The economic debacle of the early 21st century, culminating in the “great recession” of 2008–2009, has reinforced the notion that postsecondary education is a key to productive outcomes for all Americans, especially those with disabilities. As the U.S. economy becomes progressively more knowledge-based, attaining a postsecondary education becomes more critical (Carnevale & Desrochers, 2003). For example, only 20% of workers needed at least some college for their jobs in 1959; by 2000, that number had increased to 56% (Carnevale & Fry, 2000). The outlook for jobs requiring training beyond high school will be robust, even in a changing economy (Holzer & Lerman, 2009). President Obama’s call for all Americans to complete at least one year of college is especially critical for students with disabilities.

The employment outcomes have been particularly unsatisfying for individuals with disabilities. The U.S. Census Bureau reported that fewer than half (45.6%) of people with a disability between the ages of 21 and 64 were employed in 2005 (Brault, 2008). The U.S. Bureau of Labor Statistics (2009) reported that in July 2009, the employment-to-population ratio for persons with a disability was 19.5%, compared to 65.0% for persons with no disability.

Ensuring that students with disabilities have “access to and full participation in postsecondary education” has been identified as one of the key challenges in secondary education and transition (National Center on Secondary Education and Transition, 2003, p. 1). Postsecondary education has been linked to increasing earning potential for youth who continue their education after high school, even for those who have not earned a degree (Marcotte, Bailey, Borkoski, & Kienzel, 2005). Research also has demonstrated that college graduates with learning disabilities have employment rates and earnings consistent with the U.S. workforce in general (Madaus, 2006).

Although the concept of transition planning has been in place for decades and the Individuals with Disabilities Education Act (IDEA) of 1997 codified the elements of the transition planning process, it is time to focus on the goal of transition to postsecondary education if we intend to truly provide productive outcomes for students with disabilities. This article extends a clarion call for secondary schools to make the transition to postsecondary education a priority by implementing strategies that will allow students with disabilities not only to access but also to succeed in postsecondary education.

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POSTSECONDARY EDUCATION

The term postsecondary education covers a broad range of educational options including short-term vocational training (e.g., childcare, food service), schools that foster social skills development, and vocational/technical schools that teach a trade (e.g., plumbing, carpentry). In addition, technical, vocational, and community colleges provide preparation for employment, short-term continuing education, and/or academic coursework leading to a certificate, a license, or an associate degree; and a 4-year college or university offers a bachelor’s degree (Shaw, Madaus, & Dukes, 2010).

Fostering Access

This article specifically addresses access to 2- and 4-year colleges, each of which is an appropriate post-high school option for students, depending on their interests, goals, and academic preparation. Often, students utilize these options sequentially (e.g., community college, then 4-year college) or concurrently (e.g., participation in a residential support program while attending a community college). The critical issue for schools is to present all of these options to students and their parents in a timely fashion so the student can identify a postsecondary education goal and work with school personnel to plan a program to achieve this goal. The student must be informed that college is an important and realistic goal for most students with disabilities.

The National Longitudinal Transition Study-2 (NLTS2) (Wagner, Newman, Cameto, Levine, & Marder, 2007) is a 10-year study of the characteristics, experiences, and outcomes of a nationally representative sample of youth with disabilities ages 13 to 16 years and receiving special education services in grade 7 or above under IDEA in the 2000–01 school year. NLTS2 findings generalize to youth with disabilities nationally and to youth in each of the special education disability categories. NLTS2 notes that having more positive expectations for the future is associated with being engaged in high school, having higher high school completion rates, and having higher postsecondary school attendance rates. Students, therefore, need to know that, over a lifetime, an individual with a bachelor’s degree would earn an average of $2.1 million dollars—almost twice that of a worker with a high school education.

In addition, the Commission on the Future of Higher Education noted that about 90% of the fastest growing jobs in the information and service economy require postsecondary education (U.S. Department of Education, 2006). The College Board (2006) commented that adults with some college, those with an associate degree, and those with a bachelor’s degree or higher are not as likely to be unemployed as those who are high school graduates or not high school graduates.

Therefore, it is encouraging that 1 in 10 college freshman reported having a disability, a figure that has tripled since 1978 (National Center for Educational Statistics, 2006). Progress also is apparent in that, in 2005, nearly 44% of students with disabilities enrolled in postsecondary education after leaving high school, an increase from 26% in 1990 (Wagner et al., 2007). Recent NLTS2 (Newman, Wagner, Cameto, & Knokey, 2009) data on the transition to postsecondary education is presented in the accompanying box. The first item to be addressed is that postsecondary education is a primary goal for 80% of secondary students with disabilities. This clearly indicates that professionals should include a postsecondary education goal on nearly every individual transition plan.

The finding that the vast majority of students with disabilities expect to graduate from high school with a regular diploma and access postsecondary education requires careful planning to assure that coursework, supports, and accommodations are provided to make those expectations a reality. Although it is heartening that the majority (61%) of
NTLS2 DATA ON TRANSITION TO POSTSECONDARY EDUCATION

- Postsecondary education is a primary post–high school goal for more than four out of five secondary school students with disabilities who have transition plans (Cameto, Levine, & Wagner 2004).
- Youth with disabilities increasingly are taking rigorous academic courses in high school, including college preparatory courses, such as a foreign language and science (Wagner, Newman, & Cameto 2004).
- Expectations related to high school graduation are comparable for youth with disabilities and their peers in the general population. Most youth in both groups (97% of youth with disabilities and 99% of those in the general population) say they expect to finish high school with a regular diploma.
- Youth with disabilities are less positive than their general population peers about postsecondary education attendance. Of these youth with disabilities, 86% expect that they “definitely” or “probably” will continue their education after high school, compared to 95% of those in the general population who expect to go on to postsecondary school.
- Almost four of five youth in the general population report expecting they will graduate from a 4-year college (79%), compared to approximately three of five youth with disabilities who “definitely” or “probably” expect to complete this type of education (61%).
- For youth with disabilities, 45% were reported to have continued on to postsecondary education within 4 years of leaving high school, compared to 53% of similar-age youth in the general population.
- At the time of the NTLS2 interview, 41% of youth in the general population were enrolled in a postsecondary program, compared to 24% of those with disabilities.
- More youth with disabilities were reported to have ever enrolled in 2-year or community colleges (32%) than in postsecondary vocational, business, or technical schools (23%) or 4-year colleges or universities (14%).
- The rate of enrollment of youth with disabilities in 2-year or community colleges at the time of the interview was not significantly different from that of their peers in the general population (13% and 12%, respectively). This stands in contrast to differences in enrollment rates at 4-year colleges. Similar-age youth in the general population were almost four times as likely as youth with disabilities to be taking courses at a 4-year college at the time of the interview (29% vs. 8%).
- Postsecondary enrollment since high school by disability category ranged from 27% to 78%; 78% of youth with visual impairments and 72% of those with hearing impairments were reported to have ever attended a postsecondary program. More than half of those with speech/language impairments (55%), other health impairments (55%), orthopedic impairments (54%), learning disabilities (47%), or traumatic brain injury (52%) were reported to have continued their education after high school. Approximately 3 in 10 youth with emotional disturbances (34%) or multiple disabilities (35%) and one quarter of those with mental retardation (27%) participated in postsecondary programs.
- Most students with disabilities who continued on to postsecondary school did so within a few months after leaving high school. On average, approximately 5 months elapsed between a student’s leaving high school and enrolling in a postsecondary program. Students enrolled in 4-year colleges sooner after high school than they did in postsecondary vocational, business, or technical schools.


Youths with disabilities expect to graduate from a 4-year college (Newman et al., 2009), we are far from fulfilling that hope. Community college attendance for youths with disabilities is similar to that of the general population, but only 8% of youths with disabilities attend a 4-year college compared to 29% in the general population (Newman et al.).

Finally, the need for comprehensive transition planning is reinforced in that the transition to postsecondary education typically occurs during the first few months after leaving high school. If the transition planning process is implemented effectively, we should be able to greatly improve postsecondary access for our students.

Which Students Should Plan to Access Postsecondary Education?

The response to this question has changed dramatically in the last few years. Although the NLTS2 data in the box indicate that three fourths of individuals with visual or hearing
imperfections and about half of most other students with disabilities enroll in postsecondary education, only about one third of individuals with emotional disturbance, multiple disabilities, and intellectual disabilities participated. A great deal of effort has been directed to expanding access to postsecondary education for individuals with intellectual disabilities.

The Higher Education Opportunity Act of 2008 included specific elements to foster access to college through national advocacy centers and enhanced financial aid. A major movement is encouraging the development of high school/college partnerships and college support programs created specifically for students with intellectual disabilities (Grigal & Hart, 2009). Because these students are not subject to many of the legal requirements for admission under Section 504 of the Rehabilitation Act or the Americans with Disabilities Act, they will not be discussed at length here, but further information can be found at www.thinkcollege.net—which presents recommendations from several nationally funded centers that foster access to college for students with intellectual disabilities.

Students with emotional disturbance are identified as students with psychiatric disabilities in postsecondary education. They now constitute the third largest category of college students with disabilities (Harbour, 2008). This population is one of the fastest growing disability categories in college, given the recent focus on mental health issues. An example of the resources recently developed to support this population is the Higher Education Support Toolkit (http://www.bu.edu/cpr/resources/supportstudents/) developed at Boston University.

The population of students with psychiatric disabilities is expected to grow. Services such as counseling and other supports will increase as colleges gear up to serve up to 2 million veterans who are expected to access college under the new GI Bill who may be dealing with potential post-traumatic stress syndrome (Madaus, Miller, & Vance, 2009). The reality that most students expect to access postsecondary education combined with the reality that virtually all disability categories are participating not only in postsecondary education but also in college requires that secondary schools offer transition planning that addresses postsecondary education goals for all students.

**Access or Success**

The data are clear that increasing numbers of students with disabilities are interested in participating in postsecondary education, are participating in inclusive academic classrooms, and are graduating from high school with a regular diploma. Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA; 2008) guarantee equal access, and more colleges are developing programs and supports to address the needs of this population. But the laws relating to students with disabilities in high school and in college have huge differences in intent and reach and tremendous divergence in terms of both expectations and services.

Even though students with disabilities are increasingly accessing postsecondary education, whether they are succeeding is not clear. Postsecondary institutions have to improve their efforts (Brinckerhoff, McGuire, & Shaw, 2002; Getzel & Wehman, 2005), and secondary personnel can also do a great deal to help their students bridge the chasm between secondary education and postsecondary education. In coming sections we will consider the

- differences between the laws, expectations, role of parents and supports, and accommodations in the two settings;
- services, accommodations, and assessments that will enhance the transition to postsecondary education; and
- structure of high school instruction, curriculum, and services that would enhance the transition process.

**TRANSITION CONSIDERATIONS**

The transition from high school to postsecondary education entails consideration of the differences in legal mandates, the role of parents, and supports and accommodations.

**Differences between High School and Postsecondary Education**

Public secondary schools are subject to mandates of IDEA 2004. Alternatively, many secondary students with disabilities receive services under the auspices of Part D of Section 504 of the Rehabilitation Act of 1973. Although IDEA is a prescriptive entitlement law and Section 504 is a civil rights act, both require schools to provide individualized support services to students with disabilities. This includes identification, assessment, and individually appropriate education programming at no cost. In contrast, postsecondary institutions are covered under Part E of Section 504 of the Rehabilitation Act of 1973 and the ADA, both civil rights laws.

Table 1 presents the dramatic differences in student responsibilities under the law in secondary and postsecondary settings. In postsecondary education settings, students are required to self-disclose their disability and to present supporting assessment data that documents the nature of the disability. This documentation must be provided at the student’s expense, as colleges are under no obligation to identify or evaluate students. The students also are primarily responsible for selecting their courses, identifying appropriate supports, and monitoring the utility of requested accommodations.
TABLE 1

Legal Responsibilities in Secondary Schools versus those in Postsecondary Education

<table>
<thead>
<tr>
<th>Area</th>
<th>Responsibilities under IDEA/Section 504 Subpart D (secondary level)</th>
<th>Responsibilities under Section 504 Subpart E and the ADAAA (postsecondary level)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification</td>
<td>School District</td>
<td>Student</td>
</tr>
<tr>
<td>Evaluation</td>
<td>School District</td>
<td>Student</td>
</tr>
<tr>
<td>Payment for evaluation</td>
<td>School District</td>
<td>Student</td>
</tr>
<tr>
<td>IEP or service plan</td>
<td>School District</td>
<td>Not Required</td>
</tr>
<tr>
<td>Course selection and programming</td>
<td>School District</td>
<td>Student</td>
</tr>
<tr>
<td>Transition planning</td>
<td>School District</td>
<td>Student</td>
</tr>
<tr>
<td>Progress monitoring</td>
<td>School District</td>
<td>Student/Institution</td>
</tr>
<tr>
<td>Determining reasonable accommodations</td>
<td>School District</td>
<td>Student with Institution (upon student eligibility)</td>
</tr>
<tr>
<td>Monitoring effectiveness</td>
<td>School District</td>
<td>Student/Institution</td>
</tr>
</tbody>
</table>

Source: Adapted from Responsibilities under Subparts D and E of Section 504, by J. W. Madaus & S. F. Shaw (Storrs: University of Connecticut, Center on Postsecondary Education and Disability). Copyright 2004 by J. W. Madaus & S. F. Shaw. Reprinted with permission.

Whereas IDEA places most of the responsibility in the hands of the IEP Team, including the parent, in postsecondary education there is an overarching need for student self-advocacy and self-determination. Because IDEA provides a free appropriate public education (FAPE) through high school, too many students with disabilities and their parents do not seem to understand that they are not guaranteed postsecondary admission based on disability. Schools should help students realize that they must be qualified for admission into the postsecondary institution and must remain eligible by maintaining satisfactory performance, both academically and socially. Therefore, it is critically important that students understand the specific nature of their disability and related legal rights and responsibilities (Shaw, Madaus, & Banerjee, 2009).

While public secondary schools must offer individualized special education to students with disabilities, colleges are not required to offer similar services. Special education services (i.e., special education teachers, special classes) end when the student leaves high school. At a minimum, colleges are required to offer reasonable accommodations and auxiliary aids to qualified students with disabilities. Although some institutions offer more intensive and individualized services, families must understand that these more intensive services are not required by law, and, as a result, colleges can charge additional fees to students to access those supports. Colleges, however, cannot charge students for the reasonable accommodations necessary to provide equal access under Section 504 or the ADA (McGuire, 2010; Shaw, Madaus, & Banerjee, 2009).

In addition, the instructional environment differs in moving from secondary to postsecondary education settings (McGuire, 2010). These differences include a decrease in instructional time combined with increasing expectations for independent work, less frequent assessment of student performance, and less structure but more freedom (Brinkerhoff et al., 2002). In high school, instructional time is more intense, with teachers’ providing significantly more contact time and often taking attendance. Also, assessment of learning outcomes occurs more frequently than in college and sometimes includes adjustments based on student effort or degree of improvement.

The single most distinguishing quality between the two settings relates to the amount of structure and the ability to function independently (McGuire, 2010). Studying, seeking the assistance of faculty and staff, self-disclosing, advocating for accommodations, and decision making are key ingredients in a successful college experience. In contrast, for secondary students, these functions often are overseen by well-intentioned parents.
The Role of Parents

Parents have played a key role in the education of students with disabilities throughout their public school experience. Parents have been assured of participation in every programming decision as members of the IEP Team and as signatories to each assessment or change in the program. In addition, many parents have had to function as advocate, spokesperson, and intervener for their children with disabilities. These experiences make the change in status in the postsecondary environment more challenging.

Parents have little, if any, standing practically or legally in postsecondary education, particularly college. As noted in Table 1, the student, as an adult, retains all rights and responsibilities. From the admissions process, in which the student is expected to make appointments, respond to queries, and take the lead in interviews, student self-determination is expected. Under the law, the student, not the parent, is the one who plans the program, presents the documentation, requests needed accommodations, and monitors the efficacy of accommodations.

To make sure that this change in status is not dramatic, secondary personnel should work with parents to help them transfer advocacy to their children. Encouraging student self-determination, especially through participation in the IEP process, identifying postsecondary transition goals, and being involved in developing the Summary of Performance (discussed later in the article) are crucial (Shaw, Madaus, & Dukes, 2010). We have not yet fulfilled the promised postsecondary outcomes, in spite of clear legislative mandates (Rusch, Hughes, Agran, Martin, & Johnson, 2009). The renewed call for secondary schools to build bridges to adult life by fostering student self-determination and self-directed learning needs our focused consideration as we work with both students and parents.

Supports and Accommodations

As noted in Table 1, the provision of special education services in secondary school is the purview of the IEP Team that develops the IEP, specifying supports and accommodations for the year. Too often, the student is little more than the subject of those decisions. Shaw, Madaus, and Dukes (2010) have described a very different process in college:

- An accommodation needed for one or even multiple courses might not be needed or reasonable in all courses.
- An accommodation approved for one course, or at one time in a program of study, might not be approved for another course or at another time in a program of study.
- Course modifications (e.g., different content, lower standards) are rarely allowed.
- Course substitutions are rarely considered in college, and courses that may have received substitutions (e.g., math or foreign language) in high school may now be required as remedial courses in college or may even impact admission negatively.
- Documentation that was sufficient for determining eligibility for some accommodations might not be sufficient for other accommodation requests.
- Colleges can make reasoned deliberations about what constitutes an essential requirement or a technical standard. Students with disabilities may be required to fulfill these requirements or standards regardless of the documented disability.

Even more important, those efforts are typically initiated by the student who has to make the case for needed accommodations and supports and provide the data to justify the need in each individual case.

A specific area of accommodation that changes dramatically from high school to college relates to technology. According to the Occupational Outlook Handbook (U.S. Department of Labor, 2008–09), “Most college and university faculty extensively use computer technology, including the Internet; e-mail; CD-ROMs; and programs, such as statistical packages.”

Unfortunately, the ubiquity of educational technology in higher education has the potential to create additional barriers for students with disabilities. For example, a study comparing students with and without disabilities by Debell and Chapman (2006) indicated that the rates of computer and internet use are both about 10 percentage points lower for those with disabilities. In addition, many students with disabilities, particularly learning disabilities and/or ADHD, reported a reduced level of comfort with instructional technologies. Despite their increasing participation in higher education, postsecondary students with these high incidence disabilities can encounter new barriers to educational access if they are not able to develop self-regulated, strategic approaches to using learning technologies. (Parker & Banerjee, 2007, p. 6)

Banerjee (2010) has suggested that readiness for college include use and familiarity with traditional assistive technologies, as well as mainstream instructional technologies. Considering students’ need for technology skills (i.e., assistive technology and mainstream instructional technologies) that are taught and practiced before their postsecondary studies, transition planning that addresses these skills should begin as early as possible to avoid their having to learn these skills simultaneously with taking college classes (McGuire, 2010).

TRANSITION SERVICES

Given the many challenges facing students with disabilities who expect to participate in postsecondary education,
transition services must be implemented effectively. A major change to the transition timeline introduced by IDEA 2004 was an increase in the age at which transition planning must be included specifically in the IEP. Under IDEA 1997, a statement of “transition needs” was required beginning at age 14. For college-bound students, this statement might have focused on the student’s course of study. At age 16, a “statement of needed transition services” was required.

Although IDEA 2004 has specified that transition planning should begin no later than age 16, the law is permissive. Therefore, many states have been productive in developing regulations that maintain age 14 as the time to begin transition planning. Schools must make transition decisions in middle school or at the beginning of high school to assure that students are taking the course of study that would make them eligible to fulfill their postsecondary education goals. At that initial transition meeting, it also would be productive to identify transition goals and activities that will prepare the student for postsecondary education, both in terms of becoming an independent learner and developing social/interpersonal skills (Shaw, Madaus, & Dukes, 2010).

Who Should Be Involved?

The following should be involved in the transition: student, the transition coordinator, the school or district administrator, special educators, general educators, counselors, and school psychologists and other related services personnel.

Student Involvement

Because legal mandates in postsecondary education settings require the student to self-identify, provide disability documentation, and request reasonable accommodations, students must begin that process in high school by actively participating in IEP Team activities. Although some high school freshmen who have not been previously encouraged to be self-advocates may be challenged by this expectation, IEP Team members should foster that involvement.

One approach to foster self-advocacy is to meet with the student prior to the IEP meeting to discuss postsecondary goals or the use of worksheets that present the student’s voice to the IEP Team. Discussions that seek student input, ask the student about needed accommodations, and ask for student feedback on the utility of various accommodations will help to develop student self-determination (Shaw, Madaus, & Dukes, 2010).

Transition Coordinator

Transition coordinators usually lead the transition efforts in the school by managing and monitoring the school’s transition process and collaborating with outside agencies such as rehabilitation services and various postsecondary institutions. Transition coordinators often teach specific courses (e.g., strategic instruction) or develop special programs (e.g., summer transition program, collaborative programs with colleges).

School or District Administrator

Too often, transition planning is perceived as just “a paperwork burden.” Administrative direction and support, therefore, can set the tone for the school regarding the importance of the transition planning process and the expectation that it can promote positive student outcomes. This role includes making sure that school forms and processes are state of the art, personnel are trained to carry out their responsibilities, and roles are clear and appropriate (Shaw, Madaus, & Dukes, 2010).

Special Educators

The role of many high school special educators centers on supporting students with disabilities in the general education classroom. Special educators also typically play a key role in the IEP process, helping other team members and students to determine goals and accommodations and evaluate progress. Increasingly, they will play an important role in school-wide support efforts such as Responsiveness to Intervention (RtI) and School-Wide Positive Behavior Supports (SWPBS) (discussed later).

General Educators

General educators must collaborate with members of the IEP Team to provide access to the general education curriculum by granting recommended accommodations, monitoring student progress, and communicating with special education and related service personnel. Because secondary content teachers have always had students who were planning to attend college, these teachers’ insights and expertise can be helpful in the transition to postsecondary education.

Counselors

School counselors can adapt their skills in college placement to the unique needs of students with disabilities. The position statement by the American School Counselor Association (2004) on the roles of school counselors working with students with special needs specifies providing support for postsecondary transition, assisting with the development and implementation of accommodations, and serving on the school’s IEP Team. To that end, counselors can include students with disabilities in many generic college search activities and/or provide special instruction related to the college selection, access, and disability documentation needs of students with disabilities. The Guidance and Career Counselors’ Toolkit: Advising High School Students with Disabilities on Postsecondary Options (2006) from the HEATH Resource Center available at www.heath.
Anticipated postsecondary outcomes must include measurable postsecondary goals based upon student options? What are the student’s career goals that may be enhanced by postsecondary education? What kind of dialogue with the student: Is the student aware of postsecondary setting is of interest?

Ideally, this transition assessment process will lead to the student’s potential, desires, skills, and aptitude by gathering information on his or her strengths, preferences, and personal goals, identified through surveys and interviews. For the goal of transition to education—specifically, admission to a 2- or 4-year college—the transition IEP should include the following elements:

**Student preferences**

These are included to ensure that students are actively involved in the transition planning process. IDEA requires that the IEP Team take into account the student’s strengths, preferences, and interests. To assure that postsecondary goals are selected appropriately, the IEP team should assess the student’s potential, desires, skills, and aptitude by gathering information on his or her strengths, preferences, and personal goals, identified through surveys and interviews. Ideally, this transition assessment process will lead to the student’s being able to personally share goals and define expectations as an active member of the IEP Team. The following questions can initiate a productive dialogue with the student: Is the student aware of postsecondary options? What are the student’s career goals that may be enhanced by postsecondary education? What kind of postsecondary setting is of interest?

**Anticipated postsecondary outcomes**

Because transition is a “results-oriented process,” it must include measurable postsecondary goals based upon age-appropriate transition assessments. Shaw, Madaus, and Dukes (2010) note that one of the biggest problems with transition plans has been that goals have typically not been written specifically enough to be measured and, therefore, do not allow for the accountability required by IDEA 2004. Effective practice suggests a broad goal such as, “Mike will acquire the skills to apply to a 4-year college,” followed by specific objectives that would lead him to achieve that result and provide a basis upon which to plan services and monitor progress. Regardless of whether Mike achieves his goal, the IEP Team could demonstrate accountability for the appropriate transition program it had planned.

**Course of study**

In recent years, high schools have increased academic requirements for graduation and about half of the states have implemented exit exams. The Education Commission of the States (2008) reported that many high schools across the country require 4 years of English, at least 3 years of math, as well as coursework in science, social studies, and foreign language. For students who hope to enroll in 4-year colleges, a high school curriculum should include 4 years of English, 3 years of math (including algebra and geometry), 2 years of laboratory sciences, 2 years of social studies (including U.S. history), and 2 years of foreign language.

A related issue is the emphasis on standards-based education—the idea that common expectations applied to all students can be a catalyst for improved educational outcomes. Given that almost half of the states now require high school exit exams, those standards have become a driving force in secondary schools. In contrast, transition services require the school to provide individual interventions to accommodate student needs across a broad range of domains. This makes IEP Teams the focal point for addressing the discontinuity between individual transition services and group-based standards and related exit exams.

**Opportunity standards** have been recommended by Kochhar-Bryant and Bassett (2002) as a construct to bridge the gap between the group expectations and the individual needs guaranteed by IDEA. The opportunities needed by students with disabilities in their planned program may include a responsive curriculum, individualized instruction, positive behavioral interventions, adequate time for learning, and access to technology. The provision of data-based accommodations, activities that foster self-determination, and technology (both assistive and learning technologies) are all useful options for consideration by the IEP Team to fulfill these opportunity standards.
THE DISCONNECT BETWEEN HIGH SCHOOL ASSESSMENT AND POSTSECONDARY EDUCATION DOCUMENTATION

Transition assessment in secondary schools and disability documentation expectations in higher education have not been in alignment. The significant changes created by the Americans with Disabilities Act Amendments Act of 2008 (ADAAA) require everyone to reconsider how to address these challenges.

Transition Assessment

The ADA/Section 504 as applied to institutions of higher education mandates equal access to educational opportunities but only for individuals with documented disabilities. Students with disabilities and their families are often surprised to discover that the IEP mandated by the IDEA or a high school Section 504 plan does not serve as sufficient documentation for accommodations and services in college (Madaus & Shaw, 2004).

IDEA 2004 amendments that have now restructured the nature and extent of formal assessment previously provided to students with disabilities may result in increasing challenges for students and families in gathering the assessment data necessary to qualify for supports and accommodations in postsecondary education settings (Madaus & Shaw, 2006). For example, many postsecondary institutions require documentation that is time sensitive for specific disabilities and identifies current functional limitations and substantial impairment to a major life activity. IDEA 2004, however, no longer requires school districts to complete a full reevaluation for students every 3 years or an exit evaluation. These evaluations may be updated if the IEP team determines that this is necessary, but school districts facing fiscal constraints may be unwilling to pay for assessments that are not mandated by federal legislation (Shaw, Madaus, & Dukes, 2010).

The problem in procuring disability documentation that meets shifting postsecondary guidelines is exacerbated by differing expectations as to what constitutes appropriate assessments on the part of secondary and postsecondary schools. In recent years, secondary schools are focusing less on formal testing and more on monitoring student progress through Response to Intervention (RtI), Positive Behavior Supports (PBS), and curriculum-based assessment, to serve a variety of students' needs in inclusive settings (Shaw, Keenan, Madaus, & Banerjee, in press). IDEA 2004 encourages more schools to use these data for determining disability rather than relying solely on psychoeducational evaluations.

Although more K–12 schools may use RtI/PBS data to diagnose a disability, postsecondary institutions have historically called for comprehensive psychoeducational or neuropsychological evaluations to establish the presence of a specific disability and to document a student's current need for accommodations (Shaw et al., in press). IDEA 2004 requires secondary schools to provide "appropriate measurable postsecondary goals based upon age-appropriate transition assessments" (§300.320 b), but those assessments do

Technology

A broad range of technology has to be considered for incorporation into the transition IEP. In addition to traditional assistive technology devices (e.g., screen readers, audio recorders, talking calculators), students have to be prepared to meet the many technological competency expectations of colleges, such as graphics, multimedia, use of the internet, as well as technology-based learning competencies including functioning in a web-based class and doing online research (Shaw, Madaus, & Banerjee, 2009).

Students who have to deal with functional limitations caused by their disability while also trying to master new technology required in college classes will have great difficulty learning at the rate required to keep up with their classmates. IEP Teams that do a thorough assessment of technology needs and provide the necessary services to help students use both assistive and learning technologies will greatly enhance transition outcomes (Shaw, Madaus, & Dukes, 2010).

Transferring Accommodations and Supports from High School to College

High school accommodations that approximate those that would be allowed in postsecondary education under Section 504 and the ADA (Brinckerhoff et al., 2002) are critical to college success. To provide supports that will not be allowed in college just so the student can gain admission will potentially set up the student for failure in the college setting. For example, course waivers, typically in foreign language or math, may make the student ineligible for admission to many 4-year colleges or require the student to take remedial courses at a community college. It also is helpful to wean the student from accommodations that would not be allowed in college.

Colleges will deny accommodations that are not reasonable or that lower institutional standards. An accommodation will not be provided if the data related to that individual course do not clearly justify the need for that accommodation. Course modifications (e.g., not penalizing spelling in a writing class and instead basing the grade on a different expectations) will rarely be permitted. Most colleges do not provide untimed tests but, rather, extended time based on the specific assessment data (e.g., a student's processing time requires time and one-half only on math exams). The IEP Team has to be circumspect in providing only data-based accommodations and is encouraged to foster the student's future success by using supports and accommodations that will be allowed at the next level of education.
not necessarily relate to the disability documentation needs in postsecondary education.

Documentation in Postsecondary Education

Postsecondary institutions, as noted above, typically have adhered to detailed documentation guidelines that specify the needed information (Brinckerhoff et al., 2002). For example, Madaus, Banerjee, and McGuire (2009) reported that 44% of their postsecondary respondents indicated that it was “essential” that measures of aptitude be less than 3 years old, while 51% reported that it was essential that measures of achievement be less than 3 years old.

As a result of growing concerns that they were being applied rigidly, however, the Association on Higher Education and Disability (AHEAD) withdrew its guidelines and posted in its place a set of best practices (http://www.ahead.org/resources/best-practices-resources/principles, n.d.). Nevertheless, according to a study by Madaus, Banerjee, and McGuire (2009), 40% of the respondents still reported using the AHEAD Guidelines, 22% used the AHEAD Best Practices, 24% reported using institution-specific guidelines, and 7% used guidelines developed by the Educational Testing Service. More important, none of these approaches coincides with the assessment requirements of IDEA 2004. The ADAAA (2008), which took effect in January 2009, further unsettled the issue of postsecondary disability documentation.

The ADAAA and, as a result, Section 504, provide a much broader definition of an individual with a disability, specifying that disability shall be construed in favor of broad coverage of individuals to the maximum extent permitted. Determination of substantial limitation shall be made without regard to the ameliorative effects of mitigating measures, including medication, medical supplies, equipment or appliances, and low-vision devices (but not eyeglasses or contact lens).

Substantial impairment has become a broad requirement that makes determination of disability an expansive threshold issue. The important consideration is the impact of the disabling condition on the student’s current functional capacity. The focal point is the impact of the disability on a student’s capacity to perform academic-related tasks. As always, assessment of functional impact and residual functional capacity must be documented. Objective documentation is necessary to evaluate the student’s functional deficit to assist in determining appropriate accommodations (Shaw et al., in press).

Disability services providers will now be hard pressed to find that a student who received services under IDEA or Section 504 in high school is not considered to be an individual with a disability under ADAAA/Section 504 in college. In addition, the functional impact of the disabling condition must be documented to determine reasonable accommodations. The focus of analysis will shift to determining the functional impact of the disability rather than whether the student is an individual with a disability. Just as it was before enactment of the ADAAA, appropriate use of documentation should always be required to identify functional impact in determining academic accommodations. Eligibility for protection under the ADAAA will now be weighted more by the appropriateness or reasonableness of a requested accommodation than disability status. Assessment of the need for accommodations continues to be based upon analysis of the functional impact of a student’s disability.

Documentation standards that question the presence of a previously diagnosed disability or require a strict statement of disability diagnosis may be found to contravene the new standards set forth under the ADAAA. Likewise, documentation standards that arbitrarily require “current” documentation and ignore valid prior disability evaluation data may run afoul of the liberal definition of disability under the ADAAA. The age of documentation, however, is still an important consideration. The current functional impact of disability is key in determining the need for accommodations (Shaw et al., in press).

The Summary of Performance

Amendments to IDEA in 2004 require a newly mandated mechanism for the transition from secondary to postsecondary education or employment, commonly referred to as a Summary of Performance (SOP). The law states that high schools “shall provide the child with a summary of the child’s academic achievement and functional performance, which shall include recommendations on how to assist the child in meeting the child’s postsecondary goals” (20 U.S.C. §1414(c)(5)(B)(ii); see 34 C.F.R. §300.305(e)(3)). Can the SOP document be utilized by postsecondary disability services personnel to document a qualifying disability for purposes of providing academic accommodations under the ADA/Section 504?

Documenting a disability for eligibility for academic accommodations at the postsecondary level can be difficult and may impose a serious impediment for high school students with disabilities arriving at college. Historically, students who are transitioning from high school have been able to obtain exit evaluations to document their disability prior to graduation. An update to a psychoeducational evaluation report, however, may not be available any longer.

The SOP may become one of the few elements of disability documentation now available to graduating seniors (Madaus & Shaw, 2006). Possibly, students who transition to postsecondary education from secondary education with a comprehensive SOP will present strong evidence of the current functional impact of a disability for determining reasonable academic accommodations under the ADA/Section
504. A well-constructed and comprehensive SOP is a blueprint providing past evidence of academic accommodations that have been utilized and the extent to which such accommodations have been effective. The SOP has the potential to be an important piece of documentation for the postsecondary institution to consider in making academic accommodation decisions under the ADA/Section 504. The IDEA regulations that mandate the SOP, however, provide few details regarding its design or scope. Nevertheless, a comprehensive National SOP Template (Shaw, Kochhar-Bryant, Izzo, Benedict, & Parker, 2005) that would provide useful documentation to postsecondary education has been approved by many national organizations, including the Learning Disability Association of America, the Council for Exceptional Children and several of its divisions, the Higher Education Consortium for Special Education, and the Council for Learning Disabilities.

The SOP can provide a specific, clear statement of how the student’s functional level is affected. For example, a student with a learning disability may be limited substantially in her ability to take notes from a lecture, which impacts her ability to learn in a large lecture class. In addition, the SOP can include information on the efficacy of various note-taking accommodations that would be helpful to postsecondary disability personnel as they seek to identify reasonable accommodations. Information that is specific and objective and documents the student’s functional levels and use of accommodations in high school should readily transfer to the postsecondary level.

An effective SOP form provides information pertaining to the student’s current levels of performance in the domains of academic, cognitive, and functional skills. The SOP can capture data on student progress and performance collected through efforts such as RtI and PBS, as well as data such as student performance using different accommodations or the utility of varying amounts of extra time.

Once postsecondary personnel establish the functional impact of the disability, the logical sequential analysis is then used to determine the reasonable academic accommodations that will be effective in ameliorating the limitations of a student’s disability. The National Template SOP form also provides information about accommodations, modifications, and assistive technology that the student has received that were essential for participation in high school.

A recent study on the implementation of the SOP, which reviewed SOP forms developed by 43 states (Miller, Madaus, Shaw, Banerjee, & Vitello, 2009), provided some positive information on the implementation of comprehensive SOPs. Almost 90% of the state forms included all three elements required by IDEA 2004:

1. A statement of academic achievement
2. A statement of functional performance
3. Recommendations to help the student achieve post-secondary goals

Of the states, 21% not only adopted the Model SOP template but also attributed their form to the National Summit. Most of the state forms include a description of the student’s disability and present levels of accommodations and assistive technology, and 40% require attaching disability documentation that are all specified in the Model SOP Template.

These data suggest that SOPs from many states can provide the data needed under ADAAA to describe functional limitations and indicate a history of accommodations. Given that many states allow individual schools to use their own SOP form, it would be productive to review other forms if your school or state is not using a comprehensive form. The National Template SOP is freely available for adaptation at 

http://www.cec.sped.org/AM/Template.cfm?Section=Search &TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=6031. State department of education special education websites in Iowa, Connecticut, Wisconsin, and California as well as local schools (see http://www.vase.k12.il.us/Forms/sop.html) have forms that can be useful starting points for review (Shaw et al., in press). A comprehensive SOP can be a critical element of the transition process that, if implemented effectively, can smooth the transition from secondary to postsecondary services.

**STRUCTURING SCHOOLS FOR EFFECTIVE TRANSITION**

Effective transitions include school-wide supports, family supports, Universal Design, counseling programs, and joint programs between high schools and colleges.

**School-wide Supports Including RTI/PBS**

No Child Left Behind (NCLB) and IDEA are catalysts for rethinking how secondary schools conduct typical educational practice. Specifically, these laws encourage the development of school-wide models in two important ways:

1. Schools are now held accountable under NCLB for the outcomes of all students through reports of Annual Yearly Progress.
2. IDEA 2004 allows up to 15% of federal special education dollars to be made available to spend on evidence-based early intervention and prevention services (Simonsen et al., in press). Flexible use of special education dollars allows schools to leverage resources to design school-wide models that promote the completion of college prep coursework by reconceptualizing the service delivery model that potentially could help students with disabilities gain admission to 4-year colleges.
In response to these challenges, complementary three-tiered school-wide prevention models for academic and social behavior supports have taken hold: RtI and School-Wide Positive Behavior Supports (SWPBS). Emerging research supports RtI and SWPBS as productive ways to organize school resources and deliver instruction to all students in both academic (Vaughn, Linan-Thompson, & Hickman, 2003) and social (Horner et al., in press) domains.

Schools are facing the challenge of establishing a climate in which students feel safe and secure while at the same time increasing the ability of all students to meet appropriately demanding academic standards (Faggella-Luby, 2010). Schools are the place where students are to learn academic content, how to learn (e.g., time management, critical thinking, task planning), and to develop social skills (e.g., self-advocacy, problem solving). The school-wide model provides the essential framework for implementing a continuum of academic and behavioral supports that can help students with disabilities navigate postsecondary environments.

Essential to this model will be how schools operationalize universal screening, research-based pedagogical practices, regular progress monitoring, and assessments of rates of teacher fidelity of implementation (see Faggella-Luby, 2010). Equally important is how schools redeploy their professional resources, including teachers, support personnel, and administration to implement the school-wide model (Simonsen et al., in press).

One research-based intervention to consider is Strategy Instruction, which is evidence-based and focused on teaching students how to learn, to enable future independent problem solving. Research indicates that struggling adolescent learners, including those with identified disabilities, learn most efficiently when teachers use overt and explicit pedagogies such as those in the “8 Stages of the Learning Strategy Curriculum” (Deshler & Schumaker, 2006). Strategies are an essential element along a continuum of building blocks for content literacy at both the secondary level and the postsecondary level.

Although RtI and SWPBS have been implemented mostly at the elementary level, the number of high schools implementing these programs is increasing each year. The foundational principles remain constant across grade levels, but a strong infrastructure and communication system has to be implemented effectively at the more complex high school level (Faggella-Luby, 2010). Implementing a school-wide model can be the most productive way to support access to postsecondary education for students with disabilities.

Family Supports

Parents have natural anxieties and concerns for their children during the transition from secondary to postsecondary education—revealing their sense of deep responsibility for their children’s success and long-term outcomes. Effective secondary personnel work with parents from a position of understanding the depth of that responsibility. The following principles, many developed by Kochhar-Bryant (2010), illustrate how secondary education personnel can promote quality collaboration with parents.

- Begin with the premise that parents have the right and the responsibility to be involved in their child’s education, particularly in transition planning. Many parents deemed to be “difficult” are actually those who have had to “do battle” to help their child receive needed services and supports.
- Recognize that working successfully with parents is a legitimate focus for staff development.
- Affirm that school administrators have to set a tone in the building that is welcoming and inviting to parents.
- Help parents view the transition process as a pathway to independence, along which they will have to relinquish their history of control over their child’s future and adopt a role of mentor or guide. Appreciate that this is a most difficult psychological process for many parents and one for which they typically have not been prepared.
- Give parents information about changes to the law from IDEA, a prescriptive special education law to Section 504, and the ADAAA providing equal access. Help parents and their children understand the philosophy of self-determination, factors that contribute to a successful transition, and the need for student self-advocacy in postsecondary education. Include information about how parents can continue to guide their child in planning for graduation while strengthening their child’s ability and confidence to make decisions.
- Make sure that the school has a clear, written appeals process for parental objections about transition planning processes.

Universal Design

Universal Design (UD) is an approach to instruction that seeks to overcome the challenges associated with providing individual accommodations course by course. The general concept includes a specific set of principles to systematically incorporate accessible features into a design instead of retrofitting changes or accommodations. UD results in the creation of environments and products that are as usable, as much as possible, by a wide range of diverse individuals (McGuire, Scott, & Shaw, 2006).

Legislation has promoted the application of universal design in architecture (e.g., providing curb cuts, ramps, automatic doors, accessible bathrooms) so all people, including those with physical disabilities, can access stores, schools,
and other facilities. Federal legislation described and defined UD in education as “universal design for learning”:

- a scientifically valid framework for guiding educational practice that—(A) provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged; and (B) reduces barriers in instruction, provides appropriate accommodations, supports and challenges, and maintains high achievement expectations for all students including students with disabilities. (Higher Education Opportunity Act, 2008)

Therefore, a student with a learning disability may not need disability services in an *instructionally accessible environment*. Universal Design anticipates the needs of diverse learners and incorporates effective strategies into curriculum and instruction to make learning more accessible (Scott, McGuire, & Shaw, 2003). Such an environment will foster student self-determination because options are available that allow the student to select personally productive approaches to learning (Field, Sarver, & Shaw, 2003).

UD, therefore, is becoming a key element of both inclusive educational practices and postsecondary instruction (see http://wwwfacultyware.uconn.edu/ for more information). IDEA 2004 statutes on universal design include requirements to support the use of technology based on UD principles to maximize accessibility to the general education curriculum (Section 611 (e)(2)(C)(v)) and the use of UD principles in developing and administering district-wide and alternative assessments (Section 612 (a)(16)(E)).

Secondary schools that begin to implement UD features could enhance the transition to postsecondary education for all students. This can be implemented by a curriculum that provides (a) multiple means of representation, (b) multiple means of expression, and (c) multiple means of engagement. Examples of UD include providing course material online for all students and exams that do not have time limitations or are completed electronically so students can choose to use needed assistive technology (McGuire et al., 2006). The Center for Applied Special Technology (CAST) has also developed practical guides that provide teachers with ideas about ways to integrate universally designed learning tools and strategies into the curriculum (see www.cast.org).

**Counseling Programs**

A formal counseling program could provide productive supports for student transition by teaching learning strategies, exploring career options, presenting educational rights under Section 504 and the ADAAA, and developing awareness of postsecondary options. Opportunities for having high school students visit a local college or having college students with disabilities visit the high school can be highly productive. Involving outside agency personnel such as vocational rehabilitation counselors can provide additional support and extend the effort beyond high school.

Mentoring is a specific kind of counseling program in which a supportive relationship between a student and someone more senior in age or experience offers support, guidance, and assistance as the younger partner plans a new area of experience such as transition to college. Students with disabilities are likely to listen to someone who has made the transition to college successfully while coping with the same challenges they themselves face. Such a program can be initiated by contacting the Disability Services Office at a college in your region. The *Guidance and Career Counselors' Toolkit: Advising High School Students With Disabilities on Postsecondary Options* (2006), from the HEATH Resource Center, is a resource for initiating such a program. The Edge Foundation (www.edgefoundation.org) website also is another helpful resource.

**Joint Programs between High Schools and Colleges**

Finally, secondary/postsecondary collaborations can be developed and implemented. Many examples of collaboration among high schools, colleges, state agencies, and professional organizations are worth emulating. Some states have successfully built bridges by collaboratively addressing issues in the areas of legal requirements in college, disability documentation, and communication where the discontinuity between secondary and postsecondary education has been problematic. With regard to transition assessment and college disability documentation, task forces organized by the State Transition Coordinator and the state affiliate of the Association on Higher Education and Disability (AHEAD) have been productive. Stakeholders have been able to develop state-wide documentation guidelines that were agreed upon by secondary schools and colleges in the state (Reilly & Wilkerson, 2008).

The state of Iowa worked under the leadership of the State Transition Coordinator to develop two SOP forms—one form for students transitioning to employment and the other for meeting the more stringent documentation needs for transition to college (Wassenaur & Guy, 2008). This makes navigating the transition maze considerably easier for students who are planning to attend college in their home state.

and consumers to address documentation issues on a statewide basis (Virginia Higher Education Leadership Partners, 2007). A unique collaborative effort was implemented in Ohio, where an online curriculum and electronic mentoring program enhanced students’ information technology skills, fostered self-determination, and helped students match their needs and preferences to career goals (Izzo, 2009).

Many states have provided annual workshops for consumers and/or professionals on transition topics. Given that these workshops often attract 300–700 attendees, some states will run them in different regions of the state or in catchment areas for different colleges. These workshops offer diverse presentations that typically include general information on effective transition with an overall theme of self-determination, differences between secondary and postsecondary expectations, and, often, a panel composed of students with disabilities who have made a successful transition to college. Shaw, Madaus, and Dukes (2010) describe sessions that typically address the needs of professionals (e.g., the knowledge and skills students need for a successful transition to college, staff development in formulating effective transition plans for college, approaches to transition assessment, writing a Summary of Performance for college), students (e.g., what they need to do to prepare for college, the realities of college life), and parents (helping the child become a self-advocate, changes in the parental role as their child shifts from high school to college).

Groups of secondary and postsecondary personnel have developed state transition brochures, information sheets, and web-based supports that are the products of these statewide collaborations. For example, Connecticut’s Interagency Transition Task Force has developed an extensive Transition Training Manual and Resource Directory (2004) that includes sections on laws, transition curricula, interagency collaboration, transition to postsecondary education, self-advocacy, financial independence, and resources. It is available at http://www.state.ct.us/sde/deps/special/index.htm

**SUMMARY**

Secondary schools that want to foster positive postsecondary education outcomes for their students with disabilities should consider the following:

- Students with disabilities should be encouraged to plan a postsecondary education goal because it can have a considerable positive impact on their quality of life as an adult.
- Moving from high school to postsecondary education entails significant differences in terms of expectations, legal requirements, documentation, and the need for student self-determination.
- The transition should begin as early as possible so a 4-year high school course of study can be developed to meet college admission requirements, effective accommodations can be identified, and services can be provided over time to ameliorate academic and behavioral deficits.
- The transition planning process should involve the student in identifying preferences, determining postsecondary education goals, and selecting needed transition services.
- IEP Teams should seek to develop opportunity standards that balance school standards with individual transition needs. These could include a responsive curriculum, individualized instruction, access to technology, adequate time for learning, positive behavioral interventions, and valid assessments.
- The student must participate in the selection and evaluation of reasonable accommodations that are likely to be available in postsecondary settings.
- When selecting accommodations, it is necessary to avoid course waivers or course modifications that likely will not be allowed in postsecondary education and could limit access to college.
- Because students in college must self-advocate and request services, they will have to be helped to develop and practice self-determination skills to the greatest extent possible.
- Parents should be encouraged to relinquish their advocacy role to their children, based both on the changes in the law in postsecondary education and on the need for the student to develop self-advocacy skills.
- Students also have to be prepared to meet the general technology competency expectations of colleges, as well as technology-based learning strategies that will foster success in college.
- The SOP process should be developed or enhanced so it will effectively gather informal and formal assessment data that students can use to document their disability and justify the need for postsecondary education accommodations.
- Implementation of Universal Design in high schools will enhance the ability of students with disabilities, and all students, to learn independently to the greatest extent possible and lessen the need for school personnel to provide individualized services and accommodations.
- A school-wide model should be implemented, including RtI and/or PBS, to promote the development of students’ academic and social skills within the general education curriculum, which will enhance their ability to make the transition to college successfully.
- Structured elements should be developed to enhance transition, such as counseling/mentoring or collabora-
tive efforts with institutions of higher education or state agencies that foster the development of effective transition planning strategies.

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