Career and Technical School Education:

What Special Educators Need to Know

For a secondary student with a disability, enrolling in a Career and Technical Education Center (CTC) or high school career and technical education (CTE) program is one option. There, secondary students with disabilities can pursue employment goals and/or continued education or training as a goal after high school. To make certain that a CTC or CTE program is the appropriate choice, the student, the student's family, and the rest of the Individualized Education Program (IEP) team should ensure that the student's strengths and needs are aligned with CTE programs. As a valuable member of that team, there are some details you need to know.

What is Career and Technical Education (CTE)?

The key to a successful and productive society is found in maintaining a highly qualified, skilled, and educated workforce. Career and technical education is dedicated to providing secondary students with the training and skills they need to be successfully employed after graduation or to advance to postsecondary education. The goal of CTE is to prepare learners for careers that require additional education after high school. Typical programs are associated with 16 career clusters such as architecture and construction, human services, information technology, manufacturing, and business management and administration.

Pennsylvania has 84 CTCs and approximately 200 school districts offering career and technical education. It is required that CTE programs are offered as a sequence of courses supplemented by work-based experiences such as internships or apprenticeships. The work-based experiences are offered during the senior year as long as a student meets the local requirements.

How are approved CTE programs held accountable for their students' success?

Each school providing CTE is accountable to provide instruction and experiences to their students so that these students are eligible to sit for industry certification examinations or earn the industry certification during the CTE program, where applicable. Industry certifications are portable certificates that enhance a holder's opportunity for employment.

Students with IEPs must be included in the testing process. The Individuals with Disabilities Education Improvement Act (IDEA 2004) and the Improving America's Schools Act mandate that students with disabilities be included in state- and district-wide assessments. If a student with an IEP participates in the Pennsylvania System of School Assessment (PSSA) statewide testing, then that student will also participate in the occupational competency testing program. This program consists of standardized technical assessments, given in a variety of occupational fields, which mostly include multiple choice and performance components. Every school district has the expectation that their students achieve proficiency or higher on the state academic assessment.

Is career and technical education only for students planning to get a job immediately after high school?

No. Career and technical education is designed to continue at a postsecondary level, 1-year, 2-year or 4-year. The newly implemented Programs of Study require that students continue their education beyond high school to include at least two years of postsecondary education in the same or related career area. The Programs of Study operate under a statewide articulation agreement that provides secondary CTE graduates with college credit for secondary coursework when all requirements are met.

Fifty-three percent of students with disabilities have competitive employment as a goal for the period immediately following high school, 40 percent have a goal of postsecondary vocational training and/or continuing education. Career and technical education provides a foundation of skills that enables high school graduates to be gainfully employed — either full-time immediately after high school or in preparation for college. Nearly two-thirds of all high school graduates of career and technical schools enter some form of post-secondary program.

How do students with special needs benefit from CTE Programs?

National Longitudinal Transition Survey 2 (NLTS2) data show that about 60 percent of youth with disabilities hold jobs at some time during high school and gain valuable experience in the world of work. NLTS2 findings showed that students who were enrolled in occupationally oriented CTE were significantly more likely than nonparticipants to do well on school and post-school outcomes. These students had significantly lower absenteeism from school and a lower probability of dropping out of school. CTE training was related to a higher likelihood of finding a paid job and of attending a postsecondary CTE school in the early years after high school.

Data and Accountability for Performance Improvement

The Pennsylvania Department of Education (PDE) in recent years has fully implemented the Pennsylvania Information Management System (PIMS). This system utilizes a unique student identifier commonly referred to as the PASecureID. This identifier now enables PDE to pinpoint and analyze data for all federally mandated subgroups, including students with IEPs in Career and Technical Education Centers. PDE's baseline data year is 2007-2008, which established proficiency results in both reading and math PSSA scores. Through data collection in PIMS, PDE will continue to monitor annual growth in proficiency for CTE students. Recent Adequate Yearly Progress (AYP) results for this subpopulation are making gains according to Pennsylvania Value Added Assessment System (PVAAS) data. Local districts hold the responsibility to improve reading and math scores through their local remediation programs. In addition, Transition Services required in the State Performance Plan need to be monitored insuring appropriate supports, accommodations, and modifications are being offered and implemented for all students with IEPs who are attending area Career and Technical Education Centers.

Who decides if a student should consider CTE?

The decision is part of the IEP process and is made by the IEP team, including the student. Transition planning (preparing for a student's post-school life) occurs within the context of the IEP. If the student has employment as a postsecondary goal, the team considers whether or not the student would benefit from a CTE program, or receive employment training through an alternative method such as work-based learning activities.

The team bases this decision on the results of assessment of the student's interests, strengths, and preferences.

With regard to the education of students with IEPs in career and technical education programming, faculty from the CTE programs will participate as members of the IEP team. CTCs offer rigorous academic content tied to technical subject matter that can be challenging for many students and that needs to be carefully reviewed.

IEP team meetings, when scheduled by the school district, must give timely notice to the career and technical education representative assigned and shall be attended by the career and technical education representative. This is required by Pennsylvania School Code (Chapter 339.21(5)(6)).

What can you do to prepare for a student's enrollment in CTE?

- Investigate the application process used for nondisabled students planning to enroll in any state approved CTE program. Connect the student with disabilities to those same steps.
- Make arrangements for the student to visit the CTE program. If possible, the student should attend classes in different career clusters targeted to the student's specific interest areas.
- As part of the IEP process, the student, parents/guardians, and teacher should review the competencies and task lists for the desired program. There should be a match between these and the student's interests and aptitudes as determined by assessment. As needed, accommodations and adaptations should be identified.
- Be sure that the IEP details the specially designed instruction, modifications, and adaptations that the student needs to be successful in this new setting. Cite specific examples of strategies and techniques that have allowed the student to progress toward the student's IEP goals.
- Establish a procedure for communicating with CTC staff after the student enrolls in the program. This will allow CTC staff to discuss progress toward the student's IEP goals as well as to problem-solve collaboratively.

What should a student do if considering enrollment in a CTE Program?

- Participate in formal and informal assessments that target interests, strengths, and preferences. In addition to the standardized formal tests, examples of informal assessments include curriculum-based assessments, observational reports, situational assessments, structured interviews, personal-future planning activities, and functional skill inventories. Transition assessment should provide a match between the student's abilities and CTE programs and occupational outcomes. This assessment can be provided by either the school district operating the CTE program or the CTC.
- Be involved in activities identified in the Pennsylvania Academic Standards for Career Education and Work such as: identifying interests, preferences, and abilities; participating in career days; developing an awareness of career acquisition (e.g., preparing resumes, using the internet, interviewing) and career retention and advancement (e.g., communication, personal appearance, good attendance, punctuality).
- Be aware of skills needed for specific career and technical programs of interest.

What questions should the IEP team discuss if a CTC is being considered?

- Has the student expressed an interest in attending the CTC?
- Does the IEP include appropriate assessment data such as reading and math levels, functional performance levels, and mobility?
- Do the student's interests, strengths, and preferences correlate with a CTE Program of Study?
- Has the IEP team reviewed CTE curricula and task requirements as outlined in the state developed Program of Study task grid?
- Does the IEP detail the specially designed instruction, modifications, and accommodations that the student will need to be successful in the CTE Program of Study?
- Is there a process for coordination and articulation of student progress between academic and career education contacts?

Resources

Brinckerhoff, L. C., McGuire, J. M., & Shaw, S. F. (2002). Post-secondary education and transition for students with disabilities. 2nd Ed. Austin, TX: Pro-Ed.

Marder, C., Cardoso, D., & Wagner, M. (2003). Employment among youth with disabilities. In M. Wagner, T. W. Cadwallader, & C. Marder (with R. Cameto, D. Cardoso, N. Garza, P. Levine, & L. Newman). Life outside the classroom for youth with disabilities. A report from the National Longitudinal Transition Study-2 (NLTS2). Menlo Park, CA: SRI International.

National Secondary Transition Technical Assistance Centerwww.nsttac.org

Pennsylvania Department of Education, Bureau of Career and Technical Education (2009). Perkins Career and Technical Education Programs of Study. [Online]. Available:www.pde.state.pa.us/career_edu. Click on Programs of Study.

Pennsylvania Department of Education. (n.d.) Academic standards for career education and work. [Online]. Available: www.pde.state.pa.us/career_edu/lib/career_edu/Career_Education_Work_Standards_Final.pdf

Pennsylvania Training and Technical Assistance Networkwww.pattan.net

States Career Clusters Initiative. (2009). The 16 Career Clusters. [Online]. Available: www.careerclusters.org/16clusters.cfm

Wagner, M., Newman, L., Cameto, R., Garza, N., & Levine, P. (2005). After high school: A first look at the post school experiences of youth with disabilities. A report from the National Longitudinal Transition Study-2 (NLTS2). Menlo Park, CA: SRI International.

COMMONWEALTH OF PENNSYLVANIA

Edward G. Rendell Governor

DEPARTMENT OF EDUCATION

Thomas E. Gluck
Acting Secretary

Diane Castelbuono

Deputy Secretary
Office for Elementary and Secondary Education

John J. Tommasini

Director Bureau of Special Education

Patricia Hozella

Assistant Director
Bureau of Special Education



Bureau of Special Education Pennsylvania Training and Technical Assistance Network