FOCUS ON EXCEPTIONAL Children

Post-Secondary Education and Transition Services for Students Ages 18–21 With Significant Disabilities

Debra A. Neubert, M. Sherril Moon, and Meg Grigal

For the past 20 years, students with significant disabilities (SD) who remain in public school programs until age 21 have generally participated in functional or communitybased instruction (CBI) during their high school years (Agran, Snow, & Swaner, 1999; Billingsley & Albertson, 1999). In some states these students may earn IEP diplomas or certificates of attendance instead of a diploma upon exiting the school system (National Center on Educational Outcomes, 1999). After leaving the school system, these individuals typically have entered supported employment, independent living services, or adult day programs provided by nonprofit community agencies funded by Medicaid, developmental disabilities, and vocational rehabilitation systems (Neubert & Moon, 1999). Many professionals, advocates, and families, however, are questioning when and how often students with SD should participate in CBI during the high school years (Billingsley & Albertson, 1999; Quirk & Bartlinkski, 2001; Tashie, Malloy, & Lichtenstein, 1998) and what type of educational and transitional experiences will lead to more optimal post-school outcomes in integrated settings (Patton et al., 1996; Smith & Puccini, 1995).

In 1995 the Division on Mental Retardation and Developmental Disabilities (Council for Exceptional Children) recommended that students who require educational services beyond the age of 18 be allowed to graduate with their peers and then continue their education in settings such as colleges and vocational-technical schools (Smith & Puccini, 1995). Others have supported this philosophical shift to provide age-appropriate interactions with same-age peers; attend classes and social activities on college campuses; work in the community; and participate in flexible, community-based instruction during the final school years (Falvey, Gage, & Eshilian, 1995; Fisher & Sax, 1999; Moon & Inge, 2000; Patton et al., 1996; Tashie et al., 1998).

Several reports highlighting transition policy and practices for students with disabilities also have targeted a need for different or specialized transition services for students ages 18-21. The National Council on Disability and Social Security Administration (2000) identified "expanding secondary transition programs for students ages 18–21 to include two- and four-year college campuses" (p. 19) in a list of strategies that may lead to more successful post-school outcomes. Also noted was an "intense need for . . . access to individualized and effective post-secondary education services and supports . . . and meaningful options for choice by individuals in the pursuit of education, career training, and individualized services and supports" (p. 17). In a national survey of parent centers funded

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by the U.S. Office of Special Education Programs (OSEP), respondents considered students who remain in school through age 21 as having the greatest unmet needs (PACER Center, 2001).

As with other emerging issues in special education, particularly in transition services, there is a need to disseminate information on age-appropriate practices for replication purposes. Most important is the need to conceptualize how older students with SD can be served differently during their final years of public school through a range of options that result in more students with SD participating in post-secondary activities. The purpose of this article is to provide an overview of options for enhancing age-appropriate educational and transition experiences for students with SD ages 18–21.

First we discuss the rationale behind differentiating educational and vocational experiences in high school settings for students before and after age 18. We then describe two options for extending experiences after age 18: (a) programs that serve public school students on college campuses and in community settings, and (b) individual support approaches for serving public school students in college and community

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Erica J. Lawrence Editor Stanley F. Love Publisher settings. For each option we highlight key features along with replication and evaluation needs.

We base the discussion here on our work through an OSEP outreach grant, On-Campus Outreach, to identify and disseminate information on practices in post-secondary settings for students with SD (see Appendix B) and from a review of the literature of post-secondary educational practices for individuals with SD (Neubert, Moon, Grigal, & Redd, 2001). This information adds to a limited but growing knowledge base on how to develop strategies for supporting students with SD on college campuses and in the community after age 18. We extend this discussion by identifying how schools may consider a variety of services to meet the needs of all older students with SD.

DIFFERENTIATING EDUCATIONAL AND TRANSITIONAL SERVICES FOR SECONDARY STUDENTS WITH SD

The need for providing age-appropriate experiences for students with SD during their final years of public school (age 18–21) is often discussed within the context of when and how often students with SD should participate in employment training and functional, community-based experiences during the high school years. Secondary experiences for students with SD may differ based upon the philosophy of those who are planning instruction and coordinating services.

In some cases secondary instruction for students with SD has focused on community-based instruction, including job sampling, employment experiences, and accessing community resources. Students with SD may spend their years in high school learning functional skills in the classroom and community but often are separated from their peers without disabilities. The rationale for providing educational and transitional services off the high school campus after age 18 is based on the needs to (a) provide students with SD with different experiences during their final years of school, and (b) access post-secondary environments in which they will be expected to live and work as adults.

In other cases, as students with SD have been included in their neighborhood schools and in general education classes, some have questioned whether these students should participate in CBI during the high school years (ages 14–18). For example, Fisher and Sax (1999) advocate that students with SD be given the same access to academic classes as their peers without disabilities during their high school years, and that the IDEA Amendments of 1997 provide the legal mandate to do so. They maintain that "before students with disabilities had access to the core curriculum in middle school and high school, CBI was a reasonable educational alternative" (p. 303). Billingsley and Albertson (1999) maintain that special educators should be able to work with general educators to implement functional skill activities within general education classes and extracurricular activities. When CBI is offered to students with SD in high school, it should be offered "during periods that do not interfere with general education classes that would address other educational needs of higher priority" (p. 300). When students with SD participate in employment-related activities before the age of 18, they would do so in the same manner as their same-age peers, such as working or volunteering after school and during the summer.

The rationale for providing different services for these students after age 18 is based on the need for age-appropriate experiences in post-secondary courses (e.g., adult and continuing education and community colleges) and in employment sites in the community (Billingsley & Albertson, 1999; Falvey, Gage, & Eshlilian, 1995; Fisher & Sax, 1999; Quirk & Bartlinski, 2001; Smith & Puccini, 1995; Patton et al., 1996; Tashie et al., 1998). These experiences would be based on a person-centered planning process that takes into account the wishes, needs, interests of the student, his or her family, and significant friends or professionals who support the student (Baird & Everson, 1999; Pearpoint, Forest, & O'Brien, 1996).

Outcomes

Although the impetus for proposing differentiated experiences for students with SD during their final years of public school are not the same, the outcomes of these approaches are similar. Students with SD need the opportunity to receive educational and transitional experiences outside of the high school between the ages of 18–21 with ageappropriate peers. Therefore, educational and transition experiences would differ substantially before and after the age 18 for students with SD.

Logistics

Providing students with SD with different experiences based on their age is just one way for professional and families to rethink how public schools provide educational and transition services. The philosophical discussion concerning when and how much CBI students with SD should receive in their secondary years is, to date, not based on documented post-school outcomes. Agran et al. (1999, p. 58) noted that "much of the published literature on the relative benefits of community-based instruction and inclusion is based on researchers' opinions...and has not been either socially or empirically validated." In a survey of 120 special educators in Utah, they found that middle and high school teachers supported inclusive academic and community-based instructional experiences because both offered opportunities for inclusion with peers, coworkers, and community members.

Issues related to staffing will require careful planning to accommodate flexible schedules for students to participate in the community both before and after age 18 (Billingsley & Albertson, 1999; Hart, Zafft, & Zimbrich, in press; Tashie et al., 1998). The roles and responsibilities of teachers will have to be rethought as these professionals will work as case managers, employment specialists, or college-based educators rather than classroom instructors in the high school.

Despite the lack of documentation on what educational experiences (i.e., inclusion in regular classes, CBI, employment training) are best either before or after age 18, programs and individual supports for older students with SD in post-secondary settings are being implemented across the country. In the remainder of this article, we describe these options for educating students ages 18–21 with SD.

PROGRAMS IN POST-SECONDARY SETTINGS

Programs in post-secondary settings have been implemented in a number of states including California, Louisiana, Kentucky, Maryland, and Oregon (Grigal, Neubert, & Moon, 2001; Hall, Kleinert, & Kearns, 2000; Highhouse, 2001; Hunter, 1999; National Clearinghouse on Postsecondary Education for Individuals with Disabilities, 2000; National Transition Alliance, 2000; Sharpton, 1998). These programs have been developed on college campuses and in the community to serve high school students with severe disabilities who are 18 years or older in their final years of public school. The students who attend these programs typically have been in high school for four or more years and may receive an alternative exit document (e.g., certificate of attendance, IEP diploma) as they exit public school. These programs are not located on high school campuses but, instead, in various post-secondary locations, such as universities, community colleges, community businesses, or adult service agencies.

Through our work with On-Campus Outreach (OCO), we have provided technical assistance to 17 programs in 11 local school systems in Maryland and to programs in other states that are serving students with SD between the ages of 18–21 in post-secondary settings. The information presented here is based upon observations, interviews, and experiences gained through this work. For a more detailed description of Maryland post-secondary programs, the reader should refer to our website in Appendix B or Grigal et al. (2001).

Key Features

Post-secondary programs located on college campuses or in the community typically serve between 8 and 21 students a year and are staffed by a special educator or transition specialist and instructional assistants funded by the school system (Grigal et al., 2001; Hall et al., 2000). Students' activities and schedules differ depending on their goals and needs; however, most programs offer some classroombased instruction (i.e., functional academics) along with opportunities to enroll in college classes, to work on campus or in the community, and to participate in social and recreational activities with college-age peers. Programs located in post-secondary sites often include best practices in transition (e.g., Hughes et al., 1997; Kohler, 1993, 1998; Rusch & Millar, 1998), such as functional academics, job training and follow-along, assessment activities including person-centered planning, self-determination skills instruction, social and recreational skill development, community mobility training, and collaborating with families and postsecondary providers to ensure future access to adult services and supports.

One of the key features of the programs we are describing is that services are coordinated outside of the high school from a designated location in the community. Choosing a site for the program requires the collaboration of members from the school system and the community. The starting point should be a planning committee, consisting of representatives from the various key organizations including school personnel, the program host (college or business), employers, local adult service providers, rehabilitation personnel, and, of course, parents and students. The planning committee should conduct a needs assessment (see Appendix A) and carefully consider the following options in the community when developing a program.

Programs at Four-Year Institutions

In Maryland, two programs are located at four-year universities. Hall et al. (2000) also provide a description of a program at a four-year liberal arts college. Programs based at four-year colleges provide many opportunities for integrated experiences for students with SD. These institutions generally have departments in education and the social sciences and medical fields such as speech, occupational, and physical therapies. Often, students in these fields of study need experiences, both formal and informal, with students who have disabilities.

Working with the staff in these types of departments, partnerships have been formed that serve the students with SD and the college students as well. Students may work with one another in classes, practical experiences, and student service learning experiences. Four-year institutions are larger than community colleges and often provide housing for college students. This affords the programs based on four-year campuses greater access to a constant student population during the daytime, evenings, and weekends.

Programs at Community Colleges

Community colleges are also attractive locations for programs, as they often have open-door policies that may facilitate access for nontraditional students. In addition, these institutions are more prevalent and closer in proximity than many of the four-year institutions. Community college is the first post-secondary experience for many students exiting high school and provides a natural setting for integrated experiences with students ages 18–21 without disabilities.

Program teachers in Maryland, however, report that students in community colleges are transient. They come to the campus to attend their classes and often leave campus soon after class has ended. This may impact the opportunities to access college students to serve as peer buddies or tutors and may limit social interactions and participation in clubs and organizations on campus. In addition, securing office and classroom space has been a struggle for the teachers in these programs.

Programs in the Community

Three programs in Maryland are located in alternative sites in the community. One is based in a community building owned by the school system, one in a local mall, and the other in the office building of an adult service provider. Although initially these sites might not seem like ideal locations, we urge planning committees not to overlook the benefits of locating a program in a community site other than a college.

Programs based in the community often are not faced with the space or isolation concerns of programs located on college campuses. In addition, locating a program in the community does not preclude students from enrolling in classes or recreational and social activities on college campuses.

This approach benefits students who need jobs close to their homes, and it facilitates students with SD accessing the local community college's activities and classes even when it is not ideal to locate the "program" on the campus. If one of the major goals of the program is to promote integrated employment, partnerships with business and industry could be crucial when developing programs for students after the age of 18.

Another factor related to locating a program on campus or in a business setting has to do with the number of schools sending students with SD to post-secondary sites. For example, one urban school system in Maryland provides four sites, one on a four-year college campus, two on community college campuses, and one in an adult service center, to provide more students with SD access to a post-secondary program.

In a program in Oregon, students with SD receive services in an apartment in the community and at a local college (Highhouse, 2001). In the apartment, students learn to

prepare meals, wash clothes, and spend time with others or alone in a natural setting. At the local college, they take classes, use public transportation, and participate in other college social activities.

Both the Maryland and the Oregon community examples demonstrate that the use of college and community settings is not mutually exclusive. Also, by providing educational services in the community, school systems may avoid some of the pitfalls of trying to obtain classroom or office space on a college campus, which can be difficult. Providing services in community locations also may increase access to employment opportunities. If a student's post-secondary goals involve employment and community access rather than college experiences, participating in educational services located in the community can be a good alternative for their final school years.

Opportunities for Inclusion

Age-appropriate inclusion has occurred in programs on college campuses in a variety of ways (Grigal et al., 2001; Hall et al., 2000). Students with SD have enrolled in classes such as piano, ceramics, stagecraft, tai chi, math review, weight lifting, aerobics, swimming, family studies, education technology, ecology, and radio production. Participation in classes depends on various factors including level of course content, student interest, and class schedule. Students who attend college classes continue to receive support from the local school staff in much the same manner as they would in inclusive high school situations. Some of the barriers to attending college courses for students with SD include course prerequisites, placement tests, costs, scheduling conflicts, and attitudinal barriers from college instructors.

Some programs have found innovative ways to involve college students without disabilities as instructors or peer tutors in separate classes for students with SD or in community-based instruction. For example, one program at a fouryear college in Maryland had three college interns working in the classroom for 3 hours a week for credit, six college students volunteering 36 hours each semester to satisfy their student learning service requirement, and 10 students working as job coaches to support students with disabilities in their employment training.

Many programs have tapped into college activities, volunteer organizations such as Habitat for Humanity, or sororities and fraternities for integrated social and recreational activities. Best Buddies, a nonprofit organization that provides opportunities for one-on-one friendships, has been used successfully in several programs. Students also have many casual opportunities for social interaction by hanging out at student centers, using the library, and attending athletic, cultural, and other college-sponsored events. One of the main opportunities for age-appropriate inclusion may be through job training or paid employment that many students participate in for several hours each day when attending programs in post-secondary sites. Program staff, however, have not yet documented how much or what type of inclusion occurs on these worksites.

Funding and Interagency Linkages

Local school systems in Maryland generally paid for staff and instructional assistants, materials and curricula, and transportation to and from the program at a post-secondary site (Grigal et al., 2001). The program host (the college or business in which the program is located) may contribute to costs by donating space, materials, or access to facilities. Costs for tuition in college courses are determined individually. Some students paid the costs, some colleges waived the costs, or tuition was waived if the student was a recipient of Supplemental Security Income (SSI).

Teachers from several programs have partnered with local adult agencies and state agencies (e.g., vocational rehabilitation and developmental disabilities) to coordinate services for students with SD. In some programs, the staff from an adult service agency provided job-coaching services to students at the worksite or classroom instruction to students on job-seeking skills. In other programs, the staff had developed stronger links with adult service providers, which enhanced the transition planning process as students exited the program.

Therefore, locating a program off the high school site proved beneficial in terms of adult providers getting to know and observe individuals with SD before they left the school system. Hall et al. (2000) also found that having a program on a college campus was beneficial in terms of special educators increasing their knowledge of community resources and linking families to professionals in the community for individualized support. This increased collaboration is important because the National Council on Disability and Social Security Administration (2000, p. 26) found that "vocational rehabilitation and other community service providers have limited involvement in the transition process on a national scale."

Logistics

As programs in post-secondary sites have evolved, a number of issues have surfaced that can be handled in the planning stages (Moon, Grigal, & Neubert, 2001). Before choosing a location, a planning committee should consider the issues addressed in Appendix A. Other issues that should be taken into consideration when developing post-secondary experiences for students with SD include:

 Staff flexibility and availability of assistants to conduct employment training and "after school hours" activities

- 2. Scheduling and calendar differences between colleges and public school systems
- 3. Transportation to and from campus and for job training in the community
- 4. Identification and location of administrative and related service personnel
- 5. Availability of medical staff to supervise administration of medications and procedures
- 6. Equipment needs such as fax machines, laptop computers and printers, and cell phones.

Finally, program evaluation activities have to be addressed during the early stages of program planning. Grigal et al. (2001) found that only two of 14 programs in post-secondary sites had formal evaluation procedures to document student outcomes and satisfaction.

Replicating and Evaluating Programs

Although programs in post-secondary sites embrace the philosophy of alternative experiences to students after the age of 18, it is important to plan a program that promotes inclusive experiences. In a review of literature on programs for individuals with developmental and other SD between 1970 and 2000, we found numerous examples of programs on community college and four-year college campuses that served individuals who had already exited the school system (Neubert et al., 2001). The philosophy behind these programs was to provide integrated experiences in the community; however, most had separate classes or activities on the campus for the adults with SD. These programs often were started and supported through the efforts of parents and community service providers with funds from adult and continuing education, vocational rehabilitation, and vocational education, not by school systems or colleges.

Those designing programs on college campuses would do well to learn from past experience and to ensure that new programs are collaborative ventures that promote full integration of students with SD. They also should document how and why these programs improve post-school outcomes and quality-of-life experiences for students with SD. Without this information, it will be difficult to justify the expansion or addition of staff, programs, and resources.

Finally, given the small number of students served in programs in post-secondary sites, school system personnel and families will have to consider how to serve greater numbers of students with SD who desire a post-secondary experience. This may mean developing multiple sites in the community. Developing a program in a post-secondary site requires careful consideration of the purposes of the program, how students access the program, how resources and supports will be allocated to the program, and how staffing assignments can be flexible to accommodate atypical "school day" schedules. Most important, careful planning is needed with college and community personnel to ensure that students with SD are an integral part of the setting and have access to existing support services in the environment.

INDIVIDUAL SUPPORTS IN POST-SECONDARY SETTINGS

Another framework that some school systems have used to provide students with SD services outside of the high school after age 18 is based on the provision of individual supports (Bishop, Amate, & Villalobos, 1995; Fisher & Sax, 1999; Tashie et al., 1998; Hart et al., 2001; Weir, 2001). Using individual supports (IS), students receive educational and community supports outside of high school without attending a site-based program. Though limited, some case studies describe how these supports are provided to public school students (Page & Chadsey-Rusch, 1995; Tashie et al., 1998). Hart et al. (2001) also detail a model, developed from a federally funded OSERS grant, to create access to college for 25 students with SD using an individual support approach. Key features of individual supports are highlighted for those who are interested in providing these services in post-secondary settings.

Key Features

A key feature of individual supports is that they are provided and coordinated for one student at a time. The student receives services in a number of locations (e.g., college, employment site, and community environment), as determined by his or her personal needs and goals, instead of attending a program at a specific site. Using this approach, a student is not limited to existing programs or sites. The student and a support team create and implement an individualized schedule of work, college classes, or age-appropriate social activities after age 18.

Those providing individual supports often use a personcentered planning process to: (a) determine the student's interests, needs, and goals; (b) identify the environments in which these goals can be met; (c) determine the supports needed to access the environment and obtain the goals; (d) set up a system of support; and (e) monitor the coordination of support and progress toward goals. Supports can be provided by a number of individuals from the school system, the college, or agencies such as those involved with vocational rehabilitation. Coordination of services and supports usually remains the responsibility of someone in the school system until the student exits at age 21.

Proponents of this approach maintain that each student requires a unique support system based on individual choice. In addition, students with SD are seen as college students or employees, not as persons with disabilities from a "program." This approach clearly enhances opportunities for inclusion with age-appropriate peers in community settings. The emphasis remains on what support an individual student needs to achieve his or her goals, not on where or how a program is implemented. To illustrate how this process might work, Weir (2001), from the Institute of Disability at the University of New Hampshire, provided this description of one young man who accessed his local college via individual supports.

Marc, a young man with Down syndrome, had completed four years of high school and wanted to learn more about computers so he could possibly pursue a job in that field. His local school system coordinated with a communitybased support agency to support him in attending a community college of his choice and take "Introduction to Computers." He also used the learning center at the college to improve his writing skills, and he eats lunch in the college cafeteria. When he is not at class or doing schoolwork at the college, he holds down a part-time job at an office supply store.

Funding and Interagency Efforts

Providing individual supports to students with SD after the age of 18 requires school personnel, students and their families, and college personnel to rethink how services and supports are delivered on college campuses and in the community. Typically students with disabilities receive their instruction and supports from personnel paid by the school system until the age of 21 or 22. Using the IS approach, support is coordinated through various means, which may include the local school system, a college disability support office, or state agencies such as Vocational Rehabilitation (Hart et al., 2001; Rammler & Wood, 1999; Sharpton, 1998; Tashie et al., 1998).

This approach requires continuing dialogue of "who pays for what" and ongoing collaborative efforts on the part of school systems, colleges, and adult service providers to find creative solutions. To date, we have little documentation of how funding issues are resolved between schools and agencies for students needing supports in college and community settings after age 18.

Logistics

Similar to programs in post-secondary sites, logistical issues have to be considered by school system personnel and families when planning for individual supports. These can include the number of hours per day a student is involved in activities, the times of the day individual supports must be provided (e.g., student attends a community college night class), and the roles for staff, student, and family members (Certo et al., 1997). Hart et al. (2001) summarized how the roles and responsibilities for teachers must be designed when using individualized supports. These include: a move

from teaching to service coordination or case management; training and supervising of instructional assistants and job coaches; working a variable, 12-month schedule; and helping students develop self-determination skills in preferred environments.

Although many of these responsibilities are similar to what a transition specialist might provide in public schools (Asselin, Todd-Allen, & deFur, 1998; Council for Exceptional Children, 2000), the IS approach requires staff and administrators to truly reconsider how teachers and specialists who support older students can undertake case-management roles. Teachers and instructional assistants must be allowed to spend their time outside of the confines of the high school, work flexible, nontraditional schedules, and determine how natural supports can be used in post-secondary settings.

School administrators must understand the need for these changing roles and support teachers appropriately in terms of their caseload, the time needed for planning and collaborative efforts, and the resources allocated to the students and staff. Finally, community agency personnel must be involved in supporting students before they exit school. This, too, will require a shift in fiscal resources and staff responsibilities for some personnel.

Replicating and Evaluating Individual Support Approaches

An obvious benefit in the individual support approach is that students are not limited, by their schedule or predetermined instruction, to what is available in a separate "program." Weir (2001) maintains that the use of individual supports may allow individuals with SD to continue their education after they exit the school system, because they are not affiliated with a "program" during their transition years. As with the programs described in the previous section, however, no data are available indicating how the provision of individual supports enhances postschool outcomes for students with SD.

Documentation is needed describing what these students do during their final years of school and how individual supports are provided after the individual leaves the school system to maintain independent living, jobs, and social outlets. It also will be important to elicit the perspectives of students and their families regarding their experiences in accessing and retaining individualized supports.

Also, there has been little discussion about the role of or acceptance of college personnel in implementing this approach. We know, from literature and surveys in the 1980s and 1990s, that efforts to serve individuals with developmental disabilities were often separate from college disability support services and programs (Neubert et al., 2001). A national survey of disability support coordinators in 2000 found that post-secondary institutions rarely offered assistance with the transfer of supports from educational settings to the workplace (National Center for the Study of Post-secondary Education Supports, 2000). Similar to what has been documented in the past, results of this survey indicated that the most common supports for students with disabilities included testing accommodations, notetakers, personal counseling, and advocacy assistance.

We caution school personnel to be realistic about the types of support generally offered on college campuses to students with SD. In the absence of federal funding, such as OSEP post-secondary model demonstration projects, public school administrators and staff must carefully develop cooperative relationships that facilitate the support of students with SD in college and community settings.

SUMMARY

Providing age-appropriate transition services for students with SD during their final years of school provides a variety of benefits such as increased social interaction with sameage peers, age-appropriate courses and job opportunities, access to new environments, and greater opportunities for support from college and community personnel. Our intent in describing programs and individual supports for students with SD ages 18–21 is not to endorse one over the other but, rather, to provide school personnel, families, and community personnel with information about key features, replication, and evaluation issues. What is apparent in the programs and individual support approaches reported to date is that a small number of students with SD participate in these ageappropriate experiences.

We encourage school personnel, families, and community providers to consider several post-secondary options for students with SD. Having a program on a college campus for some students does not preclude the idea that other students should be provided with individual supports on the college campus and in the community. Still other students may benefit from a more traditional approach of remaining on the high school campus and being included in general classes while also receiving CBI and job training after the age of 18.

Finally, we recommend that planning teams use the resources provided in our References and in the Appendices to learn how other school systems have provided educational and transitional services to students with SD outside of the traditional high school. Though the program and individual support approaches described here may seem very different, the implications for practice are somewhat similar. These include redesigning staff roles, rethinking what students need during their first four years in high school (age 14–18), and engaging school systems and community

providers in the development and implementation of services outside of the high school. As students with SD and their families continue to learn about opportunities for ageappropriate services in their final years of school, we expect that school systems will implement a number of approaches that will better serve more students.

REFERENCES

- Agran, M., Snow, K., & Swaner, J. (1999). A survey of secondary level teachers' opinions on community-based instruction and inclusive education. *Journal of the Association for Persons with Severe Disabilities*, 24, 58–62.
- Asselin, S. B., Todd-Allen, M., & deFur, S. (1998). Transition coordinators: Define yourselves. *Teaching Exceptional Children*, 30(3), 11–15.
- Baird, P. A., & Everson, J. M. (1999). Person-centered planning: A guide for facilitators and participants. New Orleans: Human Development Center, Louisiana State University Health Sciences Center.
- Billingsley, F. F., & Albertson, L.R., (1999). Finding a future for functional skills. *Journal of Association for Persons with Severe Disabilities*, 24, 298–302.
- Bishop, K. D., Amate, S. L., & Villalobos, P. J. (1995). Post-secondary considerations. In M. A. Falvey (Ed.), *Inclusive and heterogeneous* schooling: Assessment, curriculum, and instruction (pp. 363–393). Baltimore: Paul H. Brookes.
- Certo, N. J., Pumpian, I., Fisher, D., Storey, K., & Smalley, K. (1997). Focusing on the point of transition: A service integration model. *Education and Treatment of Children*, 20, 68–84.
- Council for Exceptional Children (2000). What every special educator must know (4th ed.). Alexandria, VA: Author.
- Falvey, M. S., Gage, S. T., & Eshlilian, L. (1995). Secondary curriculum and instruction. In M. A. Falvey (Ed.), *Inclusive and heterogeneous* schooling: Assessment, curriculum, and instruction (pp. 341–362). Baltimore: Paul H. Brookes.
- Fisher, D., & Sax, C. (1999). Noticing differences between secondary and post-secondary education: Extending Agran, Snow, and Swaner's discussion. *Journal of The Association for Persons with Severe Disabilities*, 24, 303–305.
- Flannery, K. B., Newton, S., Horner, R., Slovic, R., Blumberg, R., & Ard, W. (2000). The impact of person-centered planning on the content and organization of individual supports. *Career Development for Exceptional Individuals*, 23, 123–137.
- Grigal, M., Neubert, D. A., & Moon, M. S. (2001). Public school programs for students with significant disabilities in post-secondary settings. *Education and Training in Mental Retardation and Developmental Disabilities*, 36, 244–254.
- Hall, M., Kleinert, H. L., & Kearns, F. J. (2000). Going to college! Postsecondary programs for students with moderate and severe disabilities. *Teaching Exceptional Children*, 32(3), 58–65.
- Hart, D., Zafft, C., & Zimbrich, K. (2001). Creating access to college for all students. *Journal for Vocational Special Needs Education*, 23(2), 19–31.
- Highhouse, P. (2001, June). Lake Oswego post-high transition programs. Presentation at the Region V CSPD Options in Transition Conference, Missoula, MT.
- Hughes, C., Eisenman, L. T., Hwang, B., Kim, J., Killian, D. J., & Scott, S. (1997). Transition from secondary special education to adult life: A review and analysis of empirical measures. *Education and Training in Mental Retardation and Developmental Disabilities*, 32, 85–104.
- Hunter, D. (1999, December). *Lesson in transition partnerships: An innovative school district/university relationship.* Presentation at 1999 TASH Conference, Chicago.

- Kohler, P. D. (1993). Best practices in transition: Substantiated or implied? Career Development for Exceptional Individuals, 16, 107–121.
- Kohler, P. D. (1998). Implementing a transition perspective of education: A comprehensive approach to planning and delivering secondary education and transition services. In F. R. Rusch, & J. G. Chadsey (Eds.). Beyond high school: Transition from school to work. (pp. 179–204). Belmont, CA: Wadsworth.
- Moon, M. S., Grigal, M., & Neubert, D. A. (2001). High school and beyond. *Exceptional Parent*, 31(1), 52–57.
- Moon, M. S., & Inge, K. V. (2000) Vocational preparation and transition. In M. Snell & F. Brown (Eds.), *Instruction of students with severe disabilities* (5th ed.) (pp. 591–628). Upper Saddle River, NJ: Merrill.
- National Center on Educational Outcomes. (1999). State graduation requirements for students with and without disabilities. Minneapolis: Author.
- National Center for the Study of Post-secondary Educational Supports (2000). *National survey of educational support provision to students with disabilities in post-secondary education settings*. Honolulu: University of Hawaii at Manoa, National Center for the Study of Post-secondary Educational Supports.
- National Clearinghouse on Post-secondary Education for Individuals with Disabilities. (2000, December). *Pathways to employment: Nondegree post-secondary options for individuals with developmental disabilities* (Part 2). Retrieved December 10, 2001 from http://www.heath.gwu. edu/info-from-heath/dec00.html
- National Council on Disability and Social Security Administration (2000). Transition and post-school outcomes for youth with disabilities: Closing the gaps to post-secondary education and employment. Washington, DC: Authors.
- National Transition Alliance. (2000, June). 1999 Selected model programs/ promising practices. Alliance Newsletter, 4, 3–15.
- Neubert, D. A., & Moon, M. S. (1999). Working together to facilitate the transition from school to work. In S. Graham & K. R. Harris (Eds.), *Teachers working together: Enhancing the performance of students* with special needs (pp. 186–213). Cambridge, MA: Brookline Books.
- Neubert, D. A., Moon, M. S., Grigal, M., & Redd, V. (2001). Post-secondary educational practices for individuals with mental retardation and other significant disabilities: A review of the literature. *Journal of Vocational Rehabilitation*, 16, 155–168.
- PACER Center. (2001). Technical assistance on transition and the Rehabilitation Act. Minneapolis: Author.

- Page, B., & Chadsey-Rusch, J. (1995). The community college experience for students with and without disabilities: A viable transition outcome? *Career Development for Exceptional Individuals*, 18, 85–95.
- Patton, J. R. Smith, T. E. C., Clark, G. M., Polloway, E. A., Edgar, E., & Lee, S. (1996). Individuals with mild mental retardation: Post-secondary outcomes and implications for educational policy. *Education* and Training in Mental Retardation and Developmental Disabilities, 31, 75–85.
- Pearpoint, J., Forest, M., & O'Brien, J. (1996). MAPs, Circle of Friends, and PATH: Powerful tools help build caring communities. In S. Stainback & W. Stainback (Eds.), *Inclusion: A guide for educators.* (pp. 67–86). Baltimore: Paul H. Brookes.
- Quirk, C., & Bartlinksi, A. K. (2001, March). No more community-based instruction? Paper presented at meeting of Maryland State Department of Education/ Maryland Coalition on Inclusive Education Conference, College Park.
- Rammler, L., & Wood, R. (1999). College lifestyle for all! Available from Rammler and Wood Consultants, LLC, 6 Way Road, Middlefield, CT 06455.
- Rusch, F. R., & Millar, D. M. (1998). Emerging transition best practices. In F. R. Rusch, & J. G. Chadsey (Eds.), *Beyond high school: Transition from school to work.* (pp. 36–59). Belmont, CA: Wadsworth Publishing.
- Sharpton, W. R. (1998, December). Creating post-secondary options: Issues and strategies from the field. Presentation at 1998 TASH Conference, Seattle.
- Smith, T. E. C., & Puccini, I. K. (1995). Position statement: Secondary curricula and policy issues for students with MR. *Education and Training in Mental Retardation and Developmental Disabilities*, 30, 275–282.
- Tashie, C., Malloy, J. M., & Lichtenstein, S. J. (1998). Transition or graduation? Supporting all students to plan for the future. In C. J. Jorgensen (Ed.), *Restructuring high schools for all students: Taking students to the next level* (pp. 234–259). Baltimore: Paul H. Brookes.
- Weir, C. (2001, May). Individual supports for college success (On-Campus Outreach, Fact Sheet #7). Retrieved October 12, 2001 from www.education.umd.edu/oco
- Wood, R. (1999, December). A transformation of services for students 18–21 years old. Presentation at 1999 TASH Conference, Chicago.

APPENDIX A

Convening a Planning Committee and Conducting a Needs Assessment

Step 1: Create and convene a planning committee.

The newly formed committee should meet regularly to design and conduct a needs assessment, to develop an action plan, to monitor progress, to discuss problems and successes with the staff involved in a program or providing individual supports, and to evaluate and make changes in post-secondary services. Possible committee members include older students with SD, special education administrators, secondary special educators, vocational or transition specialists, school psychologists, secondary school principals, parents, advocates, developmental disabilities and vocational rehabilitation case managers, local community rehabilitation program staff, college administrators, and local business people.

Step 2: Identify students with SD ages 18–21 who may benefit from educational and transition services offered in postsecondary sites.

One of the first jobs of the planning committee involves profiling the number of older students with SD who may need or want alternative services in post-secondary sites. Factors that should be considered are numbers of students between the ages of 18 and 21 who are SSI- or SSDI-eligible; will receive an alternative or nonstandard diploma; have paid jobs, have unpaid job experiences; have received travel training; have been included in general education; and have expressed an interest in postsecondary experiences off the high school campus.

Step 3: Review current services received by the students identified in Step 2.

The planning committee must examine educational and transition services currently being provided to students with

SD ages 18 to 21, determine what types of changes are needed in each service delivery area, and list possible actions that could lead to change. Possibly the needed changes do not involve creating alternative programs or supports delivered off-campus. Service delivery areas that might be examined include classroom instruction, inclusive educational and social opportunities, curricula, type of community-based or life-skills instruction, employment training, individual behavior or personal support needs, and interagency collaboration with businesses, colleges, community agencies, and community rehabilitation staffs.

Step 4: Determine the need for alternative services.

Based on the needs assessment of the number of students who might need alternative services, the viability of current services, and the possible actions that should be taken, the planning committee must decide what types of post-secondary programs or individual supports should be developed.

Step 5: Develop an action plan, including a timeline, for how, where, and when postsecondary services will occur.

This is a time-consuming process that usually requires six months to a year of ongoing work by the planning committee. Outcomes of this process must include hiring and training service providers, developing formal agreements with colleges and businesses where services will occur, disseminating referred or application procedures, and developing a written plan for handling logistics such as transportation, delivery of related services, IEP coordination, administrative responsibility, and medical and emergency procedures.

APPENDIX B

On-Campus Outreach www.education.umd.edu/oco

The website includes a list of post-secondary programs in Maryland, a Needs Assessment Form for Developing Programs in Post-Secondary Settings for Students with SD Ages 18–21, sample letters and forms used by personnel in post-secondary programs in Maryland, links to other resources, and a series of fact sheets including:

- Fact Sheet #1: How to Start a Program for Students with SD on a College Campus
- Fact Sheet #2: Functional, Community-based Curriculum Guides & Materials
- Fact Sheet #3: Transition Assessment Practices for Students with SD

Fact Sheet #4:	Self-determination & Students with SD on a
	College Campus
Fact Sheet #5:	Definitions and Descriptions
Fact Sheet #6:	Evaluating Programs for Students with SD
	in Post-secondary Settings
Fact Sheet #7:	Individual Supports for College Success

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APPENDIX C

Postsecondary Internet Resources for Students With Significant Disabilities

Institute on Disability/ UAP at the University of New Hampshire www.iod.unh.edu Provides tipsheets on post-secondary education. To access, click on Publications, and then click on High School/Post-secondary Education.

Institute for Community Inclusion/

UAP at Children's Hospital, Boston

http://www.childrenshospital.org/ici/ Sells a video that describes the use of individual supports for students with significant disabilities in post-secondary settings. To access, click on **Publications**, then under category of **Education and Transition**, look for *"Moving On: Planning for the Future."*

National Center on the Study of Post-secondary Educational Supports

http://www.rrtc.hawaii.edu/

Lists a variety of research articles that can be downloaded or purchased on post-secondary education and people with disabilities. To access, click on **Products**, then click on **Published Papers**, and review the list of documents available.

HEATH Resource Center

http://www.heath.gwu.edu

Includes two newsletters focusing on post-secondary opportunities for individuals with significant disabilities. To access, click on **Information from HEATH**, then click on **July 2000** for Nondegree Post-secondary Options for Individuals with Developmental Disabilities (Part I). Click on **December 2000** for Pathways to Employment: Nondegree Post-secondary Options for Individuals with Development Disabilities (Part II).

Institute on Community Integration, University of Minnesota

http://www.ici.coled.umn.edu/ici Provides access to the newsletter *IMPACT* written and distributed by the Institute. To access the issue *Postsecondary Education Supports for Students with Disabilities (2000),* click on Newsletters, then click on various topics. Cost: \$4.00.

AHEAD, Association on Higher Education and Disability

www.ahead.org/

Sells a guide for creating peer supports programs on college campuses. To access, click on **Publications**, look for *Post-Secondary Peer Support Programs: Facilitating Transition Through Peer Training and Mentoring*. Cost: \$35.00

Serving Students with Significant Disabilities in Two-Year Colleges: Six Highly Effective Approaches www.cew.wisc.edu/nidrr/

Provides access to six products available for downloading about developing effective support services for individuals with significant disabilities in post-secondary education.

APRIL 2002





Learning Disabilities Association of America

February 26–March 1, 2003 Chicago, Illinois

Contact: 40th Annual LDA International Conference 4156 Library Road Pittsburgh, PA 15234

American Association on Mental Retardation

May 28–June 1, 2002 Orlando, Florida

Contact: www.AAMR.org 800-424-3688