



THE STATE EDUCATION DEPARTMENT / THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY,
NY 12234

TO: P-12 Education Committee
College and Career Readiness Working Group

FROM: John B. King, Jr.

SUBJECT: Career and Technical Education Approval Process

DATE: April 26, 2011

AUTHORIZATION(S):

SUMMARY

Item for Discussion

What is the process by which Career and Technical Education (CTE) programs become approved under provisions of §100.5(d)(6) of the Commissioner's regulations?

Reason(s) for Consideration

Review of Policy.

Proposed Handling

This question will come before the P-12 Education Committee and the College and Career Readiness Working Group for discussion at the May 2011 meeting.

Background Information

In 2001, the Regents approved a CTE policy that permitted students to earn up to one unit each of required credit in English, science, and mathematics, and the combined unit of economics and government through integrated CTE courses in approved CTE programs. This option allowed students to pursue career and technical education through coursework that also offered credit for commencement-level academic skills and content.

Program approval is the way the State Education Department ensures that local CTE programs meet the policy requirements approved by the Board of Regents. Prior to submitting an application to the Department, both a self-study and an external review committee will have reviewed the program. The applicant's chief administrative officer

and board of education president sign the application certifying that the CTE program seeking approval provides:

- rigorous curriculum content which is non-duplicative and provides the student with a coherent sequential program of study;
- curriculum aligned with state and national learning standards and state and national skill standards;
- secondary curriculum aligned with postsecondary education;
- faculty which is state certified with the appropriate academic and/or technical certification;
- a technical assessment which meets current industry standards;
- postsecondary articulation agreements constructed to provide students with direct benefit, such as college credit or advanced standing;
- work-based learning opportunities for all students; and
- a data reporting infrastructure developed to report student performance in order to evaluate success on Regents examinations, approved alternatives, technical assessments, and placement in higher education, employment or the military.

The Department's CTE program staff review each application to ascertain that all components of an approved CTE program are in place. For example, staff review the local choice of a technical assessment. Applicants select an appropriate nationally-recognized technical assessment based on industry standards to measure students' technical proficiency. The assessment, which must be available to students enrolled in the approved program, consists of three parts: written, student demonstration of skills, and student project. Successful completion of the technical assessment is required for a student to earn a technical endorsement on the high school diploma, but is not required for high school graduation. A number of program assessments lead to industry-recognized certifications (see Attachment A).

Once a program is approved, it remains so for five years at the conclusion of which, application can be made for reapproval. Currently there are 910 CTE programs with current approval; 684 of which offer students at least one integrated academic credit.

The integrated credit option available via the CTE Program Approval Process has been effective for the BOCES delivery model inasmuch as it resolves scheduling problems brought about by the 2001 increase in graduation requirements. Consequently, the majority of BOCES CTE programs have gone through the approval process. Benefits of offering integrated academic credit through approved CTE programs go beyond solving scheduling problems. An integrated model that combines CTE content with academic content enables students to make connections between academics and the "real world." Contextualized learning connects academic content with CTE content, making the subject matter more meaningful to students.¹

¹ Stone, J. R., III, Alfeld, C., Pearson, D., Lewis, M. V., & Jensen, S. (2006). Building academic skills in context: Testing the value of enhanced math learning in CTE (Final report). National Research Center for Career and Technical Education, University of Minnesota. Retrieved April 25, 2011 from: <http://www.aypf.org/forumbriefs/2007/Resources/MathLearningFinalStudy.pdf>

The majority of LEA CTE programs, however, have not gone through the approval process. Students who take all of their CTE courses in the LEA generally are able to schedule and complete academic graduation requirements independently of their CTE coursework. Students in these LEA CTE programs earn CTE credits to fulfill the total number of credits needed for graduation. The benefits of integrating CTE content with academic content are not yet being fully realized in the LEAs.

Next Steps

Department staff will review the existing Regents CTE policy to identify ways to expand access to high-quality CTE programs. Staff will return to the Regents with considerations for policy decisions.

Descriptions of Sample Technical Assessments for CTE Students

Aviation

Federal Aviation Administration (FAA) Certification

Students in the two-year Ulster BOCES aviation program complete the classroom and air flight hours required by the Federal Aviation Administration to qualify for the FAA Private Pilot examination. The FAA private pilot examination fulfills two of the three required parts of a technical assessment in a CTE approved program. The FAA private pilot examination consists of a written test (written requirement), an oral test, and a flight test (student performance of skills). Once an FAA inspector has examined the student's proof of experience and deemed it adequate, the student is able to take the online written exam. The oral exam and the flight test are given by an FAA examiner. Aviation students prepare individual career portfolios to complete the third required part of a technical assessment (student project) required in this approved CTE program.

Computer Systems and Networking

Cisco Certified Entry Networking Technician (CCENT)

Students in many of the CTE approved computer systems and networking programs, such as at Tompkins-Seneca-Tioga BOCES, may take Cisco Career Certification Exam in CCENT as the technical assessment for their program. The two-hour online CCENT exam consists of objective questions and simulations and satisfies the written and student performance of technical skills requirements for a technical assessment. Successful completion of the CCENT exam certifies the student as an entry-level networking technician. This is the first level of CISCO certification and leads to eight different career pathways, such as network design and network security, and to 4 additional levels of certification. Networking students at Tompkins-Seneca-Tioga BOCES complete a project developed with input from local business partners as the "student project" part of their technical assessment.

Medical Assisting

National Occupational Competency Testing Institute (NOCTI) Job Ready Assessment - Medical Assisting

NOCTI Job Ready assessments are widely used as the technical assessments for approved CTE programs as CTE administrators statewide select NOCTI Job Ready assessments in over 80 different titles annually. NOCTI Job Ready assessments are designed to ascertain whether a student has the knowledge and skills necessary to perform job duties in a safe and effective manner on his or her first day of work. The Levittown School District has selected the NOCTI Medical Assisting Job Ready assessment for its medical assisting program. Typical of the NOCTI Job Ready assessments, medical assisting requires students to complete a three-hour written exam and a two-hour performance exam. The written component can be administered online, or schools can order it in hardcopy. The performance component is evaluated by trained external evaluators and requires students to demonstrate technical skill competency for six different medical assisting tasks. Students who meet or exceed the cut scores for the written and performance components are issued a NOCTI Job Ready Certificate for Medical Assisting. Levittown students complete a consortium-developed final project to accomplish the third part of their technical assessment.

Industry Certification and Credential Opportunities for CTE Students

Automotive Technology

- Automotive Service Excellence (ASE)
- National Automotive Technicians Education Foundation (NATEF)
- Mobile Electronics Certified Professional (MECP)

Aviation

- Federal Aviation Administration (FAA) Certification

Computer Programming and Web Design

- Internet and Computing Core Certification (IC3)
- Microsoft Office Certifications: Word, Excel, Access, and PowerPoint
- Web Communication: Adobe Dreamweaver Creative Suite 3
- Rich Media Communication
- Adobe Flash Creative Suite 3
- Visual Communication: Adobe Photoshop Creative Suite 3

Computer Systems and Networking

- CompTia A+ Computer Repair Certification
- Cisco Certified Entry Networking Technician (CCENT)
- Cisco Certified Network Administrator (CCNA)

Construction Technology

- National Center for Construction Education and Research (NCCER) Core Certification
- Occupational Safety and Health Administration (OSHA) 10-Hour Safety Course
- Heating Ventilation and Air Conditioning (HVAC) Excellence Certification

Cosmetology

- NYS Temporary Cosmetologist License

Culinary

- ProStart- Level 1 and 2
- ServSafe;

Early Childhood Education

- Child Development Associate (CDA)
- American Red Cross: First Aid, Cardiopulmonary Resuscitation
- Automated External Defibrillator, Adult, Child and Infant Certifications

Heavy Equipment Repair and Operation

- National Center for Construction Education and Research (NCCER) Level One Heavy Equipment Operations
- Test Preparation for Commercial Driver's License, Class B-Obtainable at age 18

Motorsport Fabrication

- National Institute for Metalworking Skills: Machining Level 1 Certification

Nursing Assisting

- New York State Department of Health: Residential Health Care Facility Nurse Aide Certification
- American Red Cross: First Aid, Cardiopulmonary Resuscitation
- Automated External Defibrillator Adult, Child, and Infant Certification

Outdoor Power Equipment Technology

- Engine Service Association
- Outdoor Power Equipment Certified Technician- Two-Stroke Engine and Four-Stroke Engine
- Briggs and Stratton Master Service Technician
- Equipment and Engine Training Council (EETC) Certification

Public Safety and Justice

- New York State Security Guard Certification
- American Red Cross: First Aid, Cardiopulmonary Resuscitation (CPR)
- Automated External Defibrillator (AED): Adult, Child, and Infant Certification
- First Responder Training: Federal Emergency Management Administration (FEMA)
- Office of Homeland Security: Incident Command Systems (ICS 100) and (ICS 200)
- Weapons of Mass Destruction Certifications (WMD160)
- Incident Command Radio Telecommunications Certification
- Basic Traffic Control Certification (Fire Police)
- American Firefighters Trainers Association 1001 Certification
- Occupational Safety and Health Association (OSHA) Personal Protective Equipment and Blood-Borne Pathogens Training Certification