THE IMPACT POTENTIAL OF CURRICULUM-BASED VOCATIONAL ASSESSMENT IN OUR SCHOOLS

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Abstract: This article provides the rationale and resulting methodology for addressing the unique vocational assessment needs of special needs individuals within public school settings. Various efficacy issues, program alternatives and a model approach are detailed, which have evolved from the need for more demonstratively useful school based vocational assessment services and outcomes.

This is a critical period in the provision of vocational assessment services for special needs students in secondary and post secondary schools. Although we have a mandate for vocational services, The Carl D. Perkins Vocational Education Act of 1984, P.L. 98-524, federal rules and regulations (Federal Register, August 18, 1985, p. 33233) do not delineate specific guidelines on how these services should be provided. This lack of specificity is intentional; it is expected that local education agencies should tailor assessment to meet their needs as well as complying with the legislative mandate.

The purpose of this issue paper is to identify efficacy issues and practitioner concerns which have evolved from school-based vocational assessment, to provide the rationale for developing program alternatives, and to present a model approach which responds to identified service delivery issues as well as the intent of the recent statute.

Short Term Solutions Vs. Long Term Benefits:

In responding to any legislative mandate, it is important to analyze issues and concerns from past experiences and use this information as a basis for decision making. Although we should learn from history, there is a natural tendency to take a path of least resistance and replicate what exists regardless of potential effectiveness. At this time, we are at this crossroad of decision making regarding the provision of vocational assessment services for students who are handicapped.

As professionals, we should analyze concerns and issues relative to various service delivery alternatives in vocational assessment. Although there is a paucity of research in school-based vocational assessment, there is sufficient experiential and qualitative information from practitioners which can dictate some experimental approaches for effective service delivery.

Professionals and advocates have sought recognition of vocational assessment as an essential service in meeting the career/vocational and transitional needs of special needs students for over a decade. (Leconte, 1985, p. 3) Now that a mandate is a reality, local and state policy makers must take precautions to most effectively provide for the needs of students, not most expediently comply with statutory requirements. If planners and practitioners focus on expediency, they may be perpetuating a service delivery structure that is under serious scrutiny within our profession.

We are in the midst of a confusing and controversial time in the field of school-based vocational assessment. There are professionals who call to eliminate time limited school-based vocational assessment because of difficulties with content validity and applicability (Cobb, Dec. 1985). There are service providers who have seen the personal benefits students have received for vocational assessment services which seem to outweigh the problems associated with the process (Leconte, Dec. 1985; Peterson 1985). In addition, there are those commercial vendors who view and advertise their products as a way to meet the Perkins assessment assurance.

In this imbroglio, school systems can be vulnerable if they lack the expertise to be educated consumers of vocational assessment materials and processes. These systems are often cognizant of the difficulties others have experienced with the logistics, expense and impact of time-limited vocational assessment services. Typically, local education agencies lack the financial resources to support this approach which traditionally involves reliance on commercial work samples or vocational evaluation systems. These programs usually are housed within an assessment center or unit and resemble the vocational rehabilitation model from which they originated. (Peterson, 1985) Public school systems have and continue to search for an alternative that can fit within a suitcase, be carried from school to school, take minimal time away from the classroom and serve as many students as possible. This approach focuses on complying with the mandate but not necessarily meeting the needs of students.

Need for a Changing Service Delivery Structure:

Although The Education of All Handicapped Children Act of 1975, P.L. 94-142, mandated the provision of assessment services to all school- aged handicapped individuals, very few localities interpreted this mandate to include the provision of school-based vocational assessment services. At the same time, the Vocational Education Amendments of 1976, P.L. 94-482, included set aside funds for handicapped and disadvantaged students which fostered the growth of school-based vocational assessment programs. Programs were generated from varied funding sources and often lacked the cooperative planning benefits between special education and vocational education. As a result, programs in the mid to late 1970's could be typified by some of the following characteristics:

- a lack of internal and external expertise to assist in setting vocational assessment services. Funding often became available as a last priority which necessitated hurried spending decisions. Staff were hired after equipment was purchased and had to utilize the equipment available regardless of their personal philosophy or actual student needs;
- activities based on a rehabilitation model of vocational evaluation which was more retraining and placement-oriented as opposed to the career/vocational exploration, planning, programming and vocational training needs of school settings;
- commercial systems which were often used in combination with other commercial systems and/or supplemented by locally developed work samples. Commercial systems were often cited as not reflective of the local labor market, not appropriate for administration to varying handicapping conditions, not reflective of student performance when established norms were used as primary indicators, and not reflective of student's production capability due to the extended time needed to learn the task.
- assessment which occurred in an isolated setting which did not provide for the evaluation of a student's critical interactive skills and work related behaviors;
- concern over the degree to which students were receiving career exploration as opposed to vocationally relevant assessment services;
- an expressed need for locally developed work samples that were reflective of in-school vocational education offerings and local labor market demands. In addition, administrators were often unwilling to provide the personnel support or allow the time for developing relevant work samples and situational assessments;

- frustration over the difficulty of insuring that the assessment results were being utilized in making programmatic decisions;
- students who were referred for services too early to have sufficient motivation or focus on career decision-making, or too late in their school careers to have any programmatic impact;
- prohibitive cost of transporting students from several schools to the vocational assessment center;and
- lack of trained personnel who possessed expertise in vocational/special education and vocational assessment/ evaluation.

These characteristics or barriers to effective service delivery were further compounded by a lack of communication and understanding about the need for and integration of vocational assessment services. Special educators were often unclear about the intent and benefits of the vocational assessment process which influenced the appropriateness and quality of referrals. There was also a teacher reluctance to sacrifice the blocks of instructional time needed to complete the assessment process. Vocational educators questioned the relationship of available work samples to the content and structure of their training programs. In addition, administrators were concerned about the expenditures (equipment, personnel, transportation) needed to establish assessment centers and its justification when compared to the limited number of students served.

All of these concerns have been echoed by practitioners in the field and researchers in the literature (Stodden & Ianacone, 1981; Ianacone & Hiltenbrand, 1982; Cobb, 1985); and as we analyze vocational assessment efforts ten years later, we regrettably find that many of these same problems still exist. Past attempts at remediating these implementation concerns can be characterized as a "band aid approach" for symptoms rather than a much larger systemic approach for planning and effective service delivery. More mature programs have taken steps to address some of these issues by establishing situational assessment opportunities, becoming involved in individualized educational programming meetings, conducting in-services, analyzing vocational training programs, and developing relevant work samples. However, newer programs seem to encounter most of these barriers to effective service delivery as they attempt to address individual systemic differences.

In either case, practitioners and researchers are calling for a truly integrated assessment process which provides opportunities for situational assessment, accommodates for the developmental levels of students, and is more reflective of the vocational training opportunities and the local labor market. (Leconte, 1985; Cobb, 1985) These professionals also agree that there needs to be an investment and involvement of all personnel who are or could be collecting relevant data, are potential consumers of the data and/or are making programmatic/placement decisions based on the data. In order to foster this interactive involvement among data collectors and consumers, all educators must feel that they are a part of the vocational assessment process, they will benefit from its outcomes, and therefore have a stake in its success. Past difficulties can be thwarted by cooperatively establishing a well delineated philosophical and structural base for the assessment process (Ianacone & Hiltenbrand, 1981) which needs to occur prior to the design and development of the actual vocational assessment process. This planning phase then becomes the most critical element in providing integrated, quality services for school systems. Sufficient time devoted to this phase should eliminate most if not all of the implementation concerns that have been described.

A Renewed Direction: School-Based Vocational Assessment

The consistency of programmatic and process barriers necessitates a re-evaluation of our current service delivery models. As a result, we are at a crossroads in the delivery of school-based vocational assessment services. Although the need has always been present, the interest has increased dramatically with the passage of the Carl D. Perkins Vocational Education Act. Evidence of the increased interest occurred in December 1985 at the American Vocational Association national conference in Atlanta, Georgia at which over three hundred professionals attended the Special Needs Division Issues Forum on Vocational Assessment. It was obvious that these professionals were seeking guidance in interpreting the Perkins assessment assurance and solutions for providing appropriate services. Ms. Charlotte Conaway (Dec., 1985), Senior Program Specialist for the Handicapped, Office of Adult and Vocational Education, USDOE emphasized that there are no easy answers but rather what is needed is a carefully planned and integrated process which directly ties assessment to instruction.

A Renewed Approach: Curriculum-Based Vocational Assessment

In addressing curriculum-based assessment, Tucker (1985, p. 199) states that it is unfortunate that good practice in education is often cast within the framework of "new" theories and "new" terms used to describe what has been a tried and true approach...." This tenant is applicable to the curriculum-based VOCATIONAL assessment process as well.

In 1981, a Career/Vocational Assessment Model was conceptualized which emphasized developmental assessment practices (Stodden & Ianacone). This model required data collection from a variety of environments and stressed the integration of assessment information in career planning and vocational and educational programming for handicapped students. Since that time, one component of the model has been field tested, refined, and implemented with a focus on curriculum-based vocational assessment.

Definition

Curriculum-based vocational assessment is a process for determining the career development and vocational instructional needs of students based upon their on-going performance within existing course content. Assessment information is collected in the areas of work related behaviors, generalized vocational outcomes and specific skill outcomes. Curriculum-based vocational assessment (CBVA) is appropriate and adaptable to any school system and relies on the use of existing school and community resources to obtain vocational assessment data about individual students. It is a structured process which is dependent on cooperative planning and implementation, on-going administrative support and constant monitoring. The process is generated from within and reflects the needs, training options and employment opportunities available for that local education agency and community in which it functions.

The CBVA process can best be described in a series of questions which assists in shaping each LEA's curriculum-based vocational assessment package. Eight major steps in the process are delineated as follows:

KEY STEPS TO CURRICULUM-BASED VOCATIONAL ASSESSMENT

1. Identify key development personnel
   - Who are the key personnel needed to conceptualize, develop and validate a curriculum-based vocational assessment model?
   - Who are the key personnel needed to operate and develop the vocational assessment model?
   - What disciplines and administrative personnel are critical to implementation and need to be represented?
2. Conduct a comprehensive search of program models, research literature, vocational evaluation/assessment instrumentation, and pertinent legislation
   - What research is available concerning the efficacy of vocational assessment services in school-based settings?
   - What program models currently exist and what factors have influenced their effectiveness within the local education community and employment settings?
   - What factors influence validity and reliability in the collection of assessment data?
3. Establish basic considerations for the model based on previous research, analyze and synthesize the programmatic needs. These considerations include tenants, i.e., vocational assessment:
   - Should be an integrated part of the total delivery of career/vocational services;
   - Should reflect pre-assessment readiness needs of the student and provide developmental growth information
   - Should be a student-centered process with a career development orientation consisting of experiences to increase one's awareness, exploration, and understanding rather than a strict predictive procedure providing isolated ability data;
   - Should be based on the assessed employment needs of the local community and the applicable skills of the student to insure key validity and efficacy factors contributing to the structure of the model;
   - Should measure key situational factors specific to work roles that can be critical determinants of interest and performance;
   - Should address contributory factors (i.e., learning style, physical or sensory limitations, self concept, reinforce system, limited awareness or exposure) which may influence participation and performance on an assessment task;
   - Should measure interest, aptitudes, skills and behaviors in a developmental context to insure content and predictive validity;
   - Should respond to the mandates and legal requirements of current legislation
4. Define local program purposes and needs
   - Why are you planning a vocational assessment process?
   - What outcomes are you expecting from the vocational assessment process?
   - What are the vocational preparation and employment needs of your local area and how doe they relate to the demands of the education system?
   - How do the vocational preparation and employment related needs of your local area relate to the demands of the labor market?
   - What are the transition needs of individuals exiting the secondary school setting and how do they relate to the community's ability to meet them?
5. Formulate a conceptual framework for the program
   - How do overall regular school program courses/options, special education programs/activities, vocational skill training options and school/community based placements relate to career preparation and employment?

- How are the career and personal development needs of students reflected in the structure of course offerings and experiences within the school setting?
- How and where can the assessment of readiness/awareness and work related behaviors/skills take place within this structure?
- How and where does the student become aware, explore and understand his/her own needs, interest, present abilities and limitations in relation to available training and employment options?
- What courses and activities would bet yield assessment information about this interaction of self and environment?
- What kinds of assessment information should be collected within these courses and activities?
- Who should coordinate and utilize the assessment information to make placement and programming decisions?
- How will this information be applied to the development of individualized educational and vocational planning and program development?

6. Establish an operational plan to implement the process
   - Where will vocational assessment activities occur?
   - Who will be assessed?
   - What information will be collected?
   - How will vocational assessment information be collected (instruments, activities, techniques)?
   - What persons will conduct vocational assessment activities?
   - How will the vocational assessment information be gathered and organized?
   - Who will be responsible for coordinating information gathering which includes facilitating, providing support and monitoring?
   - Who will analyze, synthesize, and interpret vocational assessment findings to appropriate decision making groups?
   - What time frame will be used for vocational assessment activities?
   - How will data collection be integrated and formalized as part of the instructional process?
   - How will the vocational assessment instrumentation be developed?
   - What specific competencies and specific related behaviors will be assessed?
   - How should the collected data be formatted and displayed for optimal application and utilization?
   - What evaluation criteria will be used to measure competency attainment and behaviors?
7. Pilot and evaluate the CBVA implementation activities
   - What school(s) and personnel should be involved in field testing?
   - What steps need to be taken (additional in-service training, technical assistance and on-going support) to insure the appropriate climate and expertise for full integration and application of the vocational assessment process in the pilot sites?
   - What criteria will be used to evaluate the process, instrumentation and overall impact at the pilot site?
   - What modifications need to be made to the process, instrumentation and/or support mechanisms as a result of the pilot test?
   - Who will make the modifications?
8. Implement, evaluate and expand options
   - What additional steps need to be taken on a systemwide basis for full integration and application of the curriculum based vocational assessment model and process?
   - What specific evaluation data will be collected?
   - What implementation and evaluation checkpoints need to be established?
   - What additional course and activity settings would yield relevant career and vocational assessment information?
   - What additional steps are needed to assist teachers to view their instructional processes and outcomes in a career and/or vocational context?

The steps and questions delineated above provide a structure for the development of a formalized curriculum-based vocational assessment process which can be designed to address the unique characteristics of any school system and surrounding community. As an example, these questions were specifically answered and resulting implementation plans were detailed in order to conduct curriculum-based vocational assessment in the DODDS Germany Region, an overseas public school system which serves approximately 80,000 American dependent children on military bases. In 1984, a task force was formed to assist in the development and facilitate the implementation of the curriculum-based vocational assessment model. Task force members included special education and vocational education administrative personnel, educational perscriptionists and cooperative work experience teachers. The unique aspects of this DODDS setting (i.e., transient school-based population and limited employment environment) were addressed in the model development process. Initial data collection settings were identified in junior high/middle school exploratory courses and activities, all high school vocational courses and high school cooperative work experience settings. It is planned that once the data collection process has been implemented in these areas, additional course and activity settings will be providing the support needed to collect specific career and vocationally-related assessment data in their specialty areas (e.g., academic and performing arts).

The task force determined the kinds of information that needed to be collected in each of the identified assessment environments. This information was categorized as work related behaviors, generalized outcomes and specific skill outcomes for each course. Since no two systems are the same, the process for integrating CBVA vocational assessment

techniques has built in accommodation for those unique differences.

Intrinsic Benefits of Process Integration:

A number of intrinsic benefits result from the curriculum-based vocational assessment process. This process:

- maximizes the likely impact on instruction and curriculum;
- internalizes the process with all staff and helps to focus on career and vocational outcomes;
- allows for the on-going collection of data during the vocational and career development of a student (Cobb & Larkin, 1985);
- generates an on-going career and vocational assessment base which impacts and guides the development of the student's individualized education plan (Stodden & Ianacone, 1985);
- gathers information at various stages of career orientation, exploration and preparation;
- utilizes a rich on-going source of assessment data for career planning and vocational decision making; and
- allows for continued self-awareness and realistic goal setting for students.

In addition, the CBVA process is cost effective. Although initial cost may be similar to those required for "traditional assessment," these initial expenses are being used for personnel development, on-going support and facilitating integration of the assessment process. The conceptual model, integration techniques, support mechanisms, construct building, assessment refinement, resulting curriculum formalization and data collection procedures are applicable to the career/vocational needs of all students. Spending is targeted for long term personnel development which assures a continued staff commitment to the CBVA process and provides effective integration of CBVA into all education programming.

CBVA is a dynamic, continuous evaluation process as opposed to a static, "one-shot" evaluation program. There are changing development needs of students, changing demands of the educational system and changing demands of the labor market. The evaluation content and process should reflect these changes. Curriculum-based vocational assessment affords the greatest flexibility and built in internal processes to reflect these changing needs and demands.

Renewed Directions in Education

Will (1986), in responding to changing directions in education, states that: "building level administrators often cannot mold all of the resources in their building to produce effective programs....and must be empowered to assemble appropriate professional and other resources for delivering effective, coordinated, comprehensive services for all students based on individual education needs rather than eligibility for programs. This means that special programs and regular education programs must be allowed to collectively contribute skills and resources to carry out individualized education plans based on individualized educational needs." (p. 413). CBVA provides a mechanism for allowing special and regular educators to collaboratively identify and meet the individual needs of students as they acquire the necessary skills to transition through school to work.

Will further states that an effective approach "to better education is curriculum-based assessment...since it would emphasize assessment of each student's strengths and weaknesses for instructional purposes, rather than emphasizing categorization or labeling" (p. 414). A natural extension of this premise for better education would involve the use of curriculum-based assessment since it would emphasize each student's career/vocational strengths and weaknesses for instructional, programming, and career decision making rather than the limited purposes of prediction and placement. In addition, this process would effectively assemble and mold resources for delivering coordinated, comprehensive career/vocational services for all students. Such services would be based on an individualized, developmental assessment of career and vocationally-related needs and competencies, rather than relying on an isolated snapshot of skills, interest and aptitudes during one stage of the developmental process. When effectively integrated within a school setting, curriculum-based vocational assessment is an open entry/exit, effective vehicle to transport or transition any student from school to the world of work.

When assessment is an integral part of the instruction process, the most relevant and reflective diagnostic information will directly become available to those making instructional programming and placement decisions. Neubert (1985) found that although most service consumers/users viewed vocational assessment as a prescriptive process, most vocational assessment specialists and vocational educators viewed the process as most useful for placement. A comprehensive and effective vocational assessment process should continually yield both diagnostic and instructional programming information which will

naturally facilitate placement decisions. It is a process based on the formalization of good teaching techniques and should benefit all students.

Summary

As a profession, we must integrate what we have learned in the past with new as well as existing models which will appropriately deliver and fully institutionalize a much needed service. An analysis of past experience and research cautions against reliance on using existing models which have been marginally effective and do not provide the outcomes we expect. There exists an opportunity for professionals to be on the cutting edge of new directions in the provision of vocational assessment services to all students with special needs. In light of our less than favorable budget realities, especially in the area of vocational education, we must be open to and act on new approaches and models to most effectively address a critical service delivery need which fiscally may continue to be an "empty pocket priority."

REFERENCES

Cobb, B. (1985, December). *Vocational assessment of the special needs learner: A Special education perspective.* Forum conducted at a meeting of the American Vocational Association, Atlanta.

Cobb, R. & Larkin, D. (1985). Assessment and placement of handicapped pupils into secondary vocational education programs. *Focus on Exceptional Children, 17, 1-14.*

Ianacone, R. & Hiltenbrand, D. (1981). Vocational assessment: Special education's responses to the career needs of handicapped youth. In R.A. Stodden (Ed.), *Vocational assessment* (Personnel Development series: Document 6), pp. 45-67. Champaign: University of Illinois, Office of Career Development for Special Population.

Leconte, P. (1985, December). *Vocational assessment of the special needs learner: A vocational education perspective.* Forum conducted at a meeting of the American Vocational Association, Atlanta.

Stodden, R., & Ianacone, R. (1981). Career/vocational assessment of the special needs individual: A conceptual model. *Exceptional Children,* 48, 600-610.

Stodden, R., & Ianacone, R. (1985). *Curriculum-based vocational assessment handbook.* Weibaden, West Germany: Department of Defense Dependents Schools (DODDS), Supplementary Education Branch, Germany Region.

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