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Current Challenges Facing the Future of Secondary Education and Transition Services for Youth with Disabilities in the United States

This paper is intended to promote discussion among professionals, policymakers, employers, parents, and individuals with disabilities concerning current and future challenges facing secondary education and transition services nationally. The issues identified and discussed should not, however, be viewed as inclusive of the full range of possible challenges needing to be addressed. This paper (a) presents findings from research identifying key issues influencing the implementation of federal legislation relating to transition services at state and local levels; (b) examines the impact of national organizations, government reports, policy groups, and the courts on secondary education and transition services; and (c) presents the major challenges that the Center must begin to address immediately. These challenges have broad implications for special education and its relationship with general education and community agencies and organizations responsible for supporting youth with disabilities as they make the transition from high school to postsecondary education, employment, and other aspects of adult life.

National Perspective on Secondary Education and Transition for Youth with Disabilities

Since the mid-1980s, the U.S. Department of Education, Office of Special Education and Rehabilitative Services (OSERS), has stressed the importance of improving transition services nationally. The federal government has assumed a key role in stimulating state and local efforts to improve transition services through a variety of policy, interagency, systems change, model demonstration, and research efforts. Specific language on transition was included in the Individuals with Disabilities Education Act of 1990 (IDEA), and again in IDEA Amendments of 1997 (IDEA '97). From this federal legislation, regulations were established requiring state and local education agencies specifically to address the school and postschool transition service needs of students with disabilities. These needs are to be met through coordinated planning among special educators, general educators, community service agencies, parents, and students. Much of the rationale for establishing these new provisions was based on the recognition that many young adults with disabilities were exiting high school unprepared for adult life. Follow-up studies of former special education students conducted during the past two decades have consistently documented the unsatisfactory outcomes achieved by young adults with disabilities

as they leave school and attempt to access employment, postsecondary education programs, and adult community services (DeStefano & Wagner, 1991; Halpern, 1990; Hasazi, Gordon, & Roe, 1985; Johnson, McGrew, Bloomberg, Bruininks, & Lin, 1997a, 1997b; Wagner, 1993). Predominant themes emerging from these and other studies include lower than desired academic achievement levels; high dropout rates; substantial levels of unemployment and underemployment; economic instability, dependence, and social isolation; and low levels of participation in postsecondary education and training programs.

For two decades, the Office of Special Education Programs (OSEP) has sponsored transition research, demonstration, and training initiatives that have resulted in a knowledge base of promising approaches and strategies for the delivery of transition services for students with disabilities. Advances and innovations in interagency cooperation, access to postsecondary education and training, supported employment, transition planning, student and parental involvement in school and postschool decision making, development of adult living skills, and self-determination and self-advocacy, are all valued examples of previous and current efforts. These varied approaches and strategies serve as the foundation upon which state and local education agencies, in partnership with community service agencies, parents, and students, have based the development of their transition programs and services.

Emergent Policy Influences on the Provision of Secondary Education and Transition Services

Since the mid-1980s, the efficacy of public education programs has been challenged by policymakers, business leaders, professionals, and the general public. Whether the impetus for reform comes from a perception of “falling behind” our international counterparts (as asserted in *A Nation at Risk* in 1983), “falling short” of providing equitable opportunities to all U.S. children (as in the 1988 report, *The Forgotten Half*), or not producing youth prepared for the labor market (as in *What Work Requires of Schools*, the 1991 report of the Secretary’s Commission on Achieving Necessary Skills [SCANS]), the consensus seems to be that there are serious things wrong with public education, that the problems are systemic rather than programmatic, and that nothing short of major structural change will fix these problems (Cobb & Johnson, 1997; Thurlow & Johnson, 2000). While these concerns initially focused on improving general education, there are

now efforts to closely align special education programs with emerging general education reforms (e.g., *Testing, Teaching and Learning*, Elmore & Rothman, 1999; *Educating One and All*, McDonnell, McLaughlin, & Morison, 1997).

Special education programs have been influenced by several recent federal education reforms, including the School-to-Work Opportunities Act of 1994, Goals 2000: Educate America Act of 1994, the Improving America’s Schools Act of 1994, the Workforce Investment Act of 1998, and the No Child Left Behind Act of 2001, all of which have promoted comprehensive strategies for improving public school programs for all students, including those from diverse, multicultural backgrounds and situations of poverty. These reforms stress high academic and occupational standards; promote the use of state and local standards-based accountability systems; point to the need to improve teaching through comprehensive professional development programs; and call for broad-based partnerships between schools, employers, postsecondary institutions, parents, and others.

With the reauthorization of IDEA in 1997, significant new requirements were put into place to ensure students greater access to the general education curriculum and assessment systems. IDEA ‘97 also expanded previous transition requirements by requiring that each student’s individualized education program (IEP) include, at age 14 or earlier, a statement of transition service needs focusing on the student’s course of study (such as participation in advanced-placement courses or vocational education programs). The IEP must also include, beginning at age 16 or younger, a statement of needed transition services and interagency responsibilities or needed linkages. The current reauthorization of IDEA will continue to support and strengthen these requirements.

The current challenge is to integrate and align these transition requirements with other legislated requirements giving students with disabilities greater access to the general education curriculum and assessment systems. Several recent studies indicate that the implementation of transition service requirements has been too slow, with many states failing to achieve minimal levels of compliance (Hasazi, Furney, & DeStefano, 1999; Johnson & Sharpe, 2000; National Council on Disability, 2000). Areas of greatest noncompliance include having appropriate participants in IEP meetings, providing adequate notice of meetings, and providing a statement of needed services in students’ IEPs. These problems have been complicated further by state and local standards-based assessment systems that either fail to include students with disabilities or provide inadequate accommodations to support their participation.

Students with disabilities often have trouble meeting graduation requirements, and concern is mounting about the relationship between students' academic experiences and the formulation of postsecondary transition plans that address how students will access postsecondary education, employment, and community living opportunities (Guy, Shin, Lee, & Thurlow, 1999; Johnson, Sharpe, & Stodden, 2000; Johnson & Thurlow, 2003; Policy Information Clearinghouse, 1997; Stodden & Dowrick, 2000a, 2000b). Limited levels of service coordination and collaboration among schools and community service agencies create difficulties for students with disabilities as they seek to achieve positive postschool results. Strategies are desperately needed to help state and local education agencies and community service agencies address transition service requirements as students access the general curriculum and meet state standards and graduation requirements.

The next reauthorization of IDEA, set for 2003, is expected to retain the current focus on high academic achievement and the inclusion of students with disabilities in state and local standards-based accountability systems. Further, discussions will continue to focus on effective strategies and interventions that help students develop other essential adult life skills through vocational education, training, community participation, and other means. Federal policy, research and demonstration, state and local initiatives, and other developments since 1975 have focused considerable effort on improving school and postschool results for youth with disabilities. This results-based policy ideology will no doubt continue as a major influence on both special education and general education throughout the current decade.

The Role of Federal Legislation

Given the complexity and long-term nature of transition, it is evident that families, schools, adult service providers, state agencies, and postsecondary institutions cannot carry the entire burden of fiscal, programmatic, and planning responsibility. Over the past two decades, Congress has enacted a broad range of federal legislation to make available an array of programs and services designed to support young people with disabilities in their transition from school to postsecondary education, employment, and community living. The following briefly summarizes several of these major legislative developments.

Rehabilitation Act of 1973. This law provides comprehensive services to all individuals with a disability, regardless of the severity of the disability, and outlaws discrimination against citizens with disabilities. Section 504 of this law specifically prohibits discrimination in employment on the basis of disability. It also focuses on

adults and youth transitioning into employment settings. The act ensures the development and implementation of a comprehensive and coordinated program of vocational assistance for individuals with disabilities, thereby supporting independent living and maximizing employability and integration into the community.

Technology-related Assistance for Individuals with Disabilities Act of 1988. This law assists states in developing comprehensive programs for technology-related assistance and promotes the availability of technology to individuals with disabilities and their families.

Americans with Disabilities Act of 1990. This landmark legislation guarantees equal opportunity and assures civil rights for all individuals with disabilities. The law mandates "reasonable accommodations" for individuals with disabilities in areas including employment, access to public facilities, transportation, telecommunications, and government services.

Carl D. Perkins Vocational and Applied Technology Education Act of 1990. This act requires states to ensure that special population students have equal access to vocational education and that localities ensure the full participation of these students in programs that are approved, using Perkins money. States receiving federal vocational education money must fund, develop, and carry out activities and programs to eliminate gender bias, stereotyping, and discrimination in vocational education. The act includes a wide range of programs and services, including vocational education classes and work-study for students in high schools, as well as access to postsecondary technical education programs.

Goals 2000: Education America Act of 1994. This law established a new framework for the federal government to provide assistance to states for the reform of educational programs. It encourages the establishment of high standards for all children, including children with disabilities, and specifies eight national education goals for all children.

Workforce Investment Act of 1998 (WIA). WIA creates a comprehensive job training system that consolidates a variety of federally funded programs into a streamlined process allowing individuals to easily access job training and employment services. As outlined in Section 106 of WIA, states and localities are required to develop and implement workforce investment systems that fully include and accommodate the needs of individuals with disabilities.

Ticket to Work and Work Incentives Improvement Act of 1999. This act makes it possible for individuals with disabilities to join the workforce without fear of losing their Medicare or Medicaid coverage. The legislation creates two new options for states. First, it creates a new

Medicaid buy-in demonstration to help people whose disability is not yet so severe that they cannot work. And, second, it extends Medicare coverage for an additional four and one-half years for people in the disability insurance system who return to work.

No Child Left Behind Act of 2001. This act redefines the federal role in K-12 education with the goal of closing the achievement gap between disadvantaged and minority students and their peers. It is based upon four basic principles: stronger accountability for results, increased flexibility and control, expanded options for parents, and an emphasis on teaching methods that have been proven to work. The law specifically addresses the importance of structuring implementation to include every child.

Recent Influences of National Organizations, Government Reports, Policy Groups, and the Courts

Several recent reports, studies, and court decisions have been released that affect current policies and practices concerning the secondary education and transition of youth with disabilities. Highlights of selected developments are presented here in an effort to further examine how national groups, advocacy organizations, and the courts are influencing, or attempting to influence, the transition of youth with disabilities.

National Council on Disability (NCD), Report on Disability Policy. In a July 2003 report titled *National Disability Policy: A Progress Report* (National Council on Disability, 2003), NCD offered a number of recommendations for action at the local, state, and national levels. These recommendations underscore, among other things, the need for appropriate accountability measures, greater involvement of youth in the development and evaluation of policy and program initiatives, clarification of policies aimed at reducing work disincentives, seamless integration and clearer policy guidance on regulations affecting youth with disabilities, and the need to clarify financial responsibilities and cost sharing expectations in a way that separates budgetary considerations from decisions regarding the needs of the student.

General Accounting Office (GAO), Report on Special Education. In July 2003, the General Accounting Office issued a report titled *Federal Actions can Assist States in Improving Postsecondary Outcomes for Youth* (General Accounting Office, 2003). This report noted that high school completion patterns of youth with disabilities have remained stable over recent years, and that students with some types of disabilities were much less likely than others to complete high school with a standard diploma,

instead receiving an alternative credential or dropping out. The report also notes that a variety of transition problems, including lack of vocational training and poor linkages between schools and service providers, have been consistently reported by students, parents, and others. The report's recommendations include expansion of the availability and use of data on the postsecondary employment and education status of youth with disabilities, improved feedback to states on improvement plans to address transition issues, consistency in the quality of technical assistance to states, and the development of strategies for using the federally mandated high school transition planning process to provide youth and their families with information about the full array of federally funded transition services.

OSEP Expert Strategy Panel on Secondary Education, Transition and Employment. The Secondary Education, Transition and Employment panel was one of five panels convened by OSEP in 2000 to assist in the development of a long-range plan for the IDEA, Part D, Discretionary Grants Program. The panel identified five primary issues as critical to the improvement of secondary education and transition services for students with disabilities. These included: self-determination and self-advocacy, participation in a rigorous and relevant education curriculum, enhancement of service coordination and collaboration, improved accountability for results and postsecondary outcomes, and engagement of practitioners in rigorous professional development programs. The panel was also charged with the responsibility of identifying critical gaps needing to be bridged to achieve improved results for youth with disabilities.

Presidential Taskforce on the Employment of Adults with Disabilities. In June 2000, a National Youth Transition summit was sponsored by the Presidential Taskforce on Employment of Adults with Disabilities Youth Subcommittee. The purpose of the summit was to provide a forum for a multidisciplinary dialogue on strategies for improving transition results for young people with disabilities and their families. Highlights of recommendations from the National Youth summit include: design and coordinate a public awareness campaign to promote high expectations and successful transition of young people with disabilities; design and implement an interagency one-stop information center on transition; convene a national institute of federal agencies to focus on the alignment of resources, programs, and services needed to improve transition outcomes; coordinate and implement research and conduct interagency demonstration projects to promote "what works;" strengthen the transition to postsecondary education environments; and establish a Healthy and Ready-to-Work Interagency

Council charged with ensuring access to and use of health-care services by young people with special health-care needs.

Commission on Excellence in Special Education. A report issued in July 2002 by the President's Commission on Excellence in Special Education, titled *A New Era: Revitalizing Special Education for Children and their Families*, specifically addressed school-to-work transition for youth with disabilities. Recommendations outlined in this report include: simplify federal transition requirements in IDEA; mandate federal interagency coordination of resources; create a Rehabilitation Act Reauthorization advisory committee; and support higher education faculty, administrators, and auxiliary service providers to more effectively provide and help students with disabilities to complete high-quality postsecondary education programs. Also included within this report is a strong emphasis on increased parental empowerment and school choice.

New Freedom Initiative. The Bush administration's New Freedom Initiative's goals are to increase access to assistive and universally designed technologies, expand educational opportunities, promote home ownership, integrate Americans with disabilities into the workforce, expand transportation options, and promote full access to community life. This initiative specifically promotes full access to community life through the implementation of the Olmstead Supreme Court decision and Ticket to Work and Work Incentives Improvement Act of 1999.

Olmstead decision. In July 1999, the Supreme Court issued the *Olmstead v. L.C.* decision. The court's decision in that case clearly challenged federal, state, and local governments to develop more opportunities for individuals with disabilities through more accessible systems of cost-effective community-based services. The *Olmstead* decision ensures that youth with disabilities who transition from school to adult life have increased opportunities for independent living by providing for noninstitutional options in care and services.

Influence of State Priorities and Goals. In response to the call for improved transition services and secondary education outcomes, the National Center on Secondary Education and Transition (NCSET) hosted its first National Leadership Summit on Improving Results for Youth in September, 2003. Approximately 250 people, representing 42 states and other entities, met in facilitated dialogue sessions to develop state-level strategic action plans that will build their capacity to improve outcomes for youth with disabilities. Specifically, states worked to expand or complement their current state improvement plans to address areas with significant need for change and improvement. State teams were asked to identify

state priorities, goals, action steps and technical assistance needs in relation to transition services and postschool outcomes. This information was then analyzed to determine the critical challenges to secondary education and transition evident across states and regions, and potential technical assistance needs.

Three overarching themes – State Infrastructure, Programs and Services, and Youth and Family, and ten priority content areas, emerged from the data. The state priority content areas included: state systems infrastructure; data design, collection and use; collaboration; access to general education, standards and testing; postsecondary access, enrollment and options; graduation and dropout rates; workforce development and employment; person-centered and transition-driven planning; and family education and involvement. These state-level priorities are complex, persistent, and consistent with the current national research on transition and secondary education. These priorities illustrate the need to create more collaborative relationships at the local, state, and federal levels for improved secondary education and transition policies, practices, and systems; and point to the importance of continued emphasis on aligning special programs with broader education and workforce reforms so that all youth have the opportunity to achieve successful academic, occupational, and social outcomes. These priorities also revealed interest on the part of state leaders about how best to report and use outcomes data to improve services and programs. Moreover, the education and involvement of youth and families in the transition planning process remains a critical need. The issues identified continue to challenge NCSET and other national technical assistance providers to work directly with states in focusing on developing more effective results-driven systems and enhanced research-to-practice efforts.

Current Challenges

Challenge 1: Promote students' self-determination and self-advocacy

Self-determination is a concept reflecting the belief that all individuals have the right to direct their own lives. Students who have self-determination skills are more likely to be successful in making the transition to adulthood, including employment and community independence (Wehmeyer & Schwartz, 1997). Starting with the 1990 IDEA legislation, transition services must be based on students' needs and take into account students' interests and preferences. To accomplish this goal, students must be prepared to participate in planning for their future. IDEA '97 also supported students' participation in planning for their future by requiring that all special education students age 14 and older be invited to their IEP

meetings when transition goals are to be discussed. OSEP has played a major role in advancing a wide range of self-determination strategies through sponsored research and demonstration projects.

Research indicates that many students are attending their IEP meetings (Hasazi, et al., 1999; Johnson & Sharpe, 2000). There remain, however, a significant number who are not involved. This raises questions as to whether these students are not being extended opportunities for involvement, or are simply choosing not to attend. Questions must also be raised as to how well prepared these young people are to participate in, and ultimately lead, discussions concerning their goals. Effective student participation in the IEP process requires more than attendance. It requires that students have the skills to move their lives in the directions they themselves choose, and have the support of their school, family, and the adult service system in accomplishing their goals. Practices that empower youth to play a meaningful role in the IEP process, and ultimately direct their IEP meetings, need to be implemented more consistently and systematically in schools throughout the country. Parents, educators, and researchers agree on the need to promote self-determination, self-advocacy, and student-centered planning. Self-determination, the combination of skills, knowledge, and beliefs that enable a person to engage in goal-directed, self-regulated, autonomous behavior, has become an important part of special education and related services provided to individuals with disabilities (Abery & Stancliffe, 1996). Self-determination skills include self-advocacy, social skills, organizational skills, community and peer connection, communication, conflict resolution, career skill building, career development and computer/technological competency (Martin & Marshall, 1996; Wehmeyer, Kelchner, & Richards, 1996). Research has found that helping students acquire and exercise self-determination skills is a strategy that leads to more positive educational outcomes. For example, Wehmeyer and Schwartz (1997) found that one year after graduation, students with learning disabilities who received self-determination training were more likely to achieve positive adult outcomes, including being employed at a higher rate and earning more per hour, when compared to peers who were not self-determined. A common element of many exemplary self-determination programs is the presence of an individual with a philosophy, and the accompanying motivation, to see self-determination practices implemented or enhanced in his or her school or district. Exemplary self-determination programs also have strong administrative support encouraging the implementation of self-determination programs in schools. Without administrative support,

student self-determination programs are often limited to individual classrooms and teachers who are dedicated to doing whatever they can to further their students' self-determination, despite limited resources and inadequate administrative commitment (Wood & Test, 2001).

Educators, parents, and students consistently recommend that self-determination instruction begin early, well before high school. This recommendation is consistent with published recommendations for self-determination instruction (Wood & Test, 2001). Natural opportunities for making choices occur throughout life, and increased opportunities to express preferences and choices, beginning in early childhood, can heighten an individual's sense of self-esteem and self-direction.

Izzo and Lamb (2002) suggested that schools seeking to encourage self-determination and positive postschool outcomes for students with disabilities should (a) empower parents as partners in promoting self-determination and career development skills; (b) facilitate student-centered IEP meetings and self-directed learning models; (c) increase students' awareness of their disability and needed accommodations; (d) offer credit-bearing classes in self-determination and careers; (e) teach and reinforce students' internal locus of control; (f) develop self-advocacy skills and support student application of these skills; (g) infuse self-determination and career development skills in the general education curriculum; and (h) develop and implement work-based learning programs for all students.

Recommendations Regarding Challenge 1

- Provide opportunities for decision-making starting in early childhood, and encourage their children to express their preferences and make informed choices throughout life.
- Begin self-determination instruction early in the elementary grades.
- Intensify teaching of specific self-determination skills during high school.
- Support students' development and use of self-advocacy skills, and teach students to develop an internal locus of control.
- Make work-based learning, self-directed learning, and career exploration opportunities available to all students.
- Incorporate self-determination and career development skills in the general education curriculum.

- Promote and support student-centered and student-run IEP meetings.

Challenge 2: Ensure students have access to the general education curriculum

To prosper and gain the knowledge and skills needed for success in a variety of settings, students with disabilities must have more than mere access to school buildings and placement in the least restrictive environment; they must have access to educational curriculum and instruction designed to prepare them for life in the 21st century. This assumption was the basis, in part, for the requirements in IDEA '97 stipulating that states must provide students with disabilities access to the general education curriculum, including the identification of performance goals and indicators for these students; definition of how access to the general curriculum is provided; participation in general or alternate assessments; and public reporting of assessment results. All of these requirements are embedded within a context of standards-based education, in which standards for what students should know and be able to do are defined at the state level, appropriate standards-based education is provided, and success in meeting expectations is measured through large-scale assessment systems.

The need for the access requirements in IDEA '97 was supported by research demonstrating (a) a lack of educational success (or a lack of any information about educational success) for many students with disabilities (e.g., McGrew, Thurlow, & Spiegel, 1993; Shriner, Gilman, Thurlow, & Ysseldyke, 1994/95), and (b) the all too common provision of an inappropriately watered-down curriculum (Gersten, 1998), or a curriculum undifferentiated for students with disabilities (McIntosh, Vaughn, Schumm, Haager, & Lee, 1993). According to Nolet and McLaughlin (2000), “the 1997 reauthorization is intended to ensure that students with disabilities have access to challenging curriculum and that their educational programs are based on high expectations that acknowledge each student’s potential and ultimate contribution to society” (p. 2). Within the educational context of the late 1990s and early 2000s, this means that all students with disabilities, regardless of the nature of their disability, need to have access to standards-based education.

All states (or districts within states) have become engaged in the work of identifying content standards and setting performance standards for what students should know and be able to do (American Federation of Teachers, 2000). While these standards-setting efforts may not have initially considered students with disabilities (Thurlow, Ysseldyke, Gutman, & Geenen, 1998), as time has passed many states have reconsidered their standards

in this light. This reconsideration occurred, if for no other reason, because the IDEA assessment requirements indicated that states would need to develop alternate assessments for those students who could not participate in general assessments. The alternate assessments, like the general assessments, were to be aligned to the state’s standards, a requirement reinforced by the reauthorization of the Elementary and Secondary Education Act, known as the No Child Left Behind Act (NCLB).

The IDEA requirements for inclusion of students with disabilities in assessments and access to the general curriculum have been reinforced strongly by NCLB, which requires that students with disabilities participate not only in assessments, but also in accountability systems. The purpose of these requirements is to ensure that schools are held accountable for these students’ access to the general curriculum, higher expectations, and improved learning. Requirements for students with disabilities to be included in state accountability systems, and for measuring whether schools have achieved adequate yearly progress (AYP), have heightened the importance of access to the general curriculum for all students with disabilities.

Providing meaningful access to the general curriculum requires a multifaceted approach. Appropriate instructional accommodations constitute one piece of this picture (Elliott & Thurlow, 2000). Other elements include the specification of curriculum domains, time allocation, and decisions about what to include or exclude (Nolet & McLaughlin, 2000). The process of specifying the curriculum in a subject matter domain requires cataloging the various types of information included in the domain (facts, concepts, principles, and procedures) and setting priorities with respect to outcomes. Allocation of time for instruction should be based on the priorities that have been established. Decisions about what to include or exclude in curriculum should allow for adequate breadth (or scope) of coverage, while maintaining enough depth to assure that students are learning the material. Universal design is another means of ensuring access to the general curriculum (Orkwis & McLane, 1998). When applied to assessment, Universal design can help ensure that tests are usable by the largest number of students possible (Thompson, Johnstone, & Thurlow, 2002).

Research indicates that a variety of instructional approaches can be used to increase access to the general curriculum and standards-based instruction (Kame’enui & Carnine, 1998). Approaches such as differentiated instruction (Tomlinson, 1999), strategy instruction (Deshler, et al., 2001), textbook organization (Crawford & Carnine, 2000; Harniss, Dickson, Kinder, & Hollenbeck, 2001), and technology use (Rose & Meyer, 2000), are showing that access to the curriculum can be substan-

tially improved, with positive outcomes for students with disabilities.

Recommendations Regarding Challenge 2

- Use universal design to make classrooms, curriculum, and assessments usable by the largest number of students possible without the need for additional accommodations or modifications.
- Provide appropriate instructional accommodations for students.
- Provide instructional modifications only when necessary.
- Clearly specify the subject matter domain (facts, concepts, principles, and procedures) and scope of the curriculum.
- Set priorities for outcomes, and allocate instructional time based on these priorities.
- Use instructional approaches that have been shown to promote positive outcomes for students with disabilities.

Challenge 3: Increase the school completion rates of students with disabilities

Dropping out of school is one of the most serious and pervasive problems facing special education programs nationally. The National Longitudinal Transition Study (NLTS) found that approximately 36% exited school by dropping out. The NLTS data also revealed that risk factors such as ethnicity and family income are related to dropout rates, and that some groups of special education students are more apt to drop out than others. Of youth with disabilities who do not complete school, the highest proportions are students with learning disabilities (32%), and students with emotional/behavioral disabilities (50%) (Wagner, et al., 1991).

National data indicate that there has been some improvement in the overall graduation rate of students with disabilities in the United States. Between the 1995-96 and 1999-2000 school years, the percentage of youth with disabilities graduating with regular diplomas, as reported by states, grew from 52.6% to 56.2%. During the same period, the percentage of students with disabilities reported as having dropped out of school declined from 34.1% to 29.4% (U.S. Department of Education, 2002). While these data are encouraging, the dropout rate for students with disabilities still remains twice that of students without disabilities.

Concern about the dropout problem is increasing because of state and local special education agencies' experiences with high-stakes accountability in the context

of standards-based reform (Thurlow, Sinclair, & Johnson, 2002). State and local school districts have identified what students should know and be able to do, and have implemented assessments to ensure that students have attained the identified knowledge and skills. Large numbers of students, however, are not faring well on these assessments. For youth with disabilities, several factors beyond academic achievement affect their performance on these tests, including accurate identification of the disability, provision of needed accommodations, and educational supports that make learning possible regardless of disability-related factors. The provision of accommodations is of particular importance in helping to ensure students' success within state standards and reform initiatives.

NCLB is having a significant impact on states. Under the Title I requirements of NCLB, schools will be held accountable for student progress, using indicators of AYP. These indicators include measures of academic performance and rates of school completion. Schools will be identified as needing improvement if their overall performance does not increase on a yearly basis, or if any of a number of sub-groups does not meet specified criteria. Students with disabilities are identified as one of the sub-groups whose performance will count towards assessment of AYP. If these students do not perform well, questions must be raised as to what incentives schools have to focus effort and resources on these youth. Given the pressures, it is possible that schools and educators within them may encourage special education students to seek alternative programs and leave their buildings, effectively causing many to drop out of school. High-stakes tests add to the pressure on students, because they determine whether students are promoted from one grade to the next, or graduate from high school with a standard diploma (Thurlow & Johnson, 2000). Students who experience failure or who see little chance of passing these tests may decide to leave school, because they fear they will be held back, or because they expect they will not graduate with a standard diploma or acceptable alternative credential. Accountability without the necessary opportunities and support for students with disabilities may increase the rate at which they drop out of school and fail to graduate. Dropout trends associated with these and other factors should be systematically evaluated and documented over the next several years.

Overall, Americans recognize that the nation can no longer afford to have students drop out of school. Youth who drop out generally experience negative outcomes, which may include unemployment, underemployment, incarceration, and other difficulties. School dropouts, for example, report unemployment rates as much as 40% higher than youth who have completed school. Arrest

rates are alarmingly high for youth with disabilities who drop out of school: 73% for students with emotional/behavioral disabilities and 62% for students with learning disabilities. More than 80% of incarcerated individuals are high-school dropouts (Office of Juvenile Justice and Delinquency Prevention, 1995). The social and economic costs of incarceration have been well documented and affect every level of society. Further, because postsecondary education is increasingly important to the pursuit of careers offering a livable wage, students who drop out of school have significantly diminished financial prospects.

In the United States, dropout prevention programs have been implemented and evaluated for decades, but the empirical base of well-researched programs is scant, and well-done evaluations of dropout prevention programs specifically targeted towards students with disabilities are extremely rare. Perhaps the best-researched program at the secondary level for students with disabilities at risk of dropping out is the *Check & Connect* program (Sinclair, Christenson, Evelo, & Hurley, 1999; Christenson, 2002). Using randomized assignment to experimental and control groups, these researchers found significant positive results for their program. *Check & Connect* includes the following core elements: (a) a monitor/advocate who builds a trusting relationship with the student, monitors the student on risk indicators, and helps problem-solve difficult issues between the student and the school; (b) promotion of student engagement with the school; (c) flexibility on the part of school administrative personnel regarding staffing patterns and use of punitive disciplinary practices; and (d) relevancy of the high school curriculum to students.

The empirical literature on dropout prevention programs for at-risk students (including, but not limited to, students with disabilities) is somewhat broader but still lacking in high-quality research designs. Lehr, Hansen, Sinclair, & Christenson (2002) recently completed a meta-analysis of dropout studies published between 1980 and 2001; 45 research studies were included in the final integrative review. Of these, less than 20% employed randomized assignment procedures, and not a single study was a true experiment. Nonetheless, their findings were quite consistent with well-researched components of the *Check & Connect* model, and were also consistent with a number of other empirical sources of information. Two common components of successful secondary dropout prevention programs are work-based learning and personal development/self-esteem building (Farrell, 1990; Orr, 1987; Smink, 2002). Equally important, however, as pointed out by Lehr et al., is tailoring or contextualizing these and other intervention components to the particular school environment. Finally, early intervention also

appears to be a powerful component in a school district's array of dropout prevention services. In an experimental study involving longitudinal data collection for 22 years, Schweinhart and Welkart (1998) documented impressive outcomes of their High/Scope Perry preschool study of three- and four-year-olds who were at risk of school failure.

Recommendations Regarding Challenge 3

- Develop methods and procedures to identify, document, and widely disseminate research-based information on best practices in dropout prevention and intervention.
- Determine the incentives and methods needed to fully implement evidence-based models, practices, and strategies within state and local school district programs.
- Conduct research to demonstrate and validate new dropout prevention and intervention strategies that work with high-risk groups of students, such as students with emotional/behavioral disabilities, minority students, and students living in poverty.
- Investigate and share information about the impact of new accountability forces (e.g., high-stakes testing, more stringent graduation requirements, and varied diploma options) on the exit status and school completion of youth with disabilities.
- Build on newly-funded longitudinal studies (e.g., National Longitudinal Transition Study-2 and Special Education Elementary Longitudinal Study) to examine how students' engagement with school, along with critical contextual variables of home, school, community, and peers, relate to dropout and graduation outcomes.

Challenge 4: Make high school graduation decisions based on meaningful indicators of students' learning and skills and clarify the implications of different diploma options for students with disabilities

Requirements that states set for graduation can include completing Carnegie Unit requirements (a certain number of class credits earned in specific areas), successfully passing a competency test, passing high school exit exams, and/or a series of benchmark exams (Guy, et al., 1999; Johnson & Thurlow, 2003; Thurlow, Ysseldyke, & Anderson, 1995). Currently, 27 states have opted to require that students pass state and/or local exit exams to receive a standard high school diploma (Johnson & Thurlow, 2003). This practice has been increasing since the mid-1990s (Guy, et al., 1999; Thurlow, et al., 1995).

States may also require any combination of these. Diversity in graduation requirements is complicated further by an increasingly diverse set of possible diploma options. In addition to the standard high school diploma, options now include special education diplomas, certificates of completion, occupational diplomas, and others.

Many states have gone to great lengths to improve the proportion of students with disabilities passing state exit exams and meeting other requirements for graduation. Strategies have included grade-level retention, specialized tutoring and instruction during the school day and after school, and weekend or summer tutoring programs. While these may be viewed as appropriate interventions and strategies, there is little research evidence to suggest that this is the case. Persuasive evidence indicates, for example, that repeating a grade does not improve the overall achievement of students with disabilities (Allington & McGill-Franzen, 1992; Holmes, 1989).

The implications of state graduation requirements must be thoroughly understood, considering the potential negative outcomes students experience when they fail to meet state standards for graduation. The availability of alternative diploma options can have a considerable impact on graduation rates. However, the ramifications of receiving different types of diplomas need to be considered. A student who receives a non-standard diploma may find their access to postsecondary education or jobs is limited. However, it is important for parents and educators to know that if a student graduates from high school with a standard high school diploma, the student is no longer entitled to special education services unless a state or district has a policy about continued services under such circumstances. Most states do not have such policies.

Recommendations Regarding Challenge 4

- Promote the use of alternate assessments, including authentic or performance-based assessments, portfolios, and other documentation, to support graduation decisions.
- Clarify the implications of state graduation requirements and the appropriate use of alternative diploma options for students with disabilities. Consider the potential impact of alternative diplomas on a student's future access to postsecondary education and employment opportunities. State and local education agencies should thoroughly discuss the meaning of these alternative diplomas with postsecondary education program representatives and employers.
- Clarify the implications of different diploma

options for continued special education services. Special education and general education teachers should carefully work with students and families to consider the ramifications of receiving a high school diploma. In some cases, it may be advisable to delay formal receipt of a standard high school diploma until the conditions (goals and objectives) of the student's IEP have been fully met, including all transition service requirements as outlined in IDEA '97.

Challenge 5: Ensure students access to and full participation in postsecondary education and employment

Young adults with disabilities continue to face significant difficulties in securing jobs, accessing postsecondary education, living independently, fully participating in their communities, and accessing necessary community services such as healthcare and transportation. It is well understood that preparation for the transition from high school to postsecondary education, employment, and independent living must begin early, or at least by age 14. It is at this age that students' IEP teams must engage in discussions regarding the types of course work students will need, at a minimum, to be able to enroll in postsecondary education programs, the types of learning options and experiences students will need to develop basic work skills for employment, and the skills needed for independent living.

As a result of ADA, Section 504 of the Rehabilitation Act of 1973, and other federal legislation, awareness has grown regarding accessibility issues faced by youth with disabilities seeking postsecondary education, life-long learning, and employment (Benz, Doren & Yovanoff, 1998; Stodden, 1998; Johnson, Stodden, Emanuel, Luecking, & Mack, 2002). The number of youth in postsecondary schools reporting a disability has increased dramatically, climbing from 2.6% in 1978, to 9.2% in 1994, to nearly 19% in 1996 (Blackorby & Wagner, 1996; Gajar, 1992, 1998; Wagner & Blackorby, 1996). While this increase is encouraging, and while many colleges have increased their efforts to serve students with disabilities (Pierangelo & Crane, 1997), enrollment of people with disabilities in postsecondary education programs is still 50% lower than it is for the general population. Gaps seen in postsecondary enrollment persist into adult employment (Benz et al., 1998; Blackorby & Wagner, 1996; Gilson, 1996), and are greater when comparing those with less educational attainment. Only 15.6% of persons with disabilities who have less than a high school diploma participate in today's labor force; the rate doubles to 30.2% for those who have completed high

school, triples to 45.1% for those with some postsecondary education, and climbs to 50.3% for disabled persons with at least four years of college (Yelin & Katz, 1994).

The National Center for the Study of Postsecondary Educational Supports (NCSPEs) at the University of Hawaii has conducted an extensive program of research focused upon the access, participation, and success of youth with disabilities in postsecondary education and subsequent employment. NCSPEs has studied these issues within four areas of intervention:

- *The process and content of preparation received by students with disabilities in high school under IDEA.* Findings indicate that students need to understand themselves and their disability in relation to needed services and supports, and be able to describe their needs and advocate for themselves in various postschool educational and employment settings (Izzo & Lamb, 2002; National Center for the Study of Postsecondary Educational Supports, 2000b; Stodden & Conway, in press; Stodden, Jones, & Chang, 2002).
- *The manner in which services and supports, including the use of technology, are made available and provided to students with disabilities in postsecondary programs.* Findings indicate the need for a minimal standard of postsecondary support provision and new models of support provision that are personally responsive, flexible, and individualized, as well as coordinated with instruction and integrated with the overall support needs of the student (Burgstahler, 2002; National Center for the Study of Postsecondary Educational Supports, 2000a; Stodden & Dowrick, 2000a, Stodden & Conway, in press).
- *The coordination and management of educational supports and services with the many other services and supports required by most students with disabilities in postsecondary education.* Most students with disabilities have a range of health, human service, transportation, and fiscal needs beyond the educational supports typically provided in postsecondary programs. A significant number of students with disabilities in postsecondary education require either assistance with case management or the skills, knowledge, and time to manage their own services and supports (National Center for the Study of Postsecondary Educational Supports, 2000b; Stodden & Dowrick, 2000b; Stodden, et al., 2002).
- *Transition or transfer of educational supports from postsecondary settings to subsequent employment settings.* Many students with disabilities completing postsecondary education have difficulty finding subsequent employment in the profession for which they have

prepared. Few postsecondary institutions facilitate or provide assistance with the transfer of supports to the workplace (National Center for the Study of Postsecondary Educational Supports, 2000b; Thomas, 2000).

Estimates of the employment rate of persons with disabilities vary, depending upon factors such as the method of data collection used, and the definition of disability. Data from the Bureau of Labor Statistics (BLS) indicate that in 2002, an estimated 30.9 percent of civilian non-institutionalized people with a disability in the United States, age 18-24, were employed, compared to 84.7 percent of those without a disability (Houtenville, 2003). This statistic indicates that many adults with disabilities face significant barriers to participation in the workforce. The BLS estimate is based on the Current Population Survey (CPS), which is a monthly survey conducted by the Bureau of the Census. For purposes of the CPS, persons with a disability are those who have a health problem or disability that prevents them from working or limits the kind or amount of work they can do.

Another pressing challenge is the participation of youth with disabilities in state and local work force development initiatives, such as the Workforce Investment Act (WIA) of 1998. WIA services for youth include: (1) establishment of local youth councils, (2) Youth Opportunity Grants that promote employment and training, (3) comprehensive career development services based on individualized assessment and planning, (4) youth connections and access to the One-Stop career center system, and (5) performance accountability focused on employment. Participation in WIA programs offers expanded opportunities for community-based work experiences and access to employment training services and career supports (Luecking & Crane, 2002). It is critically important to ensure that initiatives such as WIA's youth employment programs are fully accessible to individuals with disabilities as they pursue postsecondary education and employment opportunities. WIA programs, by design, further promote cross-agency approaches to serving youth, leading to strong coordination and collaboration of services.

Recommendations Regarding Challenge 5

- Ensure that prior to each student's graduation from high school, the student's IEP team identifies and engages the responsible agencies, resources, and accommodations required for the student to successfully achieve positive postschool outcomes.
- Promote the value of preparation for and participation in postsecondary education. All agencies must recognize the value of postsecondary education

and lifelong learning in securing, maintaining and advancing in employment.

- Identify the specific types and levels of accommodations and supports a student will need to participate in postschool environments.
- Ensure that community service agencies participate systematically in the development of postschool transition plans. Strategies to consider include formalizing agency responsibilities through interagency agreements or memorandums of understanding, and formalizing follow-up procedures and actions when agencies are unable to attend transition planning meetings.
- Engage in integrated service planning. IEPs should be coordinated and aligned with the individualized service plans required under other federal and state programs (Title I of the Rehabilitation Act of 1973, Title XIX of the Social Security Act [Medicaid], Title XVI of the Social Security Act [Supplemental Security Income], and other federal programs).
- Provide information to parents on essential health and income maintenance programs. Information on the Supplemental Security Income SSI program, including information on basic program eligibility, benefit redeterminations for 18-year-olds, appeals processes, and use of SSI work incentives in promoting employment outcomes should be readily accessible to professionals, parents, and students with disabilities. Special education personnel should play a major role in making such information available and assisting parents and students in accessing needed benefits.
- Promote collaborative employer engagement. Increased secondary and postsecondary work-based learning opportunities, and ultimately jobs, are predicated on available and willing employers. Vehicles are needed, such as intermediary linking entities, to convene and connect schools, service agencies and employers so as to maximize the important learning opportunities that workplaces represent. Given the multiple youth initiatives that typically exist in communities, it is expedient to engage employers through collaborative efforts that minimize the distinctions among categories of youth.
- Establish partnerships with workforce development entities. Participation of youth and young adults with disabilities, family members, and special education and rehabilitation professionals in and access

to state and local workforce development initiatives should be promoted.

Challenge 6: Increase informed parent participation and involvement in education planning, life planning, and decision-making

Research has shown that parent participation and leadership in transition planning play an important role in assuring successful transitions for youth with disabilities (DeStefano, Heck, Hasazi, & Furney, 1999; Furney, Hasazi, & DeStefano, 1997; Hasazi, et al., 1999; Kohler, 1993; Taymans, Corbey, & Dodge, 1995). Much of the discussion in the research literature centers on the role of parents as participants in the development of their child's IEP. IDEA '97 requires that state and local education agencies notify parents and encourage their participation when the purpose of a planned meeting is the consideration of transition services. Beyond the IEP process, family training and family involvement in program design, planning, and implementation are significant factors leading to positive youth outcomes (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 1998).

In addition, the Rehabilitation Act specifically cites the value of family and other natural supports as a fundamental principle shaping vocational rehabilitation policy. Recent amendments to the Rehabilitation Act give greater emphasis to the role of families, authorize funding for family training on vocational rehabilitation, and enhance opportunities for family members to be involved in the rehabilitation process. While existing policies have strongly encouraged the participation of parents, it is less clear how successful current strategies have been in creating meaningful and valued roles for parents.

Family relationships and support can play a particularly influential role in the lives of youth from diverse cultural communities (Leung, 1992; Irvin, Thorin, & Singer, 1993; Hosack & Malkmus, 1992). Despite recognition of the importance of consumer and family involvement, families are resources that have been underutilized by transition and vocational rehabilitation professionals (Czerlinsky & Chandler, 1993; DeFur & Taymans, 1995; Marrone, Helm, & Van Gelder, 1997; Salembier & Furney, 1997). Although parents and professionals are working to forge new relationships, there remains a need to build the level of trust and collaboration between them (Guy, Goldberg, McDonald, & Flom, 1997).

Family members also contribute to work readiness and employability in a number of ways, both directly and indirectly, and in manners beyond those typically recognized (Timmons, Schuster, & Moloney, 2001; University of Arkansas, 2000; Way & Rossmann, 1996). Family members act as systems advocates, role models, teachers,

service coordinators, and job developers (Lankard, 1993). They can play a significant role in finding employment for their adult children with disabilities and provide important job supports that can help these young adults to keep a job (Crudden, McBroom, Skinner, & Moore, 1998; University of Arkansas).

Although the nature of relationships may change, parents and family continue to play important roles in the lives of young adults with disabilities, even after the age of majority. Ideally, students are able to advocate for their own choices during transition planning. However, family advocates continue to play a significant role while youth are developing their self-advocacy skills. Students themselves report the need for their families to guide and support them as they plan for the future (Morningstar, Turnbull, & Turnbull, 1995).

While the value of family involvement is well-understood, the current system does not make it easy for families to be effective partners in the transition process. Multiple service programs form a confusing, fragmented, and inconsistent system (General Accounting Office, 1995). Parent centers report that families of young adults with disabilities are deeply frustrated by the lack of coordinated, individualized services for high school students and the paucity of resources, programs, and opportunities for young adults once they graduate (PACER, 2000). Cultural differences may further complicate relationships with professionals (North Central Regional Educational Laboratory, 1998).

Recent surveys indicate families seek information on a variety of issues including: helping youth develop self-advocacy skills; balancing standards-based academic instruction with functional life skills training; inclusive education practices at the secondary level; post-secondary options for young adults with developmental and cognitive disabilities; pre-employment experiences and employment options that lead to competitive employment; financial planning; resources available to youth through the workforce investment, vocational rehabilitation, Medicaid, and Social Security systems; better collaboration with community resources; housing options; and interacting with the juvenile justice system (PACER, 2001).

Meaningful parent and family involvement and participation must also expand beyond the individual student level. Youth and family involvement are important in making service systems and professionals aware of their needs (Gloss, Reiss, & Hackett, 2000). Research indicates that parent participation and leadership in transition planning practices enhance the implementation of transition policy (Hasazi, 2000). Family members can be fully included in the research process (Turnbull,

Friesen, & Ramirez, 1998) and at all levels of policy and service delivery planning. Involving family members in the development and evaluation of federal, state, and local policies and practices helps assure that the services and supports available to youth with disabilities are of the highest quality (Federal Interagency Coordinating Council, 2000). In order for families to expand their participation beyond their own child, family members must have opportunities to increase their own knowledge and develop leadership skills.

As our communities become more diverse in culture, race, ethnicity, and religious heritage, we are challenged to involve families whose primary language is not English, who are recent immigrants with no formal school experience, families in poverty and low socioeconomic status, and those who have had negative school experiences. It is widely acknowledged that the participation of parents from diverse multicultural and economic backgrounds has been difficult to achieve in both special education and rehabilitation systems (Johnson, et al, 2002). In addition, the majority of students from racial and ethnic minority groups have a wealth of cultural knowledge and skills that are rarely acknowledged, accommodated, or seen as strengths by educators and schools (Hale, 2001; Burnette, 1999). In fact, culturally-based knowledge and behavior may even be misinterpreted in ways that lead to a misdiagnosis of disability and inappropriate placement in a special education program (Patton & Meyer, 2001; Utley & Obiakor 1997). Patton and Meyer report that poor socioeconomic conditions, cultural and ethnic indicators, large urban settings, and large numbers of minority students in a school system are key factors in the overrepresentation of students of color in special education. Youth with disabilities who are from diverse cultural groups also remain among the most underemployed of all young people with disabilities (National Council on Disability, 2000).

The importance of establishing credibility and trust with culturally and racially diverse populations cannot be overemphasized; cultural responsiveness is essential to establishing such confidence (National Center for the Dissemination of Disability Research, 1999). Tailoring training to the cultural traditions of families improves recruitment and outcome effectiveness (Kumpfer & Alvarado, 1995). For example, parents from culturally and racially diverse populations often prefer one-on-one meetings to more traditional training formats such as workshops (Minnesota Department of Children, Families & Learning, 1998; National Center for the Dissemination of Disability Research). Additional strategies include family-mentoring programs, needs assessment surveys,

and working with culturally specific community organizations that have created relationships of trust (National Center on Secondary Education and Transition, 2002).

Recommendations Regarding Challenge 6

- Provide comprehensive parent/family training, including training to help parents and families understand the changing nature of their role and what they can do to foster self-determination and promote informed choice.
- Work to reduce the confusion and frustration experienced by parents and families by coordinating services and streamlining access to information and programs.
- Provide opportunities for parents to enhance their knowledge of policy issues and develop leadership skills. Establish strategies and methods to actively engage parents in discussions and decisions concerning school and postschool options, both on behalf of individual students and at policy-making levels.
- Expand parent and family involvement and participation beyond the individual student level. Provide opportunities for parents to participate in developing policy and defining transition planning practices.
- Work with community organizations serving culturally and racially diverse populations to assure that programs and services meet the needs of all parents and families.

Challenge 7: Improve collaboration and systems linkages at all levels

Effective transition planning and service depend upon functional linkages among schools, rehabilitation services, and other human service and community agencies. However, several factors have stood as barriers to effective collaboration, including (a) lack of shared knowledge and vision by students, parents, and school and agency staff around students' postschool goals and the transition resources necessary to support students' needs and interests (Johnson, et al., 2002); (b) lack of shared information across school and community agencies, and coordinated assessment and planning processes, to support integrated transition planning (Benz, Johnson, Mikkelsen, & Lindstrom, 1995); (c) lack of meaningful roles for students and parents in the transition decision-making process that respects students' emerging need for independence and self-determination and parents' continuing desire to encourage and support their children during the eman-

cipation process that is part of becoming a productive, contributing young adult (Furney, et al., 1997); (d) lack of meaningful information on anticipated postschool services needed by students and follow-up data on the actual postschool outcomes and continuing support needs of students that can be used to guide improvement in systems collaboration and linkages (Hasazi, et al., 1999; Johnson & Sharpe, 2000); (e) lack of effective practices for establishing and using state and local interagency teams as a means for capacity building in transition collaboration and systems linkages; and (f) lack of coordinated eligibility requirements and funding for agency services (Luecking & Crane, 2002).

These barriers to more effective collaboration are not insurmountable. Research suggests that systems can work more effectively together and student achievement of meaningful secondary and postschool outcomes can be improved through (a) the use of written and enforceable interagency agreements that structure the provision of collaborative transition services (Johnson, et al., 2002); (b) the establishment of key positions funded jointly by schools and adult agencies to deliver direct services to students (Luecking & Certo, 2002); (c) the development and delivery of interagency and cross-agency training opportunities; (d) the use of interagency planning teams to facilitate and monitor capacity building efforts in transition (Furney, et al., 1997); and (e) the provision of a secondary curriculum that supports student identification and accomplishment of transition goals and prepares youth for success in work, postsecondary, and community living environments (Hasazi, et al., 1999). Promising collaboration strategies have been proposed to link secondary education systems with employers and community employment services funded under the Workforce Investment Act (Luecking & Crane, 2002; Mooney & Crane, 2002) and with postsecondary education systems (Flannery, Slovic, Dalmau, Bigaj, & Hart, 2000; Hart, Zimbrich, & Whelley, 2002; Stodden & Jones, 2002).

Collaborative approaches bring together community agencies to focus their collective expertise and combined resources to improve the quality of transition planning and services for youth with disabilities. This sharing of resources, knowledge, skills, and data requires planned and thoughtful collaboration among all participants. The President's Commission on Excellence in Special Education (2002) suggested connecting special education to outside services such as vocational rehabilitation as a way to improve post school outcomes for youth with disabilities. The commission also found that, currently, not enough interagency activity occurs between schools and vocational rehabilitation agencies. Fiscal disincentives should be removed and waiver options provided to pro-

mote cost-sharing and resource-pooling among agencies to improve the availability of needed transition services and supports for students with disabilities.

Recommendations Regarding Challenge 7

- Use cross-training and other methods to promote collaboration between general education and special education in student assessment, IEP and transition planning, and instruction.
- Promote collaboration between schools and vocational rehabilitation through the establishment of jointly funded positions.
- Promote access to a wider array of community services by mapping community assets and developing interagency agreements that promote and support the sharing of information and engagement in joint planning. Align organizational missions, policies, actions, and day-to-day management so that young people and families have ready access to the services they need.
- Establish cross-agency evaluation and accountability systems to assess school and postschool employment, independent living, and related outcomes of former special education students.
- Develop innovative interagency financing strategies. Identify ways to promote cost-sharing and resource-pooling to make available needed transition services.
- Promote collaborative staff development programs. Effective approaches include cross-training; train-the-trainer; team-building; and others involving collaborative relationships between state and local agencies, institutions of higher education, parent centers, and consumer and advocacy organizations.

Challenge 8: Ensure the availability of a qualified workforce to address the transition needs of youth with disabilities

State and local education agencies across the United States are currently experiencing a shortage of qualified personnel to serve children and youth with disabilities. In 1999-2000, more than 12,000 openings for special education teachers were left vacant or filled by substitutes (U.S. Department of Education, 2001). Further, an additional 31,000 positions were filled by teachers who were not fully certified for their positions (U.S. Department of Education, 1999). Similarly, severe shortages of paraprofessionals and related services personnel nationwide are widely reported, and, there is growing concern over the skill levels of those currently doing this work.

It is critically important to increase the number of secondary special education teachers who can ably support students with disabilities through the process of transition to adult life. However, few institutions of higher education offer preservice training programs providing specialized emphasis on secondary education and transition services. Consequently, many new teachers are entering the field without the specific knowledge and skills needed to support transition. Miller, Lombard, and Hazelkorn (2000) report that few special education teachers have received training on methods, materials, and strategies for developing meaningful IEPs that include goals and objectives on transition or specifically address the student's transition needs through the curriculum and instruction. Further, many special education teachers underutilize community work-experience programs and fail to coordinate referrals to adult service providers.

Beyond preservice training, high-quality continuing professional development is needed to ensure that current teachers are up-to-date and fully able to support students in the transition from school to adulthood. Miller et al. (2000), in a national study, found that nearly 8 out of 10 teachers (79%) reported receiving five hours or less of inservice training regarding inclusion of students with disabilities in their districts' school-to-work programs. Further, nearly half (49%) indicated they had received no inservice training related to inclusionary practices for students with disabilities. These findings are consistent with the report published by the National Center for Education Statistics regarding the preparation and qualifications of public school teachers (Lewis, et al., 1999). This report notes that fewer than 2 out of 10 teachers (19%) spent more than eight hours per year on professional development activities to address the needs of students with disabilities, despite the fact that teachers report that professional development of longer duration is more effective.

The promotion of improved levels of collaboration between general education and special education points to another area of need. General education classroom teachers, work-study coordinators, career and technical education instructors, and high-school counselors all play an important role in supporting a student's preparation for transition. These general education personnel need training and other support when working with students with disabilities. A recent study of personnel needs in special education (U.S. Department of Education, 2001), found that general educators' confidence in serving students with disabilities was dependent on their relationship with special education teachers. That is, those who often received instruction-related suggestions from special educators felt significantly more confident than

those who did not in teaching students with disabilities and in making educational decisions about them. General education teachers also need additional knowledge and awareness concerning special strategies for working with students, opportunities to participate in continuing professional development programs focused on student interventions and accommodations, and direct support within classrooms from paraprofessionals and related services personnel.

The expanded role and use of paraprofessionals and related services staff to support the secondary education and transition needs of youth with disabilities has been an important development. Currently, there are approximately 250,000 individuals in paraprofessional roles nationally, and this number is increasing (U.S. Department of Education, 2000). These personnel perform a variety of roles, including direct classroom support to general education teachers, serving as job coaches in employment situations, and providing training to students directly in the community on adult living skills. Nationally, on average, paraprofessionals spend 37 hours per year in professional development programs (U.S. Department of Education, 2001). The amount and scope of training dedicated to supporting the preparation of paraprofessionals who support youth with disabilities during their transition to postsecondary education, employment, and community living has not been documented. However, it is clear that there are many competing priorities and skill areas that need to be addressed through these professional development programs. Paraprofessionals focus much of their attention on providing one-on-one classroom instruction in academic areas, providing instructional support in small groups, implementing behavior management plans, modifying materials, monitoring hallways, meeting with teachers, collecting data on students, and providing personal-care assistance. Additional training is clearly warranted; however, such training will need to be carefully planned in order to be both efficient and effective.

Another development has been the attempt by states to develop specific licensure or certification that acknowledges the unique skills and knowledge needed by teachers and others assisting students in the transition from school to adult life. Several states have developed state licensure or certification for transition coordinators, support services coordinators, work experience coordinators, and school vocational rehabilitation counselors. These licensure and certification programs are few in number and have been difficult to maintain, due to costs and competing demands for personnel in other, broader classifications of special education teacher licensure, such as learning disabilities and emotional/behavioral disorders.

Rehabilitation and career counselors are often the only

link that school programs have to postschool environments, including employment. Concern about the quality of services in the area of rehabilitation counseling has led to the mandate for the Comprehensive System of Personnel Development (CSPD) in the 1992 and 1998 amendments to the Rehabilitation Act of 1973. This directive seeks to ensure that personnel are qualified by establishing CSPD minimum standards (U.S. Department of Education, 2002). However, the CSPD initiative is being implemented in the context of what may be the largest turnover and retirement of counselors in the history of the state-federal system of rehabilitation (Bishop & Crystal, 2002; Dew & Peters, 2002; Muzzio, 2000). Turnover and retirements have been reported to be as high as 30-40 percent of personnel in some states (Institute on Rehabilitation Issues, 2001). A recent survey reported an expected 10-15% turnover rate per year for the next 5 years (Council for State Administrators in Vocational Rehabilitation, personal communication, April 23, 2003). In general, employment across all categories of counseling occupations is expected to increase 36% or more through 2010, faster than the average for other employment categories (Bureau of Labor Statistics, 2002a). The existing counseling training programs cannot be expected to meet this expanding need. Bishop and Crystal reported that in the preceding 5-year period, less than one third of vacant positions were filled by staff with a master's degree in rehabilitation counseling. The implications of losing experienced qualified professionals and replacing those individuals with less qualified and inexperienced staff are obvious. This trend will have a tremendously detrimental impact on transition services, and the situation warrants a concerted effort to address this concern. In the immediate future, the collaboration necessary for transition may be in jeopardy until new counselors fill the vacant positions, stabilize their workload responsibilities, and receive needed training. Progress in addressing this issue should be closely monitored.

As young people with disabilities prepare for and exit their public school programs, a significant number will also need access to community services that address their community living, social and recreational, health, and other related needs. Persons with intellectual and developmental disabilities, in particular, will need to rely on service program personnel to support their everyday living needs. Significant worker shortages and the associated factors of compensation, recruitment, training, and support and supervision have become increasingly prominent issues within the adult service-delivery system for individuals with intellectual and developmental disabilities (Larson, Lakin, & Hewitt, 2002). As the national movement from institutional to community settings has

occurred, community service agency professionals and direct support personnel have been requested to do more, with greater individual responsibility, less direct supervision, less structure, and greater competency, but without preparatory or ongoing training. Direct support staff, in particular, have been the most difficult to recruit, retain, and provide with proper training to ensure that they have the ability to address the residential and employment needs of the individuals they serve in community settings.

Direct support professionals play a key role in the lives of young people with disabilities exiting public schools by supporting them in their own homes, in community employment situations, and other community settings. There are an estimated 413,474 direct support professionals working in community residential programs and 90,500-120,000 of these personnel working in vocational and employment settings (Larson, Hewitt, & Anderson, 1999; Prouty, Smith, & Lakin, 2001). In addition, the number of personal and home care aides and home health aides supporting adults with intellectual and developmental disabilities is estimated respectively at 414,000 and 615,000 nationwide (Bureau of Labor Statistics, 2002b, 2002c). In the past quarter-century, staff turnover rates have consistently averaged between 43-70% in community residential settings alone (Larson, Lakin, & Bruininks, 1998). Low wages and lack of training for those filling these positions have compounded these difficulties.

Ensuring adequate training for direct support professionals, front-line supervisors, and other human services and health personnel is perhaps one of the greatest work-force development challenges we face as a nation. Although some training and professional development occurs at the agency-provider level, this training seldom addresses how to support young people with disabilities as they complete their public school programs and attempt to achieve their postschool goals. Few of these individuals, for example, directly participate in final student transition planning meetings, where specific levels of student support needs are matched with the knowledge, skills, and competencies of personnel to address them. All of these factors have significantly affected the ability of youth with disabilities to achieve positive postschool outcomes following their high school experience.

Recommendations Regarding Challenge 8

- State and local education agencies should recruit individuals with specific responsibilities for transition to promote improved postschool outcomes among students with disabilities. This means that institutions of higher education within states will

need to increase the emphasis they place on pre-service education programs for educators, related services personnel, rehabilitation counselors, and human services professionals.

- Ensure that special education, vocational rehabilitation, and human services personnel possess the skills and knowledge required to address the transition service needs of youth with disabilities. These efforts should include cross-training, alignment of information to promote common understanding, an emphasis on collaboration across groups, and commitment to securing outcomes.
- Carefully examine the role that general education teachers can play in transition. Specific attention to both preservice and continuing education programs is needed. Attention to the type and level of support needed by general education teachers during instruction will help increase the participation of these personnel in supporting students' preparation for transition.
- Address the training of paraprofessionals and direct support staff to assure that these personnel can fulfill their role of supporting general and special education teachers as well as young adults who are making the transition into community work, residential, and adult-living skill-development experiences following high school.

Conclusion

Addressing the many challenges associated with transition will require that we engage a much larger audience in our discussions on how best to proceed. This process should include young people with disabilities; parents; general education teachers and administrators; community agency staff, including those who serve youth and adults without disabilities; postsecondary education programs; and employers. Achievement of needed improvements in secondary education and transition services will require a broad-based commitment to educating all stakeholders and promoting meaningful collaboration at all levels.

References

- Abery, B., & Stancliffe, R. (1996). The ecology of self-determination. In D. J. Sands & M. L. Wehmeyer (Eds.), *Self-determination across the life span: Independence and choice for people with disabilities* (pp. 111-146). Baltimore, MD: Paul H. Brookes.
- Allington, R., & McGill-Franzen, A. (1992). Does high stakes testing improve school effectiveness? *Career Development for Exceptional Individuals*, 20(2), 179-190.

- American Federation of Teachers. (2000). *Making standards matter*. Washington, DC: Author.
- Benz, M., Doren, B., & Yovanoff, P. (1998). Crossing the great divide: Predicting productive engagement for young women with disabilities. *Career Development for Exceptional Individuals*, 62(1), 3-16.
- Benz, M. R., Johnson, D. K., Mikkelsen, K. S., & Lindstrom, L. E. (1995). Improving collaboration between schools and vocational rehabilitation: Stakeholder identified barriers and strategies. *Career Development for Exceptional Individuals*, 18(2), 133-144.
- Bishop, M., & Crystal, R. M. (2002). A human resources perspective on counselor retirement and replacement in the state-federal vocational rehabilitation program: A nationwide concern. *Journal of Rehabilitation Administration*, 26, 231-238.
- Blackorby, J., & Wagner, M. (1996). Longitudinal post-school outcomes of youth with disabilities: Findings from the National Longitudinal Transition Study. *Exceptional Children*, 62, 399-413.
- Bureau of Labor Statistics, U.S. Department of Labor. (2002a). *Occupational outlook handbook, 2002-2003 edition, counselors*. Retrieved September 15, 2003, from <http://www.bls.gov/oco/ocos067.htm>
- Bureau of Labor Statistics, U.S. Department of Labor. (2002b). *Occupational outlook handbook, 2002-2003 edition, nursing psychiatric, and home health aides*. Retrieved September 15, 2003, from <http://www.bls.gov/oco/ocos165.htm>
- Bureau of Labor Statistics, U.S. Department of Labor. (2002c). *Occupational outlook handbook, 2002-2003 edition, personal and home care aides*. Retrieved September 15, 2003, from <http://www.bls.gov/oco/ocos173.htm>
- Burgstahler, S. (2002). *The role of technology in preparing youth with disabilities for postsecondary education and employment*. Retrieved September 3, 2003, from http://www.ncset.hawaii.edu/publications/pdf/role_of_technology.pdf
- Burnette, J. (1999). *Critical behaviors and strategies for teaching culturally diverse students*. Retrieved September 2, 2003, from <http://www.ericfacility.net/ericdigests/ed435147.html>
- Catalano, R. F., Berglund, M. L., Ryan, J. A. M., Lonczak, H. S., & Hawkins, J. D. (1998). *Positive youth development In the United States: Research findings on evaluations of positive youth development programs*. Retrieved September 15, 2003, from <http://aspe.hhs.gov/hsp/PositiveYouthDev99/>
- Christenson, S. (2002, December). *Check & Connect: A model to enhance student engagement and prevent dropout*. Paper presented at the meeting of the National Dropout Forum, Washington, DC.
- Cobb, B., & Johnson, D. R. (1997). The Statewide Systems Change Initiative as a federal policy mechanism for promoting education reform. *Career Development for Exceptional Individuals*, 20(2), 179-190.
- Crawford, D. B., & Carnine, D. (2000). Comparing the effects of textbooks in eighth-grade U.S. history: Does conceptual organization help? *Education and Treatment of Children*, 23, 387-422.
- Crudden, A., McBroom, L. W., Skinner, A. L., and Moore, J. E. (1998). *Comprehensive examination of barriers to employment among persons who are blind or visually impaired*. Mississippi State, MS: Rehabilitation Research and Training Center on Blindness and Low Vision.
- Czerlinsky, T., & Chandler, S. (1993). Effective consumer-service provider interactions in vocational rehabilitation. *OSERS News in Print*, 5(4), 39 - 43.
- DeFur, S. H., & Taymans, J. M. (1995). Competencies needed for transition specialists in vocational rehabilitation, vocational education, and special education. *Exceptional Children*, 62(1), 38-51.
- Deshler, D. D., Schumaker, J. B., Lenz, B. K., Bulgren, J. A., Hock, M. F., Knight, J., & Ehren, B. J. (2001). Ensuring content-area learning by secondary students with learning disabilities. *Learning Disabilities Research and Practice*, 16, 96-108.
- DeStefano, L., Heck, D., Hasazi, S. & Furney, K. (1999). Enhancing the implementation of the transition requirements of IDEA: A report on the policy forum on transition. *Career Development for Exceptional Individuals*, 22(1), 65-100.
- DeStefano, L., & Wagner, M. (1991). *Outcome assessment in special education: Lessons learned*. Champaign: University of Illinois, Transition Institute.
- Dew, D. W., & Peters, S. (2002). Survey of master's level rehabilitation counselor programs: Relationship to public vocational rehabilitation recruitment and retention of state vocational rehabilitation counselors. *Rehabilitation Education*, 16, 61-66.
- Elliott, J. L., & Thurlow, M. L. (2000). *Improving test performance of students with disabilities in district and state assessments*. Thousand Oaks, CA: Corwin Press.
- Elmore, R. F., & Rothman, R. (1999). *Testing, teaching and learning: A guide for states and school districts*. Washington, DC: National Academy Press.

- Farrell, E. (1990). *Hanging in and dropping out: Voices of at-risk high school students*. New York: Teachers College Press.
- Federal Interagency Coordinating Council. (2000). *Principles of family involvement*. Retrieved September 15, 2003, from <http://www.fed-icc.org/Family-Involvement-Principles-101100.pdf>.
- Flannery, K. B., Slovic, R., Dalmau, M. C., Bigaj, S., & Hart, N. (2000). *Learning for a lifetime series: Preparation for postsecondary education and training*. Eugene: University of Oregon.
- Furney, K. S., Hasazi, S. B., & Destefano, L. (1997). Transition policies, practices, and promises: Lessons from three states. *Exceptional Children*, 63, 343-355.
- Gajar, A. (1992). University-based models for students with learning disabilities: The Pennsylvania State University model. In F. R. Rusch, L. DeStefano, J. G. Chadsey-Rusch, L. A. Phelps, & E. Szymanski (Eds.), *Transition from school to adult life: Models, linkages, and policy*. Sycamore, IL: Sycamore.
- Gajar, A. (1998). Postsecondary education. In F. R. Rusch & J. G. Chadsey-Rusch (Eds.), *Beyond high school: Transition from school to work*. Belmont, CA: Wadsworth.
- General Accounting Office. (1995). *Multiple employment training programs: Major overhaul needed to create a more efficient customer-driven system*. Washington, DC: Author.
- General Accounting Office. (2003). *Federal actions can assist states in improving postsecondary outcomes for youth*. Retrieved September 15, 2003, from <http://www.gao.gov/highlights/d03773high.pdf>
- Gersten, R. (1998). Recent advances in instructional research for students with learning disabilities: An overview. *Learning Disabilities Practice*, 13(3), 162-170.
- Gilson, S. F. (1996). Students with disabilities: An increasing voice and presence on college campuses. *Journal of Vocational Rehabilitation*, 6, 263-272.
- Gloss, T., Reiss, J., & Hackett, P. (2000). *Draft 10-Year HRTW/Transition plan*. Washington, DC: United States Department of Health and Human Services, Health Resources and Service Administration, Maternal and Child Health Bureau.
- Guy, B., Goldberg, M., McDonald S., & Flom, R. (1997). Parental participation in transition systems change. *Career Development for Exceptional Individuals*, 20(2), 165-177.
- Guy, B., Shin, H., Lee, S.-Y., & Thurlow, M. L. (1999). *State graduation requirements for students with and without disabilities* (Technical Report 24). Minneapolis: University of Minnesota: National Center on Educational Outcomes.
- Hale, J. E. (2001). Culturally appropriate pedagogy. In W. H. Watkins, J. H. Lewis, & V. Chou (Eds.), *Race and education: The roles of history and society in educating African American students* (pp.173-185). Needham Heights, MA: Allyn & Bacon.
- Halpern, A. S. (1990). A methodological review of follow-up and follow-along studies tracking school leavers from special education. *Career Development for Exceptional Individuals*, 51, 455-469.
- Harniss, M. K., Dickson, S. V., Kinder, D., & Hollenbeck, K. L. (2001). Textual problems and instructional solutions: Strategies for enhancing learning from published history textbooks. *Reading and Writing Quarterly*, 17, 127-151.
- Hart, D., Zimbrich, K., & Whelley, T. (2002). Challenges in coordinating and managing services and supports in secondary and postsecondary options. *National Center on Secondary Education and Transition Issue Brief*, 1(6). Minneapolis: University of Minnesota.
- Hasazi, S. B. (2000). *Factors that promote or inhibit implementation of transition policy at the state and local level*. Retrieved September 15, 2003, from http://www.ideapolicy.org/tue_oct_3/Factors.PDF
- Hasazi, S. B., Furney, K. S., & DeStefano, L. (1999). Implementing the IDEA transition mandates. *Exceptional Children*, 65(4), 555-566.
- Hasazi, S. B., Gordon, L. R., & Roe, C. A. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. *Exceptional Children*, 51(6), 455-469.
- Holmes, C. T., (1989). Grade level retention effects: A meta-analysis of research studies. In L. A. Shepard & M. L. Smith (Eds.), *Flunking grades: Research and policies on retention* (pp. 16-33). London: Falmer Press.
- Hosack, K., & Malkmus, D. (1992). Vocational rehabilitation of persons with disabilities: Family inclusion. *Journal of Vocational Rehabilitation*, 2(3), 11-17.
- Houtenville, A. J. (2003). *Disability Statistics in the United States*. Ithaca, NY: Cornell University Rehabilitation Research and Training Center. Retrieved November 14, 2003, from <http://www.disabilitystatistics.org>
- Institute on Rehabilitation Issues. (2001). *Succession planning: Building a successful organization in a dynamic environment*. Menomonie: University of Wisconsin-Stout, Vocational Rehabilitation Institute.

- Irvin, L. K., Thorin, E., & Singer, G. H. (1993). Family related roles and considerations: Transition to adulthood by youth with developmental disabilities. *Journal of Vocational Rehabilitation* 3(2), 38-46.
- Izzo, M., & Lamb, M. (2002). *Self-determination and career development: Skills for successful transitions to postsecondary education and employment*. Retrieved September 3, 2003, from http://www.ncset/hawaii.edu/Publications/pdfs/self_determination.pdf.
- Johnson, D. R., McGrew, K., Bloomberg, L., Bruininks, R. H., & Lin, H. C. (1997a). *Policy research brief: A national perspective on the postschool outcomes and community adjustment of individuals with severe disabilities*. Minneapolis: University of Minnesota, Institute on Community Integration.
- Johnson, D. R., McGrew, K. S., Bloomberg, L., Bruininks, R. H., & Lin, H. C. (1997b). Results of a national follow-up study of young adults with severe disabilities. *Journal of Vocational Rehabilitation*, 8, 119-133.
- Johnson, D. R., & Sharpe, M. N. (2000). Results of a national survey on the implementation transition service requirements of IDEA of 1990. *Journal of Special Education Leadership*, 13(2), 15-26.
- Johnson, D. R., Sharpe, M., & Stodden, R. (2000a). The transition to postsecondary education for students with disabilities. *IMPACT*, 13(1), 2-3. Minneapolis: University of Minnesota, Institute on Community Integration.
- Johnson, D. R., Stodden, R., Emanuel, E., Luecking, R. & Mack, M. (2002). Current challenges facing secondary education and transition services: What research tells us. *Exceptional Children*, 68(4), 519-531.
- Johnson, D. R., & Thurlow, M. L. (2003). *A national study on graduation requirements and diploma options* (Technical Report 36). Minneapolis: University of Minnesota, Institute on Community Integration, National Center on Secondary Education and Transition and National Center on Educational Outcomes.
- Kame'enui, E. J., & Carnine, D. (1998). *Effective teaching strategies that accommodate diverse learners*. Upper Saddle River, NJ: Prentice-Hall.
- Kohler, P. D. (1993). Best practices in transition: Substantiated or implied? *Career Development for Exceptional Individuals*, 16(2), 107-121.
- Kumpfer, K. L., and Alvarado, R. (1995). Strengthening families to prevent drug use in multiethnic youth. In G. Botvin, S. Schinke, and M. Orlandi (Eds.), *Drug Abuse Prevention with Multiethnic Youth* (pp.253-292). Newbury Park, CA: Sage.
- Lankard, B. A. (1993). *Parents and the school-to-work transition of special needs youth*. ERIC Digest. Retrieved September 15, 2003, from http://www.ericfacility.net/databases/ERIC_Digests/ed363798.html
- Larson, S. A., Hewitt, A., & Anderson, L. (1999). Staff recruitment challenges and interventions in agencies supporting people with developmental disabilities. *Mental Retardation*, 37, 36-46.
- Larson, S. A., Lakin, K. C., & Bruininks, R. H. (1998). *Staff recruitment and retention: Study results and intervention strategies*. Washington, DC: American Association on Mental Retardation.
- Larson, S. A., Lakin, K. C., & Hewitt, A. S. (2002). Direct support professionals: 1975-2000. In D. Croser, P. Paker, & R. Schalock (Eds.), *Embarking on a New Century* (pp. 203-219). Washington, DC: American Association on Mental Retardation.
- Lehr, C. A., Hansen, A., Sinclair, M. F., & Christensen, S. L. (2003). Moving beyond dropout towards school completion: An integrative review of data-based interventions. *School Psychology Review*, 32(3), 342-364.
- Leung, P. (1992). Cross-cultural issues in training and employment. In J. Fischer (Ed.), *East-West directions: Social work practice, traditions and change* (pp. 71-82). Honolulu: University of Hawaii Press.
- Lewis, L., Parsad, B., Carey, N., Bartfai, N., Ferris, E., & Smerdon, B. (1999). *Teacher quality: A report on the preparation and qualifications of public school teachers*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Luecking, R., & Certo, N. (2002). Integrating service systems at the point of transition for youth with significant disabilities: A model that works. *National Center on Secondary Education and Transition Issue Brief*, 1(4). Minneapolis: University of Minnesota.
- Luecking, R., & Crane, K. (2002). Addressing the transition needs of youth with disabilities through the WIA system. *National Center on Secondary Education and Transition Information Brief*, 1(6). Minneapolis: University of Minnesota.
- Marrone, J., Helm, E. T., & Van Gelder, M. (1997). *Families as resources: Putting positive practices into context*. Boston: Institute for Community Inclusion.
- Martin, J. E., & Marshall, L. H. (1996). Infusing self-determination instruction into the IEP and transition process. In D. J. Sands & M. L. Wehmeyer (Eds.), *Self-determination across the life span: Independence and choice for people with disabilities* (pp. 215-236). Baltimore: Paul H. Brookes.

- McDonnell, L. M., McLaughlin, M. J., & Morison, P. (Eds.). (1997). *Educating one and all: Students with disabilities and standards-based reform*. Washington DC: National Academy Press.
- McGrew, K. S., Thurlow, M. L., & Spiegel, A. (1993). An investigation of the exclusion of students with disabilities in national data collection programs. *Educational Evaluation and Policy Analysis*, 15(3), 339-352.
- McIntosh, R., Vaughn, S., Schumm, J., Haager, D., & Lee, O. (1993). Observations of students with learning disabilities in general education classrooms. *Exceptional Children*, 60(3), 249-261.
- Miller, R.J., Lombard, R.C., & Hazelkorn, M.N. (2000). Teacher attitudes and practices regarding the inclusion of students with disabilities in school-to-work and technical preparation programs: Strategies for inclusion and policy implications. *Critical challenges facing the future of transition services in the United States*. Minneapolis: University of Minnesota, Institute on Community Integration, National Transition Network.
- Minnesota Department of Children, Families & Learning. (1998). *Information and training needs survey: Report on the statewide information and training needs of parents with children with disabilities*. St. Paul, MN: Author.
- Mooney, M., & Crane, K. (2002). Connecting employers, schools, and youth through intermediaries. *National Center on Secondary Education and Transition Issue Brief*, 1(3). Minneapolis: University of Minnesota.
- Morningstar, M. E., Turnbull, A. P. & Turnbull, H. R. (1995). What do students with disabilities tell us about the importance of family involvement in the transition from school to adult life? *Exceptional Children*, 62, 249-260.
- Muzzio, T. C. (2000). Undergraduate rehabilitation education: The need for graduates from the perspective of the public rehabilitation program. *Rehabilitation Education*, 14, 89-96.
- National Center for the Dissemination of Disability Research. (1999). *Disability, diversity and dissemination: A review of the literature on topics related to increasing the utilization of rehabilitation research outcomes among diverse consumer groups, Part 2*. Retrieved September 15, 2003, from <http://www.ncddr.org/dulresearchexchange/v04n02/systems.html>
- National Center for the Study of Postsecondary Educational Supports. (2000a). *Technical Report: National survey of educational support provision to students with disabilities in postsecondary education settings*. Honolulu: University of Hawaii at Manoa.
- National Center for the Study of Postsecondary Educational Supports. (2000b). *Technical Report: Postsecondary education and employment for students with disabilities: Focus group discussions on supports and barriers to lifelong learning*. Honolulu: University of Hawaii at Manoa.
- National Center on Secondary Education and Transition. (2002). *Parent/professional collaboration*. Retrieved September 15, 2003, from <http://www.ncset.org/topics/family/?topic=29>
- National Council on Disability. (2000). *Transition and postschool outcomes for youth with disabilities: Closing the gaps to postsecondary education and employment*. Retrieved September 15, 2003, from http://www.ncd.gov/newsroom/publications/transition_11-1-00.html
- National Council on Disability. (2003). *National disability policy: A progress report: December 2001-December 2002*. Retrieved September 15, 2003, from http://www.ncd.gov/newsroom/publications/progressreport_final.html
- Nolet, V., & McLaughlin, M. J. (2000). *Accessing the general curriculum: Including students with disabilities in standards-based reform*. Thousand Oaks, CA: Corwin Press.
- North Central Regional Educational Laboratory. (1998). *Literature review of school-family partnerships. Parent involvement: literature review and database of promising practices*. Retrieved September 15, 2003, from <http://www.ncrel.org/sdrs/pidata/pi0over.htm>
- Office of Juvenile Justice and Delinquency Prevention. (1995). *Juvenile offenders and victims: A national report*. Pittsburgh, PA: National Center for Juvenile Justice.
- Orkwis, R., & McLane, K. (1998). *A curriculum every student can use: Design principles for student access*. ERIC/OSEP Topical Brief. Retrieved September 15, 2003, from <http://www.ccc.sped.org/osep/udesign.html>
- Orr, M. T. (1987). *Keeping students in school*. San Francisco: Jossey Bass.
- PACER. (2000). *TATRA survey finds that the nation's parent centers need transition, vocational rehabilitation specialists*. Retrieved September 15, 2003 from http://www.pacer.org/tatralpod_fall00.htm
- PACER. (2001). *Technical assistance on transition and the rehabilitation act: A survey of federally funded parent centers*. Retrieved September 15, 2003, from <http://www.pacer.org/tatrasurvey.pdf>
- Patton, J. M. and Meyer, G. (2001). *On Point... On the nexus of race, disability, and overrepresentation: What do we know? Where do we go?* Retrieved August 25, 2003, from <http://www.inclusiveschools.org/race.pdf>

- Pierangelo, R., & Crane, R. (1997). *Complete guide to special education transition services*. West Nyack, NY: Center for Applied Research in Education.
- Policy Information Clearinghouse. (1997). Students with disabilities and high school graduation policies. *Policy Update*, 5(6). Alexandria, VA: National Association of State Boards of Education.
- President's Commission on Excellence in Special Education. (2002). *A new era: Revitalizing special education for children and their families*. Retrieved September 15, 2003, from <http://www.ed.gov/initiatives/commissionsboards/whspecialeducation/reports/index.html>
- Prouty, R. W., Smith, G., & Lakin, K. C. (2001). *Residential services for persons with developmental disabilities: Status and trends through 2000*. Minneapolis: University of Minnesota, Institute on Community Integration, Research and Training Center on Community Living.
- Rose, D., & Meyer, A. (2000). Universal design for individual differences. *Educational Leadership*, 58(3), 39-43.
- Salembier, G., & Furney, K. (1997). Facilitating participation: Parents' perceptions of their involvement in the IEP/transition planning process. *Career Development for Exceptional Individuals*, 20(1), 29-42.
- Schweinhart, L. J., & Weikart, D. P. (1998). High/Scope Perry preschool program effects at age twenty-seven. In J. Crane, (Ed.), *Social programs that work*. New York: Russell Sage.
- Secretary's Commission on Achieving Necessary Skills. (1991). *What work requires of schools: A SCANS report for America 2000*. Washington, DC: U.S. Department of Labor.
- Shriner, J. G., Gilman, C. J., Thurlow, M. L., & Ysseldyke, J. E. (1994/95). Trends in state assessment of educational outcomes. *Diagnostic*, 20(1-4), 101-119.
- Sinclair, M. F., Christenson, S. L., Evelo, D. L., & Hurley, C. M. (1999). Dropout prevention for youth with disabilities: Efficacy of a sustained school engagement procedure. *Exceptional Children*, 65(1), 7-21.
- Smink, J. (2002, December). *Effective strategies for increasing graduation rates*. Paper presented at the meeting of the National Dropout Forum, Washington, DC.
- Stodden, R. A. (1998). School-to-work transition: Overview of disability legislation. In F. Rusch & J. Chadsey (Eds.), *Beyond high school: Transition from school to work*. Belmont, CA: Wadsworth.
- Stodden, R. A., & Conway, M. A. (in press). Supporting individuals with disabilities in postsecondary education. *American Rehabilitation*.
- Stodden, R. A., & Dowrick, P. (2000a). The present and future of postsecondary education for adults with disabilities. *IMPACT*, 13(1), 4-5. Minneapolis: University of Minnesota, Institute on Community Integration.
- Stodden, R. A., & Dowrick, P. (2000b). Postsecondary education and employment of adults with disabilities. *American Rehabilitation*, 24(3).
- Stodden, R. A., & Jones, M. A. (2002). Supporting youth with disabilities to access and succeed in postsecondary education: Essentials for educators in secondary schools. *National Center on Secondary Education and Transition Issue Brief*, 1(5). Minneapolis: University of Minnesota.
- Stodden, R. A., Jones, M. A., & Chang, K. B. T. (2002). *Services, supports, and accommodations for individuals with disabilities: An analysis across secondary education, postsecondary education and employment*. Retrieved September 3, 2003, from http://www.ncset.hawaii.edu/publications/pdf/services_supports.pdf
- Taymans, J. M., Corbey, S., & Dodge, L. (1995). A national perspective of state level implementation of transition policy. *Journal for Vocational Special Needs Education*, 17(3), 98-102.
- Thomas, K. (2000, June 22). Disabled youths seek power over education. *USA Today*, p. 10D.
- Thompson, S. J., Johnstone, C., & Thurlow, M. L. (2002). *Universal design applied to large-scale assessment* (Synthesis Report 44). Minneapolis: University of Minnesota, National Center on Educational Outcomes.
- Thurlow, M. L., & Johnson, D. R. (2000). High stakes testing for students with disabilities. *Journal of Teacher Education*, 51(4), 289-298.
- Thurlow, M. L., Sinclair, M. F., & Johnson, D. R. (2002). Issue brief: Students with disabilities who drop out of school: Implications for policy and practice. *National Center on Secondary Education and Transition Issue Brief*, 1(2). Minneapolis: University of Minnesota.
- Thurlow, M., Ysseldyke, J., & Anderson, A. (1995). *High school graduation requirements: What's happening for students with disabilities?* (Synthesis Report 20). Minneapolis: University of Minnesota, National Center on Educational Outcomes.
- Thurlow, M. L., Ysseldyke, J., Gutman, S., & Geenen, K. (1998). *An analysis of inclusion of students with disabilities in state standards documents* (Technical Report

- 19). Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.
- Timmons, J. C., Schuster J., & Moloney, M. (2001). Stories of success: Using networking and mentoring relationships in career planning for students with disabilities and their families. *Tools for Inclusion*, 9(2), Boston: Institute for Community Inclusion.
- Tomlinson, C. (1999). *The differentiated classroom: Responding to the needs of all learners*. Alexandria, VA: ASCD.
- Turnbull, A. P., Friesen, B. J., Ramirez, C. (1998). Participatory action research as a model for conducting family research. *Journal of the Association for Persons with Severe Handicaps*, 23(3), 178-188.
- U.S. Department of Education. (1999). *Twenty-first annual report to Congress on the implementation of the Individuals with Disabilities Education Act*. Retrieved November 11, 2003, from <http://www.ed.gov/about/reports/annual/osep/1999/index.html>
- U.S. Department of Education. (2000). *Twenty-second annual report to Congress on the implementation of the Individuals with Disabilities Education Act*. Retrieved November 11, 2003, from <http://www.ed.gov/about/reports/annual/osep/1999/index.html>
- U.S. Department of Education. (2001). *Study of personnel needs in special education*. Washington, DC: Westat.
- U.S. Department of Education. (2002). *Twenty-fourth annual report to Congress on the implementation of the Individuals with Disabilities Education Act*. Retrieved November 11, 2003, from <http://www.ed.gov/about/reports/annual/osep/2001/index.html>
- University of Arkansas. (2000). *The family as a critical partner in the achievement of a successful employment outcome: Twenty-Sixth Institute on Rehabilitation Issues*. Hot Springs: Author.
- Utley, C., & Obiakor, F. E. (1997). *Addressing diversity in special education*. ERIC/OSEP Special Project. Retrieved September 2, 2003, from http://www.ericfacility.net/databases/ERIC_Digests/ed461195.html
- Wagner, M. (1993). *The transition experiences of young people with disabilities: Implications for policy and programs*. Menlo Park, CA: SRI International.
- Wagner, M., & Blackorby, J. (1996). Transition from high school to work or college: How special education students fare. *The Future of Children: Special Education for Students with Disabilities*, 6(1), 103-120.
- Wagner, M., Newman, L., D'Amico, R., Jay, E. D., Butler-Nalin, P., Marder, C., et al. (1991). *Youth with disabilities: How are they doing? The first comprehensive report from the national longitudinal transition study of special education students*. SRI International (Contract 300-87-0054). Washington, DC: U.S. Department of Education, Office of Special Education Programs.
- Way, W., & Rossmann, M. M. (1996). *Lessons from life's first teacher: The role of the family in adolescent and adult readiness for school-to-work transition*. Berkeley, CA: National Center on Research in Vocational Education.
- Wehmeyer, M. L., Kelchner, K., & Richards, S. (1996). Essential characteristics of self-determined behavior on individuals with mental retardation. *American Journal on Mental Retardation*, 100(6), 632-642.
- Wehmeyer, M., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children*, 63, 245-256.
- Wood, W., & Test, D. W. (2001). *Final performance report, Self-Determination Synthesis Project*. Retrieved September 15, 2003, from <http://www.uncc.edu/sdsp/>
- Yelin, E., & Katz, P. (1994). Labor force trends of persons with and without disabilities. *Monthly Labor Review*, 117, 36-42.

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