



Abt Associates Inc.

**Providing
Opportunities for All
Students: Findings
from the Process
Evaluation of
Connecticut's
School-to-Career
System**

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Executive Summary

Introduction

The School-to-Work Opportunities Act of 1994 provided resources to states and local partnerships to strengthen systems that help prepare young people for work and further education. The Act was in response to longstanding concerns among policymakers, business leaders, educators, and others that the demands of the high-skill job market for well-trained workers were not being met.

The Act did not prescribe a pre-defined program for states and local schools to implement. Instead, it broadly described the characteristics of a system that could be integrated with the normal educational activities of schools. It provided seed money over a five-year period to states and local partnerships for development of their own STW systems.

The Act required that systems feature the following three components:

- **School-based learning** focused on achieving high academic standards;
- **Work-based learning** leading to the attainment of workplace competencies; and
- **Connecting activities** to integrate school-based and work-based learning.

Overview of the Connecticut School-to-Career System

In Connecticut, state leaders developed a School-to-Career (STC) System that addresses the three main components of the Federal legislation while allowing for considerable discretion at the local level as to the specific activities to be undertaken. It established a multi-layered, state-regional-local structure consisting of a wide variety of partners. Key partners include the state Employment and Training Commission, the Department of Education (SDE), the Department of Labor, the Connecticut Business and Industry Association (CBIA), the Department of Higher Education, community colleges, Regional Education Service Centers (RESC), Regional Workforce Development Boards (RWDB), and others.

Key features of the statewide STC system include:

- Adoption of eight career majors (called Career Clusters) and accompanying informational materials for educators, parents, and students;
- Development of industry/technical skill standards for each of the career clusters;

- Establishment of the Connecticut Career Certificate (CCC), a portable credential signifying master of academic, employability, and technical skills within one of the career clusters;
- Provision of a variety of STC-related professional development related to curriculum revision, teaching strategies, sustainability, among other activities; and
- Development of monitoring and evaluation strategies.

The state is divided into eight regional partnerships, each of which consists of representatives from RESCs, RWDBs, and community colleges. In addition, a SDE consultant is assigned to each region. Together, these partners provide a variety of technical assistance to local districts.

At the local level are school districts, vocational-technical schools, colleges, and universities, along with businesses and other community partners. School districts, vocational-technical schools, colleges, and universities are eligible to receive state STC grants. Rather than awarding grants to all of these institutions, SDE developed a competitive demonstration grant program to provide large, two-year grants to select sites. Fourteen institutions were selected as demonstration sites, and they received grants for the 1995-96 and 1996-97 school years. The intent was for these sites to begin designing and implementing STC systems, so that they could share lessons learned and provide models for other sites.

During the 2000-01 school year, 98 institutions received state STC grants. There are 118 school districts that have been approved to award the CCC, representing about 70 percent of all Connecticut districts.

Abt Associates' Process Evaluation

To gauge the progress of the institutions that received STC grants, Abt Associates conducted a process study beginning in June 2000 and continuing through the 2000-01 school year. Abt Associates' staff worked with SDE to conduct two surveys during this period – one in January 2001 and one in June 2001. Abt Associates' staff also conducted site visits to four high schools and reviewed Connecticut's STC reports. Additionally, where appropriate, Abt Associates' staff utilized data from the most recent National STW Progress Measures Survey comparing Connecticut with U.S. averages. These data were collected during the 1999-2000 school year as part of the National Evaluation of STW.

Abt Associates examined the following questions in undertaking the process study:

- To what extent have grantees implemented fundamental STC components such as career clusters, STC Coordinators, career centers, partnerships with business, and STC components at the elementary and middle levels?
- To what extent are students at grantee institutions participating in STC systems, which include activities such as internships, job shadowing, career awareness, and career cluster selection? Are certain students targeted for participation in STC activities, or are opportunities made available for all students to participate? How do Connecticut's levels of participation compare to national averages?
- How sustainable are the STC systems of grantee institutions, based on the implementation of fundamental STC components and the perceptions of grantees?
- According to the perception of grantee institutions, what difference has STC made for students and the schools?

Study Results

Implementation of STC Components. Overall, grantees have made significant progress in implementing fundamental STC components, which are features of the system that are important for sustainability and working toward all student participation.

Half of the responding grantees reported that they had implemented each of the state's eight career clusters, which meant they have made them available as career majors for students. The remaining grantees implemented seven or fewer clusters. Each of the clusters has been implemented by between 61 and 85 percent of grantees.

Grantees reported that they had formed a total of 7,677 partnerships with businesses and community-based organizations (CBO) by the end of the 2000-01 school year. The average number of business partnerships per institution was 82 and the average number of CBO partnerships was 16. Each partnership varies – some involve one activity, while others involve multiple activities. Half of the reported partnerships involved job shadowing for students, which was the most common activity. The next most frequent activities were career fairs, classroom activities, internships, and field trips.

Ninety-two percent of the responding high schools and vocational technical schools reported having at least one career center. More than half (51 percent) of the career centers reported in the survey were established in 1997 or later, which is when the state STC grant funds became available.

Almost all (92 percent) of the school districts reported having a career component taught in their middle and/or elementary school(s). In these districts, the career components consist of career awareness and exploration, and 74 percent of them have a curriculum.

Student Participation. Each responding grantee indicated that their STC systems are for all students; activities are not targeted toward particular types of students by ability or post-secondary plans. Levels of participation vary considerably, however.

The number of students receiving the CCC has risen steadily since 1998 (the first year CCCs were available), but it remains a small percentage of the student body. In 2001, 569 students received the CCC. Each of the eight career clusters were represented; the largest number was for the "Retail, Tourism, Recreation and Entrepreneurship" cluster (18 percent of CCCs), and the lowest number went to the "Construction: Technologies and Design" cluster (6 percent).

Students are more likely to be involved with STC activities such as career counseling than with more intensive STC activities such as internships. During the 2000-01 school year, 72 percent of high school students participated in career counseling, as did 62 percent of middle school students and 29 percent of elementary school students. Half of high school and middle school students participated in portfolio development, as did 11 percent of elementary school students. Half of high school and middle school students participated in a career interest survey, as did 11 percent of elementary school students. One-third of high school students had selected a career cluster by the end of the year. Twelve percent of high school students completed a job shadow, as did seven percent of middle school students and three percent of elementary school students. Three percent of high school students completed an internship.

Although the most recent data from the National STW Evaluation are from the 1999-2000 school year, it is useful to compare Connecticut's progress with national averages. Generally, on measures relating to schools' availability of STC activities for students, Connecticut tends to score higher than national averages. On measures regarding actual student participation in those activities, Connecticut tends to score at or slightly below national averages. Likewise, on measures concerning the percent of schools offering STC-influenced curriculum, Connecticut scores higher than national averages. On measures relating to the percents of students participating in these curricula, Connecticut tends to score at or slightly below national averages.

Perceptions of Sustainability, Impact on Students/Schools, and Barriers to Implementation. Grantees were asked to report perceptions of their institutions' progress toward sustainability, the impact of STC on students/schools, and barriers to implementation.

Using an adapted measure of STC sustainability, grantees generally rated themselves highly on most measures of sustainability. In particular, they indicated that the strongest progress has been made in areas such the support of school board and business/community partners, the availability of STC-related professional development, coordination of STC activities through a single point

of contact, and the availability of STC activities for students. They report that less progress has been made in areas such as release time for teachers, the integration of STC in classroom instruction, and the availability of broad career paths for students.

Grantees were asked to provide examples of what difference, if any, STC has made for students. Responses were coded into broad categories. The most frequent responses cited the valuable work experiences that students had gained in their fields of interest, the increased preparedness of students to make decisions regarding careers and higher education, and the increased skill level of students. A sample of responses is included in the full report.

Additionally, grantees were asked to indicate how STC has affected the school as a whole. Again, responses were coded into broad categories. The most frequent responses included strengthened relationships between the school and the community/businesses, the availability of increased training for educators, and the revision of curriculum to integrate skill standards and/or career awareness. A sample of responses is included in the full report.

Grantees were asked to list the goals and objectives of their 2000-01 state STC grant and to describe any challenges or barriers that could prevent them from being carried out. Sixty-one percent of respondents reported at least one challenge/barrier. The most frequently cited responses were the following:

- Staffing – the need to increase the number and/or time commitment of staff working on STC issues given the many responsibilities of STC Coordinators and related staff;
- Transportation – the lack of transportation for students to get to and from work-site experiences (noted most frequently by rural school districts);
- Teacher support – the lack of interest on the part of some teachers to STC, or their resistance to it; and
- Release time – the lack of available release time for teacher externships or other professional development during the school year.

Conclusions

STC is an instructional system that both supports and is aligned with broader school improvement initiatives. A STC system consists of three pillars: school-based learning (skills taught in classroom, career awareness, relevancy to the real world); work-based activities (internships and job shadows in careers that interest the student); and connecting activities (mechanisms linking school-based learning with work-based experiences).

Connecticut's multi-layered, state-regional-local approach has been successful in helping local schools design and implement STC systems. There is a large and diverse body of state, regional, and local organizations that have been active in providing technical assistance and other resources to local schools in support of STC. Of the schools that received state STC grant support during 2000-01, high percentages have undertaken or are currently implementing the fundamental components of STC systems such as skills-based curricula, work-based experiences, professional development for educators, career awareness and planning, and resources to support those activities (STC Coordinator, business/community partners, career centers, etc.). An important element of Connecticut's statewide plan has been that STC systems should be available for all students. All of the surveyed grantees reported that their systems are aimed at all students.

While every grantee has at least some of these components in place and STC activities are not limited to any particular type of student, there is wide variation in the intensity of implementation. There is not a consistent relationship between a district's ERG and the level of progress the district has made toward sustainability. On one hand, the surveys and site visits that Abt Associates conducted revealed that there are some schools that have STC systems with sustainable school-based activities, work-based activities, and connecting activities. On the other hand, there are institutions that report they are just beginning to assemble basic components of their systems.

Our analysis of survey data and site visit interviews suggests that STC Coordinators play particularly important roles in implementing STC systems and developing processes to sustain them. It would be difficult for an institution to implement a sustainable STC system without a coordinator or other dedicated staff with similar responsibilities.

Recommendations

Technical Assistance. In order for all schools to have sustainable STC systems, some institutions will require technical assistance and possibly additional funding. Throughout the state, it appears that there are several sources of technical assistance. In the surveys and site visits, several schools commented that the RESCs and SDE have been helpful in providing assistance as well as training. In addition, individual schools, including each of the four sites visited by Abt Associates, have provided assistance to other schools. Based on the barriers to implementation reported by grantees and the lowest-rated categories on the sustainability scale, it appears that the topics needing the most attention are classroom integration, release time for teachers to be involved in business and industry, and the establishment of broad career pathways that serve as a framework for delivering academic and vocational curricula.

Data Collection. Connecticut has developed an excellent database concerning the implementation of a variety of STC activities. The database primarily consists of survey data collected for this study, data from the national evaluation, and reports from monitoring site visits

to selected grantees. In addition, the RESCs are important sources of information because they maintain contact with local schools. The collection of accurate implementation data during 2001-02 and beyond will be important for determining the extent to which STC activities have been institutionalized by current grantees, and will be useful in guiding new grantees in developing and integrating school-to-career activities in their institutions.

Assessing the Impact of STC. Although there is information available regarding the STC systems that grantees have implemented, little information is available about the impact of these activities on students. Grantees perceive a wide range of benefits to students and their schools because of the STC systems they have developed. However, there is no evidence linking STC with student or school outcomes. State leaders may want to explore the relationship between STC activities that students have participated in and short-term outcomes such as attendance, grades, post-secondary plans, and performance on standardized tests. During the next year, student outcome data should be available through the national evaluation of STW. It might be possible to adapt the measures and methodology from the national evaluation to conduct similar research in Connecticut. Student impact data could be used for evaluation and continuous improvement of the state STC system, as well as for securing additional funds.