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AUTHOR Horne, Richard L., Ed.
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ABSTRACT

This newsletter issue describes the importance of vocational assessment in the educational process of students with disabilities. Vocational assessment is defined, its purposes are explained, and the ways in which vocational assessment can benefit teenagers with special needs are discussed. Types of informal and formal assessments are explored, as well as uses of vocational assessment data. The roles of key professionals (special education teachers, guidance counselors, vocational educators, and vocational evaluators) in the assessment process are described. The role of parents as advocates and advisors is also discussed. The importance of early career development and ongoing vocational assessment in helping youth with disabilities to make a successful transition from school to the world of career training and/or employment is stressed. The newsletter issue includes 33 references, a 19-item bibliography, and a list of 16 organizational resources. (JDD)

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VOCATIONAL ASSESSMENT: A Guide for Parents and Professionals

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NICH CY Transition Summary

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and Youth with Handicaps
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The transition from school to work is often difficult for young people, especially those with disabilities. The tasks of choosing a job and preparing for work present all youth, with or without disabilities, with complex decisions. Parents and professionals are particularly interested in helping young people with disabilities make these decisions, and can be of considerable assistance by involving them in vocational assessment. Vocational assessment can provide the information needed to match the student's abilities and preferences to appropriate training programs. It can also identify the services required by the individual to make the transition from school to work as smooth and as successful as possible.

This issue of **TRANSITION SUMMARY** describes the importance of vocational assessment in the educational process. Vocational assessment is defined, its purposes are explained, and the ways in which vocational assessment can benefit teenagers with special needs are discussed. Types of assessments are discussed, as well as the roles that key professionals play in the assessment process. As in any testing process, you should remember to interpret results carefully and to have as much information as possible regarding the type, purpose, and use of any testing instrument or assessment process. Suggestions for parents are included, as well as examples of individual cases that illustrate the issues being discussed. When reading this **TRANSITION SUMMARY**, remember that the quality and quantity of available transition services such as vocational assessment, vocational counseling, and vocational education will vary by locality. The importance of these services to youth with disabilities is just beginning to be recognized. One of the purposes of this **TRANSITION SUMMARY** is to emphasize the need to increase the availability of these services to all youth with disabilities as they plan for the future.

Transition has been defined as "...a process that seeks to establish and implement a plan for either employment or additional vocational training for students with disabilities" (Murphy, 1987, p. 1). Having such a plan provides a roadmap by which young people with disabilities can prepare for the world of work and the responsibilities of adulthood. Transition services and plans for youth with disabilities are now mandated under the recently enacted *Education of the Handicapped Act Amendments of 1990* (P.L. 101-476). This law was formerly known as the Education of the Handicapped Act (EHA). With the passage of P.L. 101-476, the name, EHA, has been changed to the *Individuals with Disabilities Education Act (IDEA)*. This law requires that plans for transition be included in a student's Individualized Education Plan (IEP) by the time that a student is age 16. 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 experi-

ences, the development of employment and other post-school adult living objectives, and, when 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)]).

Clearly, transition planning will soon become an essential component of the educational process. Recent studies and reports provide many reasons for this increased attention. For example, according to the U.S. Department of Education's Office of Special Education and Rehabilitative Services (1990), over 200,000 special education students exit our nation's schools each year. Upon leaving school, many students with disabilities and their parents have difficulty accessing appropriate adult services and/or postsecondary education and training programs (National Council on Disability, 1989). In another study, the National Council on Disability (1989) reported that students with disabilities are lagging behind their peers without disabilities. The *Twelfth Annual Report to Congress on the Implementation of the Education of the Handicapped Act* (U.S. Department of Education, Office of Special Education and Rehabilitative Services, 1990) indicated that 47% of all students with disabilities do not graduate from high school with either a diploma or certificate of completion. This figure is corroborated by data from a National Longitudinal Study (Wagner & Shaver, 1989). This study indicated that 44% of students with disabilities failed to graduate from high school and 36% of the students with

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disabilities dropped out of school. Employment data for people with disabilities is similarly discouraging. While the national unemployment rate is about 5% nationally, almost two-thirds of all Americans with disabilities between the ages of 16 and 24 are not working (Harris and Associates, 1986). These studies suggest that many factors contribute to this situation, including: attitudinal, physical, and communication barriers; lack of appropriate training opportunities; and a scarcity of effective transition planning and service programs.

Recently, however, our society has begun to change its attitudes towards people with disabilities, recognizing both the possibility and importance of successful employment for those with disabilities. As attitudes change and opportunities for employment of those with disabilities broaden, schools will undoubtedly play an increasingly significant role in preparing our nation's youth with disabilities for postsecondary training and employment. Providing young people with disabilities with transition planning and services will play—and should play—an integral part in helping them to address this critical period in their lives.

In order to be effective, transition plans are best developed through the collaboration of many people—special educators, vocational educators, parents, students, adult service system providers, and possibly the employer. All involved individuals need to recognize and stress the importance of employment as a goal for young people with disabilities. In transition planning, as in all education planning and programming, parents must assume the role of both advocate and collaborator. It is the parent who must make sure that transition planning is an ongoing part of their youth's career development plans. Most importantly, the student should be involved in transitional planning. Making the student part of the planning team can play a vital role in motivating the student in school and in developing his or her self-advocacy skills and self-reliance. In the end, transition planning should ensure that the curriculum of each student includes learning about career options. It should also include learning about himself or herself in relation to vocational opportunities and demands through vocational assessment.

Vocational Assessment: Purposes and Benefits

Attaining meaningful employment is too important to be left to chance. Careful planning and educational programming are essential to achieving this goal and must begin with gathering information. Vocational assessment is the most important process available for assembling the information needed for your son or daughter to make well-grounded career decisions.

Vocational assessment is a systematic, ongoing process designed to help students and their parents understand a young person's vocational preferences and potential. Ideally, it should occur before a student is placed in a specific program, but it can also

the vocational assessment process with increased self-awareness and a better understanding of their skills. When students are being assessed, a number of interesting changes can be observed in what they say and do. For example, students often:

- want to discuss their vocational or career futures or specific vocational education plans;
 - are able to say things they can do;
 - may show excitement about the vocational activities on which they are working;
 - may enthusiastically talk with their families and friends about what they are doing in school;
 - may develop new, realistic career interests;
 - may show more self-confidence and/or self-esteem; and
 - may show more interest in school and in their academic performances.
- Thus, the active participation of stu-

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take place at the time the individual enters the program. For the student planning his or her transition, the assessment process may include observations, anecdotal information, on-the-job-try-outs, classroom performance examples, tests, and work samples. It provides information on the student's:

- career development background (e.g., awareness);
- interests;
- aptitudes;
- special needs;
- learning style(s);
- work habits and behaviors;
- personal and social skills;
- values and attitudes towards work;
- self-concept; and
- work tolerances.

Through the assessment process, parents and professionals learn about the student, and the student learns about himself or herself. Students generally emerge from

the assessment process can be an important factor in showing them how school connects to the outside world of work and in motivating them in their school work. Moreover, through the assessment process, students and families have the opportunity to gather information about various careers. Learning about various jobs, trying out work roles, exploring interests, and getting feedback on many different aspects of individual abilities and performance broaden students' knowledge base of the work-world and themselves. This allows them to explore what careers might be appropriate for them and to identify those that are not.

An important benefit of the vocational assessment process in middle, junior, and high school years is the development of a *Vocational Profile* for the student. Working together and drawing from assessment results, parents, professionals and the stu-

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dent create the vocational profile that begins with a summary of the assessment results. It goes on to describe a student's personal and vocational attributes, as well as strengths and weaknesses. Recommendations regarding potential career directions and training programs suitable for the student are also included. Instead of the student simply entering a specific training program through default, as too often happens, the career and vocational education recommendations are based upon what the student likes and dislikes, what skills he or she is capable of doing or is good at doing, and where improvements need to be made.

Even for students with disabilities who plan to attend college, vocational assessment is being recognized as an important process in identifying postsecondary and career options. It is a useful first step for students with disabilities planning to participate in vocational education programs. In fact, the Carl D. Perkins Vocational Education Act of 1984 — reauthorized and strengthened by P.L. 101-392 in 1990 — commits federal funds to support vocational education programs for students with disabilities and includes vocational assessment as a specific service to be considered when planning vocational programming. The Act specifically requires that special needs students receive an assessment relative to successful completion of the vocational education program in the most integrated setting possible.

The primary purpose of vocational assessment, then, is to gather employability-related information about an individual. This will assist and empower that individual (and his or her advocates) in making decisions regarding work and the training or services needed by the student in order to gain employment. The benefits of gathering—and using—this information are many. Among these are career awareness and ex-

ploration, improved self-awareness and motivation, the development of a vocational profile, and the identification of short- and long-term career goals that are realistic. These goals are more realistic because they are based upon who the student is as an individual and what he or she is capable of doing and is interested in doing.

Trends in Vocational Assessment

Vocational assessment began in industry over a century ago. As employers were trying to match people with technology in new industrially-oriented occupations (moving away from an agricultural labor market), they created “trials” of actual jobs for potential employees to try or they developed samples of work and simulated the tasks of the jobs. Similarly, the first assessment processes in rehabilitation relied heavily on work sampling and job-try-outs.

This community-reality-based beginning for vocational assessment has progressed almost full circle. For several decades, assessment for training and employment centered on standardized tests (psychometrics). In an effort to make work sampling, simulated work, and job try-outs

need to appraise the potentials and attributes of individuals with disabilities has led the field back to community-reality-based assessment. This is due, primarily, to two facts: 1) the use of most standardized instruments frequently is discriminatory to persons with different attributes; and 2) “normed” work samples and simulated work assessment tools, as they became refined, were often not representative of actual work requirements on jobs.

The emergence of community-based assessment for individuals with severe disabilities, ecological and environmental assessments, and curriculum-based vocational assessments are each indicative of the movement toward reality-based and equitable appraisals. Standardized assessments remain effective methods in vocational appraisal processes, but usually are used in combination with the above.

The Vocational Assessment Process

Vocational assessment is a process that can take place at different times during your son's or daughter's education and career development. It is an ongoing process that should begin during the middle or junior high school years and may continue throughout high school and, if needed, perhaps re-occur during transitional periods in adult life.

Throughout the education process, starting in kindergarten or earlier, students are involved in career awareness and vocational exploration activities. In the early years of school, children study community workers such as firefighters, police, and transportation providers. A student's performance with school work can provide sources of important information about po-

“A student's performance with school work can provide sources of important information about potential careers.”

more credible, professionals began to collect “norms” in efforts to “standardize” these methods of appraisal. The increasing

tential careers. Extracurricular activities, such as sports, music, art, scouts, and other social organizations add to this information

base and offer opportunities for the student to try out a variety of activities and roles.

These experiences can be used in *informal* vocational assessment, in the sense that students are developing career awareness and motivation, as well as ideas of what they like and do not like. They may also develop a fair idea of what types of jobs they would be good at and what would be difficult for them, ideas they can generally articulate, if asked.

Informal and Formal Assessment

Your son or daughter may have the opportunity for informal and formal voca-

tional assessment. Vocational assessment can be described as occurring on a continuum of appraisal procedures, which have different purposes and outcomes depending upon the individual's needs and career development stage. Informal assessment is more available in schools than formal appraisal approaches.

Informal assessment differs from formal assessment in terms of the objectives, setting, personnel conducting the assessment and the materials used in the process. Informal assessment includes the gathering of information from any number of sources other than through formal testing procedures

and is conducted in classrooms or unstructured settings. Methods, such as interviewing a student or family member, making observations, conducting record reviews, and using teacher-made tests results, are examples of informal methods along the assessment continuum.

Criterion-referenced tests are another type of informal assessment. These tests measure how well a student is able to do specific tasks within a course of study. The student's performance is compared to an established level of achievement for each task or unit of the curriculum. Criterion-referenced tests are commonly used in vocational classes to determine a student's mastery of the content.

Typically, informal assessment is conducted by teachers and other professionals for the purpose of assisting a student in classroom work and for identifying possible learning difficulties. Informal assessment is an important complement to formal assessment and is essential in determining whether a referral for formal assessment is appropriate.

Formal assessment is a structured procedure conducted for a specific purpose and involves the use of norm-referenced, commercially-developed, and standardized instruments. The purpose of formal assessment in vocational appraisal is to determine a student's interests, aptitudes, learning preferences, work skills, and other vocationally relevant information. Many vocational assessment instruments have been commercially developed and administered to a representative group of individuals in order to establish normative standards of performance. Normative standards allow evaluators to compare the results of one individual's performance on a test or instrument to the performances of other individuals who have taken the same test. Vocationally-oriented assessment tools include interest inventories, aptitude and dexterity tests, work sample systems, and other appraisal instruments. Informal assessment information is frequently incorporated with formal assessment results in preparing comprehensive reports or vocational profiles.

Comprehensive vocational assessment or vocational evaluation—the collection of information via observations, interest inventories, aptitude tests, etc.—should oc-

Table 1

Uses of Vocational Assessment Data

CATEGORY	DESCRIPTION
Determination of career development	To find out where the student stands in terms of: career awareness, orientation, exploration, preparation, placement, or growth/maintenance. Appropriate for middle school/early junior high and beyond (Neubert, 1985).
Measurement	To identify abilities, interests, capabilities, strengths, needs, potentials, and behaviors within the areas of personal/social, functional/academic, community/independent, employment and employability areas. Initial testing appropriate for middle school; more involved analyses appropriate for high school and beyond (Neubert, 1985).
Prediction	To match an individual's interests and abilities with appropriate vocational training, community employment, or postsecondary training. Appropriate for high school (Neubert, 1985).
Prescription	To identify strengths and needs, and to recommend types of adaptive techniques and/or remedial strategies that will lead to improved career development and vocational preparation. Appropriate for high school and young adults and beyond (Neubert, 1985).
Exploration	To "try out" different work-related tasks or vocational activities and to determine how interests match abilities for vocational education programs, community jobs, postsecondary, or other adult activities. Appropriate for high school and young adults (Neubert, 1985).
Intervention	To implement the techniques or remedial strategies that will help a student explore vocational or work options. Appropriate for high school and beyond (Leconte, 1986).
Advocacy	To develop a vocational profile to help students, their families, and others identify concrete ways to assist students in achieving their goals. Appropriate for high school and beyond (Leconte, 1986).

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cur along a continuum, with different kinds of information being collected about the student at different points in time. The use of results will vary, depending upon the student’s year in school, as Table 1 shows. In middle, intermediate, or junior high school, for example, vocational assessment may be used to identify levels of career development and to determine career exploration and prevocational activities. During these years, vocational assessment can also help parents and teachers identify transition needs in preparing a student for high school. This type of vocational assessment is extremely helpful in guiding the student early in his education and should begin as early as age 12 or 13. Parents should take advantage of interdisciplinary planning sessions (i.e., IEP and three year triennial evaluation meetings) to learn more about the different resources available and to work with the school system to utilize all of the vocational assessment information collected on their child. This includes teacher impressions of work habits, socialization skills, and other anecdotal information about student behavior and performance. Such information can be useful during special education planning and placement decisions.

Let’s look at an example of how early vocational assessment can be helpful to planning. Thirteen year old Casey is a seventh grader with learning disabilities. At a recent IEP meeting, his parents, Casey, and school personnel considered his classes and schedule for the eighth grade. Casey did not express a specific preference regarding any electives. His parents and counselor suggested that more information was needed about Casey’s vocational interests, and it was agreed that one goal for the coming year’s IEP would include assisting Casey in identifying vocational interests. To help Casey do this, he will take both an

interest inventory and an aptitude test that, together, will help him explore career and vocational options. The results can assist in providing direction for making future educational choices.

It is important to remember that when vocational assessment is begun early in a student’s education, re-evaluation of the student should be scheduled yearly to update recommendations. Students improve skills across time and mature in their understanding of and interaction with the world. Assessment information, when used to make decisions, should be as current as possible.

If it is available, *comprehensive, formal* vocational assessment should begin approximately one year prior to placement in vocational education. This is usually around the ninth or tenth grade. At this point, assessment is conducted for the specific purpose of vocational and transitional planning. In many school systems, planning for transition is being incorporated into the established IEP process as students reach about the age of 14.

Because students are nearing the time when specific vocational placement choices will need to be made, the assessment process should begin to examine the match between specific aspects of occupations

and the individual. Information about the student should be compiled from a variety of sources, and should include:

- all assessment information collected to date that is vocationally relevant;
- current teacher impressions of such areas as the student’s: communication skills, punctuality, ability to follow directions and to work with others, concentration, and ability to work unsupervised;
- medical background;
- survey results about interests and aptitudes;
- observations of the student at work or in simulated work experiences; and
- an analysis of strengths and needs.

Results of all assessment activities should be shared with both parents and students. The vocational profile, mentioned earlier, should be developed for the student. This profile not only details assessment results, but also should include recommendations for vocational education placement, postsecondary training, or employment. A vital part of vocational and transitional planning, placement, and programming, the vocational profile also serves as a record and vehicle of communication between the student, family, school, and community personnel.

The next step in the planning process, based upon the assessment results and the nature of the student’s disability, is to identify the support services (e.g., transportation, assistive technology) the student will need to implement the vocational plan. An analysis of the employment or training site identified for the student should also be made. What skills are necessary for the student to perform the training or be suc-

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cessfully placed in the program? Does the student have these entry-level skills? This analysis will indicate any additional training the student needs before or during placement. Vocational support (supplementary) services are also mandated in the Perkins Act (P.L. 101-392).

As a teenager prepares to exit from school, parents should be aware that vocational assessment will continue to be important for a young adult's successful transition to independence in either employment or postsecondary training. In addition to identifying specific transition needs and career plans/goals, vocational assessment can assist both parents and professionals in making referrals for adult services. For many young adults with disabilities, state sponsored Vocational Rehabilitation Services or other community-based services may be realistic options. Vocational assessment will be necessary to determine eligibility for vocational rehabilitation and to determine appropriate vocational training programs and employment placement. The information gathered through the assessment process can help the individual with a disability, his or her family, adult service provider, and employer identify the accommodations or assistance needed for obtaining and maintaining employment.

Components of Vocational Assessment

There are many ways of obtaining vocational assessment information. Some of these ways, which are described more fully below, are:

- situational assessments;
- interest inventories;
- temperament inventories;
- learning styles inventories;
- on-the-job try-outs;
- curriculum-based vocational assessment;
- work samples;
- observations;
- functional assessments;
- aptitude tests/screenings; and
- achievement tests.

State Education Agencies (SEAs) and schools select different means of collecting

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information about students based on their resources, needs, and philosophy.

Levels

Secondary schools in many states organize vocational assessment services into different *levels* of service. The levels are described briefly here as categories of services.

Typically, Level One consists of a *screening* to determine functional skills and “where the student is” regarding vocational planning. Information is collected via such methods as interviewing, reviewing records, or interest inventories for screening. Level Two occurs if the student needs more information to develop his or her vocational profile and to clarify vocational planning. Often this Level is called “*clinical*” or “*exploratory*” as standardized instruments or career exploration activities may be used.

Level Three is a more comprehensive assessment during which data are usually collected during a specified period of time. Data collection is often coordinated or conducted by a professional vocational evaluator/assessment specialist. Informal assessment (interviews, samples of classwork, situational assessments, on-the-job try-outs) and formal assessment (work samples, standardized instruments and tests) are used in each of the three levels of service. The use of formal methods is more prevalent in

Maximum benefit can be realized if an array or continuum of vocational assessment approaches and opportunities are available to students. Because the needs of individuals with disabilities are so diverse, a variety of approaches is necessary depending upon your son or daughter's specific needs, his or her age, and stage of personal and career development.

It is essential that information about certain attributes of each individual be gathered. Regardless of the approach used to gather information about your youth, the following components should be included in the vocational assessment. These components represent the essential attributes of the individual that make up his or her vocational profile or identity. It is also important to remember that a student's self-concept is critical to his or her educational and vocational functioning. Vocational assessment should help clarify a student's self-concept and be included within any component of a vocational assessment.

➔ **1. Interests.** What are the student's occupational or vocational preferences? Remember that these may be preferences that your son or daughter expresses, or those he/she demonstrates, or those that are identified with an interest survey or inventory. When receiving interpretations of interest inventories, make sure that the tests are truly representative of a wide range

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Level Three, which is often called a comprehensive assessment or *vocational evaluation*. This does not mean that only formal methods are used at this level; observations, shop or job try-outs, interviewing, etc. also play a key role in the appraisal process.

of occupations, rather than being limited to one category or a few occupations. It is also important that the people who administer and interpret interest inventories represent them as occupational likes and dislikes, rather than as a measure of skills (or aptitudes) to actually do any specific occupa-

tion. Results of tests should always be verified by identifying an individual's expressed or demonstrated interests.

➔ **2. Aptitudes (abilities and capabilities).** Aptitude can refer both to the ability to do and to learn certain types of skills, such as mechanical, spatial, numerical, and clerical. Many tests exist to measure your son's or daughter's aptitude for performing in any one of these skill areas. Often, the best measure is to have the individual try different tasks which require specific aptitudes or occupational duties.

➔ **3. Temperaments (Worker Style Preferences).** Worker style is reflected in how people behave and in the emotional responses and choices they make. Preferring to work with people, things, or data, and the ways your son or daughter organizes and makes decisions are aspects of his or her worker style preference. Information about preferences can be gathered through

values, employability skills, and work related behaviors such as work habits and social skills. Positive worker characteristics are vital to successful employment and are most frequently cited as reasons for either promotions or dismissals by employers. Information about your son's or daughter's worker characteristics can be collected via inventories, observations of him or her at real or simulated work (often called *situational assessments*), teacher impressions, and the use of checklists that detail important worker skills (e.g., punctuality, safety awareness, etc.).

➔ **7. Vocational/occupational skills.** These skills refer to specific technical, industrial, or other types of skills that are required in actual jobs. In order to know if your youth has the technical skills necessary to do a specific job, a training or job analysis must be done and compared to his or her skills. The best indicators of skills

where exiting school and living and working in the community are concerns, this type of assessment may not be needed. However, for those students who are nearing this transition, *functional assessment* should be a part of the assessment process.

Functional Assessment

Functional assessment provides a comprehensive framework of factors to be considered in vocational planning and transitional preparation. A functional description of an individual with a disability includes what he or she *can* do, learn, and achieve, rather than simply recounting his or her academic, intellectual, or physical deficits. Functional assessment focuses on a person's skills within natural environments such as his or her home, school, and local community. The person's ability to deal with a variety of factors in each of these areas will impact on his or her overall integration in work and community living. Because of this, ecological or environmental assessment, which assists in analyzing the demands of different environments, adds an important dimension to the assessment process (Gaylord-Ross, 1986; Moon, et al., 1986; Wehman, 1981).

Shifting from diagnosing 'disabilities' to identifying barriers to work and community living enables professionals to plan strategies to assist individuals. For instance, an individual using a wheelchair may have no 'disability' within his school where ramps exist, but in the office building where he is doing an internship his mobility may be impeded in some way. Through functional assessment, the barrier(s) to integration in various places can be identified and adjustments can be made. Through functional assessment, a basis for defining areas needing attention and subsequent planning and problem solving can be established (Fardig, 1986; Halpern & Fuhrer, 1984).

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observation by teachers and parents, as well as through discussion with the student or through temperament inventories.

➔ **4. Learning preferences and styles.** This reflects how a person prefers to receive and process information and experiences. How does your child best retain and use input—auditorily, visually, or through hands-on exposure? Does he or she have any preferences for interaction or times for learning? This type of information can be gathered through inventories of learning style, as well as through observation and discussion.

➔ **5. Developmental background (background information).** This information does not represent a comprehensive case history; rather, it should include only the information that impacts on your child's performances and prognoses specifically related to vocational development. What special needs does your youth have, given his or her disability?

➔ **6. Worker characteristics.** These include a student's traits, attitudes,

are through observations of the individual actually trying parts of the job or occupational area. For many vocational jobs, checklists of the necessary skills already exist.

➔ **8. Functional/Life skills.** This category refers to those skills that an individual needs in order to address personal and independent living problems that people with disabilities often encounter after leaving school. Some of these skills are: use of transportation, ability to handle financial and housing management, decision-making, and social skills. If your son or daughter is not at a point in the educational process

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Several professionally developed functional assessment inventories, checklists, and interview forms have been developed to evaluate areas considered to be most significant. Competencies, such as using transportation, independent living and decision-making skills, and interpersonal relationships can be appraised through functional assessment tools (Halpern & Fuhrer, 1984).

As part of the vocational assessment process, functional assessment can serve two purposes. The information can be used to compare or verify how the student or individual functions in a work or 'hands-on' training environment. Functional assessment results can also be integrated into the vocational assessment report or profile recommendations.

Functional assessment can add useful information to assist in vocational planning and decision making. The vocational implications of the individual's strengths and needs are addressed as a part of the functional assessment.

Psychometric Tests

When tests are used to measure attributes of an individual (e.g., interest, personality, aptitude), they are called psychometric tests. Generally these tests are developed by testing a large sample of students throughout the country and producing what are called norms. Norms describe the "normal" range of scores yielded by the test. This type of testing has both benefits and drawbacks that need to be understood

when interpreting the information collected. On the positive side, norm-referenced psychometric tests give precise results. On the negative side, the norms are based upon the scores of those students who were part of the original sample. Your son or daughter may not be like these original students, making interpretation of his or her test scores uncertain.

When your youth is involved in psychometric testing and his or her test results are being interpreted, find out what type of students formed the original sample. Were they similar in age and educational background to your youth? Is there any information available in the test manual for

“Curriculum-Based Vocational Assessment is sometimes used to complement comprehensive vocational evaluation or it may actually supplant more formal types of appraisal services.”

interpreting the results of a youth with a disability such as your son or daughter? If too many dissimilarities between your youth and the normative group exist, interpret the test results with caution and common sense. Even in this circumstance, however, the basic information provided by many of these tests is useful and can be used creatively to plan for students with unique needs.

Curriculum-Based Vocational Assessment

An alternative vocational assessment approach, known as *Curriculum-Based Vocational Assessment (CBVA)*, is currently gaining recognition as a useful way to gather vocationally relevant data. This emerging form of vocational assessment is similar to curriculum-based assessment, which is widely used by classroom teachers to evaluate student's mastery of concepts that are taught (Tucker, 1985). Curriculum-Based Vocational Assessment uses performance-based procedures developed and implemented by teachers from their own curriculum. It is a continuous process that teachers use to answer questions about instruction and special service needs of vocational education students (Albright & Cobb, 1988a; 1988b). This assessment process often begins with a review of the student's records and existing assessment data. Vocationally-related information is then collected by structuring the teacher's observations of the student within the classroom or vocational setting. Assessment

may include how the student uses tools and how he or she works with other students in the class. This information-gathering approach enables teachers and others to observe and record behaviors in a natural setting—specifically, what a student is able to do and is interested in doing (Rothenbacher, 1989). Other appraisal techniques may be used as a part of the process, such as interest and aptitude measures.

Curriculum-Based Vocational Assessment is sometimes used to complement comprehensive vocational evaluation or it may actually supplant more formal types of appraisal services. Information from the CBVA can then be compiled with other assessment information and a vocational profile of the student can be developed

“When tests are used to measure attributes of an individual... they are called psychometric tests.”

“Effective programs and services depend on the collaboration of a number of professionals.”

more fully. This profile or report should specify classroom and vocational goals, as well as methods of instruction. It is also important to identify any needs that should be addressed.

Successful use of CBVA requires training for regular, special, and vocational educators. It also underscores the importance of school personnel working together as a team to make sure that information about the student is collected from all relevant areas. As the concept of CBVA becomes more accepted and understood, it may begin to emerge in more than the dozen or so places in which it now exists as a fully implemented system.

Professionals in the Vocational Assessment Process

Effective programs and services depend on the collaboration of a number of professionals. Depending on the specific school system, a number of professionals may participate in the assessment process at some level. These can include:

- special education teachers;
- guidance counselors;
- vocational educators;
- vocational evaluators (also called Vocational Assessment Specialists);
- rehabilitation professionals;
- vocational support service personnel;
- school psychologists;
- social workers; and
- employers.

The roles of some of these professionals are discussed below.

➔ **1. The Role of the Special Education Teacher.** As happens in other areas of planning for students with disabilities, vocational assessment activities and other forms of career guidance frequently become the responsibility of the special education teacher. Special educators may gather

information about the student from observing his or her performance in such areas as academic strengths, employability skills, interpersonal skills, and degree of career awareness. Special educators also collect information through discussions with other teachers and school personnel who know the student. They frequently work closely with the student and family in identifying an individual's needs and areas of interest and, in collaboration with the family, help to develop IEP goals for the student. The insights and recommendations of the special education teacher can be invaluable to the vocational assessment process of a student, particularly when supplemented by formal testing.

Special educators often serve as case managers and consultants for a variety of other professionals who work with your youth. Part of their case management and consultation responsibilities can include primary leadership and implementation of activities for Curriculum-Based Vocational Assessment (CBVA). In these roles, they not only provide an important link in the vocational assessment process but also are able to use their expertise in ensuring that the results of the assessment process are reflected in the student's program.

➔ **2. The Role of Guidance Counselors.** Vocational assessment, in some schools, is an integral part of guidance counselors' work with students. This can include interviewing your youth about his or her career goals and vocational plans and perhaps administering one or two paper and pencil or computer-based "tests" to identify interests and/or aptitudes, work values, or

temperaments. Guidance counselors may also arrange for your son or daughter to obtain more information about careers by spending time in the library using microfiche or computerized occupational information systems (data bases). Most states in the nation have a statewide occupational information system that is available to school systems, some public libraries, and other agencies. Information on state occupational information systems, career exploration materials available, and state telephone numbers can be obtained by calling the *National Occupational Information Coordinating Committee* staff at (202) 653-5665.

Often, guidance counselors serve in a position that enables them to act as case managers for coordinating the collection of assessment information from teachers, parents, and others. There are occasions when other professionals may administer assessment activities, but counselors may interpret the results for the student, parents, and teachers. To interpret results most effectively, counselors must have three bases of concrete information. The counselor should know your youth, should have a working knowledge of the assessment instruments and/or processes used, and should have current information about the requirements of in-school and outside vocational education programs. Because maintaining all of this information is a challenging task, it is most beneficial for guidance counselors to work collaboratively with special education teachers, parents, vocational support personnel, and vocational evaluators.

➔ **3. The Role of Vocational Educators.** Vocational educators, such as auto repair or data entry teachers, have expertise in vocational training and work requirements. They can assist in the vocational assessment process by providing career information, helping others design realistic assessment activities, and working with vocational evaluators to assess students in

“Most states in the nation have a statewide occupational information system that is available to school systems, some public libraries, and other agencies.”

the vocational classroom or work site. Also, vocational educators can monitor and facilitate student's progress in vocational education programs by conducting a CBVA.

↳ **4. The Role of Vocational Evaluators/Vocational Assessment Specialists.** These professionals are often responsible for conducting vocational assessments of a student. Additionally, they may serve as consultants who provide vocational assessment information to others, or they may coordinate the assessment activities of others. Vocational evaluators are professionals who work within secondary or vocational school settings, within community-based programs, in industry, adult rehabilitative services, adult job training services, community colleges or other postsecondary educational settings. Trained, certified vocational evaluators are most qualified to oversee and administer vocational appraisal services and activities, because they have been required to meet national standards of certification, which can include school-based programming (Commission on Certification of Work Adjustment and Vocational Evaluation Specialists, 1987).

In summary, collaboration among all educators and outside agency personnel is essential for gathering accurate assessment information that can be used by not only these personnel, but also by trainers, employers, parents and students. It is also important to recognize that parents play a key role in the assessment process.

Parents and the Vocational Assessment Process

What specific roles do parents play in the vocational assessment process? The answer is: Vital ones! Here, as in all aspects of your son's or daughter's education, you are a prime advocate and advisor of your

“When parents and... service providers work closely and collaboratively, the recommendations that best meet a youth's unique needs are more likely to be incorporated into his or her individualized plans...”

youth. There are both general and specific tasks you can do to help your youth before and throughout the vocational assessment process.

First, recognize that vocational assessment may or may not be taking place in your son's or daughter's school system, and that what services *are* available can fall anywhere along a continuum of informal to quite comprehensive assessment. Be prepared to ask school personnel about what vocational assessment services are available for your youth, and whether they are provided within the school system itself or through an outside agency, such as a local rehabilitation facility or the state division of vocational rehabilitation. If you find that your local school system does not provide any vocational assessment services, you may want to advocate that they begin. A good forum for voicing your concerns and achieving unified action is a local parent group. Share the resources from this **TRANSITION SUMMARY** with the school system and encourage school professionals to find out more about the range of vocational assessment strategies available and to contact experts for technical assistance. Learning about successful vocational assessment programs can convince school leaders that it can be done in their system, too.

If your school *does* have services available, identify how your son or daughter can be referred and participate. Do this

early in your child's education—around the time when your child is entering middle/junior high school. If services are provided through an outside agency, request that the school guidance counselor, special education or transition teacher investigate where and how you can access these services. Some possible sources include the state vocational rehabilitation agency, a community college, postsecondary or area vocational technical center, and the Job Training Partnership Act program.

In addition to finding out whether vocational assessment services are available for your youth and requesting that he or she participate, there are some additional suggestions for parents. These are:

- ✓ Acquaint your youth with as many occupations as possible (e.g., visit job sites, accompany family and friends to work, explore how jobs contribute to the community).
- ✓ Assign chores that encourage the development of responsibility and mastery of independent living skills.
- ✓ Encourage your son or daughter to take pre-vocational courses, such as Home Economics, Industrial Arts, and other career exploration courses.
- ✓ Request that your son's or daughter's school program include career education (e.g., class presentations about various careers, career fairs, career research activities).
- ✓ Request that career exploration and preparation activities be included in classwork (e.g., job shadowing, in-school work experience, community job internships).
- ✓ Arrange for summer work experience for your son or daughter, either volunteer or paid employment.

“What specific roles do parents play in the vocational assessment process? The answer is: Vital ones!”

- ✓ Learn about vocational education programs within the school system. (Good sources of information about these programs are the special education teacher, vocational education director, school principal, or guidance counselor; schools often have pamphlets describing these programs as well.) Tour these programs with your youth.

When your son or daughter is about to begin the assessment process, you can prepare him or her by explaining the purpose and benefits of participating. When the report is received, you and your youth should also spend time going over the results and discussing options for the future. Be prepared to attend the conference scheduled at the conclusion of any vocational assessment activity and, whenever appropriate, be sure to include your son or daughter. When parents and school or adult service providers work closely and collaboratively, the recommendations that best meet a youth's unique needs are more likely to be incorporated into his or her individualized plans (including vocational and transitional plans). Make sure that the vocational assessment findings *are* translated into IEP objectives. Here are some additional suggestions for parents.

- ✓ Ask school personnel if they use Curriculum-Based Vocational Assessment (CBVA). If they do not,

encourage training of educators in this process and integration of the results into students' vocational profiles.

- ✓ Where CBVA is part of assessment procedures, work with school personnel to ensure that this type of assessment of your child takes place each year.
- ✓ Make sure that CBVA findings are translated into IEP objectives.

Summary

This *TRANSITION SUMMARY* has emphasized the importance of early career development and ongoing vocational assessment in helping youth with disabilities

to make a successful transition from school to the world of career training and/or employment. Vocational assessment can help parents, professionals, and the young person with a disability to think strategically about the young person's vocational future — both training and employment — and to make decisions that are based upon his or her interests, abilities, and potential. As vocational assessment becomes more a part of transition planning for youth with disabilities, students, parents, and professionals can look forward to having the information necessary to ensure that students select postsecondary options and employment appropriate for *them* — who they are as individuals and what they are capable of and interested in becoming.

“Vocational assessment can help parents, professionals, and the young person with a disability to think strategically about the young person’s vocational future — both training and employment — and to make decisions that are based upon his or her interests, abilities, and potential.”

FYI: Information Resources

Bibliographic Note:

You can obtain many of the documents listed on the following pages through your local public library. Whenever possible, we have included the publisher's address or some other source in case the publication is not available in your area. The organizations listed are only a few of the many that provide various services and information programs about vocational assessment for families and professionals. Additional support is also available from state and local parent groups, as well as from state and local affiliates of many major disability organizations. Please note that these addresses are subject to change without prior notice. If you experience difficulty in locating these documents or organizations, or if you would like additional assistance, please contact *NICHCY*.

If you know of a group which is providing information about vocational assessment, or developing materials and programs in your area, please send this information to *NICHCY* for our resource collection. We will appreciate this information and will share it with other families and professionals who request it.

REFERENCES

- Albright, L., & Cobb, R.B. (1988a). Curriculum based vocational assessment: A concept whose time has come. *The Journal for Vocational Special Needs Education*, 10(2), 13-16.
- Albright, L., & Cobb, R.B. (1988b). *Assessment of students with handicaps in vocational education: A curriculum-based approach*. Alexandria, VA: American Vocational Association. (Available from the American Vocational Association, 1410 King St., Alexandria, VA 22314.)
- Berkell, D.E. (1989). Strategies for the vocational assessment of students with severe disabilities. In G.F. Elrod (Ed.), *Career education for special needs individuals: Learning, earning, contributing*. Columbia, SC: Division on Career Development, Council for Exceptional Children. (Available from the Council for Exceptional Children, 1920 Association Dr., Reston, VA 22091.)
- Brolin, D.E. (1986). Vocational assessment in public schools. In R. Fry (Ed.), *Second national forum on issues in vocational assessment*. Menomonie, WI: Materials Development Center, University of Wisconsin-Stout.
- Center on Education and Training for Employment. *Overview: Parents' role in transition for handicapped youth*. Columbus, OH: Clearinghouse on Adult, Career, and Vocational Education (ERIC Digest No. 62).
- Commission of Certification of Work Adjustment and Vocational Evaluation Specialists. (1987). *Standards and procedures manual for certification in vocational evaluation*. Arlington Heights, IL: Author. (Available from CCWAVES, 1156 Shure Dr., Arlington Heights, IL 60004.)
- Cobb, R.B., & Danahey, A. (1986). Transitional vocational assessment. *The Journal for Vocational Special Needs Education*, 8(2), 3-7, 12.
- Dick, M.A. (1987). Translating vocational assessment information into transition objectives and instruction. *Career Development for Exceptional Individuals*, 10, 76-84.
- Elrod, F.R. (1987). Transition-related assessment: The foundation of preparation for postsecondary success. *Diagnostique*, 12(3-4), 127-130. (Available from the Council for Exceptional Children, 1920 Association Dr., Reston, VA 22091.)
- Fardig, D.B. (1986). Informal functional assessment for the severely mentally handicapped. *The Pointer*, 30, (20), 47-49.
- Gaylord-Ross, R. (1986). The role of assessment in transitional supported employment. *Career Development for Exceptional Individuals*, 9(2), 122-134.
- Halpern, A.S. (1985). Transition: A look at the foundations. *Exceptional Children*, 51, 479-486. (Available from the Council for Exceptional Children, 1920 Association Dr., Reston, VA 22091.)
- Halpern, A.S., & Fuhrer, M.J. (1984). *Functional assessment in rehabilitation*. Baltimore: Paul H. Brookes Publishing Company.
- Harris, L., & Associates. (1986). *ICD survey of disabled Americans: Bringing disabled Americans into the mainstream: A nationwide survey of 1,000 disabled people*. New York, NY: International Center for the Disabled (ICD). (Available from ICD, 340 E. 24th Street, New York, NY 10010.)
- Ianacone, R.N. (1987). The impact potential of curriculum-based vocational assessment in our schools. In R.R. Fry (Ed.), *The issues papers: Third national forum on issues in vocational assessment*. (pp. 145-151). Menomonie, WI: Materials Development Center, University of Wisconsin-Stout. (Available from MDC, Stout Vocational Rehabilitation Institute, University of Wisconsin-Stout, Menomonie, WI 54751.)
- Leconte, P. (1986). *Vocational assessment of special needs learners: A vocational education perspective*. Paper presented at the meeting of the American Vocational Association in Atlanta, GA.
- Leconte, P., & Neubert, D.A. (1987). Vocational education for special needs students: Linking vocational assessment and support. *Diagnostique*, 12, 156-167.
- Mithaug, D.E., Horivchi, C.N., & Fanning, P.N. (1985). A report on the Colorado statewide follow-up survey of special education students. *Exceptional Children*, 51, 397-404.
- Moon, M.S., Goodall, P., Barcus, M., & Brooke, V. (1986). *The supported work model of competitive employment for citizens with severe handicaps: A guide for job trainers*. Richmond, VA: Virginia Commonwealth University, Rehabilitation Research and Training Center.
- Murphy, J. (Ed.). (1987). Transition: The roles of parents, students, and professionals. *Transition Summary*, (4). (Available from NCHCY, P.O. Box 1492, Washington, DC 20013.)
- National Council on Disability. (1989). *The education of students with disabilities: Where do we stand?* Washington, DC: Author. (Available from the National Council on Disability, 800 Independence Ave., SW, Suite 814, Washington, DC 20591.)

- Neubert, D. (1985). Use of vocational evaluation recommendations in selected public school settings. *Career Development for Exceptional Individuals*, 2, 98-105.
- Neubert, D., & Foster, J. (1987). *A community-based exploration guide for learning disabled students making the transition from school to work and post-secondary education*, 1-12. Unpublished manuscript.
- Public Law 101-476, *The Education of the Handicapped Act Amendments of 1990*. Washington, DC: U.S. Government Printing Office. (Available from your Congressional Representative.)
- Rothenbacher, C. (1989). *Understanding CBVA*. Presentation at the curriculum-based vocational assessment conference at The George Washington University. Washington, D.C. (Available from the George Washington University, Department of Teacher Preparation and Special Education, 2201 G Street, NW, Suite 524, Washington, DC 20052.)
- Sarkees, M.D., & Scott, J.L. (1985). *Vocational special needs* (2nd ed.). Homewood, IL: American Technical Publishers.
- Sitlington, P.L., Brolin, D.E., Clark, G.M., & Vacanti, J.M. (1985). Career/vocational assessment in the public school setting: The position of the division on career development. *Career Development for Exceptional Individuals*, 8 (1), 3-6.
- Stodden, A.R., Ianacone, N.R., Boone, M.R., & Bisconer, W.S. (1987). *Curriculum-based vocational assessment: A guide for addressing youth with special needs*. Honolulu, HI: Centre Publication International Education.
- Tucker, J. (1985). Curriculum-based assessment: An introduction. *Exceptional Children*, 52, 199-204.
- U.S. Department of Education, Office of Special Education and Rehabilitative Services. (1990). *Twelfth annual report to Congress on the implementation of the Education of the Handicapped Act*. Washington, DC: U.S. Government Printing Office. (Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or contact the Clearinghouse on Disability Information, U.S. Department of Education, Office of Special Education and Rehabilitative Services, 330 C Street, SW, Room 3132, Switzer Bldg., Washington, D.C. 20202-2319.)
- Wagner, M., & Shaver, D.M. (1989). *The transition experiences of youth with disabilities: A report from the National Longitudinal Transitional Study*. Menlo Park, CA: SRI International. (Available from SRI International, 333 Ravenswood Ave., Menlo Park, CA 94025.)
- Wehman, P. (1981). *Competitive employment: New horizons for severely disabled individuals*. Baltimore, MD: Paul H. Brookes Publishing. (Available from Paul H. Brookes Publishing Co., P.O. Box 10624, Baltimore, MD 21285-0624.)
- Wehman, P., Kregel, J., & Seyfarth, J. (1985). Transition from school to work for individuals with severe handicaps: A follow-up study. *Journal of Association for Persons with Severe Handicaps*, 10, 132-136. (Available from The Association for Persons with Severe Handicaps (TASH), 7010 Roosevelt Way, NE, Seattle, WA 98115.)

BIBLIOGRAPHY

GENERAL INTEREST

- Blakemore, T., McCray, P., & Coker, C. (1984). *A guide to learning style assessment*. Menomonie, WI: University of Wisconsin-Stout, Research and Training Center.
- Botterbush, F.J. (1987). *Vocational assessment and evaluation systems: A comparison*. Menomonie, Wisconsin: Materials Development Center, University of Wisconsin-Stout.
- Botterbush, F.K., & Michael, N. (1985). *Testing and test modification in vocational education*. Menomonie, Wisconsin: Materials Development Center, University of Wisconsin-Stout.
- DeStafano, L., & Linn, R. (1986). *Review of student assessment instruments and practices*. Champaign, IL: Transition Institute at Illinois. (Available from the Secondary Transition Intervention Effectiveness Institute, College of Education, University of Illinois at Urbana-Champaign, 110 Education Bldg., 1310 S. 6th Street, Champaign, IL 61820.)
- Farrar, D. (in press). *The Carl D. Perkins Vocational and Applied Technology Act: Questions and answers regarding the new provisions relating to exceptional students*. Reston, VA: Council for Exceptional Children.
- Fry, R. R. (Ed). (1987). *The issues papers: Third national forum on issues in vocational assessment*. Menomonie, WI: Materials Development Center, University of Wisconsin - Stout.
- Illinois State Board of Education. (1987). *Serving handicapped, disadvantaged, and, limited-English-proficient persons in vocational education programs*. Springfield: Author.
- Parker, R.M., Szymanski, E.M., & Hanley-Maxwell, C. (1989). Ecological assessment in supported employment. *Journal of Applied Rehabilitation Counseling*, 20(3), 26-33.
- Peterson, M. (1988). *Vocational assessment of special students for vocational education: A state-of-the-art review*. Columbus, OH: The National Center for Research in Vocational Education.
- Phelps, L.A., Chaplin, C., & Kelly, A. (1987). A parent's guide to vocational education. *News Digest*. (8). Washington, DC: National Information Center for Handicapped Children and Youth. (Available from NICHCY, P.O. Box 1492, Washington, DC 20013.)
- Vasa, S.F. (1983). Parental involvement in career education. *Career Education for Behaviorally Disordered Students*. Reston, VA: Council for Exceptional Children.

VOCATIONAL ASSESSMENT STATE GUIDELINES

- Illinois State Board of Education. (1988). *Vocational assessment of secondary special needs students*. Normal, IL: Department of Adult, Vocational and Technical Education.
- Lehman, J.P. (1985). *Vocational assessment handbook*. State Board for Community Colleges and Occupational Education and the University of Northern Colorado Vocational Teacher Education Department.
- Maryland State Department of Education, Division of Vocational-Technical Education. (1984). *Handbook for vocational support service team*. Baltimore, MD: Author.
- New York State Education Department. (1989). *The vocational assessment of students with handicapping conditions*. Albany, NY: Author.
- Patterson, R.S., & Mikulin, E.K. (1989). *Guidelines for serving special needs students in vocational education*. Austin, TX: Texas Education Agency.
- Posey, V. (1982). *Arizona model of vocational assessment*. Tucson: Arizona State Department of Education.
- Thomas, S., & Coleman, N. (1988). *Vocational assessment training manual*. Raleigh, NC: North Carolina Department of Public Instruction, Division of Vocational Evaluation.
- Wisconsin Department of Instruction. (1986). *Designated vocational instruction: A cooperative process for change*. Madison, WI: Author.

ORGANIZATIONS

TRANSITION AND VOCATIONAL EDUCATION INFORMATION RESOURCES AND CLEARINGHOUSES

HEATH Resource Center (Higher Education and Adult Training for people with Handicaps)- American Council on Education, One Dupont Circle, Washington, DC 20036-1193. Telephone: (202)939-9320 (VOICE/TDD) in the DC Metro Area); 1-(800) 544-3284 (VOICE/TDD).

ERIC Clearinghouse on Adult, Career, and Vocational Counseling- Ohio State University, Center on Education and Training for Employment, 1900 Kenny Rd., Columbus, OH 43210-1090. Telephone: (614) 292-4353; 1-(800) 848-4815.

ERIC Clearinghouse on Handicapped and Gifted Children- Council for Exceptional Children, 1920 Association Dr., Reston, VA 22091-1589. Telephone: (703) 620-3660.

Materials Development Center (MDC)- Stout Vocational Rehabilitation Institute, University of Wisconsin-Stout, Menomonie, WI 54751. Telephone: (715) 232-1342.

National Center for Research in Vocational Education (NCRVE)- NCRVE, University of California at Berkeley, 2150 Shattuck Ave., Berkeley, CA 94704-1306. Telephone: (415) 642-4004.

OTHER NATIONAL INFORMATION RESOURCES

American Vocational Association (AVA)- AVA, 1410 King St., Alexandria, VA 22314. Telephone: (703) 683-3111; 1-(800) 826-9972. The following organizations are associated with the AVA:

- National Association of Vocational Assessment in Education (NAVAE)
- National Association of Special Needs State Administrators (NASNSA)
- National Association of Vocational Education Special Needs Personnel (NAVESNP)
- Special Needs Division (SND)

Commission on Certification of Work Adjustment and Vocational Evaluation Specialists (CCWAVES)- CCWAVES, 1835 Rohlwing Rd., Rolling Meadows, IL 60008.

Division of Career Development (DCD)- Council for Exceptional Children, 1920 Association Drive, Reston, VA 22091-1589. Telephone: (703) 620-3660.

Parents Advocating Vocational Education (PAVE)- PAVE, 6316 S. 12th Street, Tacoma, WA 98465. Telephone: (206) 565-2266; 1-(800) 572-7368 (in WA).

Parent Education Advocacy Training Center (PEATC)- PEATC, 228 S. Pitt St., Room 300, Alexandria, VA 22314. Telephone: (703) 836-2953.

President's Committee on Employment of Persons with Disabilities (PCEPD)- PCEPD, 1111 20th Street, NW, Washington, DC 20036-3470. Telephone: (202) 653-5044.

Secondary Transition Intervention Institute (Transition Institute at Illinois)- Transition Institute at Illinois, College of Education, University of Illinois at Urbana-Champaign, 110 Education Bldg., 1310 S. 6th Street, Champaign, IL 61820. Telephone: (217) 333-2325.

Technical Assistance for Parent Programs (TAPP)- TAPP, Federation for Children with Special Needs, 95 Berkeley St., Boston, MA 02116. Telephone: (617) 482-2915 (VOICE/TDD); 1-(800) 331-0688 (in MA).

Technical Assistance for Special Populations Programs (TASPP)- TASPP, University of Illinois at Urbana-Champaign, 345 Education Bldg., 1310 S. 6th Street, Champaign, IL 61820. Telephone: (217) 333-0807.

Virginia Commonwealth University Rehabilitation Research and Training Center on Supported Employment (RRTC)- RRTC, Virginia Commonwealth University, 1314 W. Main St., Richmond, VA 23284-2011.

Vocational Evaluation and Work Adjustment Association (VEWAA)- c/o National Rehabilitation Association, 633 South Washington Street, Alexandria, VA 22314.

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PROJECT STAFF

Project Director Carol H. Valdivieso Ph. D.
 Deputy Director Suzanne Ripley
 Editor Richard Horne
 Associate Editor Lisa Küpper
 Principle Authors Carie Rothenbacher and Pamela Leconte,
 Department of Teacher Preparation and Special Education,
 George Washington University

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