

Paula Kohler, Ph.D.
Department of Education Studies
Western Michigan University
3506 Sangren Hall
Kalamazoo, Michigan 49008

December 6, 2001.

Dear Paula,

Please find enclosed five copies of the manuscript entitled, "A Review of Secondary School Factors Influencing Postschool Outcomes for Youth with Disabilities." We are submitting the manuscript for review for possible publication in *Career Development for Exceptional Individuals*. This manuscript was principally written by me, and by Professor Peter Dowrick, PhD, Shane Gilmore, M.A., and L. M. Galloway, M.Ed. Candidate (the latter two are graduate assistants at CDS). This manuscript is not under consideration for publication elsewhere.

We look forward to viewing the outcome of the review process. The best to you and your family for a happy holiday season.

Aloha,

Robert A. Stodden, Ph.D.
Director & Professor

A Review of Secondary School Factors Influencing Postschool Outcomes
for Youth with Disabilities
(MS#043-H01)

Robert A. Stodden, Ph.D.

Peter Dowrick, Ph.D.

Shane Gilmore, M.A.

L. M. Galloway, M.Ed. Candidate

National Center for the Study of Postsecondary Educational Supports
Center on Disability Studies/UCE
University of Hawai'i at Manoa
1776 University Avenue
Honolulu, Hawai'i 96822

Tel: (808) 956-9199

Fax: (808) 956-5713

Preparation of this paper was supported by grant #H133B980043 from the National Institute on Disability and Rehabilitation Research (NIDRR) within the U.S. Department of Education. The contents of this report do not necessarily reflect an official position of any sponsoring agency.

Abstract

Students with disabilities graduate from secondary school and attempt postsecondary education at significantly lower rates than students without disabilities. This review examines four areas of significant issue thought to have an influence upon student's completion of high school and subsequent postschool outcomes of employment and participation within postsecondary education. The four areas, as identified by the United States Department of Education (1999), are as follows: (1) efforts at dropout prevention and intervention, (2) improving academic results for students with disabilities, (3) secondary school transition practices, and (4) provision of postsecondary educational supports. The authors conducted an initial review of each of the four areas, followed by a discussion and listing of recommendations for research questions to be considered by participants during a review forum.

Introduction

In 1983, when Congress reauthorized the Education for the Handicapped Act, a large percentage of the 300,000 youth with disabilities who exited public education each year encountered significant barriers in their transition to adult life (DeStefano & Snauwaert, 1989). Congress authorized the Office of Special Education and Rehabilitative Services (OSERS) to spend \$6.6 million annually in grants and contracts to strengthen and coordinate education, training, and related services and thereby assist youth to experience a successful adjustment to adult life with appropriate supports to transition to postsecondary education, competitive employment, or adult services (Rusch, Hughes, and Kohler, 1991). Since that time, this process, known as secondary school transition, has continued to be defined and developed through legislation, research, and practice. Since 1983, OSERS has supported more than 500 such projects, focused upon secondary transition, postsecondary education, and dropout prevention and intervention. These funded efforts shared the purpose of developing, refining, and validating effective programs and practices that improve postschool outcomes for students with disabilities. These projects represent an enormous investment consisting of a valuable body of knowledge, covering a wide range of topics which, when properly analyzed and disseminated, could provide an invaluable resource for improving the educational and postschool outcomes of youth with disabilities.

Current research, reviews, and practice reflect the general acceptance of a composite of effective practices for transition including: family and peer support and involvement, development of self-advocacy skills, student-centered activities, life-skills training, coordination of transition services, community transition teams, (Williams, 1998), student choice and preference, and student self-determination (Hughes, Hwang, Kim, Killian, Harmer, and Alcantaro, 1997). Yet, there remains a lack of consensus on the most appropriate ways to assess transition needs and preferences of students

(Cohen & Spenciner, 1996). Researchers point to inadequate emphasis on: the "transition to living" needs of individuals with learning disabilities, (Sitlington, 1996); the need for early transition planning, coordinated interagency linkages, and information, (Virginia State Department of Education, 1994); and a need for a greater degree of student involvement in transition planning (Walker & Shaw, 1996). Examination of the perceptions of parents and professionals regarding their responsibilities during the transition process indicate that problems of role confusion exist that hinder effective transition planning (Nolan, 1999). This lack of consensus lends validity to the need to conduct a thorough review to determine the most effective models for implementing proven practices, how we encourage and empower teachers and other practitioners to use these techniques, and how state agencies best implement the use of materials being developed.

Statement of the Problem

How federally funded transition projects ultimately have effected the lives of students with disabilities over the past twenty-five years is not clear. An extensive search of the literature, conducted in preparation of this review, suggests that the pattern of federal funding resulted in bursts of activity, each with a quite narrow focus, followed by a flurry of related publications. The field then moved on, following new priorities as policies concerning secondary school, transition, and postschool performance of youth with disabilities shifted, as much in response to a changing political context as to new research-based information. For example, as special education policy and regulatory language was reauthorized and adjusted in the late 1980s, practices documented as effective in the early years (e.g., sheltered workshops) were abandoned because they did not fit with emerging policy. In this respect, potentially valuable knowledge was lost. Often, the field has moved forward before there has been a thorough analysis or effective dissemination of knowledge (Stodden, 1993).

The current literature dictates the need to stop and review the implications of what we have learned, or not learned, from a full-range of federally funded projects and other efforts focused on the needs of youth with disabilities as they transition to adulthood. As Kohler and Rusch (1994) noted, “if the practices that are being validated by federally sponsored model programs could be introduced into every high school, secondary special education program effectiveness would be drastically improved”. While it would be difficult to replicate these model demonstration programs in every school across the nation, analyzing, synthesizing and effectively disseminating outcomes gleaned from these programs can significantly increase their impact (Kohle & Rusch, 1994).

As has been noted (Kohler & Rusch, 1994; Rusch, Kohler, and Rubin, 1994; Kohler, 1996), knowledge to be gained from analysis of Office of Special Education Programs (OSEP) funded projects, as well as the broader literature base, is of vital importance. Despite years of research and model demonstration efforts, numerous calls for reform, and billions spent, our secondary schools are still failing to meet the needs of students with disabilities to achieve high academic expectations. Society currently invests over twice as much money per student identified with disabilities as it does for general education students (Parrish, 1995; US Department of Education, 1989), yet students with disabilities continue to have a fragmented educational experience, without coordinated, sustained interventions over time (Deshler & Schumaker, 1993; Knackendoffel, Robinson, Deshler, and Schumaker, 1992; Tralli, Colombo, Deschler, and Schumaker, 1996). Dropout rates for students with disabilities are nearly double that for youth in general education (Balcazar & Keys, 1997; Capital Publications, 1997; Cheney & Harvey, 1994; Edgar, 1988; Knitzer, Steinberg, & Fleish, 1990; Neel, Meadows, Levine, and Edgar, 1988; Wagner, 1991a; Wagner, D’Amico, Marder, Newman, & Blackorby, 1992), and adults with disabilities remain highly under-represented in postsecondary education and competitive employment (Blackorby & Wagner, 1996; Stodden & Dowrick, 1999;

Benz and Halpern, 1987; Hasazi, Gordon, & Roe, 1985; Mitaug, Horiuchi, & Fanning, 1985; Phelps & Hanley-Maxwell, 1997; Thurow, 1996; Wagner, 1989; Wagner, Blackorby, Cameto, and Newman, 1993; Wagner & Blackorby, 1996). As Gajar (1998) cautions, for “individuals with disabilities, a university education is highly correlated with vocational options and financial success. Therefore, the cost of failure, both to these individuals as well as to society is a pressing concern”.

It is widely known that youth with disabilities can perform and obtain high academic achievement in secondary school and excel in their transition to adulthood. Furthermore, employment rates for persons with disabilities show an even stronger positive correlation between level of education and rate of employment than we see in statistical trends for the general population (Stoddard, 1998). Citing data from a twenty year follow-up study of 41 individuals with learning disabilities, Raskind, Goldberg, Higgins, & Herman, (1999) listed self awareness, perseverance, pro-activity, emotional stability, goal setting, and social support systems as the best predictors of success--over IQ or achievement. Postsecondary program directors of learning disability support services highlight motivation towards realistic goals, academic preparation, and self-advocacy as important (Kurtz, & Hicks-Coolick, 1997). Successful college students with disabilities cited discipline and effort, acceptance of disability, personal ambition, and self-confidence as success traits (Smith & Nelson, 1993). Much of the work done in this area has focused on case study interviews and profiling of those who are successful in an attempt to define the capacities or attributes of success so they can be taught to others (Reis, Neu, and McGuire, 1997; Fink, 1996; Raskind, et al., 1999; Kurtz & Hicks-Coolick, 1997; Smith & Nelson, 1993). Others have attempted to teach life-skills (programs) to prepare transitioning students for post-secondary success (Serebreni, Rumrill, Mullins, & Gordon, 1993; Wille-Gregory, Williams, and Hughes, 1995) or developed programs for success based directly upon case study results (Reiff, Ginsberg, and Gerber, 1995). Reiff et al., (1995) recommended

focusing on student strengths rather than student deficits, and based their model on shared attributes of 71 successful adults with learning disabilities (Reiff, Gerber, and Ginsberg, 1996).

In addition to some of the exciting results generated from funded demonstration projects, a substantial body of promising research exists concerning the complex learning needs of adolescents with disabilities (Balcazar, Keys, & Garate-Serafini, 1995; Bos, 1995; Carnine, 1997; Cawelti, 1997; Council for Exceptional Children, 1998; Slavin & Braddock, 1993; Waldron & McLeskey, 1998; Warner, Cheney & Pienkowski, 1996; Zigmond, Jenkins, Fuchs, Deno, Fuchs, Baker, Jenkins, & Couthino, 1995). This literature, along with the results of funded demonstration projects, has remained unorganized and inaccessible to those who need it most--policy makers and practitioners at state and local levels and students with disabilities, their families, and their advocates and supporters. This information can be found scattered in a wide range of papers and reports often in formats that are difficult for consumers to understand and integrate into policy and practice improvements. If this information were collected, organized, reviewed, and made accessible to appropriate audiences, it could have a significant impact on improving postschool outcomes for youth with disabilities. Thus, the objective of this paper is to impact upon those persons seeking improved postschool outcomes for youth with disabilities by organizing and providing accessible and usable information to audiences formulating policy, establishing research priorities, and implementing effective practices.

Method

This review is designed to explore and document the knowledge base associated with secondary school education and resulting postschool outcomes of employment and postsecondary education for youth with disabilities. In this review, four areas of federal identified need and resulting project funding are explored and organized in a manner meaningful to policy makers, researchers, and

practitioners. Further, the review explores and organizes research literature and consumer perspectives beyond the efforts of those reporting within funded projects, to provide a broader picture of the database. Finally, we provide a discussion and summary of four areas of significance, which includes recommendations for further direction and analysis for policy makers, researchers, administrators, educators, parents and youth with disabilities.

In constructing this review, we examined data from funded projects and the extant knowledge base, within four areas, as identified by the US Department of Education (Office of Special Education Programs, RFP 84.324W, November, 1999) as having potential significance to the improvement of postschool outcomes for youth with disabilities. The four identified areas were: (1) dropout prevention and intervention, (2) improving academic results, (3) secondary school transition practices, and (4) postsecondary education support provision. Literature was gathered using computer-based searches of several electronic databases covering the past twenty years, including the ERIC database and psychological abstracts. Further, reports and reviews of activities and outcomes from federally funded demonstration and research projects were searched in each of the four areas of identified significance. The review was then limited to include only the literature and project information found within these four areas of significance

The content of articles, project reports, and chapters deemed pertinent to the four areas under review were systematically analyzed applying multivocal literature (Ogawa & Malen, 1991) and participatory action research (PAR) (Brydon-Miller, 1997) approaches. Multivocal literature sources, such as those available in this review, are characterized by an abundance of diverse documents and a scarcity of systematic investigations. Further, a number of perspectives or voices (educators, employers, parents, youth with disabilities, researchers) are found to influence the findings and conclusions drawn from this database. To further validate the finding of this review, the authors

applied the PAR process, whereby consumers of the review findings and recommendations systematically provided their perspective. This process included the participation of a broad representation of consumers or stakeholders, providing both individual, written data and face-to-face, group consensus data. Outcomes and recommendations of the PAR process are integrated, summarized and shared here with recommendations from the review of each of the four areas of significance.

1. Dropout Prevention and Intervention

The evidence to date regarding poor postschool outcomes for students with disabilities is irrefutable. Less information is available on why students with disabilities have had a difficult time staying in high school and progressing toward graduation (Phelps & Hanley-Maxwell, 1997). One report found an average of 22% of all students with disabilities dropped out of school compared to only 12% of their peers without disabilities (Benz & Halpern, 1987). Edgar (1988) found dropout rates that varied according to disability classification: as high as 42% for students with learning disabilities or behavior disorders, 18% for students with mild mental retardation, and 16% for students in regular education (these figures increased significantly for students in both categories when considering minority status and poverty conditions).

The U.S. Department of Education Office for Civil Rights estimated that 32% of students in the general school population came from backgrounds that were ethnically, culturally, and linguistically diverse from the mainstream (1992). While cultural and linguistic diversity is not a special education category, these students faced many problems, such as language and social barriers, higher likelihood of living in poverty, and feelings of isolation, all of which may have contributed to their risk of failure in school and subsequent dropout. Perhaps as a consequence,

culturally and linguistically diverse (CLD) students -- including Blacks, Hispanics, and Native Americans as well as members of some immigrant populations—have been over-represented in special education settings (Frazier, 1997; Handy, 1999; Oswald, Coutinho, Best, and Singh, 1999). Carey, Boscardin, and Fontes (1994), setting aside issues of culturally skewed assessments and racial biases of educators, cited CLD students lack of “goodness of fit” with the programming, testing, etc., needed to perform well academically, and described a “basic mismatch between students’ cultures and the school’s culture, and the failure of the school culture to adapt to various students’ cultures” (Carey et al., 1994, p. 240). Also, Cohen & deBettencourt (1991) found that students who had difficulty processing information from oral and written presentations (including CLD students) were more likely to drop out of secondary school.

American Indian and Alaska Native students have had the highest dropout rate among all U.S. ethnic or racial groups, about 30%. Several factors associated with higher dropout rates that have been particularly critical for Native students are: large factory-like schools, uncaring teachers, passive teaching methods, irrelevant curriculum, inappropriate testing, student retention, tracked classes, lack of parent involvement, and high transfer rate between schools (Reyner, 1991). Small village high schools seem to have had greater success than large schools. However, the problem likely related to the larger issue of cultural discontinuity, which has forced students to choose between home and school cultures, resulting in the loss of many students who actually pursue school failure (St. Germaine, 1995). A related paper described the lack of “cultural capital” – the perception of one’s culture having linguistic and knowledge competencies belonging to the ‘norm’ – as having a significant influence on students who belong to minority and/or

disability groups and do not see images like their own reflected in the world. (Yuen & Shaughnessy, in press). Thus, the great need for positive role models in secondary schools is underscored.

Interestingly, studies have indicated the primary influences (e.g., failure, poor grades, low self-esteem, poor attendance, repeating a grade, and dislike of school) upon dropout rates have been the same for youth with disabilities and without disabilities (Kortering & Braziel, 1998; Lichtenstein & Blackorby, 1995; Roderick, 1993; Cohen & deBertnecourt, 1991), suggesting that the vast knowledge base related to general education students dropping out may also apply to students in special education. Studies have also suggested that negative consequences of dropping out of high school (e.g., unemployment, loss of opportunity for postsecondary schooling, and lack of engagement in productive activities after high school) were equally (if not more) significant for youth with disabilities as for youth without disabilities (Edgar, 1987; Padilla & Jay, 1990; Wagner, 1991a; Kortering, Hess, & Braziel, 1996; Wehman, 1992).

One finding of particular concern was that neither students with nor students without disabilities consulted school personnel before dropping out: "Given the intended nature of special education (lower teacher-to-student ratios, additional support, responsiveness to unique needs, and individualization), the lack of perceived support becomes especially troubling. One cannot escape the implication that the individualized education for these youth had apparently failed to be 'special' in their own eyes" (Kortering & Braziel, 1998, p. 72). Data collected through the National Longitudinal Study (Wagner, 1991b) suggested students who had completed occupationally oriented vocational courses had significantly lower absenteeism from school as well as a lower probability of dropping out. Projects designed to develop a student's sense of competence and worth through meaningful vocational and academic experiences, integrated with social skills training and counseling support,

have shown encouraging results for dropout prevention (Jambor, 1990). A number of studies have shown economic and ethnic status as multiplicative factors in dropout (Balcazar et al., 1995). Such studies support educators need for organized and proven information concerning factors that contribute to school leaving, as well as information on how to intervene before students are lost to the educational system.

One of the predominant themes across studies of prevention and reduction of dropouts was the need to shift from providing traditional predetermined curricula and services to identifying the unique needs and expectations of students and families (Grayson, Wermuth, Holub, and Anderson, 1997). This shift would necessitate identifying findings and outcomes from projects and studies focused on changes in how schools are organized, managed and operated. It suggests the importance of looking at school-based reform efforts and determining how school-improvement strategies can be effectively linked to providing an educational environment that would encourage students with disabilities to stay in school (OERI, 1995). While some findings and results of demonstration projects are available, they are contextually limited and leave many unanswered questions about how to effectively support active participation of students with disabilities and families in educational programs and transition services. Yet, they do point to the likelihood that answers to these issues may be found by identifying the fundamental aspects of programs (pedagogical and philosophical) which can be adapted to support systems at any site, and used to individualize services for any students with disabilities.

2. Improving Academic Results

Poor academic performance has been clearly linked to poor postschool outcomes of youth with disabilities. When students with disabilities are not held to the same academic standards as their peers without disabilities, they have reduced occupational aspirations (Rojewski, 1996) and, by most

measures of academic and postsecondary school success, they have experienced poorer outcomes than their nondisabled classmates (Hocutt, 1996). Even though the number of students having reported a disability has increased dramatically, climbing from under 3% in 1978, to over 9% in 1994, and to nearly 19% in 1996, these figures pale when compared to 53% of youth in the general population who attended some type of postsecondary school two years after leaving high school (Wagner & Blackorby, 1996).

There has been a troubling failure to provide coordinated and integrated accommodations and supports for students with disabilities to achieve high academic expectations (Berliner & Biddle, 1996; Edgar, 1987; Fuchs & Fuchs, 1994; Hatch, 1998; USDOE, 1995; 1996; Waldron & McLeskey, 1998). Rather, the recent move toward standards-based education and increased emphasis on academic content has led to sorting of students, in which students with disabilities are once again “handed off” to specialists (Malloy, 1997; Skritic, 1991; Winfield & Woodard, 1992). By focusing on “functional” life skills at the cost of academic programming, these special education classes have often limited the opportunities of students with disabilities (Gajar, Goodman, & McAfee, 1993; Kohler, 1998; McDonnell, Hardman, McDonnell & Kiefer-O’Donnell, 1995; Szymanski, Hanley-Maxwell, and Parker, 1990; Wehman, 1992). Meanwhile, for many students with disabilities who have achieved success in academics, the narrowing of the focus of their education has led to their transition goals being limited or receiving no attention (Hasazi, Furney DeStefano, 1999; Warren, 1997). Also, tracking has invariably exposed students with disabilities to dramatically different and unequal levels of curricula (Jorgensen, 1997; Oakes & Wells, 1998; Vaughn, Schumm, & Brick, 1998) and has been shown to increase the achievement gap over time (Oakes, Gamoran, & Page, 1992). Especially detrimental has been tracking into poor quality lower-level mathematics (Gamoran, Porter, Smithson, & White, 1997; Grossman & Stodolsky, 1995; Hallinan, 1996; Loveless, 1994) and

lower-level English courses where students never achieve adequate reading and comprehension skills (Dowrick, Power, Manz, Ginsburg-Block, Leff, & Kim-Rupnow, 2001; Murphy, 1996).

The 1997 reauthorization of the Individuals with Disabilities Education Act (IDEA) has made educators legally responsible for including youth with disabilities in challenging academic curricula. Special education and academic teachers who previously seldom interacted and avoided academic preparation of youth with disabilities (including 80% of youth identified with mild disabilities) have since been required to work together. To make this dramatic change effective, those teachers in general education curriculum areas need relevant and accessible information and guides about how students with disabilities learn and what accommodations, supports and resources they can access for their students.

For example, research has indicated that students with disabilities have been negatively affected by traditional instructional practices common to high schools (Gersten, 1998). Instruction organized around chapters in textbooks and limited to teacher lectures, student note-taking, and regurgitation of collections of facts is unresponsive to students' diverse learning styles and has been particularly deleterious to students with disabilities (Onosko & Jorgensen, 1997; Darling-Hammond, Aness, & Falk, 1995; Ferguson, 1997). Some research has recommended the better use of problem-based learning, constructivist classrooms, and multiple intelligences theory. Emerging research supports the efficacy of varied instructional supports (e.g., curriculum modification strategies, meta-cognitive approaches, learning strategies, graphic organizers and other "thinking maps", etc.) for promoting both the participation of students with disabilities in the general education classrooms and the achievement of individualized learning objectives (MacArthur, Schwartz, Graham, Molloy, and Harris, 1996).

Although we know something about the teaching strategies and instructional supports that have promoted learning for students with disabilities, these practices have not always been adequately supported by school districts because they are often seen as experimental (Deshler & Schumaker, 1993; Tralli et al., 1996; Bulgren, Deschler, and Schumaker, 1995). There is a need for the use of research methodology to determine which strategies are effective, in what school contexts, and with what sorts of students, in order to disseminate proven practices to policy makers and practitioners (Sylvester, 1995; Jorgensen, 1996). Of particular concern is whether effective strategies could be integrated into the current structure of secondary schools where teachers focus on isolated academic content, have limited time for individual students, and face numerous other challenges on a day-to-day basis. Further, it is known that postschool outcomes for youth with disabilities, from minority backgrounds and low socioeconomic status, are often the worst. A study using data on 120,032 people from the 1991 national Health Interview survey to assess prevalence of disabilities among racial and ethnic minority groups found a tendency for minority persons across disability categories to be at the bottom of the socioeconomic ladder (Walker, Saravanabhavan, and Asbury, 1996).

3. Secondary Transition Practices

Secondary transition strategies have been developed to address transition to work, daily living, self-advocacy, self-care, social relationships, and other aspects of a quality adult life. Several funded demonstration projects have shown that certain practices contribute significantly to youth with disabilities obtaining and maintaining employment and postsecondary educational opportunities after high school. The foremost practice, as was confirmed by several research studies, is employment experience during the high school years (e.g., work-study jobs, paid work experiences, and high school vocational education experiences) (Fourqurean & LaCourt, 1991; Fourqurean, Meisgeier,

Swank, and Williams, 1991; Hasazi, Gordon, & Roe, 1985; Hasazi, Hasazi, Gordon, Hull, and Johnson, 1989; Scuccimarra & Speece, 1990; Sitlington & Frank, 1990). The National Longitudinal Study of Youth with Disabilities (Wagner, 1991b) reported that the likelihood of employment was 14% higher for students involved in work experience than for students who had no work experience. Hasazi, et al., (1989) found that vocational training, including part-time and summer work, were significant predictors of employment. Kohler (1994) found that more than 50% of 49 studies cited vocational training as central to transition to successful postschool outcomes.

A second contributor has been found to be a focus during high school on functionally oriented curricula in which specific occupational skills, social skills, and academic skills are systematically connected for students with disabilities. For example, Wagner (1991b) & Wagner et al., 1993) found that students who participated in occupational and adult skills vocational education during their last year in school were more likely than non-participating special education youth to register positive outcomes (e.g., employed or attending postsecondary education programs). Many studies focused on curriculum content have identified the following variables as contributing significantly to postschool employment: integration of academic and vocational education (e.g., Grubb, 1996); a community-focused curriculum (e.g., one in which academic and vocational skills were integrated through coordinated school and work-based learning; Heal & Rusch, 1995) and social skill training (Greenspan & Shoultz, 1981; Hanley-Maxwell, Rusch, Chadsey-Rusch, & Renzaglia, 1986).

Several researchers have attempted to study federally funded demonstration projects focused on improving postschool outcomes for students with disabilities (Rusch et al., 1991; Rusch, Kohler, & Hughes, 1992; Kohler, DeStefano, Wermuth, Grayson, & McGinty, 1994). For example, Rusch et al. (1994) surveyed transition model project directors to identify the outcomes and related activities

important for student employment after graduation. They reported a list of 65 activities that high school personnel may engage in to attain 22 different employment outcomes for youth with disability.

While this research has been important and informative, there remains a need to update and organize the essential elements of the transition process so that they are more completely understood by policy makers and practitioners in the field. A further need exist to determine the relationship between specific practices and specific postschool outcomes and how to replicate and disseminate these practices on a national level.

4. Provision of Postsecondary Education Supports

Disturbing evidence suggests that many students with disabilities have experienced difficulty accessing and staying in postsecondary schools, as well as completing their programs of study (Blackorby & Wagner, 1996; National Organization on Disabilities, 1998; Stodden & Dowrick, 1999; Wagner & Blackorby, 1996; Witte, Philips, & Kakela, 1998). Failure to provide appropriate academic development services, supports, and programs for students with disabilities may have caused them to achieve grade-point averages well below that of their nondisabled peers (Gajar, 1992, 1998). Further, Bursuck & Rose (1992) have found that students with disabilities who earn a tangible certificate or degree take considerably longer to finish their program of study than do nondisabled students.

With the exception of OSEP's Results of the Second PASS Field Test (1996), there exists no extensive studies of the types of services youth with disabilities require in their transition to adult higher education, or how accommodations and supports impact postsecondary access, participation, and long-term outcomes (Brinkerhoff, Shaw, & McGuire, 1993; Tindel, Heath, Hollenbeck, Almond, & Harniss, 1998; Gartin, Rumrill, & Serebreni, 1996). The PASS field test indicated that 80% of the

sample needed some type of case management services, and one-third were in need of assistance and training in the area of communication. But as Gajar (1998) chides, “[t]he recent influx of students with disabilities into postsecondary settings has precluded the establishment of both a body of proven practices and a clear relationship between practices and outcomes. Services have evolved sporadically and programs have been pieced together in a haphazard manner” (p.388).

Of particular interest to the authors of this review was the work completed over the past 10 years in the areas of self-advocacy and self-determination. A significant requirement for students with disabilities transitioning from secondary school to postsecondary educational environments has been their need to become responsible for initiating, designing, and ensuring their own educational accommodations. Given that postsecondary institutions are required by law (Americans with Disabilities Act, Sections II and III) “to provide any reasonable accommodation that may be necessary for those with disabilities to have equal access to educational opportunities and services available to nondisabled peers, *if requested*” (Pierangelo & Crane, 1997 [italics in original]) it is clear that self-advocacy and self-determination -- the abilities to express one’s needs and to make informed decisions -- must be considered among the most important skills for students with disabilities to have before beginning their postsecondary experience (Battle, Dickens-Wright, & Murphy, 1998; Benz, Doren, & Yovanoff, 1998; Deshler, Ellis, & Lenz, 1996; Miller, Miller, Armentrout, & Flannagan, 1995; Kohler, 1998; Skinner, 1998; Wehmeyer & Schwartz, 1998). Thus, it follows that there is a need for researchers in this field to prepare resources which enable students with disabilities to learn these vital skills and attitudes.

In 1988, the Office of Special Education and Rehabilitative Services (OSERS) funded an initiative to promote the study of self-determination for youths with disabilities. Twenty-six model demonstration projects were supported to focus on the identification of related skills, methods of

instruction, and opportunities to practice self-determination. These model projects developed curricula to teach students to evaluate their skills, recognize their limits, set goals, identify options, accept responsibility, communicate their preferences and needs, and monitor and evaluate their progress. In 1999, the Office of Postsecondary Education funded 22 new demonstration projects to improve methods of instruction and support integration within instructional settings in postsecondary institutions. While it has been suggested that the substantial curricula (Test, et. al., 2000) developed by these projects have been largely ineffective, the problem “does not lie in the content, it lies in the failure to integrate curricula with the larger campus environment” (Yuen & Shaughnessy, in press). Therefore, analyzing the outcomes and products of these projects is of importance to developers of future reviews so that this information can be more fully integrated into policy and practice at the secondary and postsecondary level.

Discussion

Over the last 15 years, substantial federal investments have been made in advancing the quality of education for youth with disabilities, vocational education and, more recently, school-to-work systems development at state and local levels (Kohler, 1996; Phelps & Hanley-Maxwell, 1997). But what has emerged from the array of federal education and training programs for youth with disabilities is a fragmented, disjointed quagmire of programs and services for the populations most in need of effective schooling, transition, employment, and postsecondary education (Grubb, 1996). This is not to say that individually these programs have not had some success. Secondary transition programs and services provide a broad foundation upon which to develop future federal, state, and local policy as well as teaching and support strategies that can lead to better outcomes for youths with disabilities. But we need to determine which programs deserve broader implementation and which

programs are complementary. We need to understand the variables across populations (socio-economics, race/ethnicity, geographic region, kind of disability) and types of schools that impact success of particular interventions; not all programs will work in all settings, nor should they be expected to.

In many cases we know more about what doesn't work than what works. Many possible promising programs have provided little data to support their effectiveness (Kohler, DeStefano, Wermuth, Grayson, and McGinty, 1994). Most significantly, we still do not have a clear understanding of how specific programs, supports, and services impact the postschool outcomes of employment and participation in postsecondary education.

When conducting this review, the research team noted that the literature, as well as demonstration project report summaries within each of the four areas of study lacked the voice of the student and their family members, a circumstance that is indicative of the pervasive deficit-based approach of providing service to those with disabilities, as opposed to collaborating with such individuals and families, as experts of their own abilities, to create effective strength-based supports. Specifically, responses to the following questions were lacking: "What do students with disabilities think about their secondary school preparation and transition services? What are the services and supports that excite them and influence their postschool outcomes? How have funded demonstrations influenced their participation and success in postsecondary programs?" Similarly, the literature rarely focused on the needs or perspectives of teachers who often feel they are victims of federal policy and research priority development. Regular education teachers consistently report the lack of a close working relationship with special educators. Many recommended practices appear to be implemented because "the state says we need to do this" (Knoll, & Obi, 1997). Segregation is seen as superior to inclusion, teachers view resource teachers as responsible for inclusion students (Valeo & Bunch,

1998), and have reservations about work load, insufficient collaborative time, adequacy of preservice and inservice professional development, and administrator support (Bunch, Lupart, & Brown, 1997).

Recommendations

In the development of this review paper, the authors have organized and analyzed a wide range of professional literature and the outcomes of hundreds of demonstration projects, establishing significant capacity to make recommendations for further research and provide direction for policy and practice. Knowledge in the field of secondary transition is fragmented and dispersed and is often not linked to the attainment of postschool outcomes such as employment and participation in postsecondary education. A unified conceptual framework to be applied across multiple studies to determine the relationships between variables and outcomes would be of value to researchers and policy makers. There is a need to work closely with those persons who implemented and were impacted by funded demonstration projects, to ensure practice level application to the field. Further, there is a need to clarify, organize, and validate information within and across the four areas of significance reviewed in this paper, thus contributing to the advancement of theory, knowledge, and practice. The following recommended research questions, which suggest short-term and/or long range areas for study as well as those areas of concern which should be addressed to resolve immediate and/or interim problems, are provided here to give focus to such contribution.

1. Dropout Prevention and Intervention

- Can pro-active measures to support students and parents to take leadership roles in transition/IEP meetings be taken immediately and, subsequently, can they be proven to

decrease student attrition, failure and improve secondary education outcomes and success in postsecondary education?

- To what extent can the active recruitment and involvement of positive role models (professionals or working adults with disabilities) in secondary schools be proven to influence the success of the youths with disabilities?
- What are the implications of successful high school dropout prevention programs for supporting students with disabilities to maintain and complete secondary education programs?

2. Improving Academic Results

- What is the impact of current secondary school, standards-based reform initiatives upon the participation of students with disabilities in secondary school and subsequent postsecondary education programs? How can it be ameliorated (what immediate steps can be taken, what is most promising for better long range results)?
- Which factors positively influence secondary teachers' and administrators' expectations and performance of students with disabilities? Can identifying secondary school success factors influence how strategic planning efforts will anticipate the barriers to improvement? Can such factors be cultivated in less motivated staff through a strength-based approach to program change?
- Do programs or studies exist regarding attempts to reverse the effects of low expectations of youth with disabilities in secondary schools? Can secondary schools which are contending with the issue of low expectations, or have attempted to address it, provide information to direct us to promising recommendations for change?

3. Transition Practices

- What have we learned from secondary school self-determination practices and the need for students with disabilities to advocate for their own educational supports in postsecondary programs? Which programs have achieved improved postsecondary school outcomes and why?
- Which transition practices demonstrated in secondary schools contribute to successful access and participation of youth with disabilities in postsecondary education programs? Which secondary school transition practices carry over as effective supports in postsecondary educational programs? Which can be carried over further to support individuals with disabilities in the workplace?
- How do students participating in structured secondary school transition programs fare when accessing and participating in postsecondary school programs? Can individualized case management and the development of individualized career plans (with options such as job shadowing and internship) be better incorporated into their support provision, and if so, how?
- What do students perceive to be the characteristics of promising educational support provision? What technologies do they perceive as valuable and utilize? How do these students' types and levels of disability correlate to their perceptions and reported satisfaction? How can student expertise in this area be better used to guide current and future advances in transition support?

4. Postsecondary Educational Supports

- What are the policy and funding differences regarding support provision in secondary school and postsecondary settings, and the impact of such policies upon student participation and program completion in postsecondary programs?

- How do students with disabilities adjust when they transition from the secondary school mandates of the Individuals with Disability Education Act (IDEA) to the world of postsecondary education? How can federal funding mandated by IDEA be utilized better to support students with disabilities in postsecondary education?
- To what extent is the requirement that a person disclose his or her disability in order to obtain educational accommodations and supports a deterrent to success in education and subsequent employment?
- Which transition programs, or parts of programs, generalize across educational sites (urban or rural, secondary or postsecondary education)? How can such programs be adjusted to fit unique environments and support youths with disabilities in an individualized manner, rather than through special program formats upon labels of disability types and levels?
- How can the transition concerns of students in both general and special education be further addressed with a greater degree of integration? Can it be shown that such an integrated effort (including collaboration amongst vocational, special education, general education and career-related personnel) would benefit students with disabilities transitioning into postsecondary education and employment?

5. Longitudinal Studies and Related Questions

- What would be the value of an organized and synthesized database concerning the secondary school preparation of youth with disabilities for participation in postsecondary education? What do we expect this information will be used to do, and who do we hope will do it?
- In studying diverse groups whose children exhibit lower rates of secondary and postsecondary educational success, can it be determined which attributes (beliefs, behaviors) they possess

which could be utilized to increase positive outcomes? Once identified, could specifically identified attributes be generalized and developed into strategies for broad use by support service agencies and schools to ensure better outcomes for these youths?

- Which types of secondary schools reporting improved postsecondary outcomes for students with disabilities have achieved their success through school-wide changes in pedagogy, philosophy, and/or integration of general and special education programs? How can fundamental change be achieved, or at least initiated, within current typical school structures?
- How have changes in disabilities law effected changes in public perceptions to postschool adjustment of youth with disabilities? How can positive changes be capitalized on further to encourage wider acceptance of inclusive thinking for people with and without disabilities? Can current laws be capitalized on further to advance the positive evolution of such thinking?

Summary

A wealth of opportunity for meaningful research-to-practice advances in the area of postschool outcomes for youth with disabilities exists at the fingertips of researchers, policy makers, practitioners and educators. It is found in the vast array of literature, as well as the documentation of federally funded demonstration projects, which has been generated over the last decade and was reviewed in this paper. In order to actualize improvements to postsecondary education and employment outcomes for such youth through analysis, organization and dissemination of this knowledge base, we must link specific practices to validated outcomes. The writers of this paper examined four areas of significance as determined by the U.S. Department of Education: (1) efforts at dropout prevention and intervention, (2) improving academic results for students with disabilities, (3) secondary school transition practices, and (4)

provision of postsecondary educational supports. As a result of this study, numerous recommendations for further research were generated, the most pertinent calling for action which will: (1) provide a comprehensive database of the best and most promising practices to enable all stakeholders to generalize practices, without sacrificing the goals of individualized education as mandated in IDEA; (2) explore and advance the principles self-determination and self-advocacy; and (3) ameliorate public perceptions and the underlying fundamental beliefs which drive school systems to success. Inherent in our recommendations is the belief that researchers themselves must approach this work from a strength-based standpoint, which is to say, we must strive for change that is not based on “fixing” what is wrong, but extending the scope of what is right.

References

- Balcazar, F. E. & Keys, C. B. (1997). A comprehensive model to identify, train, and place Hispanic youths with disabilities who have dropped out of high school. Final report to the U.S. Office of Special Education and Rehabilitative Services. Chicago: Institute on Disability and Human Development, University of Illinois at Chicago.
- Balcazar, F. E., Keys, C. B., & Garate-Serafini, J. (1995). Learning to recruit assistance to attain transition goals: A program for adjudicated youths with disabilities. Remedial and Special Education, 16, 237-246.
- Battle, D., Dickens-Wright, L., & Murphy, S. (1998). How to empower adolescents: Guidelines for effective self-advocacy. Teaching Exceptional Children, 30(3), 28-33.
- Benz, M., Doren, B., & Yovanoff, P. (1998). Crossing the great divide: Predicting productive engagement for young women with disabilities. Career Development for Exceptional Individuals, 21(1), 3-16.
- Benz, M. R. & Halpern, A. S. (1987). Transition services for secondary students with mild disabilities: A statewide perspective. Exceptional Children, 53, 507-514.
- Berliner, D. & Biddle, B. (1996). Standards amidst uncertainty and inequality. The School Administrator, 53(5), 42-47.
- Blackorby, J. & Wagner, M. (1996). Longitudinal postschool outcomes of youth with disabilities: Findings from the National Longitudinal Transition Study. Exceptional Children, 62, 399-413.
- Bos, C. S. (1995). Professional development and teacher change: Encouraging news from the trenches. Remedial and Special Education, 16, 379-382.

- Brinkerhoff, L., Shaw, S., & McGuire, J. (1993). Promoting postsecondary education for students with learning disabilities: A handbook for practitioners. Austin, TX: Pro-Ed.
- Brydon-Miller, M. (1997). Participatory action research: Psychology and social change. Journal of Social Issues, 53(4), 657-666.
- Bulgren, J. A., Deshler, D. D., & Schumaker, J. B. (1995). The concept comparison routine. Lawrence, KS: Edge Enterprises.
- Bunch, G., Lupart, J., & Brown, M. (1997). Resistance and acceptance: Educator attitudes to inclusion of students with disabilities. Ottawa, Ontario, Canada
- Bursuck, W. & Rose, E. (1992). Community college options for students with mild disabilities. In F. R. Rusch, L. Destefano, J. Chadsey-Rusch, L. A. Phelps, & E. Szymanski (Eds.), Transition from school to adult? life (pp. 71-91). Sycamore, IL: Sycamore Publishing.
- Capital Publications, Inc. (1997). Graduation rates remain stagnant for disabled. Special Education Report, 23(1), 1-2.
- Carey, J. C., Boscardin, M. L., & Fontes, L. (1994). Improving the multicultural effectiveness of your school. In P. Pedersen & J. C. Carey (Eds.), Multicultural counseling in schools. A practical handbook (pp. 239-249). Boston: Allyn & Bacon.
- Carnine, D. (1997). Bridging the research-to-practice gap. Exceptional Children, 63, 513-521.
- Cawelti, G. (1997). Effects of high school restructuring: Ten schools at work. Arlington, VA: Educational Research Service.
- Cheney, D. A. & Harvey, V. S. (1994). From segregation to inclusion: One district's program changes for students with emotional and behavioral disorders. Education and Treatment of Children, 17, 332-346.

- Cohen, S. B. & deBettencourt, L. V. (1991). Dropout: Intervening with the reluctant learner. Intervention in School and Clinic, 26, 263-271.
- Cohen, L. G. & Spenciner, L. J. (1996). Research digest: Transition assessment. Diagnostique, 21(3), 59-74.
- Council for Exceptional Children. (1998). State-wide assessment programs: Including students with disabilities. Research Connections in Special Education, 2, 1-8.
- Darling-Hammond, L., Anness, J., & Falk, B. (1995). Authentic assessment in action: Studies of schools and students at work. New York: Teachers College Press.
- Deshler, D. D. & Schumaker, J. B. (1993). Strategy mastery by at-risk students: Not a simple matter. Elementary School Journal, 94, 153-167.
- Deshler, D., Ellis, E. & Lenz, B. K. (1996). Teaching adolescents with learning disabilities (2nd Ed.). Denver, CO: Love Publication.
- Destefano, L. & Snauwaert, D. (1989). A value-critical approach to transition policy analysis [Monograph]. Secondary Transition Intervention Effectiveness Institute, University of Illinois at Urbana-Champaign.
- Dowrick, P. W., Power, T. J., Manz, P. H., Ginsburg-Block, M., Leff, S. S., & Kim-Rupnow, S. (2001). Community responsiveness: Examples from under-resourced urban schools. Journal of Prevention and Intervention in the Community, 22, 71-90.
- Edgar, E. (1987). Secondary programs in special education: Are many of them justifiable? Exceptional Children, 53, 555-561.
- Edgar, E. (1988). Employment as an outcome for mildly handicapped students: Current status and future directions. Focus on Exceptional Children, 21(1), 1-8.

- Ferguson, D. L. (1997, March). Changing tactics: Research on embedding inclusion reforms within general education restructuring efforts (1997. Presentation made at the annual meeting of the American Educational Research Association, Chicago, IL.
- Fink, R. P. (1996). Successful dyslexics: A constructivist study of passionate interest reading. Journal of Adolescent & Adult Literacy, 39(4), 268-80.
- Fourqurean, J. M. & LaCourt, T. (1991, January/February). A follow-up of former special education students: A model for program evaluation. Remedial and Special Education, 12(1), 16-23.
- Fourqurean, J. M., Meisgeier, C., Swank, P. R., & Williams, R. E. (1991). Correlates of postsecondary employment outcomes for young adults with learning disabilities. Journal of Learning Disabilities, 24, 400-405.
- Frazier, H. (1997). Derailing student tracking: SCLC, others strive to eliminate educational channelling. Black Issues in Higher Education, 13(25), 12-13.
- Fuchs, D. & Fuchs, L. S. (1994). Inclusive schools movement and the radicalization of special education reform. Exceptional children, 60, 294-309.
- Gajar, A. (1998). Postsecondary education. In F. R. Rusch & J. G. Chadsey (Eds.), Beyond high school: Transition from school to work (pp. 383-403). Belmont, CA: Wadsworth.
- Gajar, A. (1992). University-based models for students with learning disabilities: The Pennsylvania State University model. In F. R. Rusch, L. Destefano, J. Chadsey-Rusch, L. A. Phelps, & E. Szymanski (Eds.), Transition from school to adult? life (pp. 51-70). Sycamore, IL: Sycamore.
- Gajar, A., Goodman, L., & McAfee, J. (1993). Secondary schools and beyond: Transition of individuals with mild disabilities. New York: Macmillan.

- Gamoran, A., Porter, A.C., Smithson, J., & White, P.A. (1997). Upgrading high school mathematics instruction: Improving learning opportunities for low-achieving, low-income youth. Educational Evaluation and Policy Analysis, 19(4), 325-338.
- Gartin, B., Rumrill, P., & Serebreni, R. (1996). The higher education transition model: Guidelines for facilitating college transition among college-bound student with disabilities. Teaching Exceptional Children, 28(5), 30-33.
- Gersten, R. (1998). Recent advances in instructional research for students with learning disabilities: An overview. Learning Disabilities Research & Practice, 13(3), 162-170.
- Grayson, T. E., Wermuth, T. R., Holub, T. M., & Anderson, M. L. (1997). Effective practices of transition from school to work for people with learning disabilities. In P. J. Gerber & D. S. Brown (Eds.), Learning disabilities and employment. Austin, TX: PRO-ED.
- Greenspan, S. & Shoultz, B. (1981). Why mentally retarded adults lose their jobs: Social competence as a factor in work adjustment. Applied Research in Mental Retardation, 2, 23-28.
- Grossman, P. & Stodolsky, S. S. (1995). Content as context: The role of school subjects in secondary school teaching. Educational Researcher, 24(8), 5-11, 23.
- Grubb, W. N. (1996, Fall). Creating coherent workforce preparation systems from the quagmire of education and job training. Center Focus, 13, 78-89.
- Hallinan, M. T. (1996). Track mobility in secondary school. Social Forces, 74, 983-1002.
- Handy, A. J. (1999). Ethnocentrism and black students with disabilities: Bridging the cultural gap (Vol. 1). New York: Vantage Press.

- Hanley-Maxwell, C., Rusch, F. R., Chadsey-Rusch, J., & Renzaglia, A. (1986). Reported factors contributing to job terminations of individuals with severe disabilities. Journal of the Association for Persons with Severe Handicaps, 11(1), 45-52.
- 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, 455-469.
- Hasazi, S. B., Hasazi, J. E., Gordon, L. R., Hull, M., & Johnson, R. (1989). Employment of youth with and without handicaps following high school from 1979 to 1983. Exceptional Children, 51(6), 455-469.
- Hatch, T. (1998). How comprehensive can comprehensive reform be? Phi Delta Kappan, 79, 518-522.
- Heal, L. W. & Rusch, F. R. (1995). Predicting employment for students who leave special education high school programs. Exceptional Children, 61, 472-487.
- Hocutt, A. M. (1996). Effectiveness of special education: Is placement the critical factor? The Future of Children: Special Education for Students with Disabilities, 6(1), 77-102.
- Hughes, C., Hwang, B., Kim, J., Killian, D. J., Harmer, M. L., & Alcantra, P. R. (1997). A preliminary validation on strategies that support the transition from school to adult life. Career Development for Exceptional Individuals, 20, 1-14.
- Jambor, S. O. (1990). The Technical Alternative High School: A federal demonstration program using comprehensive programming to support drop-out prevention. Nashville, TN? BOCES Southern Westchester, National Dropout Prevention Conference.

- Jorgensen, C. (1996). Developing inclusive curriculum right from the start: Practices strategies and examples from the high school classroom. In S. Stainback & W. Stainback (Eds.), Inclusion: A guide for educators (pp. 221-236). Baltimore, MD: Paul H. Brookes.
- Jorgensen, C. M. (with Fisher, D. & Roach, V.). (1997, July). Curriculum and its impact on inclusion and the achievement of students with disabilities. Issue Brief - Consortium on Inclusive Schooling Practices, 2(2), 19.
- Knackendoffel, A., Robinson, S. M., Deshler, D. D., & Schumaker, J. B. (1992). Collaborative problem solving. Lawrence, KS: Edge Enterprises.
- Knitzer, J., Steinberg, Z., & Fleisch, B. (1990). At the schoolhouse door: An examination of programs and policies for children with emotional and behavioral problems. New York: Bank Street College of Education.
- Knoll, J. A. & Obi, S. C. (1997, April). An analysis of inclusive education in eastern Kentucky: Final project report. Kentucky: Morehead State University.
- Kohler, P. D. (1994). A taxonomy for transition programming. Champaign: University of Illinois, Transition Research Institute.
- Kohler, P. D. (1996). Taxonomy for Transition Programming: Linking Research and Practice. Transition Research Institute-University of Illinois at Urbana Champaign.
- Kohler, P. D. (1998). Implementing a transition perspective of education: A comprehensive approach to planning and delivering secondary education and transition services. In F. R. Rusch & J. G. Chadsey (Eds.), Beyond high school: Transition from school to work (pp. 179-205). Belmont, CA: Wadsworth Publishing.

- Kohler, P. D., DeStefano, L., Wermuth, T., Grayson, T., & McGinty, S. (1994). An analysis of exemplary transition programs: How and why are they selected? Career Development for Exceptional Individuals, 17, 187-202.
- Kohler, P. D. & Rusch, F. R. (1994). Promoting Employment for Youths in Transition: Outcomes, Activities and Indicators. Transition Research Institute. University of Illinois at Urbana-Champaign.
- Kortering, L. J. & Braziel, P. M. (1998). School dropout among youth with and without learning disabilities. Career Development for Exceptional Individuals, 34, 61-72.
- Kortering, L. J., Hess, R. S., & Braziel, P. M. (1996). School dropouts. In G. Baer & K. Minke (Eds.), Best practices in school psychology. Bethesda, MD: National Association of School Psychologists.
- Kurtz, P. D. & Hicks-Coolick, A. (1997). Preparing students with learning disabilities for success in postsecondary education: Needs and services. Social Work in Education, 19(1), 31-42.
- Lichtenstein, S. & Blackorby, J. (1995). Who drops out and what happens to them? Journal for Vocational Special Needs Education 18, 1-5.
- Loveless, T. (1994). The influence of subject areas on middle school tracking policies. Research in Sociology of Education and Socialization, 10, 147-175.
- MacArthur, C. A., Schwartz, S., Graham, S., Molloy, D., & Harris, K. (1996). Integration of strategy instruction into whole language classroom: A case study. Learning Disabilities Research & Practice, 11, 168-176.
- Malloy, W. (1997, January). Responsible inclusion: Celebrating diversity and academic excellence. Bulletin, 64, 80-85.

- McDonnell, J. J., Hardman, M. L., McDonnell, A. P., & Kiefer-O'Donnell, R. (1995). An introduction to persons with severe disabilities. Needham Heights, MA: Allyn & Bacon.
- Miller, S. R., Miller, P. F., Armentrout, J. A., & Flannagan, J. W. (1995). Cross age peer tutoring: A strategy for promoting self-determination in students with severe emotional disabilities/behavior disorders. Preventing School Failure, 39(4), 32-37.
- Mithaug, D. E., Horiuchi, C., & Fanning, P. (1985). A report on the Colorado statewide follow-up survey of special education students. Exceptional Children, 51, 397-404.
- Murphy, D. M. (1996). Implications of inclusion for general and special education. The Elementary School Journal, 96(5), 469-493.
- National Organization on Disabilities. (1998, July 23). 1998 N. O. D. /Harris survey of Americans with disabilities. Washington, DC: Louis Harris & Associates.
- Neel, R., Meadows, N., Levine, P., & Edgar, E. (1988). What happens after special education: A statewide follow-up study. Behavior Disorders, 13, 209-216.
- Nolan, J. (1999, March). Perceived roles and competencies involved in the transition planning process: A comparison of rural and non-rural areas. In Rural Special Education for the new Millennium: Conference Proceedings of the American Council on Rural Special Education (ACRES) (19) (pp. 395-401).
- Oakes, J. & Wells, A. (1998). Detracking for high student achievement. Educational Leadership, 55(6), 38-41.
- Oakes, J., Gamoran, A., & Page, R. N. (1992). Curriculum differentiation: Opportunities, outcomes, and meanings. In P. W. Jackson (Ed.), Handbook of research on curriculum (pp. 570-608). New York: Macmillan.

Office of Educational Research and Information. (Spring 1995). Bulletin Number Seven.

Washington DC: Author

Office of Special Education Programs. (1996). Services anticipated to be needed by exiting students with disabilities: Results of the second pass field test. In Eighteenth Annual Report to Congress on the Implementation of the Individuals with Disabilities Act.

Washington DC: Author.

Office of Special Education Programs, 1999 RFP 84.324W. Nov, 1999

Ogawa, R. T. & Malen, B. (1991). Towards rigor in reviews of multivocal literatures: Applying the exploratory case study method. Review of Educational Research, 61(3), 265-286.

Onosko, J. & Jorgensen, C. (1997). Unit and lesson planning in the inclusive classroom: Maximizing learning opportunities for all students. In C. Jorgensen, Restructuring high schools for all students: Taking inclusion to the next level (pp. 71-106). Baltimore: Paul H. Brookes.

Oswald, D. P., Coutinho, M. J., Best, A. M., & Singh, N. N. (1999). Ethnic representation in special education: The influence of school-related economic and demographic variables. Journal of Special Education, 32(4), 194-206.

Padilla, C. L. & Jay, E. D. (1990). Dropping out: A look at the problem in special education. Readings on Equal Education, 10, 193-225.

Parrish, T. (1995). What is fair? Special Education and finance equity (brief #6). Palo Alto, CA: Center for Special Education Finance, American Institutes for Research.

Phelps, L. A. & Hanley-Maxwell, C. (1997). School-to-work transitions for youth with disabilities: A review of outcomes and practices. Review of Educational Research, 67(2), 197-226.

- Pierangelo, R. & Crane, R. (1997). Complete guide to special education transition services. West Nyack, NY: The Center for Applied Research in Education.
- Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. Learning Disabilities Research and Practice, 14(1), 35-49.
- Reiff, H. B., Gerber, P. J., & Ginsberg, R. (1996). What successful adults with learning disabilities can tell us about teaching children. TEACHING Exceptional Children, 29(2), 10-16.
- Reiff, H. B., Ginsberg, R., & Gerber, P. J. (1995). New perspectives on teaching from successful adults with learning disabilities. Remedial and Special Education, 16(1), 29-37.
- Reis, S. M., Neu, T. W., & McGuire, J. M. (1997). Case studies of high-ability students with learning disabilities who have achieved. Exceptional Children, 63(4), 463-79.
- Reyner, J. (1991). Plans for dropout prevention and special school support services for American Indian and Alaska native students. Washington, DC: Department of Education, Indian Nations at Risk Task Force.
- Roderick, M. (1993). The path to dropping out: evidence for intervention. Westport, CT: Auburn House.
- Rojewski, J. W. (1996). Educational and occupational aspirations of high school seniors with learning disabilities. Exceptional Children, 62, 463-476.
- Rusch, F. R., Hughes, C., & Kohler, P. D. (1991). Descriptive analysis of secondary special education and transition services model programs. Secondary Transition Intervention Effectiveness Institute, University of Illinois at Urbana-Champaign.

- Rusch, F. R., Kohler, P. D., & Hughes, D. (1992). An analysis of OSERS-sponsored secondary special education and transitional services research. Career Development for Exceptional Individuals, *15*, 121-143.
- Rusch, F. R., Kohler, P. D., & Rubin, S. (1994). Descriptive analysis of OSERS-sponsored postsecondary education model programs. Career Development for Exceptional Individuals, *17*,(1) 53-63.
- Scuccimarra, D. & Speece, D. (1990). Employment outcomes and social integration of students with mild disabilities: The quality of life two years after high school. The Journal of Learning Disabilities, *23*, 213-219.
- Serebreni, R., Rumrill, P. D., Mullins, J. A., & Gordon, S. E. (1993). Project Excel: A demonstration of the higher education transition model for high-achieving students with disabilities. Journal of Postsecondary Education and Disability, *10*(3), 15-23.
- Sitlington, P. L. (1996). Transition to living: The neglected component of transition programming for individuals with learning disabilities. Journal of Learning Disabilities, *29*(1), 31-39.
- Sitlington, P. L. & Frank, A. R. (1990). Are adolescents with learning disabilities successfully crossing the bridge into adult life? Learning Disabilities Quarterly, *13*(2), 97-111.
- Skinner, M. E. (1998). Promoting self-advocacy among college students with learning disabilities. Intervention in School and Clinic, *33*, 278-283.
- Skritic, T. (1991). Students with special educational needs: Artifacts of the traditional curriculum. In M. Ainscow (Ed.), Effective schools for all (pp. 87-99). London, England: Fulton Publishing.

- Slavin, R. E. & Braddock, J. H. (1993). Ability grouping: On the wrong track. College Board Review, 168, 11-17.
- Smith, D. J. & Nelson, J. R. (1993, April). Factors that influence the academic success of college students with disabilities. Paper presented at the Annual Convention of the Council for Exceptional Children, San Antonio, TX.
- St. Germaine, R. (1995, November). Drop-out rates among American Indian and Alaska Native students: Beyond cultural discontinuity. ERIC Digest.
- Stoddard, S., Jans, L., & Kraus, L. (1998). Chartbook on work and disability in the United States: An InfoUse report. Washington DC: National Institute on Disability and Rehabilitation Research.
- Stodden, R. A. & Dowrick, P. W. (1999). Postsecondary education and quality employment for adults with disabilities. (Invited article under review.) American Rehabilitation.
- Stodden, R. A. (1993). A systems improvement approach to the transition initiative. InterChange 12(4), 1-2.
- Sylwester, R. (1995). A celebration of neurons: An educator's guide to the human brain. Alexandria, VA: Association for Supervision and Curriculum Development.
- Szymanski, E., Hanley-Maxwell, C., & Parker, R. M. (1990). Transdisciplinary service delivery. In F. R. Rusch (Ed.), Supported employment: Models, methods, and issues (pp. 199-214). Sycamore, IL: Sycamore.
- Thurow, L. C. (1996). The future of capitalism: How today's economic forces shape tomorrow's world. New York: William Morrow.

- Tindel, G., Heath, B., Hollenbeck, K., Almond, P., & Harniss, M. (1998). Accommodating students with disabilities on large-scale tests: An experimental study. Exceptional Children, 64, 439-450.
- Tralli, R., Colombo, V., Deshler, D. D., & Schumaker, J. B. (1996). The strategies intervention model: A model for supported inclusion at the secondary level. Remedial and Special Education, 17(4), 204-216.
- U. S. Department of Education. (1996, October). What is a school wide program? Improving America's schools: A newsletter on issues in school reform
- U. S. Department of Education. (1995). Research in the Education of Individuals with Disabilities. Innovation and Development in Special Education, Directory of Current Projects. Washington, DC: Author.
- U. S. Department of Education, Office for Civil Rights. (1992). 1990 elementary and secondary school civil rights survey. Washington, DC: Author.
- U. S. Department of Education. (1989). To assure the free appropriate public education of all children with disabilities: Eleventh annual report on the implementation of the Individuals with Disabilities Act. Washington, DC: Office of Special Education and Rehabilitative Services.
- Valeo, A. & Bunch, G. (1998). Teachers, attitudes, inclusion, and the curriculum. B.C. Journal of Special Education, 21(3), 6-19.
- Vaughn, S., Schumm, J., & Brick, J. (1998). Using a rating scale to design and evaluate inclusion programs. Teaching Exceptional Children, 30(4), 41-45.
- Virginia State Department of Education. (1994). Demographics of students exiting special education (House Document No. 14). Richmond, VA: Author.

- Wagner, M. (1989). The transition experiences of youth with disabilities: A report from the national longitudinal transition study. Menlo Park, CA: SRI International.
- Wagner, M. (1991a). Dropouts with disabilities: What do we know? What can we do? Menlo Park, CA: SRI International.
- Wagner, M. (1991b, April). The benefits of secondary vocational education for young people with disabilities. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- 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., Blackorby, J., Cameto, R., & Newman, L. (1993). What makes a difference? Influences on postschool outcomes of youth with disabilities. Menlo Park, CA: SRI International.
- Wagner, M., D'Amico, R., Marder, C., Newman, L., & Blackorby, J. (1992). What happens next? Trends in post school outcomes of youth with disabilities. Palo Alto, CA: SRI International.
- Waldron, N. & McLeskey, J. (1998). The effects of an inclusive school program on students with mild and severe learning disabilities. Exceptional Children, 64, 395-405.
- Walker, J. H. & Shaw, S. F. (1996, April). Perceptions of team members regarding the involvement of students with learning disabilities in transition planning. Paper presented at the annual International Convention of the Council for Exceptional Children, Orlando, FL.

- Walker, S., Saravanabhavan, R. C., & Asbury, C. (1996). Prevalence of disabling conditions among diverse racial/ethnic groups in the United States. Washington, DC: Howard University Research and Training Center.
- Warner, M., Cheney, C., & Pienkowski, D. (1996). Guidelines for developing and evaluating programs for secondary students with mild disabilities. Intervention in School and Clinic, 31, 276-284.
- Warren, S. (April 1997). Building school-based capacity to sustain change in special education practices. Paper presented at the annual meeting of the American Education Research Association, San Diego, CA.
- Wehman, P. (1992). Models and approaches to transition planning. In P. Wheman (Ed.), Life beyond the classroom: Transition strategies for young people with disabilities (pp. 71-80). Baltimore, MD: Paul H. Brookes.
- Wehmeyer, M. L. & Schwartz, M. (1998). The self-determination focus of transition goals for students with mental retardation: Career development for exceptional individuals. Council for Exceptional Children, 17, 75-83.
- Wille-Gregory, M., Williams G. J., & Hughes, C. (1995, Spring.) Preparing students with learning disabilities for success in postsecondary education. TransitionLINC.
- Williams, T. M. (1998). Life after high school: Transitional issues for learning disabled students. Unpublished master's thesis, Chicago State University.
- Winfield, G. & Woodard, M. (1992, January 31). Where are equity and diversity in Bush's Proposal 2000? Education Week, 32-41.
- Witte, R., Philips, L., & Kakela, M. (1998). Job satisfaction of college graduates with learning disabilities. Journal of Learning Disabilities, 31, 259-265.

Yuen, J. & Shaughnessy, B. (in press). Cultural empowerment: tools to engage and retain postsecondary students with disabilities. Journal of Vocational Rehabilitation.

Zigmond, N., Jenkins, J., Fuchs, L., Deno, S., Fuchs, D., Baker, J., Jenkins, L., & Couthino, M. (1995, March). Special education in restructured schools: Findings from three multi-year studies. Phi Delta Kappan, 76(7), 531-540.