Career and technical education (CTE) can provide significant benefits to students with disabilities. CTE teachers need to be aware of the rights of students with disabilities and of the planning process involved in meeting their needs. In addition, CTE teachers must know what role they play both in planning and in providing instruction. CTE teachers often need background information on the details of disabilities and the accommodations required. This Digest provides information on students with disabilities for secondary CTE teachers.

**BENEFITS OF CTE**

Research shows that students with disabilities in secondary CTE programs were less likely to drop out and more likely to be employed, to have paid competitive jobs, and to work full time after high school (Cobb et al. 1999; Colley and Jamison 1998). However, CTE that included only simulated work experience in classroom settings did not appear to lead to optimal employment outcomes. Students with disabilities who had paid or unpaid work experience in high school had better employment outcomes--higher wages, more hours, more continuous employment. Furthermore, students with disabilities mainstreamed into regular CTE or academic classrooms obtained paid competitive jobs more often and felt better prepared to keep their jobs. Qualitative studies reviewed by Eisenmann (2000) imply that integration of academic and vocational curricula promoted meaningful engagement and inclusion of students with disabilities by increasing persistence, academic achievement, and postsecondary engagement.

**RIGHTS OF STUDENTS WITH DISABILITIES**

Four key federal laws define the rights of students with disabilities (Ordover and Annexstein 1999). Two federal civil rights laws, the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973, require access for students with disabilities to all federally funded programs and prohibit discrimination based on disability in any aspect of public education programs. The 1998 Perkins Act requires equal access for special populations, including students with disabilities, to all vocational programs, services, and activities and prohibits discrimination based on special population status. The Individuals with Disabilities Education Act (IDEA), as amended in 1997, establishes the right of students with disabilities to a free appropriate public education programs. The Individualized Education Program (IEP) mandated by IDEA draws on the results of a comprehensive evaluation of the student's educational needs at least once every 3 years (ibid.; Smith 2000). The IEP must identify the student's current level of educational performance; measurable goals and objectives; special education, related services, and other accommodations to be provided; and the extent of participation with nondisabled students. The IEP must also specify how the student's progress will be measured, how parents will be informed of progress, and the extent of modification in
state- and districtwide tests. Beginning at age 14, the IEP must include a statement of transition services the student will need to reach postschool goals; beginning at age 16, the IEP must include a statement of transition services to help the student prepare for leaving school. IDEA requires that six participants be involved in the IEP meeting: the student (if appropriate); a parent (and family if desired); at least one of the student's special education teachers (or related services provider, if appropriate); at least one of the student's regular education teachers; a representative of the local educational agency; and other agency personnel with knowledge or expertise to meet the student's needs.

THE PLANNING PROCESS

The planning process involved in IEP development includes three steps (Kohler 1998). First, the abilities, needs, interests, and preferences of the individual student are determined. Second, individual postschool goals are developed based on abilities, needs, interests, and preferences. Third, instructional activities and accommodations, modifications, and supports appropriate to the student's postschool goals are identified. A variety of individuals must work together in an effective IEP team, including special education, CTE, and academic teachers, program support staff, guidance counselors, and school administrators. Other personnel are included as appropriate to meet the individual student's needs--for example, speech, occupational, or physical therapists; adult service providers such as rehabilitation or independent living counselors; and employers or postsecondary education representatives.

Effective planning for activities and services that benefit students with disabilities and improve postschool outcomes involves several broad practices (Kohler and Hood 2000). Planning should be proactive, focused on individual students, and driven by students and parents; it should involve student assessment, life skills development, and accommodations. Planned educational activities should focus on school- and work-based experiences linking high academic and workplace standards, with integrated academic and vocational curricula for employment skills and specific occupational instruction. Family involvement should be facilitated by training to increase parents' knowledge and skills in advocacy, planning, support, and legal issues. Business, labor, and government and community agencies should be actively involved to provide resources, training sites, and mentoring for students and educators. Finally, program policy and structure should support needed partnerships, philosophy, planning, evaluation, and human resource development.

ROLE OF THE CTE TEACHER

CTE teachers are only one member of the team that plans and provides educational activities and accommodations for students with disabilities. In IEP development and transition planning, CTE teachers' role is to provide information, support, and assistance to others who lead the process. However, CTE teachers play a primary role in providing
instruction through school- and work-based experiences and activities linking the two and in integrating academic and vocational instruction; in that role, CTE teachers should receive support and assistance from others.

IEP DEVELOPMENT

Special educators typically play the primary role in identifying educational activities and accommodations that suit students' interests, aptitudes, abilities, and postschool preferences (Evers and Elksnin 1998). Trained vocational assessors, if available, may use formal assessment tools, or special educators can conduct informal assessments using data in school records; interviews with students, families, and previous instructors; or published interest, aptitude, or skills instruments. CTE teachers may be able to provide program inventories or assessment tools to establish a student's readiness for specific occupational courses. CTE teachers can also provide information on the instructional demands (e.g., prerequisite basic, interpersonal, reasoning, and learning-to-learn skills) and setting demands (e.g., independent work, self-monitoring, ability to stay on task).

In particular, CTE teachers can provide CTE-specific information (Division of Special Education 1999). That information would include occupationally specific courses of study, cooperative education, apprenticeship, and career guidance and counseling services. CTE teachers would also provide any formal program entry criteria (e.g., prerequisite courses or entry-level skills along with tests to assess them). Although students with disabilities must meet standard program entry requirements, entry testing must allow any accommodations listed in a student's IEP for test-taking (e.g., extended time, use of a reader).

PROVIDING INSTRUCTION

CTE teachers have a larger responsibility in providing instruction for students with disabilities, particularly school-based experiences. CTE teachers must plan and provide school-based instructional activities that correspond with the goals and objectives of students' IEPs, including classroom and lab activities to teach occupationally specific skills and work-related behaviors (Kohler 1998). Planning activities that integrate academic and occupational instruction requires collaboration and coordination between CTE and academic teachers (Eisenman 2000). CTE teachers must also evaluate and grade students' attainment of the IEP objectives on which instruction is based (Evers and Elksnin 1998). In addition, CTE teachers must either provide the instructional accommodations and modifications specified in each student's IEP or work with special education personnel who do so.

CTE teachers also have an important role to play in providing effective work-based experiences for students with disabilities, which can include field trips, job shadowing, school-based enterprises, career-related camps, apprenticeships, internships, cooperative education, work-study, and part-time job placement (Hagner and Vander Sande 1998; Institute on Community Integration 1998). CTE teachers may share responsibility for contacting local employers; arranging sites and experiences that meet
employer and student needs; orienting employers to work-site roles (coaches for instruction, mentors for social initiation and inclusion); visiting sites to observe student work; and monitoring student progress, work, and difficulties. Perhaps most important, CTE teachers must plan and provide the connecting activities that link school- and work-based learning--feedback sessions, discussions, journal writing, student presentations, projects, or portfolios, for example.

DISABILITIES AND ACCOMMODATIONS

To meet the needs of students with disabilities, CTE teachers need background information on students' disabilities and on appropriate accommodations (Vail and Mandiloff 1996). Only a brief discussion is possible here; more details are available from such sources as the National Information Center for Children and Youth with Disabilities: http://www.kidsource.com/NICHCY. In particular, CTE teachers may need to correct stereotypes--for example, that entrepreneurial training and business ownership are not appropriate options for students with disabilities (President's Committee on Employment of People with Disabilities 2000). Accommodations can include modified instructional methods (e.g., repeat and summarize key points, use audiovisual aids, conduct oral testing or alternative assessments) or equipment (e.g., hand or foot controls, adjustable tables); curriculum objectives might be adapted or supplemented to meet specific student needs (Division of Special Education 1999). CTE teachers should identify the assistance available from special educators, tutors, paraprofessionals, or volunteers (e.g., providing print materials in alternative formats, monitoring student work, answering questions, developing teaching aids).

So in a nutshell, CTE teachers are one member of the team that helps students with disabilities participate fully and meaningfully in high-quality educational programs. They play a key role in providing a strong mix of all school programs--academic, functional, occupational--carefully linked to each other and to work experience, delivered with customized accommodations to meet students' individual needs, and embodying the same high expectations they have of all students (Rutkowski and Riehle 2001).

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