

INFORMATION PAPER 5

FUNCTIONAL ASSESSMENT

As part of the Renewed Service Delivery System (RSDS), a systematic approach to the solution of student performance problems is recommended. The purpose of assessment should be expanded beyond its traditional orientation toward classification and placement. A functional assessment approach should be adopted in which there is a more direct link between assessment and intervention. This paper will define functional assessment, identify important characteristics, and provide a general description of its purpose. The variables assessed and the procedures used as part of the approach will also be described.

DEFINITION

Functional assessment is a process for collecting meaningful, relevant information about student problems. These problems may have to do with skills deficits or performance deficits. They may be related to academic and/or non-academic behaviors. The purpose of data collection is to answer specific questions about student functioning in a particular setting. This information is used to plan effective individualized interventions, to make specific educational decisions, and to write appropriate goals.

CHARACTERISTICS OF FUNCTIONAL ASSESSMENT

Functional assessment is characterized by the following factors:

1) Relevant assessment. Functional assessment procedures collect data specific to the identified behaviors of concern and to the hypotheses and assessment questions generated as a result of problem-solving collaborative consultation. Assessment should move away from an approach in which a standard, comprehensive test battery is administered to every referred student regardless of the presenting problem.

2) Direct assessment. Academic skills are assessed with measures sampled directly from specific curriculum materials or skills sequences. Student behaviors and related environmental factors are assessed through direct observation in defined settings.

3) Multi-dimensional assessment. In an ecological approach to assessment, learning is viewed as the result of an interaction between the student and a specific environment. Data is collected about environmental, curricular and instructional variables as well as student variables, since all of these factors affect student performance. The most reliable data is generated by using multiple methods of data collection across multiple settings using multiple sources of information (Knoff, 1990).

4) Formative assessment. Assessment procedures are used to "form" (e.g., plan and monitor) interventions. Assessment procedures should be useful in identifying specific curriculum-related academic skill deficiencies, and/or specific social or adaptive skill deficits. Assessment should also help to identify variables affecting the student's learning situation that may be modified in order to produce improvements in performance. Assessment data should be consistent across decision-making stages, so that the same type of data is collected from the time of initial problem identification through the outcome evaluation stage. This ongoing assessment can be used to evaluate the effectiveness of interventions.

5) Frequent, repeated assessment. Assessment procedures allow for the regular and frequent collection of student performance data during the progress monitoring phase of problem-solving. Data should be collected one to three times per week. Data analysis should examine not only levels of performance, but performance trends over time, in order to evaluate progress toward goals.

6) Individually-focused assessment. Assessment procedures place primary emphasis on individually-referenced comparisons. In other words, assessments focus on identifying an individual's strengths and weaknesses and on monitoring any changes in a student's performance relative to his/her own previous performance. There will continue to be times when peer/norm-referenced comparisons are useful, such as when decisions are made about entry into or exit from programs. However, individually-focused assessment has the most direct relationship to intervention planning.

7) Technically adequate assessment. A functional assessment approach makes use of procedures that have proven technical adequacy. In other words, these procedures should be reliable and valid with respect to their intended purpose, and should have adequate normative data if they are to be used in a norm-referenced manner.

THE PURPOSE OF FUNCTIONAL ASSESSMENT

The specific purpose for which functional assessment procedures are used should depend on the nature of the questions to be answered or the decisions to be made at a particular point in the problem-solving process. Assessment procedures should be selected based on their ability to provide the information necessary to make a specific decision. Some of the specific decisions for which functional assessment procedures may be used include goal setting, intervention planning, progress monitoring, screening and eligibility determinations, and outcome evaluation.

A functional assessment approach can also be described in terms of purposes which should be de-emphasized. For example, assessment should not have as its primary focus the prediction of student learning potential. Traditional assessment practices have placed a great deal of emphasis on defining a student's cognitive ability, so as to make predictions about learning rate or relative success in school. However, quantifying a student's "potential" does not provide useful information about how to teach that student. In some cases, it may serve only to lower expectations about what an individual student may achieve. Therefore, cognitive ability measures should be used only in instances where the resulting information is necessary to make a particular kind of educational decision, and should not be a routine assessment tool used with all children.

Another purpose that should be de-emphasized is the a priori prediction or assumption of an intervention's effectiveness. Diagnostic-prescriptive methodologies assume that student aptitudes interact with specific treatments to produce differential instructional outcomes for students (Ysseldyke & Christenson, 1988). However, there is little research evidence to support the notion of aptitude-treatment interactions. As an example, for a student with good visual memory skills, a sight word instructional approach might be expected to prove effective in improving reading skills. This approach may or may not be successful in improving the student's skills. Progress monitoring procedures must be implemented, and additional performance data must be collected in order to evaluate the actual effectiveness of the sight word approach.

Functional assessment procedures should take a "hypothesis testing" approach in which interventions are viewed as hypotheses about procedures that are likely to improve student performance. These hypotheses are then tested by implementing the intervention and monitoring its effectiveness.

VARIABLES ASSESSED AS PART OF FUNCTIONAL ASSESSMENT

As previously noted, functional assessment takes an ecological approach to evaluation and assume that learning is a function of the interaction between the student and a particular learning environment. Four broad categories of variables should be assessed:

1) Student variables. Functional assessment procedures assess pertinent academic and behavioral performance levels. Information should be collected about a student's repertoire of skills, in terms of specific objectives that have been mastered, as well as those which have not yet been acquired. In addition, a student's task-related learning behaviors should be assessed. Such learning behaviors might

include academic engagement or on-task behavior, study skills, use of learning strategies, or motivation. The information collected about the student may assist in determining whether the student's problem is primarily a) a skills deficit in which the student lacks the specific skills necessary to complete a task, or b) a performance deficit in which the student possesses the skills to perform a task, but does not apply those skills in a given setting.

2) Curricular variables. Functional assessment procedures take into account relevant information regarding the curriculum materials in which a student is receiving instruction. Such information might include the scope and sequence of objectives, teaching examples and techniques used to introduce new material, the relative rapidity with which new concepts or objectives are introduced and/or opportunities to respond and practice new skills in workbooks or other materials. Consideration should be given to the relationship between the student's skills and his/her placement in curriculum materials, since placement in materials that are too difficult or too easy may result in problems.

3) Instructional variables. Functional assessment procedures examine variables related to behaviors and techniques that the teacher uses to support the student's engagement in learning. Such instructional variables might include the use of prompts to gain student attention or to produce accurate responses, questioning techniques, contingencies for student behaviors, feedback procedures, error correction techniques, and teacher management of student behaviors that interfere with learning.

4) Environmental variables. Functional assessment procedures examine other relevant aspects of the learning environment such as class size, physical arrangement of the classroom, available equipment and materials, and other such variables.

FUNCTIONAL ASSESSMENT PROCEDURES

A wide variety of assessment procedures may be used as part of a functional assessment approach. Specific information about these techniques is beyond the scope of this paper. The reader is referred to the references at the end of this paper as well as to other sources for additional information.

In general, four broad categories of procedures may be used as part of functional assessment. These include: interviews, examination of permanent products, direct observation, and direct assessment of skills. Interviews should be used to establish a problem-solving collaborative relationship among members of the problem-solving team. Interviews should also aid in the behavioral definition of the problem and the identification of hypotheses and assessment questions. Depending on the nature of the concern, interviews may be conducted with the student's teacher(s), parents and/or the student him/herself. The examination of permanent products might include a review of cumulative records, data from a teacher's grade book, or written assignments and work samples produced by the student. The direct observation of behavior should be systematic and should take place in settings relevant to the behavior(s) of concern. The direct assessment of academic skills should include the use of curriculum-based measures.

In addition to these four basic procedures, a functional assessment approach may also make use of other procedures such as task analysis (Howell, 1986), process assessment (Meyers & Kundert, 1988), or error pattern analysis (Gerken, 1985). Again, the key to selecting a given set of functional assessment procedures is to identify specific questions to be answered, as well as procedures appropriate to answer those questions.

In most cases, functional assessment should proceed from a general to a more specific level of data collection. In the initial stage of assessment, global procedures may be used to develop a broad background of information regarding the student and the environment. This global assessment may be used to screen students, make normative comparisons, and identify more specific assessment questions. Global assessment might examine behavior across a variety of settings, may involve general screenings of factors such as vision, health, hearing or motor functioning, and may identify pertinent environmental factors that need to be examined in more detail.

Following this global phase of data collection, the next phase involves more focused and specific data collection aimed at answering the identified assessment questions. This phase of data collection provides information regarding specific strengths and weaknesses in a student's repertoire of skills. It

also provides information regarding specific curricular, instructional or environmental factors that appear to be affecting student performance. This information is used to formulate an individualized intervention and specific goals for the student.

The global and specific phases of functional assessment correspond with the problem identification and problem analysis phases of consultation. Team members work together collaboratively to formulate hypotheses and assessment questions. They should also collaborate to collect and analyze data, and to develop an intervention and goals. Once an intervention has been selected and implemented, team members should continue to collaborate as on-going performance data is collected during the plan implementation and evaluation phases of consultation. Assessment data collected during these phases can be used to evaluate and refine intervention plans, and to make decisions about outcomes.

SUMMARY

Functional assessment procedures collect relevant, meaningful information about student performance in a specific setting. The purpose of such assessment is to collect the data necessary to write goals and plan an individualized intervention.

ADDITIONAL RESOURCES

Fuchs, L. S., & Fuchs, D. (1986). Linking assessment to instructional intervention: An overview. School Psychology Review, 15, 318-323.

Gerken, K. C. (1985). Best practices in academic assessment. In A. Thomas & J. Grimes (Eds.) Best practices in school psychology. Kent, OH: National Association of School Psychologists.

Howell, K. W. (1986). Direct assessment of academic performance. School Psychology Review, 15, 324-335.

Knoff, H. (1990). Designing meaningful assessments. In Components of problem-solving videotape series. Des Moines, IA: Iowa Department of Education.

Lentz, F. E., & Shapiro, E. S. (1986). Functional assessment of the academic environment. School Psychology Review, 15, 346-357.

Meyers, J., & Kundert, D. (1988). Implementing process assessment. In J. L. Graden, J. E. Zins, & M. J. Curtis (Eds.) Alternative educational delivery systems: Enhancing instructional options for all students. Washington, D.C.: National Association of School Psychologists.

Shapiro, E. S. (1989). Academic skills problems: Direct assessment and intervention. New York, NY: Guilford Press.

Shinn, M. R. (Ed). (1989). Curriculum-based measurement: Assessing special children. New York, NY: Guilford Press.

Ysseldyke, J. E., & Christenson, S. L. (1988). Linking assessment to intervention. In J. L. Graden, J. E. Zins, & M. J. Curtis (Eds.) Alternative educational delivery systems: Enhancing instructional options for all students. Washington, D.C.: National Association of School Psychologists.