their home countries. ESL classes were held two days a week for two hours on site at the facility. This class was free for students and the arrangements and funding for the class was covered by the 1199 Training & Upgrading Fund, with help from the local Workforce Investment Board (The Workplace, Inc.) and Norwalk Community College. St. Camillus paid its employees for one hour of the two they spent in class. Thirty-three (33) workers completed the ESL training in June 2006. Nine of these workers continued their training with support from the 1199 Training and Upgrading Fund either by taking
adult education classes through their Stamford Learning Center (3) or applying for tuition reimbursement (6).

Staff at both nursing homes reported to evaluators that they now have better places to work, and that the atmosphere at each home is more respectful and inclusive. Managers reported to evaluators that the lessons they have learned about being leaders are lasting lessons and have changed the way they manage.

**Second Pilot Initiative**

Based on the positive experiences at the two initial pilot sites, the CCLAC provided a second contract to B&F Consulting and partnered with 1199 Training & Upgrading Fund to work with a collaborative of nursing homes to promote culture change and career ladders. Three unionized homes were chosen to participate in the pilot (Alexandria Manor in Hartford, Trinity Hill in Hartford and Jewish Home for the Aged in New Haven).

The project’s goals were to improve the workplace culture and create a climate that will support a career advancement opportunity within each home. The objectives were to increase management’s capacity to create a better workplace environment in which staff feel and are respected and included, to build the capacity of each site’s labor-management team to work well together, and to build the capacity of the sites to have workplace education for its low-wage workforce.

Each of the homes that participated in the project noted a growing sense of harmony in the workplace. Staff appears to be appreciative of each other and needs and concerns of front-line workers are being addressed as the homes seek to make significant changes in patient care. All of the homes in this project have a higher than average student enrollment rate in educational classes offered by the 1199 Training & Upgrading Fund which can be attributed to the improved workplace culture.

**Pilot Initiative: Online Perioperative Nursing Course**

In the summer of 2004, CCLAC members held a focus group discussion with human resource staff from hospitals across the state. The representatives identified the need for training of operating room/perioperative nurses. Although the current vacancy rates for these nurses are low, they are expected to rise as the workforce retires. Associate and Bachelor's degree programs do not provide enough training in this area to prepare new nurses for these experiences. In addition, because hospitals often only have a few potential students, colleges have been unable to address their training needs because of the small class enrollment size.

In order to maintain a pool of qualified operating room nurses to address the future critical nursing shortage, Charter Oak State College (COSC) in collaboration with the Connecticut League for Nursing (CLN) and the Connecticut Hospital Association (CHA) developed an online perioperative nursing course for nurses who want to move into this field.

Ten students were recruited to pilot the new curriculum. Slots for the pilot were offered to the hospitals of the administrators who served on the advisory committee and then slots were opened to all others within CHA. The interest in enrolling in the pilot was high demonstrating that it is conducive to meeting the needs for perioperative training without the constraints of location. The online course is also much less expensive than the on ground course ($900 compared to $2000) and provides continuity to the training statewide, yet allows the individual hospitals some flexibility in the on site training component. Hospitals cover the cost of tuition for this program as well as selecting their participating nurses. There have been 70 graduates of the training program since.
This project highlighted the ability and willingness of higher education to solicit and meet the workforce needs of employers and employees. This modest investment now provides hospitals and nurses statewide with online training in perioperative nursing to meet future labor market demands.

**Pilot Initiative: Summer Internship Program**

The goal of this pilot was to provide more comprehensive clinical training to advanced nursing students throughout the summer and to better prepare new nurses entering the field. Nurses enter the field and are immediately responsible for acutely ill patients, sometimes having a high number of patients to care for, which increases anxiety. In addition, nurses often wait at least a year before working in a specialty area. This program was developed to help prepare nurses for the work environment they will be entering and provide them with additional clinical experiences.

The two-year career ladder grant provided scholarships for the Eastern Connecticut Health Network (ECHN) Summer Internship Program for 17 third year nursing students at Manchester Memorial and Rockville General Hospitals. The summer interns spend two weeks of intensive orientation and then begin functioning in their student nurse role in areas such as operating rooms, cardiac units and pediatrics under the supervision of their preceptor.

The interns worked 32 hours a week, working 16 hours per week as a student nurse and 16 hours spent as a nurse aide. The interns elect to participate in the summer experience even though it is beyond the requirement for their course of study. To alleviate the financial burden of the course for the interns, ECHN reimbursed half the cost of tuition. In addition, ECHN paid the interns for all hours worked, including the two days per week when the interns worked in their student capacity.

Students complete a skill self-assessment rating at the outset of the internship experience and again at the end of the experience. The intern’s preceptors are also asked to complete the same instrument to assess the students’ skill levels at the beginning and end of the internship. Overall, the average assessment of the students’ skills improved, both from their and the preceptor’s perspective. This pilot has provided additional training for nursing students and given them more experience when hired into the field. The pilot has met the needs of both students and the hospitals which get their labor as summer employees and the opportunity to recruit them for employment after graduation. With nursing programs teaching a broader range of topics in a condensed time frame, this summer opportunity is a real asset to students. Of the 17 students supported with grant funding, 9 were working at ECHN and 7 are working at other local hospitals. These nurses were working in a variety of departments including the emergency department, operating room, surgical and intensive care. Of the nine nurses who were working at ECHN, 6 are still working and 2 are pursuing their graduate degree in nursing.

**Pilot Initiative: Building Health Career Pathways for High School Students**

There is an ongoing concern that high school students are unaware of career pathways in health care and that their high school course taking doesn’t align with college programs of study. The goal of this project is to develop a high school advising and course-taking sequence that leads seamlessly to the CT Community College System’s Health Career Pathways Certificate Program.

In order to promote this seamless transition, Charter Oak State College (COSC) was given a grant in the fall of 2008 to undertake a curriculum alignment initiative with partners from the state’s comprehensive high schools, technical high schools, community colleges and other educational and technical assistance organizations. COSC will work with these partners to align high school courses
with the CT Community College “Investigation in Health Careers” course. The goal is to provide high school students with career pathway information and college credit for their successful participation in these high school courses.

Charter Oak State College is convening the faculty team to conduct this review as well as working with the educational institutions to make the suggested changes to the high school curriculum to ensure alignment and articulation.

**Pilot Initiative: Next Generation Careers Project**

The goal of this project was to provide professional development exposure to educators that will enhance their capacity to guide students’ career preparation efforts. This project was supported by the Office for Workforce Competitiveness (OWC) and the Department of Economic and Community Development (DECD) and coordinated by the Regional Education Service Centers (RESCs). The CCLAC contracted with the Northwestern Allied Health Education Center (AHEC) to provide resources specific to health care to this effort. In particular, AHEC was responsible for participating in project planning and implementation with the RESCs, guidance counselor training in each RESC area and dissemination of their Hot Jobs Guide to training participants and interested parties.

AHEC developed five lesson plans for health careers awareness and exploration. The lesson plans are at grade level 9-12. Twelve schools participated in the project:

- Hill Regional Career High School (New Haven)
- Wallingford High School
- Greenwich High School
- Read Middle School (Bridgeport)
- South Windsor High School
- Hartford Magnet Middle School
- Killingly High School
- Killingly Intermediate School
- Ella T. Grasso Southeastern Technical High School (Groton)
- Waterford High School
- Brookfield High School
- New Milford High School

Each school sent a team of five to the trainings including an administrator, guidance counselor, career specialist and two teachers. The inclusion of the health care component enabled educators to deliver health care career information to students as an integrated part of their learning.

**Pilot Initiative: RN Refresher Course**

Charter Oak State College was also given a grant in January 2008 to support their RN Refresher course development. Charter Oak State College, in collaboration with the Connecticut League for Nursing, has been offering an online RN Refresher course since 2001. The course, initially developed with funding from the Office of Workforce Competitiveness (OWC), has now brought over 200 inactive registered and licensed practical nurses back into the workforce.

This grant supports two initiatives to revise the course. The first supports an extension of the reach of the course to a wider population of inactive nurses by creating a license version that hospitals may use flexibly in their own settings to recruit, refresh, orient and retain inactive nurses.
within open positions in their institutions to address areas of shortage. Charter Oak State College has been working with Danbury Hospital to pilot the revised online course that will provide a model for staff development which any hospital can use in the future.

The second initiative focuses on a feasibility study for a new model of placing students for the clinical component of the course in hospitals and long-term care facilities. After exploring and eliminating other possibilities for clinical placement models, Charter Oak State College worked with employers and the CT League for Nursing to improve the feasibility and efficiency of the preceptor model currently in use with students.

**Pilot Initiative: Licensed Practical Nurse and Nurse Aide Curriculum Review**

Charter Oak State College was given a career ladder grant to: 1) review Licensed Practical Nurses (LPN) programs offered through Connecticut’s Technical High School System (CTHSS) to determine if general education college credit can be awarded for part of the curriculum and if there is a need for additional college level courses to assist their graduates in transitioning to RN degree programs; and 2) review the current Certified Nurse Aide (CNA) programs offered in the state.

**LPN Review**

The LPN program is offered by Connecticut’s Technical High School system to adult students in two formats, as a three-semester day program and a two-year part-time evening program. Charter Oak conducted an evaluation of the current LPN program to determine if additional credits can be recommended in the behavioral sciences and in the sciences.

The final report was presented to the Connecticut Technical High School System Superintendent and her staff. The findings and recommendations are:

- Adjust the LPN curriculum to correlate with the National Council of State Boards of Nursing Licensing Exam for Practical Nurses (NCLEX-LPN).
- Review the curriculum to correlate with the LPN scope of practice.
- Review current test questions to include a higher percentage of questions at the application/analysis level to foster critical thinking skills and ease the transition into the RN curriculum.
- Require intermediate algebra, English composition, and psychology credit level courses either online or in the classroom.
- Increase the passing grade for LPN courses to a grade of C or C+.
- Increase the content in life span development so it is equivalent to college credit or encourage students to pass a CLEP exam or college-prepared final exam so they can earn college credit in this area.
- Explore feasibility of gaining credit (with the inclusion of a lab experience) for a biology course that serves as a prerequisite for Anatomy and Physiology.

The Connecticut Technical High School System and Charter Oak State College worked together to implement these changes before the next round of students was enrolled in the fall of 2008. A total of 409 students were admitted into the program in August 2008 and their retention rate as of November 2008 was 98%.
CNA Review

Currently there are approximately 165 State of Connecticut approved nurse aide programs. These programs are offered by community colleges, health centers, and training centers. The training programs follow the guidelines spelled out in Public Health Code 19-13D—100 hours of training, 75 of which are in nursing areas and 25 in physical, psychiatric, psychosocial, and cognitive disorders.

In order to investigate nurse aide programs, Charter Oak State College appointed an advisory committee to determine which programs should be studied and to frame a set of objectives to guide the study. In addition, Charter Oak reviewed the current CNA programs offered in the state to develop a three-tiered system that builds from the current program offerings/requirements to include two additional levels with added skills in key substantive areas (dementia, phlebotomy, etc.) and in college readiness (developmental/academic preparation).

These levels are being designed in conjunction with Capital Workforce Partners (CWP) and the CT Community College System both of which have USDOL projects related to nurse aide training. The work of the advisory committee was suspended while these projects related get underway. CWEALF will work with Charter Oak State College to resume meetings of this group in 2009.

Pilot Initiative: Collegiate Health Service Corp

This project is designed to increase enrollment, retention and success in the allied health and nursing professions by targeting students early in their educational careers by developing a Collegiate Health Service Corps (CHSC). The CHSC is an extension from the Area Health Education Center’s (AHEC’s) high school program Youth Health Service Corps (YHSC).

A pilot of the CHSC was conducted in 2007 on the UConn campus. The purpose of this grant is to expand this program to Western Connecticut State University (WCSU) and Eastern Connecticut State University (ECSU). CHSC’s goal is to enhance commitment to students’ choice of health career, increase graduation rates from health profession training programs and to encourage eventual practice in underserved communities. These programs combine teaching students about health information and requiring students to perform community service.

The CHSC coordinators for each campus have met with student leaders to put together a recruitment initiative including student information session and information booths at student events. Student training was planned for late fall with volunteer service to follow. Service learning sites include family literacy programs, soup kitchens, shelters and afterschool programs to name a few. Currently there are 50 students participating in the project. This project will be in full implementation in 2009 with ongoing student training and service learning opportunities in both campus communities.
Early Care and Education

Since 2003, a great deal of emphasis has been concentrated on early childhood education. One major challenge in the original career ladder planning was the lack of a standardized, comprehensive method for estimating the size and qualifications of the childcare workforce. Though the number of licensed facilities was known, the actual number of employees was not. Further, the state did not have a comprehensive view of the level of education and training of these current workers.

In order to address the lack of data on which to build a workforce strategy, the CCLAC contracted with the Center for Survey Research & Analysis (CSRA) at the University of Connecticut and the Child Health and Development Institute (CHDI) to conduct a workforce survey of school-based, community-based and family day care centers. The survey, administered to over 600 total centers by telephone, gathered information about employees on an aggregate level in three main areas: qualifications, compensation and turnover.

Key findings of the report included:

- More than half of center directors (57%) and teachers (68%) have at least 12 credits in early childhood education. However, this is true for only 14% of family child care providers.
- The study reports that 77% of center directors and 43% of full-time teachers have baccalaureate or master's degrees.
- Median income for full-time teachers, regardless of setting, was $24,000 and for assistant teachers/aides, it was $17,000.
- Full-time teachers in school-based programs (license-exempt programs) are much better compensated than those in licensed centers, with median annual incomes of $40,000 for teachers and $22,000 for assistants/aides.

The research report was issued in November 2005 and disseminated to committees of cognizance in the state legislature, the members of the CT Employment and Training Commission, the Higher Education Early Care and Education Task Force, the Governor's Early Care and Education Cabinet and the Governor's Jobs Cabinet.

Future planning will be assisted by the development of the state's ECE workforce registry. Through the leadership of CT Charts a Course, the state has developed a statewide ECE workforce registry to record information on individual staff working in child care centers. Information is collected on their qualifications and compensation. Additional support for the registry is being provided by the Governor's Early Childhood Education Cabinet who will use the information for statewide planning efforts and accountability.

ECE Workforce Subcommittee

On behalf of the Governor’s Early Childhood Research and Policy Council, the Office of Workforce Competitiveness and the Department of Higher Education are chairing the ECE Workforce Subcommittee.

The immediate charge to the Workforce Subcommittee was to develop a plan to increase the number and qualifications of the workforce in publicly funded school and center-based early
childhood education (ECE) programs for 3- and 4-year-old children. This includes public preschools, Head Start and School Readiness programs, and Department of Social Service child care centers. The objectives for this plan were outlined in the Research and Policy Council’s Investment Plan (fall 2006) which made specific recommendations for increasing the minimum requirements for the staff in publicly-funded ECE programs and for expanding the number of children served by these programs. Therefore, the subcommittee was charged with recommending strategies that will:

1. Increase the qualifications of the staff at all levels (administrators, teachers and assistant teachers) to meet the new requirements.
2. Increase the number of qualified staff so as to meet the projected expansion.
3. Develop the infrastructure needed to support these changes in a coordinated manner.

In order to gather information from stakeholders across the state, the consultant and staff conducted 38 interviews, held 3 focus groups, and conducted a poll of the members. Using data from interviews, focus groups, and poll the subcommittee identified goals, objectives, and action steps for a workforce plan. However, in December 2007 the sub-committee was unable to support the plan because of concerns over the standard for teachers. The ECE Workforce Subcommittee came to the decision that the state law requiring 100% of teachers to have a bachelor’s degree by 2015 was unrealistic and an analysis of the capacity of the higher education system has confirmed this judgment. The Subcommittee developed an Alternative ECE Workforce Proposal that calls for 50% of teachers to have a bachelor’s degree and the remaining to have an associate’s degree by 2015. In addition, all teachers will be required to have a new ECE teaching credential by 2015. The alternative proposal and a draft workforce plan have been submitted to the ECE Cabinet for consideration by the Governor and legislature.

**Pilot Initiative: ECE Career Ladder Initiative**

The pilot program was developed by Connecticut Charts-A-Course to meet specific goals. The first was to ensure ongoing training and professional development opportunities for child care professionals including providing subsidies to centers to offset tuition costs for college credit-bearing courses. The second goal was to enhance opportunities for basic skills training so that child care workers could enhance their skills and ease the transition to higher education programs.

Some of the main components of the program were to offer scholarships, tuition, and payments for books and/or assessment fees. Participants were required to complete a certain amount of coursework during a prescribed contract period and after completing educational benchmarks, participants were eligible for increased compensation in the form of educational bonuses. To participate in the program, participants honor their commitment to stay at their child care program or the field for at least 6 months.

Three pilot sites were chosen to participate in this initiative; Mt. Olive Childcare Center in Hartford, West Haven Child Development Center in West Haven and Thames Valley Council for Community Action in Norwich. A total of 47 students were selected from these three sites to continue their studies.

The Mt. Olive site in Hartford partnered with Capital Community College. The College provided five courses onsite to 15 students needing those particular classes to complete their one-year certificates. Seven students took individual courses at Capital that were necessary for them to complete their certificates.
The West Haven Child Development Center had 6 students participate in this pilot project. West Haven Child Development Center partnered with Teikyo College to offer online classes to help students complete one-year certificates. The students had access to computers at their worksite and time was allotted during the workday for each student to log into class.

TVCCA partnered with Three Rivers Community College. Thirteen students participated in an accelerated Child Development Associate class held on the Three Rivers campus. Six students from TVCCA took individual classes at the college towards completing their certificates or degrees.

Individual education plans were designed for each student and continually revised and discussed to ensure they remained focused on their goals. Some students had difficulties in making the transition from their entry level training to college courses and many were required to take developmental courses before they could enroll in credit courses. Tutors were hired to work with students and support them in their educational endeavors.

The pilot program ended in June 2007. Of the 45 students who completed the project: 12 students received their CDA and are earning college credits toward a certificate or degree, 20 completed the one year certificate program and are earning credits toward their associates degree, 7 students completed their associate’s degree and 1 finished their bachelor’s degree and has started on their master’s degree. The remaining 5 students left the field for a variety of reasons.

Additional resources were included in the 2008-2010 Governor’s budget to support scholarships and bonuses for ECE teacher going through educational programs to meet new higher standards. These resources are managed by CT Charts-a-Course in collaboration with the State Departments of Education and Social Services.

**Pilot Initiative: Achieving Latina/o Academic Success (ALAS)**

The goal of this initiative, funded in February 2008, is to develop an education and training model that provides Latina early childhood professionals with knowledge and skills to enable Spanish-speaking children to reach school success.

The Hartford Child Care Collaborative, which led the project, convened a diverse group of stakeholders to address the issues related to developing a successful Latina early childhood workforce. They formed a committee of a broad range of stakeholders; researched various college models, including interviewing people at out-of-state colleges to explore their models; interviewed national consultants on national and regional initiatives; developed an initial structure of pathways and supports; and conducted focus groups.

This project will increase the numbers of teachers who are proficient in English and Spanish to effectively work with English Language Learners and their families. In addition, it will provide early childhood programs within the college systems with a tool to help counsel students and determine appropriate placement on an early childhood career path.
Pilot Initiative: ECE Leadership Training & Capacity Building

The Connecticut Association for the Education of Young Children (CAEYC) in collaboration with CT Charts-a-Course (CCAC) plays a key role in supporting leadership development in the early care and education field. Through this career ladder initiative the Accreditation Facilitation Project (AFP) offered courses to child care center directors who must complete the Connecticut Director’s Credential (CDC) to meet the new NAEYC Accreditation program administrator’s training requirements.

Research has shown that early childhood administrators play a pivotal role in attracting and retaining qualified teachers that promote children’s development and learning. In addition, the director’s level of education has been found to be a strong predictor of whether or not a program pursues accreditation status.

The CDC provides individuals with a voluntary system of credentialing. The credential, offered at four levels of proficiency and issued by Charter Oak State College, is earned by successfully meeting the training requirements and proving leadership capabilities necessary to run a high quality child care center. The Connecticut Director’s Credential is a collaboration between Charter Oak State College, Connecticut Charts-A-Course, the Department of Social Services and the Hartford Area Child Care Collaborative. Currently there are 172 individuals who hold the CDC.

To improve the level of director qualifications and provide entry to the CDC Career Ladder, CCAC/AFP offers ECE 206 Administration and Supervision in the Early Childhood Program (the required survey course for the CDC) on a regular basis. Over the past seven years a total of 418 participants have attended this CCAC/AFP sponsored course. There are 130 individuals on a waiting list for future offerings of the introductory Administration and Supervision course (as well as other courses for which the intro is a CCAC/AFP prerequisite), and over 400 waiting for the other CDC competency area classes.

In the first round of career ladder grant funding, AFP offered a one-week course, ECE 206, Administration and Supervision in the Early Childhood Program. Twenty participants successfully completed the requirements for the course and were awarded the 3 credits necessary to obtain the CT Director Credential. In addition, they were able to develop and implement ECE 212 Administrative Leadership in Early Childhood Programs with funding from the Career Ladder Initiative and the Department of Social Services and in collaboration with Gateway Community College.

A second grant was awarded in 2007 to establish a CT Director Leadership Training Institute to advance individuals on the CDC Career Ladder. The full week Institute included two sections of the survey course, Administration and Supervision, and one section each of Early Childhood Finance and Administrative Leadership. Additionally, CCAC/AFP offered the leadership and finance courses in the 3-weekend format. This plan placed particular priority on the individuals who hold the provisional level of the CDC as this level sunsets in January 2009. Between March 2007 and January 2009, 315 individuals have participated in the administration, leadership and finance courses.
In October 2008, a final year of funding was given to CCAC/AFP for two initiatives to support program administrators who wish to improve their credentials within the CDC competency areas.

1. Development of CDC competency area courses at the upper baccalaureate level through Charter Oak State College. CCAC/AFP will develop the introductory administration and supervision course and the personnel competency area course at the upper baccalaureate level. Currently, the introductory course has only been offered through the community college system. The fifth competency area, personnel, will complete for CCAC/AFP a corps of course offerings that meet the CDC competency areas. (Development of the Community and Family course at the BA level area is currently underway with the goal of completing the process and offering BA level credit at the next institute.) The development and review process for the administration and supervision and personnel courses will happen during the 08-09 year with approval allowing the courses to be offered at the BA level in FY10.

2. Sponsored coursework to advance administrators’ credentials relative to the Connecticut Director Credential and/or NAEYC program administrator criteria through a Program Administrator Leadership Institute (multiple courses delivered in simultaneous or overlapping compact delivery formats). To improve the level of director qualifications and provide entry to the CDC Career Ladder, CCAC/AFP offers opportunities for administrators to work toward NAEYC’s requirements through the provision of coursework that also achieves the CT Director Credential. This grant will support a fall 2008 Connecticut Program Administrator Leadership Institute to advance individuals on the CDC Career Ladder and to assist in the achievement of NAEYC’s Program Administrator requirements. This Institute will include the following courses: Administration and Supervision, Finance for Early Childhood Programs, Leadership in Programs for Young Children, and Community and Family. The courses in the fall 2008 Institute would be offered in various non-traditional formats, with some portion of each course taking place during the 5 days of the Institute to further the development and networking experience. The course formats include: 5 consecutive days; three two-day sessions, and/or four day/two day session.

**Pilot Initiative: Early Language and Literacy Pathways Exam**

Charter Oak State College (COSC) has developed three exams identified by Connecticut Chart-A-Course to enable individuals working in the field of ECE to earn college credit for knowledge acquired outside the college classroom. The main objective of these is to convert the Training Program in Child Development into college credit for those individuals who have completed all four of the modules. In addition, anyone who has knowledge equivalent to what is learned in a full semester course on the exam topics, but does not have college credit in these areas, may consider taking exams. These exams are:

- Introduction to Early Childhood Education,
- Child Developmental Psychology, and
- Infant/Toddler Development.

This grant will allow COSC to develop a fourth exam in the series, *Early Language and Literacy Development in Young Children.* To date, faculty content experts have completed test questions for each section of the pathways exam. These questions will be reviewed by an independent group of subject matter experts and then compiled in a number of testing formats. A Standard Settings Committee
of 8-10 faculty or others who have appropriate content knowledge will be engaged to work with the psychometric consultant to set the passing scores. A detailed study guide will be developed by the faculty developers which will include: a) a general description of the exam; b) a detailed description of the content and the percentage of exam questions assigned to each topic; c) the cognitive levels assessed and the percentage of questions assigned to each; d) sample questions; e) recommended study resources; and f) information on the passing score.

**Pilot Initiative: NAEYC Associate Degree Accreditation**

The National Association for the Education of Young Children (NAEYC) has developed a system to accredit associate degree early childhood education programs. NAEYC’s Governing Board has given its support to the development of associate degree program accreditation and has authorized the use of significant Association funds to help launch the system. It is currently in its second year of implementation and has successfully accredited 17 associate degree programs, with another 123 associate degree programs now enrolled in the process.

The Council of Early Childhood Coordinators of CT Community Colleges (7C’s) consists of all two year faculty from the twelve community colleges. They each represent their respective early childhood education associate degree programs. The 7C’s work collaboratively to ensure consistency among the quality of programs for their students and to maintain open and strong communication channels with the state’s public and private four year institutions that offer early childhood education programs at the baccalaureate degree level. The CCC early childhood education programs are the largest and fastest growing career programs at the colleges. Currently they enroll approximately 2000 students per year.

New national and state standards are being placed on the qualifications of teachers who work in early care and education programs. NAEYC accreditation and the alternative ECE workforce plan mentioned in an earlier section call for all teachers to have a minimum of an associate degree by 2015.

Many early childhood practitioners come to the field with little or no experience or post-secondary education. Practitioners who wish to attain credentials and/or degrees are most likely to be attracted to community college early childhood programs to begin their collegiate program. When a student chooses to persist to a four-year program, the associate degree should be viewed with “quality assurance” by the transferring college. It is therefore incumbent upon the community colleges to assure that their academic programs meet the criteria and standards established by the field for associate degree accreditation in early childhood education.

This project seeks to work with 3 cohorts of 4 early childhood education programs each from the Connecticut Community Colleges (CCC), who wish to engage in the NAEYC Associate Degree Accreditation process. The target programs in the first two cohorts would be those college serving teachers who work in school readiness communities and/or priority school districts. Career ladder funds will be used for release time for faculty working on the accreditation process as well as to pay the NAEYC review fee.
Information Technology

The CCLAC made a decision early in its tenure that a variety of technology related initiatives were taking place and that their resources were best spent on health care and early care and education. However, the Committee did identify a need to pilot educational strategies with out of school youth who lack career ladder opportunities.

Pilot Initiative: Street Smart Ventures

In order to improve outcomes for youth who are involved in the juvenile justice system, in crisis or expelled from high school, Street Smart Ventures implemented a Work and Learn model program with New Haven Adult Education (NHAE). The goal of this project was to give high school students an opportunity to build academic and occupational skills in technology, particularly construction-related fields.

The Work and Learn model integrates learning, mentoring and work experience and creates a portfolio of work opportunities for youth. The heart of the model is the team of adult and older youth role models who support the youth. In this project, the New Haven Adult Education team expanded to include entrepreneurs and work site supervisors from the local community. The project used work experience, adult and youth mentoring and the prospect of full-time employment after graduation to motivate youth to stay in school and earn their diploma. In addition to high school graduation, project goals included increasing students’ social and workplace skills, self-esteem and successful completion of work experiences leading to full-time employment after graduation.

This project was completed in the fall of 2007 with continuation funding for activities coming from the State Department of Education and NHAE. According the NHAE staff, the program motivated students to re-engage in education while getting on-the-job experience and job coaching. For those with little or no experience in the workforce, the one-on-one coaching and case management provided a safe and protective entry to employment. The program staff agreed that this program helped them find better ways to engage students so they value education. It also provided opportunities to promote employment and career education and enabled NHAE to look for new ways to incorporate employment readiness within their facility and also to leverage community resources to enhance the educational experience.

Lessons learned from this project were shared with the state’s Workforce Investment Boards and the State Department of Education to connect these efforts to those of the youth and adult initiatives taking place statewide. This project demonstrated the types of activities that can be developed to promote high school completion and labor market attachment for at risk young adults. Hands on work activities serve as a motivator for youth who struggle with educational goals. This model inspires and connects youth to the education and workforce pipeline and their communities.
Recommendations

It is clear from the pilot projects initiated over the last five years that allied health and nursing programs are most successful when they include opportunities for acquisition of foundational skills in writing and math, career awareness and counseling, case management support and employer engagement.

Based on these experiences, we recommend replication of past initiatives to additional sites and students. With continued Career Ladder funding, the Advisory Committee will work with state agency and community partners to support the following initiatives:

1. Most individuals who participated in Career Ladder Initiatives are already working in the health care field and need the support of their employer to increase their skills. It is recommended that incumbent worker training funds continue to be available through the Department of Labor and Workforce Investment Boards (WIBs) to help employers actively engage in the career advancement of their employees. This investment, which is matched by employer partners, would allow the WIBs to serve individuals interested in career ladders in health care.

2. The Community Colleges have demonstrated the effectiveness of Learning Communities on their campuses. This model should be scaled up to provide all students, particularly those needing developmental education, with the holistic academic and support services necessary to be successful. In addition, the community college Health Career Advisor positions have proven successful and resources should be found within college budgets to sustain these positions.

3. It is also recommended that the legislature authorize the use of state financial aid provided to the state’s public and private colleges and universities for students who are pursuing non-credit certificate programs in our state’s training programs. Currently, no state funding is available for training in these short-term occupational areas that support the state’s health care infrastructure.

Conclusion

The Career Ladder Advisory Committee has worked diligently to identify and support model programs that assist individuals in gaining the skills they need to advance in their careers. These models are ready to be shared and replicated statewide with ongoing support from the Committee and the pilot project partners that have been forged over the past five years. We encourage the legislature’s continued funding of the Career Ladder Advisory Committee’s identification and support of pilot projects and continued investment in their replication and evaluation.