

NEW YORK STATE EDUCATIONAL CONFERENCE BOARD



New York students deserve a Career and Technical Education (CTE) pathway to high school graduation

The New York State Educational Conference Board — comprised of the seven leading educational organizations representing school boards, parents, superintendents, teachers, school administrators, business officials and other educators — is calling on policymakers to introduce multiple pathways to high school graduation, **including** a career and technical education pathway.

Background

Among the most important obligations of today's education system — and indeed, today's society — is the preparation of our youth to grow into productive and successful citizens who contribute to their communities in positive ways. This charge includes ensuring all students graduate from high school ready to succeed in college, a career or both.

However, in an increasingly complex global marketplace that requires different skills than were necessary even for the last generation, schools have struggled to keep pace with industry and employer demands. Yes, schools across the country are raising academic standards; but too few have been able to take a broader approach and implement initiatives that provide students with both the skills and knowledge they need to either enter college without remediation or to enter careers that allow for a comfortable standard of living. This includes not only core academic skills, but also employability skills and job-specific, technical knowledge.

Consider these statistics:

- In New York, if current trends continue, the state will have a deficit of 350,000 employees by 2020 for mid-level skills jobs, which are considered to be those requiring more than a high school diploma but less than a four-year college or university degree. (Source:

RECOMMENDATIONS AT A GLANCE

Recommendation 1

Give New York's students access to fully funded programs that allow students access to multiple pathways to high school graduation, including a new CTE-based pathway.

Recommendation 2

Give students the opportunity to earn a New York State Regents diploma by substituting one CTE assessment for one of the five required Regents exams.

Recommendation 3

Align CTE courses to both state and industry standards.

Recommendation 4

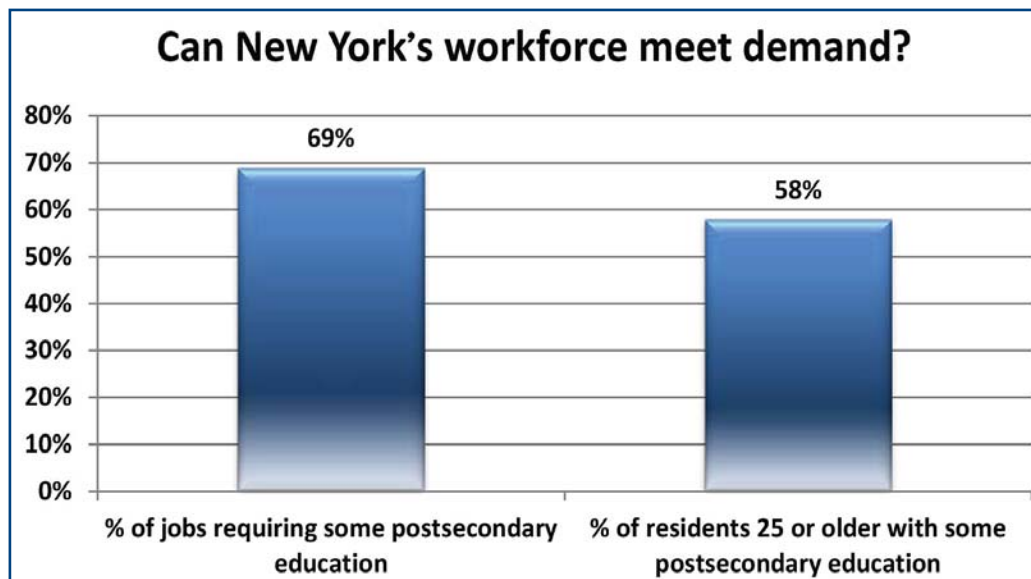
Ensure that CTE course content provides for a balanced integration of technical and academic knowledge.

Recommendation 5

Create data collection systems necessary to drive continuous CTE program improvement and create new student opportunities while assuring necessary privacy protections.

Chmura Economics and Analysis, 2013). Without significant changes in education, this challenge will continue, as 25 percent of the state's students are not graduating in four years and just 37 percent are considered college- and career-ready, according to 2013 New York State Education Department data.

- According to the U.S. Bureau of Labor Statistics, youth employment rates have decreased at an alarming rate since 1998. Just 45 percent of 2012 high school



tives rated their staff as above average in these skills. The Georgetown University report entitled *Recovery: Job Growth and Education Requirements Through 2020* yields similar information, reporting, “Of all occupations, 96 percent require critical thinking and active listening to be either very important or extremely important to success.” Leadership and analysis skills were also identified as vital.

The changing tide

graduates who did not immediately enter college were able to find a job and only half of those jobs were full-time. In addition, youth (aged 16-19) who dropped out of high school have a 30 percent employment rate. The picture is even more bleak for low-income and minority students. Only 5 percent of African-American high school graduates from the class of 2012 seeking full-time employment were able to find jobs.

- The unemployment rate for American youth is nearly double the rate for older workers.
- According to the National Association of Manufacturers, “despite high unemployment, 600,000 jobs [in advanced manufacturing] remain unfilled because of a lack of skilled talent.” Further, manufacturers’ “ability to succeed in the highly competitive global marketplace depends on access to an educated, flexible and knowledge-based workforce. In turn, employees need the education and skills to support a robust and dynamic manufacturing economy.”
- A critical skills survey conducted by the American Management Association in 2010 showed that, nationwide, 90 percent of executives indicated that “soft skills” (e.g., critical thinking, communications, collaboration) are vital for job success. Yet, fewer than half of the execu-

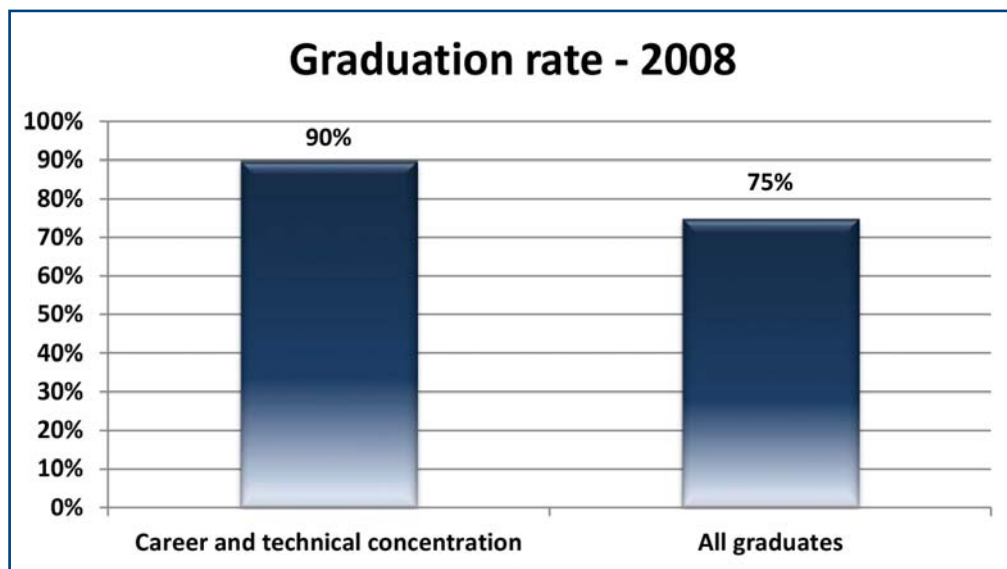
Armed with these statistics and an awareness of emerging global marketplace demands, progressive education professionals have started to take action. Among the positive steps is the implementation of integrated career and technical education (CTE) programs — a research-based approach that has been proven effective in preparing students for future success. Members of the Educational Conference Board urge policymakers to build on this success by giving students the option to choose multiple pathways to graduation.

Today’s career and technical education programs go far beyond teaching a narrow skill set that would allow for an entry-level job (i.e., this isn’t your father’s vo-tec program). As an indication of the fundamental shift in philosophy, the previous descriptors “vocational and technical” have been updated to “career and technical” education. High-quality CTE initiatives are preparing students for colleges and

careers by equipping them with a combination of: (1) *core academic skills* and the ability to apply those skills to concrete situations in order to function in the workplace and in routine daily activities; (2) *employability skills* (such as critical thinking and responsibility) that are essential in any career area; and (3) *job-specific, technical skills* related to a specific career pathway

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(Source: Association for Career and Technical Education). For many students, CTE programs are the reason they remain in school, as the applied learning approaches help them see the relevance of what they're doing in the classroom and how this connects to future employment opportunities. For other students, CTE programs reinforce their desire to pursue particular college majors or career paths or to earn industry certifications.



The statistics outlined earlier illustrate the need for expanded implementation of CTE initiatives — including a CTE pathway to graduation. Such a change can provide a more favorable forecast for New York’s students. Consider these statistics:

- CTE programs can reduce drop-out rates. In a survey cited in *The Silent Epidemic* (Bridgeland, et. al.), 81 percent of respondents said that increasing learning opportunities that make classroom work relevant to the real world would have inspired them to stay in school.
- Pupils attending schools that have highly integrated and rigorous academic and CTE programs show significantly higher achievement rates in math, reading and science compared to students who attend schools with less integrated programs.
- Students who concentrated their studies in CTE programs increased their 12th-grade scores on the National Assessment of Education Progress (NAEP) exams by 11 points in math and eight points in reading. In comparison, students who took no CTE courses did not improve on their mathematics scores at all and improved reading scores by four points.
- CTE students are better prepared for college and ca-

80 percent of students in college prep curricula with rigorous CTE programming met college and career readiness goals compared with 63 percent of students who took the college preparation route without CTE integration.

reers. A recent High Schools that Work Assessment from the Southern Regional Education Board, shows that 80 percent of students in college prep curricula with rigorous CTE programming met college and career readiness goals compared with 63 percent of students who took the college preparation route without CTE integration.

- CTE students learn the skills that today’s employers demand. In fact, according to the report *Career and Technical Education Pathway Programs, Academic Performance and the Transition to College and Career*, “CTE students are significantly more likely than their non-CTE counterparts to report that they developed problem-solving, project completion, research, math, college application, work-related, communication, time management and critical thinking skills during high school.”

- The National Center for Education Statistics data shows that 80 percent of high school CTE graduates who went on to college earned an industry cre-

credential or were still enrolled in college two years later. Those who obtained a credential or an associate’s degree earned \$4,000 to \$19,000 more annually than graduates with a humanities associate’s degree.

In addition, CTE pathways can address the needs of the

fastest-growing industries in the state and nation, including those in the healthcare, renewable energy and STEM (science, technology, engineering and math)

fields — thus helping to close a significant skills gap by providing rigorous, industry-aligned instruction and experiences.

ECB RECOMMENDATIONS REGARDING A CTE PATHWAY

With this “big picture” information on the promise of career and technical education to prepare students for college, career, or both, the Educational Conference Board endorses the following actions:

Recommendation 1: Career and Technical Education (CTE) Pathway to Graduation.

Give New York’s students access to fully funded programs that allow students access to multiple pathways to high school graduation, including a new CTE-based pathway.

To directly address the college- and career-readiness needs of today’s students, improve the rate of successful school completion, increase student engagement and address the nationwide skills gap, schools must expand opportunities for students to learn 21st century skills and gain knowledge directly related to their career interests and strengths. This can be achieved by establishing a CTE-focused graduation option in New York.

In order to ensure equitable student access to the proposed CTE pathway, this initiative should be fully funded using state and federal resources. Furthermore, members of the Educational Conference Board support funding options that include, but are not limited to: (1) increasing the portion of BOCES’ salaries that qualify for state aid reimbursement from the 1990 level of \$30,000; (2) increasing the \$3,900 per pupil cap on special services aid for the Big 5 and other non-component school districts; (3) maintaining federal Perkins funding; (4) increasing state aid to levels that are adequate to allow schools to prepare students for college and careers and (5) aligning funding levels with CTE curriculum requirements.

Recommendation 2: The 4:1 Regents Exam Model. Give students in New York the opportunity to earn a Regents diploma by successfully passing one CTE assessment in lieu of one of the five required Regents exams.

Members of the New York State Educational Conference Board (ECB) support providing students with the op-

tion to replace one of the five Regents exams with a CTE industry-based assessment that is related to their career interests. This assessment should be equal to (or greater than) the rigor of Regents exams.

Recommendation 3: CTE Pathway Alignment to Industry Standards. Align all CTE courses with state learning standards and levels of rigor practiced in the associated industry/career.

The new CTE pathway must prepare students to enter and succeed in their chosen career field. To this end, CTE class content and assessments should be developed collaboratively by the education community and industry professionals and updated regularly to reflect the highly complex, changing and/or emerging marketplace.

Recommendation 4: Integration of Academic and Technical Knowledge. Ensure all CTE course content provides for a balanced integration of technical and academic knowledge.

All CTE class content should allow students to master core academic content through applied instructional approaches, as well as gain the 21st century and employability skills necessary for success in a chosen career field.

Recommendation 5: CTE Program Data Collection. Support the development of the CTE pathway by creating systems for collecting valid, reliable data necessary to drive continuous program improvements and create new educational opportunities for students while protecting student and staff privacy.

Currently, collection of data on CTE participation and outcomes is scarce and inadequate and, when done, is often unsystematic, producing limited information upon which to base programmatic evaluations or identify needed revisions. Therefore, the introduction of a CTE pathway in New York should be accompanied by robust systems and procedures for collecting and analyzing data to allow proper evaluation of CTE programs that will inform subsequent improvements.