

Future Directions Initiative: A Framework for New York State Secondary and Postsecondary Career & Technical Education

INTRODUCTION

Approaching the second decade of the 21st century, the time is right to set directions for the future of Career and Technical Education (CTE) in New York State that will provide students with additional paths to high school graduation and ensure that all students acquire the rigorous knowledge and skills needed to succeed as productive citizens in a global economy. CTE can be better leveraged to help achieve the Regents goals of improving the graduation rate, closing the achievement gap, and enhancing student achievement at all levels.

Responding to this need for change, a CTE work group was established to carry out a statewide initiative that will help define and promote a broader role for CTE in the educational plans of our students. The work group, supported by the New York Comprehensive Center (NYCC), consisted of approximately thirty individuals from State Education Department (SED) offices representing secondary, adult, and postsecondary perspectives, and from the New York State Department of Labor, which serves as a key partner in many of SED's CTE and workforce development efforts.

With input and direction from national researchers, a CTE Statewide Reactor Panel, and through statewide survey results, the CTE work group developed priority areas and key action steps that allow us to better focus the efforts of the State Education Department and our statewide CTE stakeholders for the benefit of all our students.

The SED CTE work group proposes these action steps to provide more options for students as they plan for high school graduation and beyond. With input and analysis from the researchers, the reactor panels, and our statewide CTE stakeholders, the work group narrowed their recommendations to a total of six major areas, four that are student-centered and two that are system-focused. It is now up to us, New York State CTE stakeholders, to move these priorities from proposals to actions by securing diverse input, building consensus, establishing collaborative support, and developing implementation strategies. Some components can be achieved administratively through the teamwork of our statewide CTE networks and through the Carl D. Perkins State Plan. Others will require Board of Regents consideration and approval to achieve full effectiveness.

Student-Centered Priorities

The CTE Future Directions work group has identified four student-centered priority areas that target integrated academics, flexibility in meeting graduation requirements, recognition of CTE achievement, and the linkages between learner levels. The student-centered priorities respond to the needs of a wide range of students including: English language learners; the “forgotten middle” (those students not currently targeted for services because they fall neither at the low nor the high end of achievement); students with disabilities; and accelerated students. Specific actions, of course, need to be taken at the local level to ensure the full participation of this wide range of students.

1. Integration of Academic and Technical Content Must be Available to All Students.

Currently students enrolled in approved CTE programs have access to integrated academic coursework. This flexibility has helped a number of those students to stay in school and graduate.

Proposed Action Steps:

- Require all students to take an integrated course that incorporates technical knowledge and/or includes a career focus. Both academic and technical studies can contribute to each other's delivery of content through concepts of integration and reverse integration.
- Permit an approved integrated CTE course to be used as preparation for the associated Regents examination.
- Develop the instructional supports and strategic interventions needed for students from diverse populations to fully participate in their chosen CTE programs.
- Develop curriculum guidance that would incorporate technical content in academic courses in various subjects across learner levels.
- Provide targeted pre-service and in-service professional development to teachers to ensure understanding of the connections between New York State learning standards in Career Development and Occupational Studies and various other tested and non-tested content areas.
- Increase CTE opportunities for students by creating continuity and greater collaboration between local high school programs and those at the BOCES.

- Explore the establishment of non-traditional educational settings to deliver programs with pathways towards high school graduation that reflect 21st century career themes.

2. Rigorous Technical Studies and Assessments Must be Recognized as a Viable Component of Graduation Requirements.

Students now enrolled in CTE approved programs take an industry-recognized technical assessment that is in addition to the current graduation requirements.

Proposed Action Steps:

- Develop options that acknowledge and properly recognize student achievement in CTE, such as the passing of a technical assessment, as a factor in meeting graduation requirements.
- Institute a CTE required elective or other rigorous "CTE Experience" as part of a complete high school education.
- Permit additional graduation credit (currently limited to two credits) for student participation in recognized work-based learning experiences.

3. Achievement in CTE should be Included in Documentation of a Student's Readiness for College and Career.

A diploma documents the attainment of academic skills. Comparable recognition does not exist for the acquisition of skills that are needed to succeed in high wage, high skill, high demand 21st century occupations and careers. Additional forms of evidence need to be available to document all of what students know and are able to do.

Proposed Action Steps:

- All students should be required to develop graduation plans that include career exploration and academic and technical skill proficiency goals aligned with demands of a dynamic labor market.
- All students should pursue graduation through a "dual concentration" approach. The dual concentration approach requires all students to create an electronic career skills portfolio as soon as they start to build academic credits towards graduation. This portfolio will chart the acquisition of work and life skills that will follow them through high school and beyond. An emphasis on the interrelationship of academic and 21st century skills will show students' connections between academics and career and work readiness skills. Dual concentration is for all students.
- School transcripts should specifically list CTE programs of study successfully completed by students and other achievements such

as industry-recognized certifications, work study, business and community service, or involvement in school and student leadership organizations.

4. Linkages Between Learner Levels Must be a Component of Student Graduation Plans.

Career and technical education can be an important vehicle to teach vital academic and 21st century skills needed for success in school, college, and the workplace. If students start a career skills exploration process in middle school, they will be able to better chart their course through high school and postsecondary studies.

Proposed Action Steps:

- Provide professional development for guidance counselors and other school staff in developing student graduation plans. Encourage parent involvement and engagement in the career planning process.
- Formalize the use of the Department of Labor's CareerZone online tools to enhance required graduation plans for all students.
- Develop middle level intervention strategies with parent involvement that employ CTE as the vehicle for academic skill acquisition for at-risk populations.
- Promote more effective articulation of secondary to postsecondary CTE and create more dual credit options in secondary CTE programs so that students can successfully transition to postsecondary studies.
- Share through a statewide CTE center best practices for linking learner levels (i.e., achieving seamless transitions).

System-Focused Priorities

The CTE Future Directions Initiative has developed two systemic priorities: the transition to a new robust CTE data collection system, and the review and enhancement of CTE teacher preparation and certification.

1. Transitioning to the Student Information Repository System (SIRS).

The systemic demand that ties all of our priorities together is the need for more complete CTE data. A more accurate picture of CTE program performance will guide CTE and academic program development. Full participation in CTE data reporting

through the statewide SIRS (Student Information Reporting System) will help identify the practices and organizational models that contribute to student success.

Proposed Action Steps:

- Make formal training widely available to BOCES, the Regional Information Centers (RICs), and local education agencies to properly coordinate and report CTE data.
- Use SIRS data to provide more detailed information about CTE student performance on school report cards to encourage community discussion on the effectiveness of local programs.
- Establish a CTE Statewide Data Center to foster, promote, and support best practices in generating and making effective use of complete CTE data.

2. CTE Teacher Preparation and Certification Should Change to Meet the Need for Qualified CTE Teachers.

SED continues the process of reviewing current certification requirements to identify options for increasing flexibility without compromising quality. Successful implementation of the student-centered priorities depends on strengthening instruction from a systems perspective focusing on teacher quality, pre-service and professional development, and teacher recruitment and retention.

Proposed Action Steps:

- Develop and implement strategies that promote the improved recruitment, preparation, certification, and retention of CTE teachers.
- Focus teaching certification requirements on content and pedagogy so that CTE teachers are experts in teaching their respective disciplines and are able to provide effective instructional practices, such as differentiated instruction, to meet the individual needs of students.
- Develop innovative, job-embedded professional development models focused on adding pedagogy and classroom management skills to address the problem of teacher candidates with advanced degrees who cannot teach CTE because the combination of their educational and work experience does not match the current requirements for CTE certification.
- Explore opportunities for teachers and teacher candidates to secure relevant dual certification to promote interdisciplinary teaching and learning.

Next Steps: Defining Stakeholder Engagement

The CTE work group has developed these priorities for the future direction of CTE in New York State. Access to effective CTE experiences will allow students to add relevance to their education and define their excellence. How can we provide students with additional options to meet graduation requirements? How can we ensure that students succeed in school, college, and the workplace? Successful implementation of the proposed action steps will permit CTE to contribute to the Board of Regents' priorities of closing the achievement gap, reducing the dropout rate, increasing the graduation rate, and improving student achievement at all levels.

Background and Basis for this Call to Action

In 2001 the Board of Regents approved a policy for Career and Technical Education that provided greater flexibility in curriculum and courses for high school students who wanted to pursue CTE programs and also meet graduation requirements. At the time, implementation of learning standards and revised graduation requirements created time constraints that limited students' ability to participate in CTE. The policy offered students the option of meeting the new graduation requirements through CTE programs that provided academic credits.

Today the CTE policy is a successful option for students pursuing both academic and technical achievement with over 900 approved CTE programs statewide. While successful at providing many students an option for graduation, the CTE policy's intention to broaden access to CTE programs so that all students would achieve greater success in postsecondary education and in an increasingly competitive global workforce, has not materialized. Structured CTE programs at LEAs (local education agencies or school districts) have been diminished, while programs at BOCES have maintained stable enrollments. Recent economic conditions have exacerbated the pressure on LEAs to downsize their programs and reduce student involvement in BOCES CTE programs at a time when there is a national call for greater emphasis on science, math, and technical studies that will meet the need for a highly skilled workforce to bolster the economy.

The CTE work group was established to identify more effective strategies for using CTE to raise student graduation rates and enhance postsecondary education and workforce preparation. The goal of the work group was to identify priority areas and key action steps to move CTE in the proper future direction required for all NYS students to be successful. The work group reviewed previous reform and program improvement initiatives of the Board of Regents and the State Education Department. It also analyzed key resources, including the recommendations of the New York City Mayoral Task Force on Career and Technical Education. The Five-Year State Plan submitted to the U.S. Department of Education under the federal Carl D. Perkins Career and Technical Education Act of 2006 served as a touchstone for planning efforts. This State Plan responded to the requirements of the Act that CTE programs in the State prepare students at both secondary and postsecondary levels to succeed in high skill, high wage, and high demand occupations. In addition, the work group reviewed economic and workforce trend data supplied by the NYS Department of Labor and other entities to map where CTE offerings need to better align with areas of increasing workforce demand.

The CTE work group then engaged in dialogues with four national researchers that resulted in the initial drafting of a "Discussion Framework." This Framework included possible actions for review and feedback from a diverse group of New York State CTE stakeholders. The participating researchers accessed by the Work Group were:

Appendix

- Anthony Carnavale, Director, Center on Education and the Workforce at Georgetown University;
- Jim Stone, Director, National Research Center for Career and Technical Education;
- Gary Hoachlander, President, ConnectEd: The California Center for College and Careers; and
- Betsy Brand, Executive Director, American Youth Policy Forum.

Electronic surveys based on updated drafts of the Discussion Framework were conducted to ensure ongoing input from diverse stakeholders and relevant professional groups. In addition, in July 2009, the work group met in Albany with two Reactor Panels of NYS CTE Stakeholders who provided input and feedback on the draft Discussion Framework so as to shape and refine the entire Future Directions Initiative. This diverse group of Reactor Panel members included:

- Ellen Bieber, Counselor, Somers Central School District
- Dr. Jessica Cohen, District Superintendent, Onondaga-Cortland-Madison BOCES
- Sherrion Elmore, CTE Chairperson, Smithtown School District
- Bert Flugman, CUNY Center for Advanced Study in Education
- Cynthia Fowlkes, Principal, Academy of Innovative Technology, NYC
- Dr. Dennis Golladay, Vice Chancellor for Community Colleges, SUNY
- Kathy Heinle, CTE Director, Buffalo City School District
- Terry Hughes, Perkins IV Director, SUNY Cobleskill
- Howard Korn, CTE Director, Ulster BOCES
- Kevin MacDonald, Superintendent of Schools, Royalton-Hartland Central School District
- Carlos Molina, Academic Special Programs Dean, CUNY Hostos Community College
- Rosemarie Posillico, Director of CTE, Burnt Hills-Ballston Lake Central School District
- Brian Pulvino, Director of Special Education, Syracuse City School District
- Gene Silverman, CTE Director, Nassau BOCES
- Stephanie Stewart, Executive Director, Association of Career and Technical Education Administrators (ACTEA)

New York State Career & Technical Education: Fact Sheet

New York State Career and Technical Education is committed to providing high-quality CTE opportunities for all students. New York State's CTE delivery system consists of over 1,100 CTE providers, serving over one million students in school districts, BOCES, and postsecondary institutions.

CTE studies are organized in New York in the following content areas:

- Agricultural education
- Business & Marketing education
- Family & Consumer Sciences education
- Health Occupations education
- Technology education
- Trade, Technical & Industrial education

CDOS Standards and 21st Century Skills

The Career Development and Occupational Studies (CDOS) Standards are the framework for delivery of 21st century skills. These skills are demonstrated by students through achievement of the standards.

- 1 Career Development- Students will be knowledgeable about the world of work, explore career options, and relate personal skills, abilities and aptitudes to future career decisions
- 2 Integrated Learning- Students will demonstrate how academic knowledge and skills are applied in the workplace and other settings
- 3a Universal Foundation Skills (SCANS)- Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace
- 3b Career Majors- Students who choose a career major will acquire the career specific technical knowledge/skills necessary to progress toward gainful employment, career advancement, and success in post-secondary programs

The 2001 Regents CTE Policy

The use of Career and Technical Education as a means by which students can achieve state academic standards is a core concept underpinning the 2001 Regents Policy on Career and Technical Education. The Policy created the Program Approval Process, which has raised the bar for program quality. Approved CTE programs:

- incorporate secondary education and postsecondary education elements;
- include rigorous content aligned with challenging academic standards, and relevant career and technical content in a progression of courses that align secondary education with postsecondary education to prepare students for success in postsecondary education and beyond;
- include articulation agreements between secondary and postsecondary programs—including the opportunity for secondary education students to participate in dual or concurrent enrollment programs or other ways to acquire postsecondary education credits; and
- lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree.

Since the adoption of the CTE Policy in 2001 over 900 CTE programs have received approval under the Regents Policy.

For more information please visit:

The website for the Career and Technical Education Office at: <http://www.emsc.nysed.gov/cte/>

You can also telephone the CTE Office at: (518) 486-1547

A CTE Moodle with more information on the CTE Future Directions Initiative is available at: <http://cte-forum.nyit.edu/index.php>

General Information on NYSED can be obtained at: <http://www.nysed.gov/>