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A SYSTEMATIC APPROACH FOR THE USE OF VALPAR WORK SAMPLES IN THE VOCATIONAL EVALUATION OF INDIVIDUALS WITH LEARNING DISABILITIES

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Abstract

This paper will present a systematic method for using VALPAR Work Samples to vocationally assess people with learning disabilities. Specifically, the paper will present: (1) a standardized approach for the selection of VALPAR Work Samples in which the work samples selected will not negatively affect performance due to exacerbation with the client's disability and, (2) a method for developing an aptitude profile which will represent abilities independent from the client's specific learning disability. VALPAR work samples were classified according to instructional method and appropriate learning skills necessary to complete them. Comparisons were then made to select work samples in which performance is less likely to be negatively affected by a specific learning disability. Using a variety of work samples which measure different and varying levels of aptitudes, a vocational aptitude profile can be developed which is relatively free of learning disability bias.

The need to accurately assess people with learning disabilities is necessary because "the probability for success is very low for the specific language disability person who is directed into an occupation and/or work environment that is inconsistent with the person's vocational profile" (Molkey, Kopp, & Miller, 1984, p. 58). Vocational evaluation for these individuals has generally been attempted using conventional evaluation tools and methods. There is little research, however, documenting the success of specific vocational evaluation techniques for the learning disabled population (Emery, 1984), and innovative evaluation procedures have been suggested as needed (Brechin & Kemp, 1984). Diagnostic test batteries for the learning disabled individuals have also been recommended (Sanchez, 1984).

For example, (Hursch, 1984) has suggested that work samples in particular, provide a valuable evaluation activity for learning disabled adults. Newill, Goyette, and Fogarty (1984) have identified commercial work sample systems such as JEVS, VALPAR, and Singer as appropriate for providing evaluators with job performance results in a standardized setting when evaluating the learning disabled individual. Maurer (1981) also lists the VALPAR Component Work Sample System as appropriate for evaluating this client population.

There have been criticisms of work samples in the assessment of learning disabled persons. Stodden (1980) argues that standardized assessment instruments utilize one trial learning and might tend to magnify learning deficits. On the other hand, modification of work samples give an opportunity to experiment with various teaching and behavior training techniques (Peterson, 1986), although this will invalidate the norming procedures. In fact, modification of work samples have been recommended as a common technique to accommodate for specific learning disabilities (Thomas, 1982; Hursch, 1984; CARF, 1986).

Vocational evaluators are called upon to utilize their professional skills to alter work sample tasks to evaluate potential (Hursch, 1984). McCray (1979) gives guidelines to follow when modifying work samples but also suggests the evaluator intuitively modify the standardized instructions as needed.

Two problems with work sample modification become evident. Modifications, while useful for finding out information about the individual (Peterson, 1986), do not give normable abilities once either instructions or the work sample itself are changed. The other major problem which is apparent is the dependence on vocational evaluator discretion for modification. Dickson (1976) has given specific suggestions for modifications of work samples for the visually impaired for example, but none have been suggested for the learning disabled. In summary, work samples are suggested as useful tools in the evaluation of people with learning disabilities and several commercial vocational evaluation systems have been identified as appropriate. Problems do exist, however, with the the current structure of work sample testing for learning disabled individuals in that although work sample modifications are acceptable and encouraged as a method of determining vocational potential, standardized normative data cannot be used.

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### Rationale for the Model

This paper will present a systematic method for using VALPAR Component Work Samples to vocationally assess persons with learning disabilities. Specifically, the paper will present (1) a standardized approach for the selection of VALPAR Work Samples in which the work samples selected will not negatively affect performance due to exacerbation with the client's disability and (2) a method for developing an aptitude profile which will represent abilities independent from the client's specific learning disability. In contrast to a complete Dictionary of Occupational Titles vocational profile, only vocational aptitudes will be considered and these included; G-Intelligence, V-Verbal Aptitude, N-Numerical Aptitude, S-Spatial Aptitude, P-Form Perception, Q-Clerical Perception, K-Motor Coordination, F-Finger Dexterity, and M-Manual Dexterity.

It is not suggested that some work samples would not have to be modified or would not measure a person's ability due to the nature of the performance skills needed to complete them. Instead we believe that enough work samples are available to measure the abilities of those with learning disabilities if the learning disability is known and the performance skills needed to complete that work sample are identified. The major logic of our model is:

1. work samples can be identified and classified according to the specific performance skill needed by the client.
2. work samples can then be selected based on not being negatively affected by a specific learning disability, and
3. there are enough work samples available to allow for determination of a client aptitude profile taking into account the variety of learning disabilities.

A number of the VALPAR Component Work Samples were analyzed and classified as to the learning skills needed to perform them. In addition, the type of instruction methods used for each work sample was identified and classified. An individual's specific learning disability can then be compared to the work sample in which performance or instruction is less likely to be negatively affected by that learning disability.

VALPAR Component Work Samples #1-19 were analyzed by a Dictionary of Occupational Titles (D.O.T.) Analysis, (VALPAR, 1986). It then is possible to develop a D.O.T. vocational profile using a variety of VALPAR Component Work Samples. Inclusive in this analysis were vocational aptitudes.

In summary, it appears an aptitude profile can be developed using a variety of VALPAR work samples. If these work samples are compared to performance skills requirements, those which would not be negatively affected by a specific learning disability would be used. As a result, a standardized approach to the selection of VALPAR work samples and the development of an accurate aptitude profile for those with learning disabilities can be accomplished.

### Work Sample Analysis and Classification

Definitions for specific learning disabilities considered were a combination of those presented by Thomas (1982) and Hirsch (1984). Those used for this analysis under the auditory category included: Auditory Comprehension (perception), Auditory Discrimination, and Auditory Memory. Visual problems considered were; Visual Discrimination, Visual Memory, Visual Acuity, Visual Perception and Visual Figure Ground. Also considered were Color, Size, and Tactile Discrimination. Auditory to motor and visual to motor problems were not considered because most work samples require motor skills to some extent. A task-type analysis was performed on selected VALPAR work samples to determine

the skills necessary to complete that work samples. Two certified vocational evaluators and one vocational evaluation student rated each work sample and a consensus regarding required skills was reached.

Table I presents the analysis indicating whether or not (Y-Yes, N-No) these related learning skills would be needed in performing a particular VALPAR work sample. In addition, Table I indicates the type of instruction methods used for the client prior to performing the work sample. The type of instruction methods considered were identified by McCray (1979) and included; oral (verbal), modelling, hands-on and written (V-Verbal, M-Modelling, H-Hands-On, and W-Written).

The analysis of Table I indicates that auditory memory is essential on all work samples, with the exception of VCS #13, primarily due to the instructional method of having to remember the instructions. Except for auditory memory problems there appears to be enough work samples for selection on the basis of no apparent conflict with a particular learning problem. Reference must be made to the VALPAR D.O.T. Analysis of Work Samples #1-19 in order to determine what work samples measure particular aptitudes.

The results of Table I also indicate that verbal and modelling instructions are given on all the work samples analyzed. About 75% allowed for practice or client hands-on. No written instruction were provided for the client, although some written material is used for practice and performance on some work samples.

### Discussion

Obviously, research is needed to test the utility of the proposed model. In addition, the need for more in-depth analyses of the performance skills needed to complete the entire VALPAR Component Work Sample System and perhaps other work sample systems are evident. A more complete matrix than the one provided would be one suggestion. Test developers can better help in the selection of work samples for the learning disabled individuals if the learning skills needed to perform the work samples are identified. Vocational evaluators could then be more concerned about the appropriateness of the work sample in relation to providing the answer to a question rather than wondering if the results are due to inability to do the task or due to a learning disability.

A suggested approach to the development of an accurate aptitude profile for a learning disabled individual is as follows:

1. Determine specific learning disabilities through appropriate testing.
2. Examine Table I and determine what work samples would not be negatively affected by a particular specific learning disability.
3. Look at VALPAR D.O.T Analysis of Work Samples #1-19 and determine what previously identified work samples could be used to develop an aptitude profile.
4. Test until at least two scores are developed for each particular aptitude.
5. Utilize a method such as the McCroskey Vocational Quotient Scale (MVQS) DATASHEET (McCroskey, 1980), in the determination of a final vocational aptitude profile.

No attempt has been made in this paper to discuss the appropriateness of work samples for purposes such as assessing work behaviors, as Peterson (1986) supports work samples as beneficial for this purpose. It was also felt that other assessment instruments are available to determine other components of the vocational profile (reasoning, math, language, interests, etc.). Instead VALPAR work samples

were analyzed to determine how they could be selected and utilized to measure aptitudes in a more standardized method. This was accomplished by identifying the type of performance and instructional skills needed to complete the work samples in relation to the unique problems of learning disabilities.

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**TABLE I**

VALPAR Work Samples Matched with Specific Learning Skills and Instructional Methods

	VCS 1	VCS 4	VCS 5	VCS 6	VCS 7	VCS 8	VCS 9	VCS 10	VCS 11	VCS 13	VCS 14	VCS 15	VCS 16
Aud. Comprehension	N	N	Y	N	N	N	Y	N	N	N	Y	N	N
Aud. Discrimination	N	N	Y	Y	N	N	N	N	N	N	N	N	N
Auditory Memory	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Visual Discrimination	Y	N	Y	Y	Y	N	N	N	N	N	Y	Y	Y
Visual Memory	N	N	N	Y	N	N	N	N	N	N	N	Y	N
Visual Acuity	Y	N	N	Y	Y	N	N	Y	Y	N	Y	Y	Y
Visual Perception	N	N	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y
Visual Figure Ground	Y	N	N	Y	Y	N	N	N	Y	N	Y	Y	Y
Color Discrimination	N	N	N	Y	Y	Y	N	N	N	N	Y	N	Y
Size Discrimination	N	Y	N	N	N	N	N	N	N	N	N	N	Y
Tactile Discrimination	Y	Y	N	N	N	N	Y	N	N	N	N	N	N
Instruction Method	VM	VM	VMH	VMH	VMH	VMH	VM	VMH	VMH	VMH	VM	VMH	VMH

V = verbal  
M = modelling  
H = hands-on

Y = yes  
N = no