

The Vocational Evaluation Process and Assistive Technology

Background

An accurate and thorough assessment of an individual's ability to work takes into account interests and personal preferences, strengths and capabilities, how specific job tasks can be performed, and where career opportunities exist. This requires specialized expertise, appropriate tools, and access to information resources. Improving the effectiveness of vocational assessment requires that the process be continually reviewed, that appropriate tools and resources are made available, and that goals and objectives of the assessment be directly linked to achieving successful employment outcomes. Involvement of the consumer throughout the process provides essential feedback and direction as the assessment is unfolding. Follow-up after the assessment helps to maintain the focus on employment and employment outcomes to keep vocational assessment and evaluation current and relevant.

The traditional role of the vocational assessment staff, especially vocational evaluators, to primarily test and evaluate is changing. As a result the vocational assessment process reflects much greater consumer involvement and attention to the ultimate goal of rehabilitation, the successful achievement of meaningful vocational goals. Effective vocational assessments now must go beyond strictly assessing what someone can do now to focus on better determining out what people could be capable of doing. When the resources and tools for creative problem solving are available, vocational evaluators can explore possibilities as information is gathered. The involvement of the consumer as an active participant helps to ensure that career possibilities are explored and that ways to maximize performance and increase employment options takes place. As with any effective rehabilitation service, vocational assessment must be individually tailored to address specific needs of the individual. To be truly individualized, accommodations and assistive technology should be an integral part of the assessment process.

Neff (1970) and others have cautioned that there is a complex interaction between the individual and their environments. In *Problems of Work Evaluation* (1966) Neff pointed out that vocational assessment “has depended principally on aptitude testing, job analysis, the work sample technique and systematic use of behavioral observation”. These observations were directed at existing vocational assessment at the time, however in large part these also apply almost 40 years later in 2004. As we look at how vocational assessment is practiced today there are signs that the field is clearly moving beyond a concentration on assessment tools and techniques to the creation of flexible, consumer driven services that go beyond the walls and confines of vocational rehabilitation centers.

A Closer Look at Vocational Evaluation and Assessment

In current practice vocational assessment and evaluation is a complex process that varies between programs and settings depending on many factors. For this document a general vocational assessment process that includes most, but not all of the components found in vocational assessment, is described. This process is divided into three phases to illustrate recommended practices that should be in place in vocational assessment and evaluation programs.

Phase 1 - Referral and Planning

Phase 2 – Assessment and Career Exploration

Phase 3 - Follow-up and Quality Assurance

These phases connect to create a flexible, consumer-needs driven process that should adjust for each individual. Referral questions provide vocational assessment staff with information to begin planning the nature and content of the vocational assessment process.

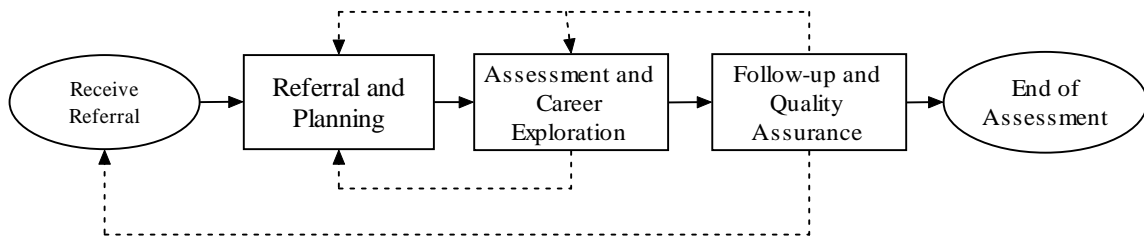
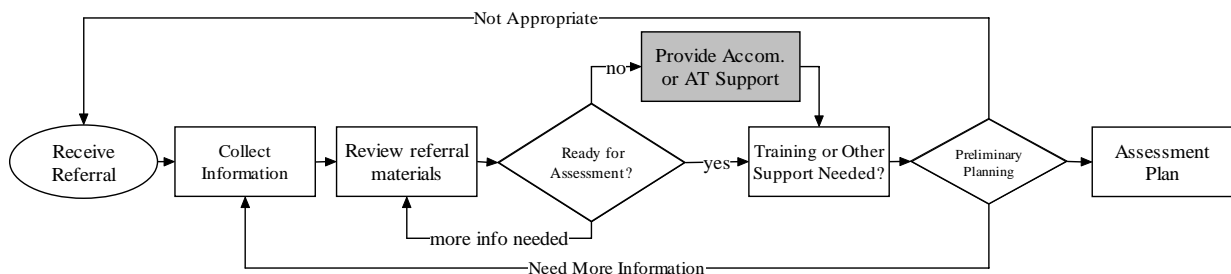


Figure 2: **Phases of the Vocational Assessment Process**

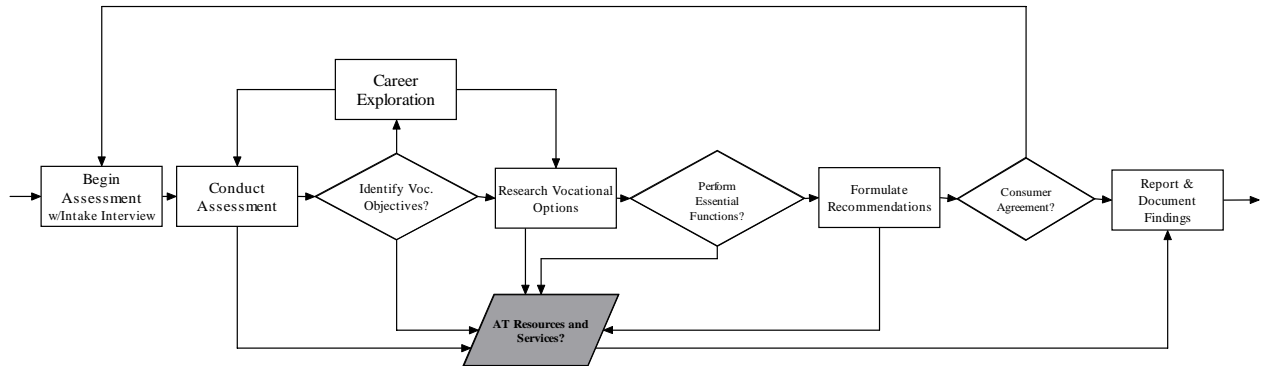
Phase 1: Referral and Planning

The first phase collects and reviews information on the reason and objectives for the referral to determine what type of assessment is needed and to verify the readiness of the individual to participate.



Phase 2: Assessment and Career Exploration

The second phase of the process encompasses the common elements used for assessment and career exploration that should be present in all levels or types of vocational assessments.



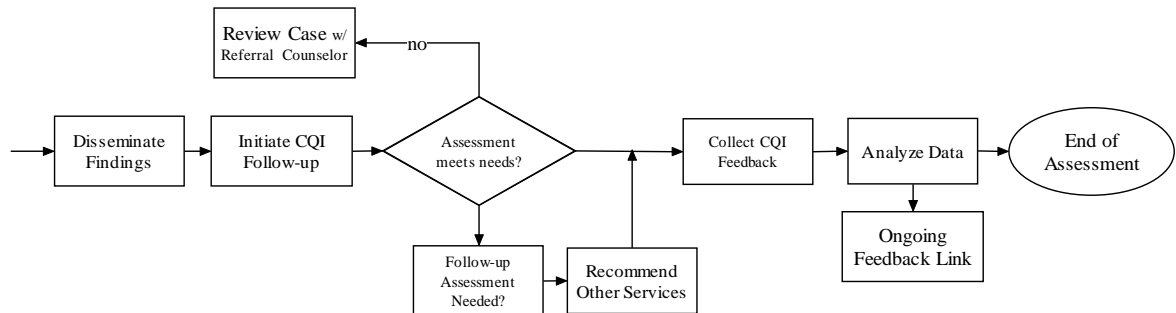
Depending on the types of assessment tools and methods used this process will usually take a minimum of three to four hours and could extend for two weeks or more depending on severity of disability and nature of the referral questions. Activities are initially guided by the assessment plan developed in Phase 1, but direct consumer involvement beginning with the intake interview provides essential feedback that determines the actual assessment and career exploration activities that are needed.

Assistive technology resources and services should be an option at any point during assessment and career exploration. AT-related services can be provided by the vocational evaluator but will frequently involve the services of a technology specialist. This problem-solving resource can be used to enhance capacity and capability of the individual and address environment factors in the workplace that may limit vocational options.

Phase 3: Follow-up and Quality Assurance

Dissemination of findings marks the conclusion of the assessment and career exploration phase and the start of the third phase, which focuses on follow-up and continuous quality improvement. The dissemination, usually through staffing and written report, provides the consumer and referral source with documentation of important findings and recommendations for training, placement or other employment-related outcomes.

Vocational assessment does not end when the report is written. There should be ongoing feedback that keeps vocational assessment staff informed of employment outcomes and the ultimate results of rehabilitation services.



Emerging Paradigm: Assistive Technology and Vocational Assessment

Changes and shifts in paradigms in rehabilitation are impacting all of rehabilitation services, including vocational evaluation and assessment. Disability itself, and how we understand the conditions and limitations that accompany disability, are gradually changing.

According to Enders (2002), *disability is actually a complex interaction between an individual and the environment, mediated by tools, skills, and interaction with other people. Technology is often literally the interface between person and environment. The ability to access and use technology is likely to play a pivotal role in functionally redefining disability, and in bridging the wide gulf between what "significant disability" means to the disability community, and what it means today in the business/employer community.*

In our increasingly technology-dependent work settings disability is more and more not so much a function of the individual as it is the interaction that takes place between an individual and the environments in which they function. If vocational assessment fails to include assistive technology resources and services as an integral part of the process, vocational choice and options are likely to be limited. There is a risk of underestimating the capability and performance of persons served, particularly those individuals with severe disabilities.

Assistive Technology and the Vocational Evaluation Process

Effective utilization of AT technology in the rehabilitation process is a primary responsibility of the vocational rehabilitation counselor. The counselor coordinates and manages cases and is primarily responsible to identify the individual=s needs, which could include technology-related needs. Similarly, the vocational evaluator is in an excellent position to recognize ways that AT could be used. The length of time that evaluators work with and observe an individual function creates an excellent opportunity to explore possible uses of assistive

technology and workplace accommodation options. When technology needs are identified, vocational evaluation staff can work with appropriate assistive technology specialists to obtain the specialized services that may be needed.

When AT is introduced into vocational assessment, particularly more in-depth vocational evaluation services, the focus shifts from primarily assessing performance to an interactive, problem solving activity that seeks ways to determine how to maximize someone's capabilities. Traditionally, evaluators have included problem solving as part of the evaluation. This was shown when they fabricated alternate ways that tasks could be completed, identified skills that could be transferred to other jobs, substituted one assessment tool for another, or devised other ways to measure particular factors. When assistive aids and devices are available, it becomes possible to explore even more ways to accomplish a task or to determine what could be done to make a difference in performance.

The use of traditional tools, e.g., tests or work samples, required accurate measurement through the application of a psychometric approach. This technique still has a place in evaluation along with functional, situational and environmental techniques that have assistive technology as an integral part of the process. A move in this direction represents a radical shift in the approach to evaluation.

Identifying feasible vocational objectives should be done by opening possibilities rather than narrowing choices. Whether someone may be able to perform essential functions of a job may depend on knowing how well AT serves to reduce functional limitations that appeared to make a job an inappropriate goal. The vocational evaluation process is often the best place where vocational exploration, assessment and AT can come together. Although referral counselors are expected to identify any potential technology-related needs, this may not always occur. Time crunched counselors may have limited contact with consumers and often do not have the opportunity to review technology-related needs or to observe typical work behaviors to the same extent as the vocational evaluator. The vocational evaluator is often better able to recognize the potential benefit of assistive technology and can incorporate this into the vocational assessment or make the appropriate referral for technology services.

Clearly the recommended approach is to have vocational assessment staff who have the knowledge and skills needed to take care of basic AT needs combined with a team of AT specialists who could be called in on relatively short notice for consultation and additional services. This situation exists however in only a limited number of comprehensive rehabilitation centers that have both vocational assessment and assistive technology service programs. Most vocational assessment programs will have to gradually develop skills needed in existing staff and continue to make arrangements with other AT service delivery resources for specialized expertise.

Suggestions for Using Assistive Technology

Assistive technology resources and services should be an option at any time during a vocational assessment. There are general places or points in any assessment where consideration of assistive technology and workplace accommodations should be taken into account. These include *pre-evaluation preparation and orientation, initial interviewing, developing the evaluation plan, administering assessment tasks, doing career exploration and developing recommendations.*

Making pre-evaluation preparations:

- Review referral information to determine if technology needs are indicated;
- Identify functional limitations or problems that may require accommodations during the assessment;
- Ensure that all test and instructional materials that are likely to be used are available in appropriate formats;
- Ensure that the evaluation area is completely accessible for individuals with disabilities;
- Consult with technology specialists for cases where significant AT needs have already been noted.

Conducting the Initial Interview:

- Determine if the individual uses or has used any assistive devices;
- Are there any apparent functional limitations that would suggest the need for involving a technology specialist?
- Determine what the consumer's attitude is toward using assistive technology or workplace accommodations. If any reluctance is noted, this should be explored before considering use of assistive technology.

Developing the evaluation plan:

- Arrange for any consultation or other involvement of technology specialists if AT needs have been identified;
- If immediate need for assistive technology aids/devices was noted, arrange to obtain necessary equipment;
- If formats of tests and assessment activities may not be appropriate for the individual, consider what other assessment instruments or alternate formats may be needed.

Administering assessment tasks and activities:

- Observe to see if the individual is experiencing difficulties performing assessment tasks/activities. If so, be prepared to modify the task or activity to obtain the optimal performance possible.
- Permit the individual to use any device necessary to complete the assessment;
- Focus on the consumer's ability to perform essential functions and less on norms.

Conducting career exploration activities;

- Focus on interests and knowledge rather than on limitations or what someone cannot do;
- Use job analysis techniques to identify essential functions and explore ways to adapt the job and /or utilize devices to compensate for loss of function;
- Avoid eliminating consideration of vocational options without providing opportunity to tryout and perform work tasks;
- Often vocational options which had been considered not feasible, or perhaps not considered at all, may become feasible through use of assistive technology

Developing Recommendations:

- If need for job accommodations seem apparent, identify specific information needed;
- Once a specific job has been identified, if necessary consult with an appropriate technology specialist to identify specific worksite accommodations strategies;
- When recommendations are made for assistive technology resources or services, exit interviews should specifically discuss use, maintenance/repair and replacement of AT equipment. Role of the employer and the individual in replacing equipment should be clarified.

Conclusion

The core elements of vocational assessment and evaluation have not changed appreciably since the early days of the field in the 1970's, however the practices and process of evaluation has changed. Vocational evaluation practice has been adversely affected by excessive use of group processing, heavy reliance on standardized assessment tools, and an isolation of vocational assessment staff from direct employer and community involvement. The influences of increased consumer empowerment, culture, assistive technology and individualization served as the impetus for the examination of the process of vocational evaluation. Renewed interest in use of community-based assessments and the infusion of new resources such as assistive technology to better serve consumers with the most severe disabilities are promoting fundamental change in vocational evaluation and assessment.

There are many advantages of including assistive technology as an integral part of the vocational evaluation and assessment process:

First, this insures that any technology-related needs or accommodations necessary in the evaluation can be addressed;

Second, occupational decisions made during the assessment can better take into account the possible role of assistive technology and need for worksite accommodation thus opening up additional options;

Thirdly, this helps to guarantee that assistive technology needs have been adequately addressed; and

Fourth, need for additional assistive technology services can be better documented in recommendations of the assessment.



References

- Corthell, D. & Griswold, P.P. (Eds.) (1987). *The use of vocational evaluation in VR*. 14th Institute on Rehabilitation Issues. Menomonie: University of Wisconsin-Stout, Research and Training Center.
- Crow, S.H. (1973). *Positions on the practice of vocational evaluation*. VEWAA Project Year One. Vocational Evaluation and Work Adjustment Association, Wash. D.C.
- CRTS (1994). *Rehabilitation technology services in vocational rehabilitation agencies: General report of findings*. Center for Rehabilitation Technology Services. Columbia, SC.
- Enders, A. (2002). *Technology and the employment of persons with disabilities*. Rural Institute on Disabilities, University of Montana, Preliminary Draft.
- Flynn, C.C. & Clark, M. C. (1995). *Rehabilitation technology assessment practices in vocational rehabilitation agencies*. Assistive Technology. Vol. 7.2 RESNA Press. 111-118.
- Kaiser, J. & Noll, A. (1997). *Intensive vocational/technology assessment*. In R. Fry (Ed.) *The Issues Papers. Eight National Forum on Issues in Vocational Assessment*. Menomonie, WI: University of Wisconsin-Stout, The Rehabilitation Resource.
- Langton, A. J., Smith, F., Lown, N.F., & Chatham, L. J. (1998) *Guide To Using Assistive Technology in Assessment and Vocational Evaluation*. West Columbia, SC: South Carolina Vocational Rehabilitation Department.
- Langton, A. & Lown, N. (1995). *Rehabilitation technology resources and services: How well are we using them in vocational evaluation*. In R. Fry (Ed.) *The Issues Papers. Seventh National Forum on Issues in Vocational Assessment*. Menomonie, WI: University of Wisconsin-Stout, The Rehabilitation Resource.
- Maki, D.R., McCracken, N., Pape, D.A. & Scofield, M.E. (1979). *A systems approach to vocational assessment*. *Journal of Rehabilitation*, 45, pp.48-51.
- Neff, W.S. (1970). *Vocational assessment-theory and model*, *Journal of Rehabilitation*, (36) 27-29.
- Nadolsky, J.M. (1966). *Vocational evaluation: An experimental trend in vocational assessment*.
- Radtke, J (Ed). (1998). *Achieving successful employment outcomes with the use of assistive technology*. 24th Institute on Rehabilitation Issues.

Menomonie: University of Wisconsin-Stout, Research and Training Center.

- Thomas, S., (1999). Vocational evaluation in the 21st century: Diversification and independence. *Journal of Rehabilitation* January, February, March, 10-15.

Note: *This material was written by Tony Langton, Steve Sligar and Jeff Annis as part of the 30th IRI document "A New Paradigm for Vocational Evaluation: Empowering the VR Consumer through Vocational Information". Permission is granted for use of this material as a reference only. This material should not be reproduced or distributed. The complete IRI publication is available from the RCEP 6 at the University of Arkansas (501) 623-7700 at www.rcep6.org.*