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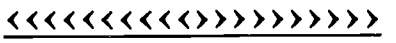
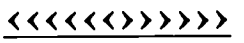
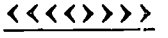
ABSTRACT

As part of the effort to create a labor force that is competitive across the world, Connecticut is planning a School-to-Career System that would give high school students the opportunity to extend learning into the community and workplace. The state would provide schools with information about the fastest-growing jobs and skills needed for entry-level positions; the academic, employability, and technical skill standards would be translated into curriculum ideas; and each program would include a workplace experience. A visit to Germany to learn about apprentice programs resulted in the following recommendations to improve the passage from school-to-career: creation of new relationships among employers, labor organizations, and educators; structured programs with employers for high school students; use of applied, hands-on curricula; and development of a system to connect schools to employers. For the third year, the statewide recognition program, Educating for High Performance, has identified, validated, and honored the work of educators involved in change aimed at high standards and higher student achievement levels. Recommendations regarding Carl Perkins funding and the Job Training System urge schools to move vocational education toward programs that use applied curricula and toward school-to-career opportunities for students and the state to continue to provide basic education programs for people outside the labor force. (YLB)

PREPARING FOR A HIGH PERFORMANCE WORK PLACE







A Report of the Connecticut State Council on Vocational-Technical Education

1995

COUNCIL MEMBERSHIP

The State Council draws its membership from business, labor and educational organizations. Members are appointed by the Governor for three-year terms and are authorized to hire the staff necessary to carry out the Council functions.

The State Council has thirteen members, seven from the private sector and six from education. The Council membership includes:

Annette Cohen
Director, Marcon--
a federally-licensed capital investment company

Carol Coppa
Senior Engineer
Northeast Utilities

Daniel Cronin
Manager, Professional Recruitment
Pratt & Whitney

John Ellsworth
Chair, Technical Education Department
Southington High School

Richard Gagliardi
Director, Career and Vocational Education
Manchester Public Schools

Ann Gaulin
Director, Tech Prep Programs
Three/Rivers Community/Technical College

Lauren Weisberg Kaufman, Chair,
Vice President
Connecticut Business and Industry Association

Susan Moore Lincoln
Dean of Student Affairs
Gateway Community/Technical College

Dianne Noth
General Manager
Westfarms Mall

David Pinsky, Treasurer
Professor Emeritus,
University of Connecticut

Robert Ruggiero, Vice Chair
Principal
Lake Grove at Durham

Thomas Sportini, Secretary
Director, Joint Apprentice Training Committee,
Local Union #488, I. B. E. W., Bridgeport

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Guidance Department
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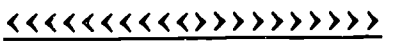
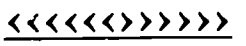
Anne Wingate, Executive Director
Susan Hanley, Assistant Director

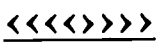
PREPARING FOR A

HIGH PERFORMANCE

WORK PLACE







A Report of the Connecticut State Council on Vocational-Technical Education

1995

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THE STATE COUNCIL

The federal government requires all states that receive federal vocational education funds under the Carl D. Perkins Vocational and Applied Technology Education Act to create a Council.

The Connecticut State Council is appointed by the Governor and consists of thirteen members: seven representing business and labor and six representing educational interests.

Connecticut receives approximately $10 million from the federal government for vocational education programs. The Department of Education, which admininisters the funds, writes a State Plan to detail how the money will be spent.

Council Role

As an independent group outside the state Department of Education, the Council has a number of functions, such as:

1) Advising the department on development of the State Plan;
2) Making recommendations on policies to strengthen vocational education;
3) Involving the private sector in suggestions to modernize vocational education;
4) Analyzing and reporting on the distribution of funds for vocational education programs and on the availability of activities and services within the state;
5) Advising on the establishment of evaluation criteria for programs;
6) Reporting on whether members of special populations have equal access to programs;
7) Analyzing and reviewing Department of Corrections' educational programs;
8) Producing a biennial report in which the Council:
   -Evaluates whether programs meet the needs of the economy in the state;
   -Determines whether programs under the Carl Perkins Act and the Job Training Partnership Act (JTPA) achieve the purposes of the two Acts;
   -Evaluates the coordination between the two Acts;
   -Comments on the adequacy of State action in implementing the State Plan;
   -Recommends ways for the vocational education system and the job training system to coordinate better at the State and local levels.

The Council is directed to advise the Governor, the State Board of Education, the Connecticut Employment and Training Commission and the Secretaries of Labor and Education about its evaluations, findings and recommendations.

STATE COUNCIL ON VOCATIONAL-TECHNICAL EDUCATION

The **mission** of the State Council is to advocate for improvements in education that will help students prepare for the work force, whether directly after high school or after post-secondary education.

The **vision** of the State Council is that every student will leave school prepared to be a productive member of a technically-oriented, high performance economy.

Background

Recognizing that almost every student in our educational institutions will eventually be in the labor force, the State Council believes that the state's educational system should ensure that every graduate bring to a job **the knowledge and skills to make a successful beginning, as well as the ability to go on learning as job demands change.**

The Council also recognizes that for many jobs in our economy, **successful beginnings and continued learning require different skills, and higher level skills, than in the past.**

The Council believes that for Connecticut to reach its social and economic goals, **our work force must have education and training equal to, or better than, any in the world.**

The Council supports the concepts in the State Board of Education's "Common Core of Learning and the "Framework for Action to Improve Public Elementary and Secondary Education." It believes that new practices in education can help students reach these goals, as well as achieve "successful beginnings" in the world of work.

The Council believes that:

1) **All students should learn in context through the use of applied, "hands on" curricula.**
2) **All students should learn work skills, including appropriate behavior on the work site, working cooperatively with others, applying statistical analyses, using the tools of problem solving and decision making and understanding the use of technology in the work place.**
3) **All teachers and students should use educational technology, such as computers, scientific calculators, video equipment, laser disks and presentation software. Such tools should be used in all courses in the curriculum.**
4) **All students should connect their studies to the work place through school-to-work programs. These programs should be based on the state-recommended career clusters and career certificate program.**
5) **All students should learn about the economy and careers from guidance counselors, teachers and members of business, labor and the community.**
6) **All students should be taught with curricula and methods that recognize that individuals tend to learn in different, but equally valid, ways.**
7) **All students should be able to show what they have learned through performance.**
8) **All students have the right to be asked to do high quality and meaningful work.**
9) **All students should be in schools that are striving to improve their organization and management, such as with total quality education concepts.**

EXECUTIVE SUMMARY

The Connecticut economy is just beginning to emerge from a recession that has continued for several years. In some cases large companies are still restructuring their organizations and laying off employees.

Nevertheless, a number of economists believe that the small businesses of the state are beginning to revive and thrive and that this sector offers the best hope both for employment and for maintaining Connecticut's status as a high wage state.

As part of the effort to create a labor force that is competitive across the world, the state is planning a **School-to-Career System** that would give high school students the opportunity to extend their learning into the community and the work place. It will have the following characteristics:

- **The state will provide schools with information about the fastest-growing jobs in each of eight identified career clusters and about the skills needed for entry-level positions in each cluster, as determined by employers.**

- **The academic, employability and technical skill standards will be translated into curriculum ideas.**

- **Each program will include a work place experience that is connected with the career cluster students have chosen to explore.**

- **The state will create a Connecticut Career Certificate for each of the career clusters.**

> **A structured school-to-career system in Connecticut will permit students in high school to combine their studies with exploration of real life jobs that would give them the background to choose their post-secondary education and training with more understanding of the needs of the real world and their own interests.**

Employer Participation Needed

It is clear that no school-to-career system can succeed without the cooperation and full participation of employers. It is only in real work places that students can begin to understand how work is organized and what is expected in terms of knowledge, skills and attitudes when an employee is trying to successfully carry out a task.

Work-Based Learning in Other Countries

As part of the effort to create a school-to-career system in the state, a group of Connecticut residents traveled to Europe in June of 1994 to learn about apprentice programs provided by employers for high school students.

In Germany, at the end of the U. S. equivalent of 10th grade, students choose whether to continue on to a school that prepares them for the university or whether to enter an apprenticeship and continue their education in a combination of a work place setting and a vocational college. Seventy percent eventually choose to continue their education by entering an apprenticeship. We observed:

- **Students who choose to enter an apprenticeship are not leaving school and going to work. They are, in fact, choosing to receive their education in a work place setting. They will continue to study academic subjects, but now have work place examples to illustrate what they are learning.**

- **The education that students in apprenticeships receive is impressive. It is at least equal to what students receive in community/technical colleges in Connecticut, although the students are much younger;**

- **Young people appear to have very strong basic skills by age sixteen. This allows them to succeed in apprentice programs that are rigorous and that hold students to very high standards;**

- **Europeans have higher expectations of sixteen-, seventeen- and eighteen-year-old students than we do in this country, but the education they receive is connected to the real world in ways that keep the students engaged.**

<u>Recommendations to improve the passage from school-to-career in Connecticut:</u>

- **Create new relationships among employers, labor organizations and educators that emphasize joint responsibility for educating the young;**

- **High schools should make it possible for many 11th and 12th grade students to spend part of the school day or year in structured programs with employers;**

- **School-to-Career programs should become a priority of the education system;**

- **All schools should use applied, hands-on curricula because it places learning in context;**

- **Students should be asked to use and demonstrate what they have learned;**

- Students should be introduced to employability skills by middle school, and the skills of decision making, problem solving and team work should be integrated throughout all grades;

- The state needs to develop a system that helps connect schools to employers, possibly through the Work Force Development Boards, chambers of commerce, business associations or the recently-established One-stop Career Centers;

- Schools should adapt the school-to-career programs they are now offering to meet the criteria of the state School-to-Career System

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Recognition Program

For the third year the Council has sponsored the statewide recognition program, **Educating for High Performance.** The purpose of the program is to identify, validate and honor the work of educators who are involved in change efforts aimed at high standards and higher achievement levels for all students. The program is also a vehicle for building public support for change in schools.

> **Applicants are not asked to compete against each other. Every well-structured, current program that meets the criteria is recognized. The aim is to hear about and publish information on as many change efforts as possible that will prepare students to live in a high performance economy.**

<u>Recommendations for Creating a Network of Educators on the Cutting Edge of Change:</u>

- More educators should apply to have their innovative long-term change efforts recognized;

- The summaries of recognized programs should go on an electronic bulletin board;

- Additional activities should take place, such as seminars or workshops to give Connecticut educators the opportunity to talk about their projects.

Carl Perkins Funding

Connecticut receives approximately $10 million a year from the federal government under the Carl Perkins Vocational and Applied Technology Education Act of 1990. The purpose of the federal legislation is "to make the United States more competitive in the world economy."

State Plan

The State Plan that is developed for the funds directs schools to use them in the following ways:

- To restructure their applied/vocational education delivery systems;
- To provide services to special populations;
- To ensure that all students have access to programs that provide workplace readiness and employability skills;
- To find ways to integrate academic and hands-on, applied education;
- To develop linkages among education, business, higher education and the community.

Over the past several years, the state Department of Education has urged schools to move vocational education toward programs that use applied curricula and toward providing school-to-career opportunities for students.

Tech Prep

A school-to-career program funded by Carl Perkins is Tech Prep, which brings community/technical colleges and high schools together to create pathways for students to begin preparation for careers.

The Tech Prep concept has been enthusiastically supported in Connecticut. More than half the high schools in the state now offer students the opportunity to sign on to Tech Prep programs, beginning in the 11th grade, that lead to a variety of career areas, such as business and finance, manufacturing technologies and health care. More than two thousand students are now in such programs

In general, the Carl Perkins funds help some schools run programs that connect in-school learning with the real demands of the work world. Students benefit from the programs whether they intend to enter the work force directly after graduation or go on to more education.

<u>Recommendations for Carl Perkins Funding:</u>

- **Funding for Carl Perkins should not be decreased under a block grant system;**

- **The state should supplement the Carl Perkins funds to continue the movement toward offering all students a School-to-Career experience;**

- **The state should make funds available for all schools to purchase the technology necessary to become part of the "information superhighway";**

- **Schools should start programs that follow the state's criteria for the School-to-Career system and begin the process of developing relationships with employers in their region;**

- **As part of a funding strategy, schools should be expected to create partners with industry for the purposes of giving students an understanding of the changing uses of technology.**

THE FEDERAL JOB TRAINING PARTNERSHIP ACT (JPTA)

JTPA programs and services are provided at the local level in nine Service Delivery Area regions (SDA's). Until 1994 each SDA had a Private Industry Council (PIC) to work with local officials to provide guidance for the programs. In 1994 the PIC's were expanded to become the Regional Work Force Development Boards, which include business people, labor representatives, public officials, state agency representatives and providers of services to clients.

JTPA funding in Connecticut amounted to about $29 million in 1992-93 and $33 million in 1993-94.

Although each of the SDA's has had some programs that succeeded in placing people in employment over the past two years, the recession in Connecticut has left many people with years of attachment to the labor force without jobs. **Young people and adults without strong skills are less likely to become employed during periods of labor surplus.**

Recommendations for the Job Training System

- **The state must continue to provide basic education programs and basic skill development for people who have been outside the labor force, regardless of whether Congress decides to move to block grants;**

- **A strong School-to-Career System in high schools should be supported as a way to improve the employability of young people before they leave the educational system;**

- **The Regional Work Force Development Boards should be supported and strengthened so they can bring coordination to the education- and training-for-employment system in the state.**

Part I

THE CONNECTICUT ECONOMY

The Connecticut economy is just beginning to emerge from a recession that has continued for several years. In some cases large companies are still restructuring their organizations and laying off employees. In fact, many observers seem to believe that restructuring will be a way of life for the country's large organizations, which may mean that the feeling of instability that we have been living with will become permanent.

Nevertheless, a number of economists believe that the small businesses of the state are beginning to revive and thrive and that this sector offers the best hope both for employment and for maintaining Connecticut's status as a high wage state.

It is more difficult to craft employment and training policies around a large number of small businesses, mainly because they usually have a great variety of skill needs and do not have the staff resources available to large companies for communicating their needs to the schools and colleges of the state.

Targeted Technologies

The state is especially interested in supporting technologies that represent the state's growth industries of the 1990's. The targeted industries identified by the Connecticut Academy of Science and Engineering are:

- Advanced Marine Applications
- Advanced Materials
- Aerospace
- Applied Optics and Micro-electronics
- Computer Applications
- Energy and Environmental Systems
- Medical Technology/Instrumentation
- Robotics and Process Controls
- Telecommunications

Business Development Resources

The state of Connecticut has developed or funded a number of programs aimed at helping businesses in these targeted industries. These include:

-The **Technology Assistance Center**;
-Product Development Financing;
-Product Marketing Financing;

-Supplemental funding for federal **Small Business Innovation Research Grants (SBIR);**
-**Yankee Ingenuity Initiative Programs** (cooperative research programs with higher education);
-The **Connecticut Seed Venture Group;**
-The **Institute for Industrial and Engineering Technology;**
-**CONN/STEP,** the State Technology Extension Program;
-**Small Business Development Centers;**
-The **Manufacturing Application Center** at Central Connecticut State University.

Educational Resources

Connecticut has many institutions of higher education. State-supported ones include the University of Connecticut and branches, the Connecticut State University System, the twelve Community/Technical Colleges and Charter Oak State College. There are twenty-five private higher education institutions, some of which have national reputations for excellence.

In addition, the state funds seventeen regional vocational-technical schools which provide training in the trades to students in grades 9 through 12 and adults in afternoon and evening courses. Comprehensive high schools throughout the state offer a range of courses in technology education, business, marketing, food service and health. Finally, the state has over seventy-five private occupational schools.

As in other states, Connecticut educators struggle to match the needs of business and industry with the desires and expectations of students. Although the state government has targeted technically-based industries as the ones to encourage and support, it is still difficult to get the message to students that technical skills, at various levels, will give them substantially more choices for employment.

Part II

PREPARING A FUTURE WORK FORCE

High schools in Connecticut tend to focus on helping students prepare for a traditional four-year college experience. But large numbers of college students do not complete their course of study and leave college to enter the work force. At the same time, some students enter the work force directly after high school, while as many as twenty-five percent of students who enter high school do not even graduate. **Consequently, there are many more young people trying to enter the labor force without sufficient skills than is usually acknowledged.**

In general, we do not provide students in high school with an opportunity to connect their in-school learning to what is happening in the real world outside the school walls.

Creating a School-to-Career System

The state Department of Education has begun an effort with the Departments of Higher Education and Labor, the State Council on Vocational-Technical Education, the Connecticut Business and Industry Association, business people, organized labor, teachers and administrators to create a **statewide School-to-Career System.**

The **goal** of the system is to give high school students the opportunity to explore potential careers before they graduate and enter either the work force or post-secondary education. The system should help students sort out the following:

- What careers will be available to them in the future?
- What should they know and be able to do to succeed in various careers?
- What courses, programs, and work place experiences would help them get prepared for various careers?
- What might they expect in the way of wages, benefits, working conditions and employment potential?

How Will the System Work?

The system is organized to provide school-based learning, work place-based learning and activities to connect the two. Programs such as **tech prep, magnet schools, career academies and cooperative work experience** can all be part of the system. The system will have the following major characteristics:

- **Programs will be organized around state-identified career clusters.** Eight career clusters that represent most of the jobs available in the Connecticut economy and labor market have been identified. These

cover more areas than the technologies targeted for support by the state and are designed to include the broad range of interests of high school students:

- Arts and Media
- Business and Financial
- Construction: Technologies and Design
- Environmental, Natural Resources and Agriculture
- Government, Education and Human Services
- Health and Biosciences
- Retail, Tourism, Recreation and Entrepreneurship
- Technologies: Manufacturing, Communications and Repair

The clusters were chosen both to represent growth areas for the state and **to offer an area of interest and exploration to all high school students, not just those who do not plan to attend college.**

- **The state will provide schools with information about the fastest-growing jobs in each of the career clusters and about the skills needed for entry-level positions in the cluster.**

The state Department of Education contracted with the Connecticut Business and Industry Association to convene committees of employers for each career cluster. The employers have identified the fastest-growing jobs in each career cluster and have also identified the **academic, employability and technical skills** necessary to perform these jobs at entry level.

To begin with, the committees concentrated on jobs that could be filled directly from high school (very few of those) to jobs that required post-secondary education up to and including an associate degree (many of those).

- **The academic, employability and technical skill standards will be translated into curriculum ideas.**

Committees of educators are taking the academic, employability and technical skill standards identified by employers and recommending ways that schools can adapt their curricula to prepare students to meet the standards.

- **Each program will include a work place experience that is connected with the career cluster students have chosen to explore.**

The experiences can range from job shadowing and internships to paid positions for older students.

- **The state will create a Connecticut Career Certificate for each of the career clusters.**

Programs in a career cluster will prepare students to earn a statewide

Connecticut Career Certificate in the skill standards for that cluster. The Certificate will show what academic, employability and technical skills the graduate can demonstrate, as well as describe the student's work place experience connected to the cluster.

Purpose of the Design of the System

By basing the School-to-Career system on the requirements developed by industry, the state hopes to give students information that can help them understand how their high school courses are connected to needs in the work world.

Ideally, more high school courses will become hands-on and organized around problem solving, while employers who have students in work-based learning positions will discuss with teachers how knowledge and skills are used in the work place.

> **A structured school-to-career system in Connecticut will permit students in high school to combine their studies with exploration of real life jobs that would give them the background to choose their post-secondary education and training with more understanding of the needs of the real world and their own interests.**

Progress to Date

- The state is preparing to respond to an RFP from the federal government in order to receive school-to-career funds;
- The committees of employers have finished their work on skill standards, and the curriculum people have begun to turn the standards into ideas that high schools can use in their courses;
- Information on all the pieces of the system will be available to schools before September, 1995.

Employer Participation Needed

It is clear that no school-to-career system can succeed without the cooperation and full participation of employers. It is only in real work places that students can begin to understand how work is organized and what is expected in terms of knowledge, skills and attitudes when an employee is trying to carry out a task successfully.

> **By convincing students that their school work is truly relevant to needs in the real world, we can motivate students to stay in school and to take responsibility for their own learning.**

Work-Based Learning in Other Countries

As part of the effort to create a school-to-career system in the state, a group of Connecticut residents traveled to Europe in June of 1994 to learn about apprentice programs provided by employers for high school students. The group included educators, business people, state officials and a representative from organized labor. Although most of the time was spent in Germany, the group also saw programs in Austria, Denmark and Sweden. The trip was mainly funded by the German Marshall Fund and was organized by Lauren Weisberg Kaufman, vice president of the Connecticut Business and Industry Association and chair of the State Council on Vocational-Technical Education.

From written accounts, group members knew that employers in many European countries believe in making a long term investment in young people, even during times of recession. They hoped to find out why employers, unions, educators and parents were willing to support the system with enthusiasm.

How the European System Works

Using the German system as an example of European apprentice programs, the group found it has several characteristics:

- At the end of the U. S. equivalent of 10th grade, students choose whether to continue on to a school that prepares them for the university or whether to enter an apprenticeship and continue their education in a combination of a work place setting and a vocational college. Seventy percent of students eventually choose to continue their education by entering an apprenticeship;

- The apprenticeship system is prescribed in federal law and the roles of business, unions and schools are all assigned. All businesses belong to a chamber of commerce, and the chamber represents employers in administering the system;

- It is possible to enter an apprenticeship in one of three hundred and eighty different job categories. Each of these positions has national standards developed by industry, so that employers throughout the country understand what graduates should know and be able to do;

- The apprenticeships take from two and a half to three years to complete. Students are paid and typically spend three and a half days a week being educated in a work place setting and a day and a half at a regional vocational college;

Our Observations:

- Students who choose to enter an apprenticeship are not leaving school and going to work. They are, in fact, choosing to receive their education in a work place setting. They will continue to study academic subjects but now have work place examples to illustrate what they are learning.

- The education that students in apprenticeships receive is impressive. It is at least equal to what students receive in community/technical colleges in Connecticut, but the students are much younger;

- Preparing for the work force is a major focus of education;

- The educational component of apprenticeships is so high and the quality of training is so good that the apprentice system is valued by society;

- German employers take on apprentices because:
  - -They believe it is the best way to ensure a prepared work force, competitive throughout the world;
  - -They find it increases their productivity;
  - -They believe they have a responsibility to share in the education of the young;
  - -It ensures that people are prepared for the jobs that actually exist.

- The system has a great deal of support among business, labor, government, education, parents, students and the community;

- Young people appear to have very strong basic skills by age sixteen. This allows them to succeed in apprentice programs that are rigorous and that hold students to very high standards;

- Europeans have higher expectations of sixteen-, seventeen- and eighteen-year-old students than we do in this country, but the education they receive is connected to the real world in ways that keep the students engaged;

- Most university education is free in the countries we visited, although access is rather limited. But, in general, higher education for working adults is not available in Europe to the extent that it is in the U. S.;

- The apprentice programs that were visited were considered to be among the most desirable to enter, but they did not appear to have a structured way to seek out minorities or immigrants or to attract women into apprenticeships for non-traditional areas.

The group members were impressed by the programs they saw in Europe, but believe that Connecticut must construct a school-to-career system that fits our culture and our needs. They particularly admired the way the European societies accept responsibility for helping their young people join the adult world. There are probably many ways to do this well. But taking responsibility is the key, and the challenge to Connecticut's educators, employers and parents is to recognize that it is up to all of us to help our children understand how to succeed in their life's work.

Recommendations to improve the passage from school-to-career in Connecticut

- Create new relationships among employers, labor organizations and educators that emphasize joint responsibility for educating the young;
- High schools should make it possible for many 11th and 12th grade students to spend part of the school day or year in structured programs with employers;
- School-to-career programs should become a priority of the education system;
- All schools should use applied, hands-on curricula because it places learning in context;
- Students should be asked to use and demonstrate what they have learned;
- Students should be introduced to employability skills by middle school, and the skills of decision making, problem solving and teamwork should be integrated throughout all grades;
- The state needs to develop a system that helps connect schools to employers, possibly through the Work Force Development Boards, chambers of commerce, business associations or the recently-established One-stop Career Centers;
- Schools should adapt the school-to-career programs they are now offering to meet the criteria of the state School-to-Career System.

Part III

EDUCATING FOR HIGH PERFORMANCE

Recognition Program

For the third year the Council has sponsored the statewide recognition program, **Educating for High Performance.** The purpose of the program is to identify, validate and honor the work of educators who are involved in change efforts aimed at **high standards** and **higher achievement levels for all students.** The program is also a vehicle for building public support for change in schools.

In addition to the State Council on Vocational-Technical Education, the program is sponsored by the Connecticut Department of Labor, the Connecticut Business and Industry Association, the Bureau of Applied Curriculum, Technology and Career Information and the Bureau of Certification and Professional Development of the Connecticut Department of Education and the Connecticut Academy for Education in Mathematics, Science and Technology. Corporate funding support is provided by the Aetna Foundation, Inc., Northeast Utilities, People's Bank and Pratt and Whitney, a Division of United Technologies.

The program objectives are:

- **To identify cutting edge practices in Connecticut's schools;**
- **To validate and honor the work of educators and others involved in change at a Recognition Event;**
- **To create a resource for all Connecticut educators by publishing descriptions of each change effort, with name and number of a contact person;**
- **To generate support for change by sharing information about the change efforts with business and other members of the community.**

The program invites educators to apply if they are involved in long-term change efforts that fall into any of the following categories:

I System-Wide Change

Efforts in this category might include moving toward total quality education concepts that promote continuous improvement practices, that recognize customers of the system and that design new organization and management structures that include administrators, teachers, students, parents and the community.

II Demonstration Schools

Individual schools, magnet schools and multi-school collaborations that are working on changing their structure and practices to ensure that all students have the opportunity to learn at higher levels and are prepared to enter a high performance economy.

III Practices that lead to higher levels of learning. For example:

- •School-to-career opportunities such as Tech Prep, career pathways and work experience in business and industry connected to academic programs;
- •Integration of academic and applied education strategies
- •Technology integrated into curriculum and/or uses of the "information superhighway"
- •Interdisciplinary curriculum, particularly at the high school level
- •Performance-based assessments
- •Techniques that help to develop skills such as teamwork, problem solving, decision making and conflict resolution
- •Strategies to increase participation and improve performance of typically "under-represented" groups in math, science and technology education courses
- •Career awareness and career guidance programs, K-12
- •Methods that use the problems and issues of the community as a basis for learning
- •Strategies to utilize the resources of the community

The program is based on the premise that there are important changes going on in schools all over the state that are generally not known about.

Applicants are not asked to compete against each other. Every well-structured, current program that meets the criteria listed above is recognized. The aim is to hear about and publish information on as many change efforts as possible that will prepare students to live in a high performance economy.

In 1995 more than one hundred efforts will be recognized. The booklet that describes each effort will be sent to several people in every school district, state education officials, other government officials, business people and other members of the community.

Response to the Program

Educators whose programs have been chosen over the past three years are enthusiastic about the program, despite the fact that winning does not bring any financial reward. They have found, however, that being recognized by statewide organizations has made it easier for them to convince their colleagues, their school administrators and their Board of Education that the recognized program should be supported and expanded. The sponsors of the program believe that this can be the first step toward institutionalizing needed educational change.

Recommendations for Creating a Network of Educators on the Cutting Edge of Change:

- More educators should apply to have their innovative long-term change efforts recognized.
- The summaries of recognized programs should go on an electronic bulletin board;
- Additional activities should take place, such as seminars or workshops to give Connecticut educators the opportunity to talk about their projects.

Part IV

CARL PERKINS FUNDS IN CONNECTICUT

Connecticut receives approximately $10 million a year from the federal government under the Carl Perkins Vocational and Applied Technology Education Act of 1990. The purpose of the federal legislation is "to make the United States more competitive in the world economy."

State Plan

The State Plan that is developed for the funds directs schools to use them in the following ways:

- To restructure their applied/vocational education delivery systems, including purchasing equipment, training teachers, rewriting curricula or instituting the state-purchased applied curricula;
- To provide services to special populations, including tutoring and remedial programs;
- To ensure that **all** students have access to programs that provide workplace readiness and employability skills, such as instituting the nationally-developed, state-purchased curriculum based on the SCANS skills;
- To find ways to integrate academic and hands-on, applied education strategies in courses, such as purchasing equipment for the Principles of Technology course, which is team-taught by a vocational and a physics teacher;
- To develop linkages among education, business, higher education and the community.

In addition to the funds that are distributed to and administered by the schools and community/technical colleges, the state solicits proposals and administers funds for programs for: single parents, displaced homemakers, single pregnant women, community-based organizations; improving gender equity; training in the corrections system and consumer home economics.

Over the past several years, the state Department of Education has urged schools to move vocational education toward programs that use applied curricula that move toward providing school-to-career strategies for all students.

Tech Prep

A school-to-career program funded by Carl Perkins is Tech Prep, which brings community/technical colleges and high schools together to create pathways for students to begin preparation for career.

The Tech Prep concept has been enthusiastically supported in Connecticut. More than half the high schools in the state now offer students the opportunity to sign on to Tech Prep programs, beginning in the 11th grade, that lead to a variety of career areas, such as business and finance, manufacturing technologies and health care. More than two thousand students are now in such programs

It is expected that Tech Prep programs will form the basis for many of the programs that are funded through the the state school-to-career system. The programs already meet many of the criteria. The major change will be that to become part of the statewide school-to-career system, a Tech Prep program would have to include a structured work place experience for each student.

Work Place Experience

Most educators involved in Tech Prep and other school-to-career programs recognize that having a work place experience connected with a career cluster is vital to making a better transition from high school to work or to post-secondary education. Nevertheless, most of these same educators point out that it is going to be difficult to find enough placements for students.

The state has asked the Regional Workforce Development Boards, to help find work place positions for students. The Boards coordinate education- and training-for-employment programs in their region. The Regional Boards are also working with the Regional Education Service Centers (RESC's) in their areas to help coordinate the efforts of schools to connect to employers.

But, in the end, the success of the school-to-career programs will depend upon the willingness of employers to become involved in giving young people the opportunity to spend time in the work place, learning first-hand what can only be talked about in the classroom.

Council Visits to Schools

In visiting several school districts in the state that receive substantial Carl Perkins funds, the Council learned the following:

- Many schools depend heavily on the federal funding to provide equipment, new hands-on, applied curricula, better guidance services, professional development for teachers and remedial services for students with special needs;
- Some felt that Carl Perkins funding has allowed them to encourage the transformation of the entire comprehensive high school, making it more focused on connecting students to the wider world where they must eventually function;
- Educators administering the funds think it would be very difficult to replace the funds with state or local dollars;
- There is a serious need to continually upgrade technology; machines lasted for several years in the past, but the fast pace of change in computer technology means that systems must be upgraded frequently;
- Having up-to-date technology often means that applied education teachers can entice academic teachers to create joint courses that bring together the best practices of academic and hands-on, applied education;
- All schools visited would welcome more interaction with employers;
- Most of the educators interviewed felt the 1990 changes to the Carl Perkins legislation had greatly improved the program;
- All were carefully monitoring the discussions taking place in Washington, wondering what a block grant strategy would mean to the programs they administer.

In general, the Carl Perkins funds help some schools run programs that connect in-school learning with the real demands of the work world. Students benefit from the programs whether they intend to enter the work force directly after graduation or go on to more education.

Most agreed, however, that the move toward Tech Prep, or other programs that help students see the relevance in what they are doing in school, are important changes.

<u>Recommendations for Carl Perkins Funding:</u>

- **Funding for Carl Perkins should not be decreased under a block grant system;**

- The state should supplement the Carl Perkins funds to continue the movement toward offering all students a School-to-Career experience;

- The state should make funds available for all schools to purchase the technology necessary to become part of the "information superhighway";

- Schools should offer programs that follow the state's criteria for the School-to-Career system and begin the process of developing relationships with employers in their region;

- As part of a funding strategy, schools should be expected to create partners with industry for the purpose of giving students an understanding of the changing uses of technology.

Part V

THE FEDERAL JOB TRAINING PARTNERSHIP ACT (JPTA)

Organization

State level policy guidance for JTPA is provided by the Connecticut Employment and Training Commission (CETC). Administrative oversight is the responsibility of the state Department of Labor (DOL).

JTPA programs and services are provided at the local level in nine Service Delivery Area regions (SDA's). Until 1994 each SDA had a Private Industry Council (PIC) to work with local officials to provide guidance for the programs.

In 1994 the PIC's were expanded to become the Regional Work Force Development Boards, which include business people, labor representatives, public officials, state agency representatives and providers of services to clients. The Boards continue to maintain at least fifty-one percent business membership. They are now expected to coordinate all the federal- and state-funded education- and training-for-employment programs in their region.

Purpose

According to the federal legislation, the purpose of JTPA is "to establish programs to prepare youths and adults facing serious barriers to employment for participation in the labor force by providing job training and other services. . ."

Most training programs and services occur within three programs: Title IIA provides funding for year-round programs for adults and youths; Title IIB is a summer program for youths providing work experience and academic enrichment; Title III provides services and retraining to dislocated workers who have lost their jobs to to layoffs or business closings.

JTPA funding in Connecticut amounted to about $29 million in 1992-93 and $33 million in 1993-94.

Programs in Connecticut

Although each of the SDA's has continued to place people in employment over the past two years, it is a fact that the recession in Connecticut has left many people with years of attachment to the labor force without jobs.

When the labor market becomes saturated with people with excellent skills and background, it becomes extremely difficult to find positions for those who are trying to enter for the first time. **Young people and adults without strong skills are less likely to become employed during periods of labor surplus.**

Changes in JTPA

At the present time, Congress says that it plans to turn federal job training programs into a block grant for the states. This potential has introduced an element of uncertainty into plans for future programs.

> **Regardless of what Congress does, the state needs to continue providing basic education programs and skill development for thousands of people; an improving economy should increase their chances of getting hired.**

Regional Work Force Development Boards

In addition to coordinating education and training for employment programs in their regions, the Work Force Boards, along with the Regional Education Service Centers, have become involved in the School-to-Career System that the state is beginning to create.

The Boards were asked to identify potential businesses in their areas that might be approached to become part of the system and to identify the school-to-career programs presently taking place in surrounding school districts. This information should turn out to be very helpful as the system develops.

The Boards now include representatives from local schools, regional vocational-technical schools and area Community/Technical Colleges, as well as business people, labor, public officials, state agency representatives and providers. They will all be asked to take a substantial part in the School-to-Career System, as it develops.

Recommendations for the Job Training System

- **The state must continue to provide basic education programs and basic skill development for people who have been outside the labor force, regardless of the decisions made in Congress;**
- **A strong School-to-Career System in high schools should be supported as a way to improve the employability of young people before they leave the education system;**
- **The Regional Work Force Development Boards should be supported and strengthened so they can bring coordination to the education- and training-for-employment system in the state.**

Appendix I

Carl Perkins Vocational Funding 1993-94

Connecticut

GRANT TITLE	AMOUNT BUDGETED *	POPULATION SERVED **	NUMBER OF GRANTS
BASIC GRANTS			
SECONDARY	$5,432,542	155,521	85
POST-SECONDARY	$1,250,376	21,051	10
CETO GRANTS			9
SINGLE PARENT/ DISPLACED HOMEMAKER/ SINGLE PREGNANT WOMEN	$ 651,283	414	
COMMUNITY-BASED ORGANIZATIONS	$ 109,122	306	
GENDER EQUITY	$ 309,767	3,125	10
CORRECTIONS			
ADULT	$ 118,292	2,504	1
JUVENILE	$ 13,143	710	1
CONSUMER HOME ECONOMICS		1,893	
DEPRESSED AREAS	$ 113,761	N/A	6
OTHER	$ 73,171	N/A	5
TECH PREP	$1,145,321	1,749	12
TOTAL	**$9,216,778***	**187,273****	**139**

*ALL FIGURES ARE BUDGETED AMOUNTS. ACTUAL EXPENDITURES MAY BE FOUND IN THE FEDERAL EXPENDITURE REPORT.

**ENROLLMENTS ARE ESTIMATES.

State Department of Education