Levinson, E. M., & Ohler, D. L. (1998). Transition From High School to College for Students with Learning Disabilities: Needs, Assessment, and Services. High School Journal, 82(1), 62. Retrieved from EBSCOhost.

TRANSITION FROM HIGH SCHOOL TO COLLEGE FOR STUDENTS WITH LEARNING DISABILITIES: NEEDS, ASSESSMENT, AND SERVICES

More than 130,000 students with learning disabilities attend college in this country and the numbers continue to increase (Matthews, Anderson, & Skolnick, 1987). One reason for the influx of students with learning disabilities into college is Section 504 of the Rehabilitation Act of 1973. This Act required colleges receiving federal funds to provide services and programming to individuals with disabilities. Postsecondary institutions are required by law to make reasonable accommodations to ensure the success of students with disabilities, including those with learning disabilities.

Increasing numbers of persons with learning disabilities who are now entering college have been found to have special needs related to both academic survival and career development that are often unrecognized and unmet in institutions of higher education. Students with learning disabilities may require considerable intervention before vocational decisions can be made. As such, they are in need of, and required by law to be provided with, services that are designed to assist them in making the transition from high school to postsecondary education. In the landmark document "OSERS Programming for the Transition of Youth with Disabilities: Bridges from School to Working Life", Madeline Will of the Office of Special Education and Rehabilitative Services defined transition as follows:

The transition from school to working life is an outcome oriented process encompassing a broad array of services and experiences that lead to employment. Transition is a period that includes high school, the point of graduation, additional postsecondary education or adult services, and the initial years of employment. Transition is a bridge between the security and structure offered by the school and the opportunities and risks of adult life. Any bridge requires both a solid span and a secure foundation at either end. The transition from school to work and adult life requires sound preparation in the secondary school, adequate support at the point of school leaving, and secure opportunities and services, if needed, in adult situations. (Will, 1986; p. 10)

In October, 1990, Congress enacted the Education of the Handicapped Act Amendments of 1990 (P.L. 101-476), an amendment of P.L. 94-142, the Education of the Handicapped Act (EHA). Under this law, the name EHA was changed to the Individuals With Disabilities Education Act (IDEA). IDEA includes a definition of transition that is currently the basis for many school-based transition programs. Section 602(a) of IDEA defines transition services as:

A coordinated set of activities for a student, designed within an outcome-oriented process, which promotes movement from school to post-school activities, including post-secondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation. The coordinated set of activities shall be based upon the individual student's needs, taking into account the student's preferences and interests,

and shall include instruction, community experiences, the development of employment and other post-school adult living objectives, and, if appropriate, acquisition of daily living skills and functional vocational evaluation (Education of the Handicapped Act Amendments of 1990, P.L. 101-476, Section 602(a) [20 U.S.C. 1401(a)].

P.L. 101-476 requires that a student's Individual Education Plan (IEP) address the issue of transition, and that transition planning be initiated by at least age 16. Unfortunately, transition services which are initiated just prior to high school graduation are bound to be ineffective. Clearly, the skills students need to be successful in college and other post high school settings take years to nurture and develop. Only a program which attempts to identify transition needs of students early in a student's educational career is likely to be effective. As such, we, along with many others in the field, suggest that transition services be embedded within a total career development / career education model within the schools, and that successful transition be conceptualized as a goal of a K-12 career education program. To date, most efforts designed to facilitate transition have targeted students with severe disabilities, and have focused upon the skills needed for employment and independent living. Students with learning disabilities, who comprise the largest group of students with disabilities in the public schools today, have not received the same degree of attention relative to transition as have their more severely disabled peers. Even less attention has been paid to the transition needs of students with learning disabilities who have decided to pursue postsecondary education.

<u>Career-Related Needs of Students with Learning Disabilities</u>

Career maturity is a developmental process that may present unique difficulties for persons with learning disabilities (Alley, Deshler, Clark, Schumaker, & Warner, 1983; Hallahan, Gajar, Cohen, & Tarver, 1978; Hershenson, 1984; Rosenthal, 1985; Tollefson et al., 1980). Unfortunately, little research has been conducted which specifically focuses on the career maturity of individuals with learning disabilities. Research that has been conducted suggests that various interactions and activities that facilitate career maturity, such as the work routines of childhood and observation and imitation of the work routines of family members, are complicated by several factors specifically related to learning disabilities. For example, in early childhood, persons with learning disabilities may have unique difficulties establishing routines of all kinds as well as accurately observing and effectively imitating work habits of role models (Kronick, 1981; Siegel, 1974). Also, persons with learning disabilities have problems processing information correctly (Zinkus, 1979) and may find facts about the world of work to which they have been exposed in texts, lectures, and literature to be both confusing and overwhelming. Persons with learning disabilities have been found to be passive learners who then might not engage in exploratory activities such as part time jobs or extracurricular activities (Alley et al., 1983). Likewise, they often have low self esteem and identity problems and suffer from "learned helplessness" (Rosenthal, 1985; Watts & Cushion, 1982). As a result, the ability to self assess abilities, deficits, interests and values is often impaired, and decision making of all types, including career decision making, becomes a difficult and problematic process.

Several studies have suggested that learning disabled students demonstrate a slower rate of career maturity than do non-learning disabled students (Bingham, 1975, 1978, 1980; Kendall, 1980; 1981). Though a recent study suggested no differences between college students with and without learning disabilities on a measure of career maturity,

students with learning disabilities who were receiving more instructional accommodations demonstrated a lower level of career maturity than did students with no learning disability (Ohler, Levinson, & Barker, 1996). Additionally, studies have indicated that learning disabled students are employed in lower level jobs than are their non-learning disabled counterparts (Weller & Buchanan, 1983; White, Schumaker, Warner, Alley, & Dreshler, 1980), and are less satisfied with their jobs than are their nonlearning disabled peers (Weller & Buchanan, 1983). Several studies reviewed by Biller (1987) have suggested that learning disabilities have a negative impact on educational attainment, and that this subsequently influences the learning disabled student's occupational outcomes.

While research has demonstrated that learning disabled students do not differ from nondisabled students in terms of occupational interests and personality types (Cummings & Maddux, 1987), learning disabled individuals consistently end up in jobs that are not suited to their abilities and characteristics (Sitlington, 1981). It has been suggested that individuals with learning disabilities make incongruent career decisions because they fail to understand how their own characteristics are related to career choice (Jagger et al., 1992). Consequently, students with learning disabilities often need assistance in making decisions like what occupations are appropriate for them, whether they should pursue postsecondary training, what type of postsecondary training institution might meet their needs, what they should major in, what types of accommodations they may need to be successful, etc. These are issues which should be addressed by the transition services afforded these students.

Transdisciplinary Transition Model

The Transdisciplinary Transition Model (TTM) advocated by Levinson (in press) encompasses services from a variety of community agencies in addition to the schools, and consists of the following phases: Assessment, Planning, Training, Placement, and Followup.

Assessment. An initial first step in transition planning is an assessment of a student's skills and individual needs. A variety of domains need to be assessed and these include the following: intellectual/cognitive, educational/ academic, social/interpersonal, occupational/ vocational, independent living, and physical/ sensory. Different assessment approaches and techniques can be utilized to gather information about a student, and assessment should not be the responsibility of one professional, but instead should be conducted by a team of professionals, each of whom is responsible for gathering specific information about the student. Professionals involved in this process may be employed by the schools or by community agencies. Additional discussion of this phase of the model, particularly as it relates to the college bound student with learning disabilities, will be presented later in this paper.

Planning. Following a thorough assessment of the student's individual needs and skills, the information gathered is used by the transdisciplinary transition team to develop a transition plan for the student to be included in the student's IEP. This plan should specify goals and objectives and the professionals and agencies responsible for providing needed services. Additionally, a time frame for service provision should be included.

Training. Following the development of a transition plan as part of the student's IEP,

instruction and training is initiated. In addition to school personnel, professionals from a variety of agencies may be involved in training the student.

Placement. Once instruction and training have been completed, the student is ready to be placed in a job, in a residence, and/or in a postsecondary educational setting. A variety of employment, residential living, and postsecondary placement options exist for a student, and the appropriateness of any one option for a student depends upon their level of functioning. For college-bound students with learning disabilities, postsecondary educational options may include community colleges, four year colleges and universities, private technical and trade schools, etc. The appropriateness of any of these options will depend upon an individual student's need and occupational choice.

Followup. The final phase of the transdisciplinary transition model specifies that an evaluation must be made of the degree to which a student is functioning successfully in various postschool settings. Termination of some support services, initiation of other services, and/or a change of placement may result from this followup evaluation.

Several factors should be considered when structuring assessments for the purpose of

Structuring Assessments for Transition Planning

transition planning for college-bound students with learning disabilities. First, assessments should be structured with career development theory in mind, and all assessment data should be interpreted in light of this developmental theory. One can not develop or implement a valid vocational assessment program without an understanding of what is developmentally appropriate vocational behavior to expect of an individual at any given point in time. To design and implement a school-based vocational assessment program, one must understand career development theory, and use such knowledge in deciding what traits will be assessed in a particular individual at any given grade or age level. Similarly, career development theory allows assessment results to be placed in perspective, and will allow users of the assessment data to generate developmentally appropriate recommendations for the student who has been assessed. Second, assessments should be conducted by a transdisciplinary team and should embody a multitrait, multimethod theoretical perspective (Levinson, 1993). Thirdly, only instruments with acceptable psychometric properties that have been adequately standardized should be utilized. Lastly, assessment should be an ongoing process rather than a "once upon that career development is a continuous process, and assessment should be linked to developmental objectives, it naturally follows that assessment should be a somewhat continuous process as well. Consistent with this, many vocational assessment programs based in the schools are multi-level programs. At each level, the assessment process has different purposes (based upon what is developmentally appropriate to assess at a particular point in time), uses a variety of assessment techniques and strategies, and is designed to gather different types of information. Different professionals are responsible for several aspects of the assessment, and assessment responsibilities are assigned based upon a professional's knowledge and expertise. Programs usually consist of either two or three levels of assessment. As summarized by Anderson, Hohenshil, Buckland-Heer and Levinson (1990), level I assessments begin during the elementary school years, focus upon an individual's needs, values, interests, abilities, interpersonal skills, and decisionmaking skills, utilize vocational and career exploration activities, and have the goal of building self awareness. Level 2 assessments generally occur during the middle

school or junior high school years, focus more specifically on an assessment of vocational interests, vocational aptitudes, work habits and career maturity, utilize interviews, observations, and standardized norm referenced assessment instruments, and have the goal of continuing to encourage career exploration and assisting individuals in making tentative choices regarding educational and career goals. A level 3 assessment generally occurs during the high school years, often employs more experientially-based assessment devices like work samples and situational assessment, and focuses upon the specific training one needs to obtain post-school education or employment. For a comprehensive treatment of issues associated with the establishment and implementation of school-based vocational assessment programs, readers are referred to Levinson (1993).

Assessment and Services for College-Bound Students with Learning Disabilities
Research which has investigated factors associated with the successful transition from high school to college for students with learning disabilities offer direction to those professionals working with these students. As summarized by Baxter (1995), Levinson, Ohler & Baxter (1996), and Levinson & Ohler (1997), the following are academic predictors of success among college-bound students with learning disabilities: average intelligence, completion of an academically oriented curriculum, success in English classes, a grade point average of 2.5 or above, motivation and persistence, well developed study skills and strategies, and well developed social and interpersonal skills. Additionally, successful students have well developed problem solving skills, social support, and adequate self awareness. In particular, they are aware of their weaknesses, can articulate the accommodations they need, and are able to successfully advocate for themselves. Each of these areas should be targeted in both the assessment and servicing of college bound students with learning disabilities.

Awareness of one's weaknesses, awareness of what accommodations are available, and the ability to successfully advocate for oneself may be particularly important for students with more severe learning disabilities. A recent study utilized the Career Development Inventory to compare levels of career maturity between college students with and without learning disabilities, and to investigate factors associated with the career maturity of college students with learning disabilities. Few differences in career maturity were found between students with and without learning disabilities. However, different predictors of career maturity for the two groups emerged. For students with learning disabilities, number of accommodations and quantity of work experience accounted for 22% of the variance in career maturity. For students without disabilities, academic achievement and type of work experience accounted for 21% of the variance in career maturity. Students with learning disabilities who received more instructional accommodations had lower levels of career maturity than did students without disabilities or students with learning disabilities who received fewer instructional accommodations (Ohler, Levinson, and Barker, 1996.) These results may suggest that degree of impairment is positively correlated with the degree of intervention needed at the college level, and inversely correlated with career-related assets. It may also suggest that those students who are able to articulate their needs for accommodations, and to advocate for themselves experience higher levels of career maturity.

Secondary special education services which are designed to facilitate the transition from high school to college of adolescents with learning disabilities should include the following components: 1) multidimensional vocational assessment, including an assessment of intellectual ability, academic skills, personality, interests, and career

maturity; 2) guided awareness and exploratory career activities, including reading, informational interviewing, shadowing, and job simulation; 3) individual academic and career counseling to develop a plan of study appropriate to the student's goals and assets; 4) hands-on work experience (experiential learning) in the form of part-time or summer jobs, volunteer, supervised credit-bearing internships or cooperative education; 5) participation in social skills training with emphasis on interpersonal communication, self awareness, self advocacy, and job-keeping skills; 6) shared monitoring of career development needs and progress by postsecondary service providers, parents (if applicable), and rehabilitation agency personnel; 7) proactive faculty consultation and inservice regarding the nature of learning disabilities and impact on academic and vocational potential; and 8) appropriate placement assistance including job development, instruction in job-seeking skills, and follow-up to facilitate successful transition to both college and the world of work (Ohler, Levinson, & Sanders, 1995). Differences between high school and college requirements, such as time spent in class; class size; time for study; testing approaches; grading methods; teaching strategies; and freedom/ independence pose additional challenges for students with learning disabilities who are making the transition from high school to college (Shaw, Brinckerhoff, and McGuire, 1991.) Discussing these differences and assessing student practices are important for survival and adaptation. When evaluating postsecondary options, students need to assess the amount and type of LD support services they require in order to be successful. A continuum of postsecondary and LD support services exist and include: no services available; decentralized and limited services; loosely coordinated services; centrally coordinated services; and data-based services (McGuire and Shaw, 1989.) Catalogs and resource guides often include details about available services but campus visits are strongly encouraged, especially when a structured interview format is utilized.

While a limited number of standardized tests provide norms for students with learning disabilities, there are some commercially-prepared packages to assist educators in providing transition services. One such package published by American Guidance Services (1991) is "Tools for Transition." "Tools for Transition" includes several self-assessment worksheets, structured interviews, sample letters, questionnaires, and activity guides. Units and materials cover the following topics: study strategies; appropriate accommodations; self-advocacy; exploring careers; priorities in choosing a career; social skills (self-acceptance, self-control; negotiating, asking for help); building a transition file; postsecondary options questionnaire; and others.

Brinckerhoff (1995) has proposed a timetable for transition planning for college-bound students with learning disabilities which incorporates specific developmental activities in

students with learning disabilities which incorporates specific developmental activities in each of Grades 8 through 12. Grade 8 emphasizes student involvement in the IEP meeting, comprehensive career exploration and assessment, and understanding of the connection between education and work. In Grade 9, students are encouraged to develop a thorough understanding of their learning disability and its relationship to educational and career preparation. Students in Grade 10 should focus on understanding their psychoeducational report, need for accommodations, and reality testing of career options in the form of summer or volunteer jobs. By eleventh grade, students should be actively selecting colleges with appropriate programs and LD support services, preparing a Personal Transition File, and conducting informational interviews of employees. Transition planning for twelfth graders should include formulating a realistic career plan and reviewing postsecondary alternatives for final decision making. Instruments from

"Tools for Transition" can be interspersed throughout Grades 8-12 to accomplish the specific goals identified at each level.

Summary

In summary, successful transition planning for postsecondary students with learning disabilities involves multidimensional informal and formal assessment beginning early in the student's educational career. The assessment and transition planning process should be integrated within a school's K-12 career education / career development program and should be guided by career development theory. The assessment process should be conducted by a transdisciplinary team and embody a multitrait multimethod approach to assessment. Only assessment instruments with acceptable psychometric properties and standardization procedures should be utilized. For college bound students with learning disabilities, the areas of intellectual/cognitive functioning, academic achievement (particularly in the areas of English and Writing), self awareness, social/interpersonal functioning, problem solving, self advocacy, study skills/strategies, and need for accommodations should be given special attention.

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