A model for employability development is introduced to improve employability assessment and planning programs in rehabilitation and educational settings. The major components of an employability assessment and planning program are vocational choice, job acquisition, and job retention. The model offers strategies for empowering the consumer and involving the consumer as a co-manager of his/her program. Assessment and planning strategies involve measuring vocational readiness, aptitudes, interests, vocationally relevant personality factors, work temperament, personal capacities, work values and needs, job seeking behavior, basic work habits and behavior, and on-the-job coping behavior. Organization and administration of an employability assessment and planning program require consideration of the statement of mission, organizational placement, personnel needed and their competencies, staff responsibilities, operational procedures, scheduling/unit capacity, length of assessment program, program activities, evaluation plan development, and reporting. (30 references) (JDD)
Employability
Assessment & Planning
In Rehabilitation & Educational Settings

Roy C. Farley • Neal D. Little • Brian Bolton • Joe Chunn

Arkansas Research & Training Center in Vocational Rehabilitation • University of Arkansas at Fayetteville • Arkansas Rehabilitation Service
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Preface

Employability assessment is an important process to the rehabilitation of persons with disabilities. In this monograph, we have introduced a model for employability development that can serve as a guide to develop a new employability assessment and planning program (EAPP) or provide information for upgrading and improving existing employability assessment and planning services.

There are many issues in the field of assessment and evaluation today and we cannot address all of them in this monograph. Instead we have chosen to present a general introduction of a model with suggestions of how this model may be developed and integrated in rehabilitation and educational settings.

The Arkansas Research and Training Center in Vocational Rehabilitation regularly conducts workshops and seminars on how to implement an EAPP in rehabilitation and educational settings. Opportunities are provided at these sessions to address specific issues. RTC faculty are also available to provide assistance to organizations who desire to implement this model.

In summary this monograph only presents a general overview of one model that might be used to develop and implement employability assessment and planning activities in rehabilitation and educational settings. We hope you find this monograph informative and useful as you develop and provide services that are designed to enhance the employability and employment outcomes of individuals with disabilities.
DEVELOPING AN EMPLOYABILITY ASSESSMENT AND PLANNING PROGRAM

In a recent publication entitled, Toward Independence, the National Council on the Handicapped (1986) outlined an ambitious agenda for the improvement of rehabilitation services for the 1990's. One of the Council's primary recommendations stressed the need for Congressional support for the development of "area model centers on employment for persons with disabilities" (p. 25). Citing the high unemployment rates of persons with severe disabilities, the Council proposed that these model centers stress such services as dissemination of state-of-the-art information on employment strategies, vocational evaluation, and placement. Recognizing the need to promote research and training activities in this area the National Institute on Disability and Rehabilitation Research identified two priorities in a Request for Proposals in the Area of Enhancing Employability of Individuals with Disabilities. One priority called for the development of research and training models that will enhance the capabilities of persons with disabilities in developing rehabilitation plans, selecting career goals, and matching personal abilities and expectations to available vocational opportunities. The other priority called for research and training that will improve the use of vocational evaluation and assessment. The major focus is to develop reliable and valid assessment measures that will optimize personal choice and the range of employment opportunities for people with disabilities.

This monograph describes employability assessment and planning strategies that can be used in responding to these priorities. These strategies can be used to establish an employability assessment and planning program either in a model center on employment or in existing rehabilitation and educational facilities or organizations.

Employability Assessment and Vocational Evaluation

What is meant by employability assessment, especially as it relates to vocational evaluation? The employability assessment and planning program presented in this monograph recognizes employability assessment as a major focus of the vocational evaluation process. It is consistent with the purpose of evaluation described by the Fourteenth Institute on Rehabilitation Issues (1987), i.e., "To Gather Employability Related Information about an Individual that will Assist/Empower that Individual in Making Decisions and Reaching Their Maximum Vocational Development." Vocational evaluation is defined in the VEWAA Glossary (1988) as a comprehensive process that systematically uses work, either real or simulated, as the focal point for assessment and vocational exploration. The purpose as stated above is to assist individuals in vocational development. The process incorporates medical, psychological, social, vocational, educational, cultural, and economic data to obtain the goals of evaluation.
Employability as defined in the VEWAA Glossary (1988) is a complex set of interrelated factors that determine whether a person can be placed on a job and whether he/she can keep the job once placed. The Glossary defines assessment as a general term for the process of measuring an individual's level of functioning in one or more areas (e.g., vocational, social, personal, medical, or intellectual). Employability assessment in this monograph expands the VEWAA definition somewhat and is defined as the comprehensive process of measuring an individual's level of functioning as it relates to a complex set of interrelated factors that determine whether a person can choose an appropriate vocational goal, find and obtain a suitable job, and keep and advance on the job once employed.

Employability assessment, is then, an integral part of and a major focus of the overall vocational evaluation process. A focus of this monograph is how one might develop an employability assessment and planning program that does the following: 1) identifies a complex set of interrelated factors which determine how successful a person is at choosing, getting, and keeping a job and 2) identifies the assessment and planning strategies to measure an individual's level of functioning in those areas.

**Employability Development: A Career Development Perspective**

The goal of employability assessment and planning is employment, which should be viewed as developmental (leading to a career) rather than as static (completed once an entry level job is secured). Acknowledged authorities in the career development field (e.g., Super, Holland, & Crites) identify various stages of the career development process. Frequently mentioned are the following stages: exploration, establishment, maintenance, and retirement. The first three of these stages are particularly relevant to the rehabilitation and education of persons with disabilities and are emphasized in many rehabilitation and educational settings. Therefore, the developmental model which provides the foundation for the development of an EAPP includes the stages of Vocational Choice, Job Acquisition, and Job Retention, sometimes referred to as the Choose-Get-Keep model. Figure 1 presents the model.

### Figure 1

<table>
<thead>
<tr>
<th>Career Development</th>
<th>Exploration</th>
<th>Establishment</th>
<th>Maintenance</th>
<th>Retirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rehabilitation Emphasis</td>
<td>Vocational Choice</td>
<td>Job Acquisition</td>
<td>Job Retention</td>
<td></td>
</tr>
<tr>
<td>Simplified Model</td>
<td>CHOOSE</td>
<td>GET</td>
<td>KEEP</td>
<td></td>
</tr>
</tbody>
</table>
**Major Task Demands**

As an individual moves through the employability development process, a number of major task demands must be accomplished to successfully choose, get, and keep a job. For example, in the vocational choice area, major task demands include: (1) selecting an **appropriate** and **suitable** occupational goal; and (2) planning to achieve that goal. Key words in the vocational selection process are suitable and appropriate. What constitutes a suitable and appropriate occupational goal? One definition is the establishment of a goal that is consistent with a person’s work values and needs, aptitudes, interests, personal capacities and abilities. The more consistent a vocational goal is with these individual characteristics the more suitable and appropriate it is for an individual.

In meeting the planning task demand, the emphasis is on a systematic step-by-step process in which the person with a disability is the developer and/or co-manager of the plan. The more knowledge the individual has about his/her personal attributes, the more appropriately and effectively the individual can participate in the planning process.

In the job acquisition phase, major task demands involve finding employment opportunities and acquiring employment. Individuals must be able to seek out and locate job opportunities, present self effectively in a variety of settings (e.g., on a resume, a job application form and in a job interview). They must also possess the skills necessary to function in a specific job (e.g., welding, bookkeeping, etc.). In the job retention phase, major task demands include adapting to the workplace and workworld and possessing the skills necessary to retain employment over time.

Figure 2 summarizes the major task demands in the Choose-Get-Keep Model.

**Figure 2**

**Major Task Demands**

<table>
<thead>
<tr>
<th>CHOOSE</th>
<th>GET</th>
<th>KEEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select an appropriate &amp; suitable occupational goal &amp; Plan to achieve that goal</td>
<td>Find employment opportunities &amp; Acquire a job</td>
<td>Adapt to the workplace &amp; Retain employment</td>
</tr>
</tbody>
</table>
Factors Influencing the Completion of Major Task Demands

Many factors influence how successful a person will be at completing the major task demands required of one to move through the employability development process. Two broad categories of factors can be labeled environmental and person factors. Environmental factors include such external variables as one's family, finances, the economy, labor market, employer attitudes, benefits, etc. Person factors include work-related competencies such as those listed in the appendix and discussed in the next section.

The major focus of the vocational evaluation and employability assessment process has historically been on person variables. Therefore, the EAPP described here will also focus on person variables. However, we want to emphasize that environmental factors must not be ignored and need to be considered in an overall employability development program. So with the emphasis on assessment of the person’s employability, let us proceed with discussion of work related competencies.

Work Related Competencies and Functional Vocational Capabilities (FVC's)

In order to successfully complete the major task demands required to choose, get, and keep a job a number of work related competencies or FVC’s are needed (brief descriptions of FVC’s are provided in Roessler & Bolton [1983]). See appendix for a listing of these FVC’s. The following figure outlines examples of the knowledge and skills that enhance success in choosing, getting, and keeping a job. Figure 3 portrays those variables that represent critical attributes that the person must possess if he/she is to be successful in completing the major task demands required to move through the employability development process and succeed in work.

Figure 3
Examples of Work Related Competencies Needed to Choose, Get, and Keep a Job

<table>
<thead>
<tr>
<th>CHOOSE</th>
<th>GET</th>
<th>KEEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Knowledge</td>
<td>Work Orientation/Motivation</td>
<td>Basic Work Habits &amp; Behaviors</td>
</tr>
<tr>
<td>Work-Knowledge</td>
<td>Job Finding Skills</td>
<td>Personal &amp; Environmental Coping Skills</td>
</tr>
<tr>
<td>Vocational Decision-Making Skills</td>
<td>Self-Presentation (i.e., resumes, applications, interviews)</td>
<td>Interpersonal Relationship Skills</td>
</tr>
<tr>
<td>Program Planning Skills</td>
<td>Position Performance Skills</td>
<td>Work Attitudes &amp; Value</td>
</tr>
</tbody>
</table>
The individual’s level of functioning in each of these areas is the target for employability assessment and planning. The following information describes how an employability assessment and planning program can be designed and developed around the employability development model.

Major Components of an Employability Assessment and Planning Program

An EAPP is designed to provide assessment and planning programming that attends to each of the major phases of the employability development process. Therefore, an EAPP has three major components focusing on vocational choice (choose), job acquisition (get), and job retention (keep). Figure 4 outlines the major components and their objectives.

**Figure 4**

Major Components of an Employability Assessment and Planning Program

**COMPONENT A**

**Vocational Choice**

Provide assessment programming designed to enable an individual to identify strengths and limitations related to vocational choice and plan services to facilitate the selection of an appropriate vocational goal.

**COMPONENT B**

**Job Acquisition**

Provide assessment programming designed to enable an individual to identify strengths and limitations related to job acquisition and plan services to facilitate the acquisition of employment.

**COMPONENT C**

**Job Retention**

Provide assessment programming designed to enable an individual to identify strengths and limitations related to maintaining employment and plan services to facilitate job retention.
Component A: Vocational Choice

The focus of Component A is on the vocational choice process. The objective of activities performed in Component A is to provide assessment programming designed to enable an individual to identify strengths and limitations and other personal characteristics related to vocational choice and plan services to facilitate the selection of an appropriate and suitable occupational goal. Programming is designed to help the individual to successfully complete the major task demands that fall in the vocational choice area: choosing an appropriate goal and planning for that goal. Examples of personal attributes that need to be assessed are (1) the degree of self-knowledge (i.e., knowledge of vocational interests, aptitudes, work values, abilities, strengths and limitations, etc.), (2) work knowledge (i.e., knowledge about different jobs, duties required to perform the jobs, training required, availability of jobs, etc.), (3) work related personality characteristics, (4) interests, (5) aptitudes and work abilities, (6) personal capabilities, and (7) work values and needs. In addition to assessing these personal attributes individuals need to possess or develop (1) self and work knowledge, (2) vocational decision-making skills so that he/she can relate self-knowledge to work knowledge and choose a vocation consistent with self-characteristics and work opportunities, and (3) program planning skills so that he/she can plan a step-by-step process to achieve a vocational goal.

Component B: Job Acquisition

The focus of Component B is on the acquisition of work. The objective of activities performed in Component B is to provide assessment programming designed to enable individuals to identify strengths and limitations and other personal characteristics related to the acquisition of a job. Programming is designed to help persons to successfully assess their capacity to perform the major task demands that fall in the job acquisition area, e.g., finding employment opportunities and acquiring work. Examples of personal attributes that need to be assessed are work motivation, job finding skills (i.e., ability to seek out and locate job opportunities), ability to effectively present self in job seeking situations (i.e., resumes, job applications, job interviews, etc.), and minimal job performance ability. In addition to assessing these personal attributes, programming should be designed to plan services to facilitate the acquisition of employment. For example, recommendations flowing from the assessment data should be made to plan services to enhance job seeking skills, self-presentation skills, and minimal job performance skills.

Component C: Job Retention

The focus of Component C is on the individual's capacity to retain employment over time. The objective of activities performed in Component C is to provide assessment programming designed to enable persons to identify strengths and limitations and other personal characteristics related to this process of maintaining employment over time. Programming is designed to help individuals successfully assess their capacity to
perform the major task demands that fall in the job retention area such as adapting to the worksite and workworld and retaining work over an extended period of time. Examples of personal attributes that need to be assessed are (1) basic work habits and behaviors such as dress, grooming, punctuality, conformity to rules, ability to stay on task, etc., (2) personal and environment coping skills such as ability to cope with everyday job demands, problems-solving ability, etc., (3) interpersonal relationship skills (e.g., ability to interact effectively with co-workers and supervisors), and (4) work attitudes and values (e.g., work gratification and work needs). In addition to assessing these personal attributes, programming designed to plan services that will facilitate the retention of employment should be provided. For example, recommendations based on assessment data should be made so that planning can be done to provide services that will facilitate the development of effective basic work habits and behaviors, personal and environmental coping skills, interpersonal relationship skills and proper work attitudes and values.

Examples of Assessment and Planning Strategies for an EAPP

Although an extensive effort has been focused on the construction of assessment instruments to evaluate employment potential (see Bolton 1985a, 1987a, 1988; Bolton & Cook, 1980) resulting in several dozen excellent measures, relatively little progress has been made in the development of planning models to enable practitioners to use the results of assessment data in service planning. The EAPP concept presented here involves a comprehensive approach to the integration of employability assessment and planning functions. Emphasizing a career development and empowerment approach in working with people with severe disabilities, samples of assessment and planning tools are briefly described which can be useful in developing and implementing an EAPP. They are categorized and presented in a manner consistent with the employability development model and EAPP components. Strategies for processing assessment information and involving the consumer in the planning and decision-making process with a focus on empowerment are also presented. It is acknowledged that the selection of specific instruments and strategies may be based on the personal choice of individuals in a particular facility or organization and the following discussion is not a complete analysis of available tools. However, the following can serve to meet the objectives of an EAPP and we only presented an example of many excellent tools available.

Vocational Choice

Individuals completing the vocational choice phase of the EAPP will be knowledgeable of those personal characteristics that will enable them to meet the task demands of choosing an appropriate and suitable occupational goal as well as how to utilize that personal knowledge to plan to achieve their goal.
<table>
<thead>
<tr>
<th>ATTRIBUTES</th>
<th>ASSESSMENT STRATEGY</th>
<th>PLANNING TOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocational Readiness (Vocational Maturity)</td>
<td>Employability Maturity Interview (EMI)</td>
<td>Vocational Readiness Report (VRR)</td>
</tr>
<tr>
<td><strong>Aptitudes</strong></td>
<td>General Aptitude Test Battery (GATB)</td>
<td>Occupational Report - Aptitude Section</td>
</tr>
<tr>
<td></td>
<td>MicroTOWER (MT)</td>
<td>MT &amp; WS Reports</td>
</tr>
<tr>
<td></td>
<td>Work Sampling (WS)</td>
<td></td>
</tr>
<tr>
<td><strong>Interests</strong></td>
<td>United States Employment Service Interest Inventory (USESII)</td>
<td>Occupational Report - Interest Section</td>
</tr>
<tr>
<td><strong>Vocationally Relevant Personality Factors</strong></td>
<td>16 Personality Factors Questionnaire</td>
<td>Vocational Personality Report (VPR)</td>
</tr>
<tr>
<td><strong>Work Temperament</strong></td>
<td>Work Temperament Inventory (WTI)</td>
<td>Work Temperament Profile (WTP)</td>
</tr>
<tr>
<td><strong>Strengths &amp; Limitations</strong></td>
<td>Personal Capacities Questionnaire (PCQ)</td>
<td>PCQ Results</td>
</tr>
<tr>
<td><strong>Work Values &amp; Needs</strong></td>
<td>Personal Needs Assessment Questionnaire (PNAQ)</td>
<td>PNAQ Results</td>
</tr>
</tbody>
</table>

Figure 5 lists some of the personal attributes that are to be assessed with examples of assessment and planning tools and strategies that might be used.
Measuring Vocational Readiness - One of the most important tasks facing rehabilitation clients is the selection of an appropriate vocational goal. If this decision is to result in worker satisfaction and satisfactoriness, it must be based on an accurate understanding of the relationship of abilities, interests, and values to demands of the work role. Although the vocational choice process is an extremely important phase of rehabilitation, little attention has been devoted to developing a measure to determine client readiness for such planning.

Previous research underscores the need for a readiness instrument, but it does not specify the format for such a measure. To meet this need, the Employability Maturity Interview (EMI) (Roessler & Bolto, 1987) was developed.

The EMI is designed to assess readiness for vocational planning. Readiness is defined as the level of self knowledge (interests, aptitudes, abilities, strengths, limitations, work values, needs, etc.) and knowledge of the workworld or amount of occupational information (the nature of work involved in specific jobs, duties and requirements, education and training needed, where jobs are to be found, salary levels, outlook for the future, etc.) the individual possesses. The assumption is that those who know more about their interests, abilities, aptitudes, etc., as well as information about various occupations are more ready for vocational planning and will be more successful at planning. Those with less self-knowledge and occupational information will be less successful. The implication for vocational planning is that vocationally mature people are more ready to participate in joint planning and serve as co-managers in planning their vocational programs. They are partners in the development of their vocational plans. The more involved people are in their own planning, the more likely they are to carry out those plans.

Some of the features of the EMI are listed below.

- The EMI is a 10-item structured interview developed to assess readiness for the vocational rehabilitation planning process.

- Agreement between EMI raters is high; average interrater correlations exceeded .90. Split-half reliability estimates for the EMI total score approached .80.

- The construct validity of the EMI was confirmed by predicted relationships between EMI scores and intelligence, achievement, interest in work, and an independent measure of employment potential.

- The EMI has promising utility as a brief screening instrument to identify those VR clients needing additional vocational exploration and employability services.
• The EMI is a 6-page self-contained instrument which consists of the following: structured interview questions and response blanks, instructions for administering and scoring the EMI, EMI norms, and scoring criteria.

The Vocational Readiness Report (VRR) (Bolton, 1987) reports the results of the EMI. The report is divided into three sections and presents an overall score for self-knowledge, work knowledge, and overall vocational readiness. This planning tool can be used to identify the level of self-knowledge and work knowledge that the individual possesses. It not only serves as a tool to prescribe an intervention program such as the Occupational Choice Strategy (to be discussed later) but also can be used as pre-post measure in the comparison of an individual's level of vocational readiness at the beginning of the Employability Assessment and Planning Program and at exit from the Program, thus measuring change in the individual's level of vocational maturity.

Measuring Aptitudes - There are several excellent tools for measuring aptitudes. One instrument is the General Aptitude Test Battery (GATB) (U.S. Department of Labor, 1982). The GATB and its non-reading counterpart, the NATB (U.S. Department of Labor, 1982), are multi-part batteries which include paper-and-pencil as well as apparatus board tests. It yields scores for nine aptitudes: general learning ability, verbal aptitude, numerical aptitude, spatial aptitude, form perception, clerical perception, motor coordination, finger dexterity, and manual dexterity. The complete test takes approximately 2 1/2 hours.

Another strategy for assessing aptitudes is the Micro-TOWER (Backman, 1977). The Micro-TOWER contains 13 work samples which measure eight specific attitudes, plus General Learning Ability. The 13 work samples are organized or clustered into five major groups: motor, spatial, clerical perception, numerical and verbal and provide an overall aptitude profile.

The Micro-TOWER is designed to be administered to small groups, typically 5 to 10 persons. Administration and scoring procedures are standardized. An audio-cassette tape is used for each work sample and is coordinated with evaluator's demonstrations. Administration time ranges from 15-20 hours, depending on time allocated to group discussion.

Another strategy used for aptitude assessment is Work Sampling (Job Sampling). Work Sampling refers to a well-defined work activity involving tasks, materials, and tools that are identical or similar to those in an actual job or cluster of jobs. This procedure is not only useful for measuring a person's aptitudes but can also serve as a measure for vocational interests and work characteristics (VEWAA Glossary, 1988; Roessler & Bolton, 1983).

Measuring Interests - As with aptitudes there are many excellent measures of interests. One strategy for assessing interests is the United States Employment Service Interest Inventory (USES-II) (Bolton, 1985b). The USES-II is a self-report
instrument that measures the respondent's relative strength of interests in 12 broad categories of occupational activity (artistic, scientific, plants and animals, protective, mechanical, industrial, business detail, selling, accommodation, humanitarian, leading-influencing, and physical performing). It consists of 162 items of three types: (1) job activity statement, (2) occupational titles, and (3) life experiences. The examinee responds to each item using a three-choice format: Like(L), Dislike(D) and Not Sure(?). Completion time is about 15 to 20 minutes.

The **Occupational Report** (OR) (Bolton, 1987b) is a planning tool that translates a person's aptitudes and interests into a list of feasible occupational goals. It is used to guide persons toward the selection of an occupation goal that is consistent with their aptitudes and interests.

The conceptual framework upon which the OR is based is the U.S. Department of Labor's (DOL) "Counselee Assessment/Occupational Exploration System." The key to the DOL's System is the **Guide for Occupational Exploration** (1979), which organizes all 12,000 occupations in the U.S. labor force according to their predominant interests and essential aptitudes. Thus, standardized measures of occupational interests and vocational aptitudes are required to accurately identify suitable occupations.

Some of the features of the OR are listed below.

- The OR is a computer-generated report that provides occupational information essential in planning vocational rehabilitation services.

- Input data required by the OR include: (a) raw scores from the USES Interest Inventory, and (b) raw scores from either the General Aptitude Test Battery (GATB) or the Non-Reading Aptitude Test Battery (NATB).

- The OR generates: (a) an occupational interest profile with 12 interest areas ranked from high to low, (b) an occupational aptitude profile with 9 aptitudes ranked from high to low, (c) a list of work groups for which the client has suitable (high level) aptitudes for success, and (d) a list of work groups for which the client has minimal (medium level) aptitudes for success.

- The OR may generate a list of supplementary work subgroup for which individuals who function below minimal aptitude levels possess employment potential.

- Written in BASIC for MS DOS machines, the OR will run on most IBM compatible machines.

*Measuring Vocationally Relevant Personality Factors -* Many excellent measures of personality are currently available. One measure for assessing personality is the
Manual for Form E on the Sixteen Personality Factor Questionnaire
(16PF-E) (Institute for Personality and Ability Testing, 1985).

The 16PF-E is a special purpose personality inventory that was designed for use with persons with limited cultural and educational backgrounds. It consists of 128 items which have been shown to measure the major dimensions of the normal personality sphere. A forced choice format is used—all 128 items are phrased as simple questions consisting of two options separated by the conjunction "or."

A planning tool for looking at vocationally relevant personality factors is the Vocational Personality Report (VPR) (Bolton, 1987c). Some of the VPR features are listed below.

- The VPR is a computer-generated report that provides information useful in vocational rehabilitation service planning.

- Input data required by the VPR are 16 raw scores from the Sixteen Personality Factor Questionnaire-Form E.

- The VPR generates scores on 16 vocationally-relevant factors: five normal personality scales, two psychopathology scales, three vocational interest scales, and six occupational scales.

- All 16 scores are reported on the sten (standard ten) scale based on a broadly representative normative sample of almost 1,000 vocational rehabilitation clients.

- Written in BASIC for MS DOS machines, the VPR will run on most IBM compatible machines.

Measuring Work Temperament - The largest body of systematic information about jobs in the U.S. economy has been assembled during the past 40 years by the DOL and has been made available to vocational counselors through various DOL publications, the best known being the Dictionary of Occupational Titles (1977), Occupational Outlook Handbook (1980), and Guide for Occupational Exploration (1979). Standardized job data developed by the DOL include requisite abilities, essential formal training, strength requirements, environmental conditions, interests, and temperamental factors.

1Copies of the 16PF-E Booklets, answer sheets, scoring keys and manual may be obtained from the Institute for Personality and Ability Testing, Champaign, IL.
While instruments have been constructed to measure some job features (e.g., abilities and interests), most DOL job characteristics are simply judged or rated by the vocational counselor. Of special concern are the ten work temperaments that were described originally in the DOL's *Handbook for Analyzing Jobs* (1972), but are still not quantifiable by standard psychometric techniques. Because of the established relevance of temperamental factors in the vocational success of persons with disabilities, it is a reasonable hypothesis that improved rehabilitation planning may result from the use of a standardized inventory designed to profile the client's work temperaments.

A recently published two-volume compendium of information about jobs, the *Dictionary of Worker Traits* (Kerns & Neeley, 1987) presents the salient work temperaments for all occupations in the U.S. labor force in a readily accessible format. This extensive data will be incorporated into a microcomputer-generated report of the results of the Work Temperament Inventory.

**Measuring Personal Capacities (Strengths and Limitations)** - One strategy for assessing personal capacities is the Personal Capacities Questionnaire² (PCQ) (Crewe & Athelstan, 1981). The PCQ is a self-report device used to assess individuals' perception of their strengths and limitations in the following major areas: cognitive, vision, hearing, motor functioning, physical condition, vocational qualifications, and adaptive behavior. The questionnaire allows individuals to assess their strengths and limitations in those areas from definite strength to various levels of limitation.

**Measuring Work Values and Needs** - The Personal Needs Assessment Questionnaire (Schriner & Roessler, 1988) is a self-report device that allows individuals to rank order various work needs and values that are useful in helping them to select an occupation that would be consistent with their work values and needs.

**Job Acquisition**

Individuals completing the job acquisition phase of the EAPP will be knowledgeable about those personal characteristics and behaviors and the behavioral strengths and limitations associated with meeting the task demands of finding employment opportunities and acquiring a job. Figure 6 lists some of the personal skills and behaviors that are to be assessed with suggested assessment and planning tools.

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²Copies of the PCQ may be obtained from Stout Vocational Rehabilitation Institute, University of Wisconsin-Stout, Menomonie, WI.
Job Acquisition Assessment and Planning

<table>
<thead>
<tr>
<th>BEHAVIOR</th>
<th>ASSESSMENT STRATEGY</th>
<th>PLANNING TOOL</th>
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<tbody>
<tr>
<td>Job Application Behavior</td>
<td>Job Application Assessment</td>
<td>Job Seeking Skills Assessment Report Part I</td>
</tr>
<tr>
<td>Job Interview Behavior</td>
<td>Job Interview Assessment</td>
<td>Job Seeking Skills Assessment Report Part II</td>
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</table>

Measuring Job Seeking Behavior - No comprehensive assessment of employability skills is complete without an evaluation of job seeking skills. Virtually all persons seeking jobs must contend with completing an employment application form and with presenting themselves for a job interview. Since employers stress independent completion of the job application and job interview, these two tasks are critical, and often the most problematic, for job seekers with disabilities.

Assessment of client job seeking skills has typically received little systematic attention during the evaluation process, even though training in this area is recognized as an important vocational rehabilitation service. The Job Seeking Skills Assessment (JSSA) (Hinman, Means, Parkerson, & Odendahl, 1987) provides rehabilitation practitioners with a standard procedure for assessing clients' abilities to complete a job application form and participate in the employment interview.

Some of the features of the JSSA are listed below.

- The JSSA is a standardized procedure for evaluating rehabilitation clients' job application and job interview skills.

- The job application assessment uses a standard employment application form to evaluate five features: neatness/legibility, spelling, completeness, whether answers are printed, and whether directions are followed (accuracy).

- The job application assessment is objectively scored using detailed guidelines for judging the adequacy of the evaluator's skills.
• The job interview assessment follows a standard sequence of questions that cover the range of topics comprising the typical employment interview.

• The job interview assessment is scored on 19 content components (e.g., introduces self, describes job skills, and asks relevant questions) and 14 style components (e.g., maintains eye contact, speaks clearly, dresses appropriately, and displays enthusiasm).

Job Retention

Making an appropriate vocational choice, acquiring the requisite technical skills and mastering job seeking demands are major accomplishments. But these achievements also lay the groundwork for yet another challenge, that of maintaining employment.

Individuals completing the job retention assessment phase of the EAPP will be knowledgeable about those personal characteristics and behaviors and behavioral strengths and limitations associated with meeting the major task demands of adapting to the worksite/workworld and maintaining employment over time. Figure 7 lists some of the personal attributes, skills, and behaviors that are to be assessed with suggested assessment and planning tools.

Measuring Basic Work Habits and Behaviors - One strategy for measuring basic work habits and work-related behaviors is the Work Personality Profile (WPP) (Bolton & Roessler, 1986). The WPP is a work behavior rating instrument for use in situational assessment in work centers, comprehensive facilities, and employment settings.

Figure 7

Job Retention Assessment and Planning

<table>
<thead>
<tr>
<th>BEHAVIOR**</th>
<th>ASSESSMENT STRATEGY</th>
<th>PLANNING TOOL</th>
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</thead>
<tbody>
<tr>
<td>Basic Work Habits and Behaviors</td>
<td>Work Personality Profile (WPP)</td>
<td>WPP Report</td>
</tr>
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<td></td>
<td>Behavior Observation during MicroTOWER and Job Sampling</td>
<td>Behavioral Reports</td>
</tr>
<tr>
<td>On-the-Job Coping Behavior</td>
<td>Work Performance Assessment (WPA)</td>
<td>WPA Report</td>
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</table>
Particularly appropriate for evaluating general employability, situational assessment is widely used in workshop and facility settings. Specifically, situational assessments yield a realistic sample of the individual’s responses to a wide variety of stimuli relevant to task performance and interpersonal relationship demands on the job.

Persons with disabilities must either possess job maintenance skills upon entering services or develop them as a result of work adjustment interventions. The major reason for developing the WPP was to make available for research and service applications a comprehensive observational instrument for assessing critical work role requirements.

Some of the features of the WPP are listed below.

- The WPP is a work behavior rating instrument for use in situational assessment in work centers, comprehensive facilities, and employment settings.

- The WPP assesses those capabilities that satisfy fundamental work role requirements, i.e., work attitudes, values, habits, and behaviors that are essential to achievement and maintenance of suitable employment.

- The WPP possesses the advantages of comprehensive coverage, behavioral orientation, diagnostic function, and direct rating format.

- The WPP consists of 58 items that are completed by vocational evaluators using a standard 4-point scale. It requires 5-10 minutes to complete following an observation period of one week.

- WPP results are reported on a profile form that includes 11 primary work behavior categories and 5 second-order factor scales. Both raw scores and normative percentile scores are reported.

- The WPP instrument, scoring key, profile report form, normative table, and directions for administration and scoring as well as reliability and validity evidence, are contained in the WPP manual.

- The WPP is also available on a floppy disk that generates the score profile directly from ratings on the 58 items. Written in BASIC for MS DOS machines, the WPP will run on most IBM compatible machines.

**Measuring On-the-Job Coping Behavior** - One strategy for measuring on-the-job coping behavior is the *Work Performance Assessment* (WPA) (Roessler, Hinman, & Lewis, 1987). The WPA is a work simulation procedure designed to assess an individual’s response to typical on-the-job supervisory behaviors. These supervisory behaviors include 19 different stimulus demands and are presented in 3 parallel forms of the WPA, each of which involves sorting food service items. Trainee responses
the 19 demands are evaluated by using a behavior rating form with pre-established criteria for each demand. Special features of the WPA are listed below.

- The WPA is an efficient alternative to multi-week situational assessment methods.
- Using three work samples (sorting food service items), the WPA measures trainee responses to 19 common work demands in four categories: responding to supervision, completing job tasks, cooperating with other workers, and socializing on the job.
- Requiring one hour to administer, the 19 WPA demands are presented by a supervisor (evaluator) to two trainees.
- The WPA may be scored by completing either (a) an 83 item behavior rating form or (b) the Work Personality Profile.
- When the WPA rating form is used, a total score is generated by calculating the proportion of behavioral criteria demonstrated in responding to the 19 work demands.
- Interrater reliability of the WPA rating form is acceptable, although multiple ratings/administrations are recommended for the most reliable performance estimate.
- Research indicates the presence of administrator effects on WPA scores which underscores the need for careful administrator training.

Strategies for Involving and Empowering the Consumer

Helping people toward employment is the major purpose of vocational evaluation and an employability assessment and planning program. Empowerment of the person is an integral part of helping (Rappaport, 1985). Hence, commitment to empowerment means that professional helpers in an employability assessment and planning program will encourage service recipients to set their own goals and develop their own action plans. The consumer will be placed at the center of the evaluation/assessment process. The concepts of co-management and partnership will be operationalized.

Two strategies for involving and empowering the consumer are discussed here for inclusion into an employability assessment and planning program. They are the **Know Thyself intervention** (Farley, Parkerson, Farley, & Martin, in press) and the **Occupational Choice Strategy (OCS)** (Schriner & Roessler, 1988).
**Know Thyself Intervention (KTI)**

Vash (1981) originally recommended a strategy for involving rehabilitation clients in the interpretive process called a Know Thyself manual, a notebook that includes all test protocols, as well as summaries of interpretations and recommendations. Vash believes that providing clients in rehabilitation facilities with Know Thyself manuals is especially appropriate. She proposes that each client be given copies of the results of all tests and inventories as they are completed, and that clients assume responsibility for maintaining their personal files of evaluation results.

The KTI proposed for the EAPP consists of a notebook with three sections consistent with the employability development model—vocational choice, job acquisition, and job retention. Each section guides the individual through a series of activities that identifies and briefly describes each assessment procedure that will be conducted. Following assessment, activities are conducted that share the results, including all summaries, and interpretations, with the consumer. Finally, the consumer is guided through activities that encourage him/her to personalize the information and utilize it in the planning process to set goals and develop action plans.

**Occupational Choice Strategy (OCS)**

The OCS intervention (Schriner & Roessler, 1988) is a small group vocational exploration strategy that continues the emphasis on the promotion of consumer self-direction and independence. A series of individual and group activities are presented that fall into the following major modules:

- **Understanding Myself** - This module enhances consumer empowerment by facilitating self-awareness. Activities are presented that allow the participant to explore various job options and relate them to personal characteristics such as work values and needs, interests, aptitudes, and personal strengths and limitations.

- **Knowing the World of Work** - This module is designed to increase participants' work knowledge, and various activities are presented that allow them to gather occupational information and relate it to their vocational goals.

- **Making a Vocational Choice and Plan** - This module engages participants in a decision-making process that culminates in the selection of a vocational goal and plan to achieve the goal.

The OCS intervention enhances empowerment by increasing the consumer's self-knowledge, work knowledge, and decision-making ability. It involves consumers in the assessment process by allowing them to utilize assessment data that have been gathered during the vocational choice stage (i.e., interest, aptitudes, capacities, etc.) to set their own goals and develop their own action plan.
Organization and Administration of an Employability Assessment and Planning Program

Statement of Mission

An initial step in the planning and prospective implementation of an EAPP should be the development of a mission statement clearly defining the scope and direction of evaluative services at the respective facility. The formulation of a specific statement of the mission of the program is essential to the effective communication and understanding of its role and purpose and is necessary to provide a consistent reference point for the management and operation of the program. The mission statement should contain information to establish the function and orientation of the program, and provide a common, agreed on, reference point to the unit staff and utilizers of its services.

If, because of the particular role of the host facility, certain limitations and restrictions are imposed (e.g., certain types of disabilities cannot be appropriately accommodated), these conditions or restraints should be clearly stated in information describing the purpose and objectives of the program. Extreme care should be exercised to assure that the mission of the EAPP properly reflects, is supportive of and consistent with, the mission of the host facility and parent agency or organization.

Organizational Placement and Administration

The EAPP, if housed in a larger organizational unit or facility, should be placed within the existing vocational evaluation unit. If no vocational evaluation unit exists, the EAPP should be placed on the same organizational level as other major service units, e.g. department.

Personnel

Staff Required - The mission, structure, and orientation of the host facility will, to some extent, determine the number and types of personnel who staff the EAPP. Minimum staff positions needed to administer and conduct the assessment activities constituting the EAPP should, however, include the following:

1. Supervisor
2. Coordinator/Counselor
3. Evaluator
4. Psychologist
5. Evaluator/Psychometrist Aide
6. Secretary/Clerk-Typist
The number of staff in each position, with the exception of Supervisor, will depend on the number of people to be served. The number of Coordinator/Counselor and Evaluator positions, for example, should be based on no more than 1 to 10 ratio and staffed accordingly.

**Staff Competencies** - EAPP personnel should be selected on the basis of their demonstrated competencies and skills in the area of rehabilitation client assessment. The program head or Supervisor, for example, should have demonstrated effective management and supervisor skills, in addition to possessing a superior knowledge of the evaluation process, relevant tools and techniques, and their appropriate application.

The Coordinator should possess excellent counseling, case management, planning, and reporting skills and have demonstrated a capacity to function as a team leader. The assigned Evaluators should, preferably, be certified as Vocational Evaluators by the Vocational Evaluation and Work Adjustment Association and have at least two years experience in vocational evaluation in a rehabilitation setting.

**Staff Responsibilities**

**Supervisor** - The Supervisor (Program Director) is responsible for the administration, direction, and management of the EAPP. He/she represents the staff to the designated superordinate and is responsible for the total operation of the organizational unit. The Supervisor plans, implements, and monitors operational procedures to assure the efficient, effective management of the unit in support of its established mission.

**Coordinator/Counselor** - The Coordinator/Counselor(s) is responsible for the planning, direction, and coordination of individual programs of evaluation. His/her direction and guidance of an individualized program of evaluation services requires a close, facilitative relationship with individual clients and EAPP staff members. Operationally, the Coordinator functions as a non-authoritative team leader in coordinating, supporting, and facilitating the work of individual staff members.

The Coordinator convenes and chairs planning, progress, and summary conferences. The Coordinator also represents the unit to external referral sources and is responsible for the coordination of the preparation of the summary evaluation report and is a principal contributor to the content of the report. The Coordinator is also responsible for arranging for specialty examinations (e.g., neuropsychological) external to the EAPP and assuring that the results and their implications are made available to all staff.

**Evaluator** - The primary function of the Evaluator(s) is the selection and administration of a variety of assessment activities and instruments. The selection of instruments is generally determined through a cooperative relationship and interactive planning with the individual recipient of services. Depending on the population and
workload, the Evaluator may administer a variety of the previously prescribed assessment activities, or may specialize and confine his/her work with an individual to a particular area of assessment, e.g., job-seeking skills.

In addition to the cooperative selection, and administration/observation of assessment activities, the Evaluator participates in the evaluation planning process and is a vital member of the team in participating in progress and summary evaluation conferences. He/she has significant reporting responsibility in synthesizing, analyzing, and interpreting the results of cooperatively accomplished assessment activities and contributing to the preparation of a summary, comprehensive report.

Operational Procedures

Specific operational procedures for the EAPP must be consistent with and supportive of the structure and orientation of the host facility, organization, or agency; however, certain operational procedures are considered fundamental to the efficient, effective function of the program:

Referral Process - The EAPP should utilize a formal, systematic process for the review and scheduling, or other disposition, of persons referred for service. The review and scheduling process may range from a review of the request for services by a single staff member, e.g., the Director or Coordinator/Counselor, to a review by a formal review/admissions committee.

The EAPP should establish and communicate guidelines for referral, (e.g., specification of forms and materials requested) and keep referral sources informed of the status of referrals, level of enrollment, and delays in scheduling. To expedite referral and assure the availability of relevant information, an enrollment/admission request form should be designed and utilized as the formal request for services. A critical component of the enrollment/admission request form should require specific information concerning the reason for the request for EAPP services and the posing of specific questions to be addressed during the evaluation process. This information provided by the referral source is essential in planning appropriate and relevant evaluative services and in providing a proper orientation or direction to the subsequent evaluation program. A number of reference materials concerning referral/request forms are available (Fourteenth Institute on Rehabilitation Issues, 1987) and should be consulted prior to the development of specific forms.

Scheduling/Unit Capacity

A clerical staff member should be assigned as Admissions/Enrollment and prepare correspondence to the referral source concerning action relative to the request for enrollment, the scheduled date of enrollment, etc. The admissions/enrollment secretary should also maintain the master schedule.
The number served by the EAPP will depend on the staff resources assigned and it is important that a maximum capacity be established and adhered to assure quality services, and thoroughness of the evaluative process.

A specified number can be enrolled each week, or greater numbers can be grouped and scheduled each month. There are advantages and disadvantages to either admission schedule, but in most cases, a grouping will prove to be most advantageous in regard to the economical use of personnel and the quality of services provided.

**Length of Assessment Program**

Generally, no rigid time frames should be established for the conduct and accomplishment of the assessment of individuals. To plan and complete the prescribed EAPP activities described in this monograph a period of 10-15 work days will usually be necessary. In individual cases, where the needed evaluative information would be confined to the answering of specific questions (e.g., What are this individual’s job seeking skills, strengths and deficiencies?) a much shorter period of time will be necessary. It would be expected that the majority of persons referred would be in need of a more comprehensive program of assessment activities and programming should be based on individual needs, not arbitrary establishment of pre-determined time frames.

Flexibility in scheduling should be established to vary levels of new enrollments at given points in time to allow for or offset the accumulative number of individuals needing assessment services beyond the usual 10-15 day period.

**Program Activities**

As described earlier, the EAPP assessment activities are designed and structured to provide information and data concerning an individual’s strengths and limitations relative to choosing, getting, and keeping a job.

**Evaluation Plan Development**

While the structure and sequencing of the EAPP assessment activities suggests and is supportive of a standardized approach to rehabilitation evaluation, the individualization and person centeredness of the evaluation process should not be compromised to adhere to the proposed structure. An individual plan of evaluation should be developed for each person and should be based on his/her individual needs for additional information relative to employability strengths and limitations, knowledge of self in relation to work, and consideration of individual circumstances and their relation to his/her employment needs.
The plan should be cooperatively developed with the individual through interviews, review and analysis of self-reported and documented information relative to work experience, vocational interests, and preliminary self-assessment of employability strengths and limitations.

The EAPP Coordinator should have primary responsibility for the plan development, which should be accomplished soon after entrance into the EAPP, and prior to the initiation of assessment activities. The plan, as a minimum, should specify assessment activities to be accomplished, the staff member or resource responsible for their accomplishment and the targeted date of completion. To facilitate communication and coordination, the plan should be a formal document and be a part of the standard recording and operating procedures employed by the unit.

Reporting

Many of the individual assessment activities described produce computer-generated reports, profiles of results, etc., but they should not be considered, individually or collectively, to constitute an adequate and appropriate report to document the activities, outcomes, and implications of the evaluative services provided by the EAPP.

Guidelines for the content and formatting of EAPP reports should be developed and implemented and should be comprehensive in orientation. A variety of materials concerning the preparation of reports are available (Thomas, 1986; Coffey, 1977; Esser, 1974) for consultation in the preparation of a reporting structure or format. The content of the EAPP report, while including results of activities, should highlight interpretation of the integrated findings of all evaluative activities, emphasize their implications in relation to the employability development needs of the particular person, and provide relevant recommendations.

Although the Coordinator will have primary responsibility for the EAPP report, it should include the contributions of all respective team members who participated in the evaluative process with a particular individual.

Summary

Vocational Choice (Choose), Job Acquisition (Get), and Job Retention (Keep) represent three major phases of the employability development process. Major task demands face people with disabilities as they move through these phases. Examples include choosing an appropriate and suitable vocational goal, planning to achieve that goal, finding employment opportunities, acquiring work, adapting to the workworld, and maintaining employment over time. Many variables influence whether or not a person will be successful at completing those major task demands thus moving through the process in an efficient and effective manner. These variables represent both environmental (e.g., transportation, housing, receptive attitudes, accessible work places, etc.) as well as person variables (aptitudes, interests, values, knowledge, skills, etc.). This
monograph has presented an overview of an employability development model, identified some of the person variables that relate to performing major task demands and outlined how it can be used in developing and implementing an employability assessment and planning program in rehabilitation and educational settings. An EAPP built around the model can help focus a program and insure a comprehensive assessment of employability. Implementing planning components which involve the consumer as a co-manager of his/her program allows one to integrate assessment and planning and insures that the service provider and the consumer of services utilize assessment data to plan services that will enhance employability development and employment outcomes for people with disabilities.
References


Institute on Rehabilitation Issues (Fourteenth) (1987). The use of vocational evaluation in vocational rehabilitation. Menomonie, WI: Materials Development Center, Stout Vocational Rehabilitation Institute, University of Wisconsin - Stout.


Appendix

Functional Vocational Capabilities

I. Disabling conditions
   A. Physical functioning
   B. Learning ability and academic skills
   C. General emotional adjustment

II. Work role requirements
   A. Fundamental prework skills, attitudes, and values
      1. Behavioral self-control
      2. Grooming
      3. Interpersonal relationship skills
      4. Problem-solving/decision-making
      5. Punctuality
      6. Work orientation
   B. Work-related skills, attitudes and values
      1. Interpersonal/social demands of work
         a. Peers
            (1) On-the-job interpersonal skills
            (2) Supervising another worker
            (3) Working effectively with co-workers
         b. Authority
            (1) Acceptance of supervision/supervisor
            (2) Amount of supervision required
            (3) Appropriateness of communication with supervisor
            (4) Emotional response to supervision/supervisor
      2. Work habits and behavior
         a. Conformity to work setting rules
         b. Production of quality work
         c. Work pace
         d. Work role acceptance
         e. Work tolerance/persistence
      3. Work attitudes and values
         a. Work gratification
         b. Work needs

III. Job seeking skills

IV. Specific vocational skills

V. Career choice and advancement (career development)

VI. External factors affecting employability (family, finances, economy, labor market, employers, Social Security, etc.)