Lecture 4

Book: Students with Learning Disabilities

Chapter 4- Assessment

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Summary

Purposes of Assessment: Quality assessment is based on the premise that an individual's performance on any task is influenced by the requirements of the task, the individual's background and characteristics, and the factors inherent in the assessment setting. Assessment is the systematic process of collecting data that can be used to make decisions about students. The four primary purposes of assessment are:

1. Screening: It is an initial stage of data collection in the process of identifying students who may have learning disabilities or who are struggling in a particular content area. During screening, data usually are collected for an entire group and individuals who exhibit potential problems are identified. There students are referred to as being at risk for academic failure, or at risk for being identified as having a disability, and the need for further assessment is indicated. Screening can be given to a large number of students in a short period of time.
2. Diagnosis: diagnosis involves collecting data that enable professionals to identify as student as having a learning disability or to diagnose specific needs within an academic area e.g. reading. Many of the data items used for classification come from standardized tests, although diagnostic data can be obtained from informal data as well. It is also used to determine specific needs within a content area. A reading specialist or special education teacher may administer a series of informal measures to determine or diagnose the specific academic needs of a student with a learning disability. The diagnostic assessment in this case would then be used to establish an intervention plan for the student.
3. Progress monitoring: These assessments are administered at regular intervals and assist in planning and implementing an individualized program. Typically, assessments that allow a teacher to monitor student progress are implemented a minimum of two to three times per week for students with learning disabilities. A primary purpose of monitoring student progress is to evaluate a program's ongoing effectiveness. Based on the student's performance on these measures, a teacher will continue with the intervention program or make adjustments as necessary. Progress monitoring assessment is also a necessary

component in response to intervention (RTI) programs. Progress monitoring assessments can be individually or group administered, and they typically take only a few minutes to administer.

4. Measurement of student outcomes: Evaluating a program involves collecting data on student outcomes to determine the program's effectiveness. Measurement of student outcomes typically requires formal standardized assessments. These measures allow for the comparison of states, districts, schools, and teachers. Outcome measures are often linked to accountability. Most students with disabilities are included in state-level outcome measures, but they may receive testing accommodations if they are needed.

Types of assessment: Assessment procedures can be either formal or informal. Commercially developed tests, either norm-referenced or criterion referenced are usually considered formal measures. Teacher made-tests, portfolios and checklists are considered informal measures. Some types of assessments are as follows:

- Standardized tests: They are formal measures that compare a student's performance to that of others (norm referenced) or to a specific mastery criterion (criterion-referenced). Most assessment of this type is conducted outside the classroom by school psychologists, language clinicians, special educators, reading specialists and on occasion, medical or health related personnel.

  i) Norm referenced tests: These tests compare a student's performance to that of others of the same age or grade level. Data from norm referenced tests are reported quantitatively (e.g. by age level, percentile, stanine, standard score or quotient). The most useful scores are standardized scored because they are easy to understand and thus are less likely to be misinterpreted by teachers and parents. Grade and age equivalents, on the other hand, are misinterpreted frequently.

  ii) Achievement and diagnostic tests: These tests are frequently used with students who have learning disabilities and are often norm referenced. Achievement tests may be administered to an individual student or to a group of students. These tests sample content in one area (e.g. mathematics) or several areas (e.g. mathematics, reading and spelling). These tests provide an overall index of performance. Diagnostic tests are individually administered and focus on evaluating specific skills and abilities in one or more areas. For e.g. a diagnostic mathematics test probably would include specific subtests in addition, subtraction, multiplication, division, fractions, money, measurement, time and word problems. Most achievement and diagnostic tests are norm-referenced and thus, they usually provide a quantitative score e.g. percentile, stanine.

- Tests of intelligence: The goal of intelligence tests is to assess the global ability of an individual's intellectual functioning. It estimates a person's ability to learn new skills. They also predict a student's performance from current performance and reasoning

abilities. In the area of learning disabilities, intelligence tests are used to ascertain a student's general ability level and to rule out intellectual disabilities. An IQ score is used as an index of an individual's ability. This measure is then compared with achievement scores to determine whether a discrepancy exists between ability and achievement. If the discrepancy is severe enough, the student is considered to have a learning disability.

- Non standardized assessment: These assessments consist of any informal method of gathering data about a student. Teachers conduct informal evaluation to obtain information directly related to instructional planning. In addition to monitoring student's progress, informal assessment can also provide diagnostic information that the teacher needs. There are many types of informal assessment measures such as:

  i) Criterion tests: The results of some tests are interpreted in terms of an established criterion. Performance is expressed in actual skills or tasks performed, and the student's skill is compared with the criterion (i.e. the student did or did not reach the criterion). With this method, one student's performance is not compared with the performance of other students. E.g. a spelling test in which the teacher expects the criterion of 80% correct before mastery is assumed. Informal criterion tests are used to assess a student's progress on a span of skills (e.g. scope and sequence of reading) or on a specific skill (e.g. vowel sounds in consonant-vowel-consonant words).

  ii) Probes: Probes are used in daily instruction to determine the student's progress on target skills. Probe sheets sample the student's behavior, usually on academic tasks, for a specified period of time. Typically, the student works on the probe sheet for one minute and the teacher records the rate of correct and incorrect responses and notes any error patterns. From these data, the teacher makes strategy decisions (e.g. introduce a new skill, repeat an intervention, or drop to a lower skill). Progress over time is recorded on charts. Probes are used for the purpose of progress monitoring.

  iii) Placement tests: Some criterion tests or probes help determine where the student should begin instruction in a specific body of material of graduated difficulty. Such a placement test is made up of samples of items found in the proposed material.

  iv) Checklists: A checklist consists of a series of statements that imply a question about the student's performance or learning characteristics. When a teacher observes that a particular skill has been mastered, that skill statement is checked. In the social skills area, the teacher may use the checklist to record whether the student is taking turns in games or playing with others during free time. This information helps the teacher decide what to teach and when to teach it.

  v) Direct observation: Careful observation of students in class is very valuable. It helps inform the teacher if students are having any kind of difficulty. Moreover, the teacher must be sensitive to behaviors. For example, a students who becomes tense and anxious while trying to complete seatwork may be trying to work at material that is too difficult, and the teacher can intervene immediately to prevent unnecessary frustration.

vi) Curriculum based assessment (CBA): CBA refers to any approach that uses information obtained from direct observation and the recording of a student's performance in the school curriculum as a basis for making instructional decisions. CBA is well suited for monitoring the progress of students and providing teachers with data that help them make appropriate instructional decisions. Within the CBA model, curriculum based measurement (CBM) refers to the use of specific procedures whereby a student's academic skills are assessed with repeated rate samples using stimulus materials taken from the student's curriculum. The primary uses of CBM are to establish district or classroom performance standards, identify students who need special instruction, and monitor individual student progress toward long-range goals. Research shows that teachers who base instructional decisions on CBM yield higher achievement results for students on standardized measures. Two primary advantages of CBM are: (1) it is curriculum-referenced so that a student's competence is measured in terms of local school curriculum (2) it is individual-referenced so that judgments can be made about an individual student's progress.

- Alternative assessment: IDEA 2004 requires that alternative assessments be provided to students with disabilities who are unable to participate in state testing procedures with accommodations. Alternative assessment represents some changes in what is assessed and how assessment takes place. First, authentic tasks are emphasized, e.g. writing a letter is a worthwhile real life task. Second, student performance is assessed directly across numerous formats, including writing, oral discourse, portfolios and demonstrations. Furthermore, assessments can be integrated across domains e.g. academic and social. Third, higher order thinking is stressed by requiring students to explain, demonstrate or document their thinking processes.

- Portfolio assessment: It is an attempt to enhance instructional decision making and the evaluation of student progress. According to Paulson, Paulson and Meyer (1991), "A portfolio is a purposeful collection of student work that exhibits the student's efforts, progress and achievements in one or more areas". Portfolios are being applied to academic areas for several purposes such as (a) to demonstrate student effort (b) to document student achievement (c) to enhance assessment information from other sources and (d) to document the quality of educational programs. Portfolio assessment consists of six elements:
i) Valued outcomes are targeted for assessment.
ii) Authentic tasks (real work) are used for assessment.
iii) Selected tasks involve cooperative endeavors among students and between the teacher and the student.
iv) Multiple dimensions e.g. content, strategies, methods of inquiry and work processes are used to evaluate training.

v) The completion of products includes reflection and self-evaluation.
vi) Assessment and instruction are integrated.

- Miscellaneous techniques: Other informal methods include interviews with parents and colleagues, anecdotal reports, rating scales, classroom quizzes, and various student self-report techniques. Computers can also be used to help teachers develop, administer and score teacher made tests that focus on the needs of students with learning disabilities.

Testing guidelines: The integrity of the standardized testing procedures must be maintained to ensure reliable and valid results. Moreover, the integrity of the student must be protected to ensure that the test results actually represent the students' abilities, skills and perceptions. Some factors that help preserve the integrity of the student include: (a) rapport between the examiner and student (b) student motivation (c) non-discriminatory items (d) "best practice" tests (e) corroboration of results through other measures and observations (f) written descriptions of testing conditions that may have affected the results negatively (g) familiarity with examiner and (h) absence of language barriers between the examiner and student.

Guidelines for assessing culturally diverse students: For a non discriminatory or unbiased assessment, educators must consider socio-cultural factors when dealing with students who are culturally and linguistically different. An aptitude or achievement test written in English is obviously an invalid measure for students who do not speak English. Even for students who do speak some English, but who are English language learners, standardized tests and their procedures may be biased and will not provide an adequate representation of their abilities. McLoughlin and Lewis (2005) noted that the potential for bias can be minimized if several considerations are used:

1) Determine whether the norm group is representative of the student's gender, race and culture. Ensure that the normative sample of the monitory student is large enough to be representative.
2) Review and test for culturally biased items.
3) Use a test that is technically adequate in the student's most fluent language and have the test administered by an examiner who is proficient in the student's primary language.
4) Select measures that bypass the limitations imposed by the student's disabling condition. E.g. if a student has a reading disability, the examiner should present questions orally or through demonstrations.

Guidelines for testing accommodations: Testing accommodations are alterations in the testing procedures that minimize the effects of a disability on student performance. Common testing accommodations include alterations to the schedule (e.g. extended time), setting (e.g. small group or individual administration), presentation format (e.g. tests read aloud), and response format (e.g. responding via a computer rather than paper and pencil). As research does not provide sufficient evidence to select a particular accommodation for all students with learning disabilities, L.S. Fuchs and Fuchs (2001) recommended that teachers make data-based decisions

in the selection of testing accommodations. The Dynamic Assessment of Test Accommodations (DATA) is a tool available to teachers to assist in data-based accommodation decisions.

The law and its' relationship to assessment: Federal legislation ensures that all students with disabilities receive a free, appropriate public education and establishes a set of procedures to protect against inappropriate assessment of and placement practices. The regulations promote valid practices in the gathering, interpretation and use of data in making decisions about students with disabilities.

The challenge of assessment in learning disabilities: The identification of learning disabilities is a highly debated area. Under-identification deprives students of services, whereas over identification results in inappropriate placements and drains resources from other programs and students. The need for the accurate identification of students with learning disabilities is crucial. The following obstacles are currently present:

    i) Consensus on a theoretical definition of learning disabilities exists, however, much disagreement remains regarding how to operationalize the definition.

    ii) The discrepancy factor, a major component in identifying students with learning disabilities, has been difficult to operationalize. In IDEA 2004, states are no longer mandated to use, and may not require the use of discrepancy process in identifying students with learning disabilities; thus, discrepancy formulas may indeed be a thing of the past.

    iii) Many instruments used to identify students with learning disabilities are inadequate, lacking adequate reliability and validity.

    iv) The heterogeneity of the population with learning disabilities makes it difficult to develop a unifying set of identification criteria.

    v) Many schools do not provide adequate services to low achievers or disruptive students to give general classroom teachers the support system they need. Consequently, many students who do not have learning disabilities but who may have other difficulties are placed in learning disabilities programs. IDEA 2004 should reduce the occurrence of this problem by requiring documentation that evidence based practices have been implemented before a student a can be identified as having a learning disability.

    vi) In many instances, multidisciplinary team members have not been trained to identify students with learning disabilities.

Assessment for identification: The steps of assessment to identify learning disabilities is as follows:

- Prereferral: Initially, the prereferral process had focused on reducing the number of inappropriate placements in special education. While the goal of reducing inappropriate placements remains viable, prereferral interventions now include extensive use of

systematic problem solving and collaborative consultation. Through school based problem solving teams and collaborative consultation among teachers, schools are concentrating on developing interventions in general classrooms that are more responsive to the needs of students with learning or behavior problems.

- Referral: The referral process enables professionals to (a) determine whether a student is a viable candidate for special education services (b) make contact with the parents to discuss the student's difficulties (c) begin a screening study to locate problem areas and contributing factors and (d) meet with parents and appropriate professionals to determine whether a formal evaluation is needed. The law requires the general education teacher to be involved during the referral process.

- Identification: Determination of a learning disability begins with the examination of the parameters that define it. In an examination of these parameters, the heterogeneous nature of the population must be considered. Under IDEA 2004, to identify a student as having learning disabilities, the team must determine that "the child does not achieve adequately for the child's age or to meet State-approved grade-level standards in one or more of the following areas. (i) Oral expression. (ii) Listening comprehension. (iii) Written expression. (iv) Basic reading skill. (v) Reading fluency skills. (vi) Reading comprehension. (vii) Mathematics calculation. (viii) Mathematics problem-solving [or that the] child does not make sufficient progress to meet age or State approved grade-level standards in one or more of the [areas identified above] when using a process based on the child's response to intervention." The team may not identify a student as having a learning disability if the lack of achievement is primarily the result of a visual, hearing or motor disability, mental retardation, emotional disturbance, cultural factors, environmental or economic disadvantage or limited English proficiency. The team's decision related to the child's eligibility must be documented in a written report. The final regulations implementing IDEA 2004 outline the requirements of the written report, which must state:
    1. Whether the child has a specific learning disability.
    2. The basis for making the eligibility determination.
    3. The relevant behavior noted during observation.
    4. The relationship of that behavior to the child's academic functioning.
    5. The educationally relevant medical finding, if any.
    6. Whether the child does not achieve adequately for his or her age to meet state-approved grade-level standards.
    7. Whether the child does not make sufficient progress to meet age or state approved grade level standards or exhibits a pattern of strengths and weaknesses in performance, achievement or both.
    8. The determination of the team concerning the effects of visual, hearing or motor disabilities, mental retardation; emotional disturbance, cultural factors, environmental or economic disadvantage or limited English proficiency.

9. The student centered data collected if a response to intervention process was used.

Response to intervention as an identification process: The response to intervention process for identifying students with learning disabilities came into being as a result of concern with the inadequacy of discrepancy procedures for identifying students with learning disabilities. In particular, concern that the discrepancy model failed to reach students early enough was a key issue in debates around the topic. The basic model or conceptualization of RTI is based on a multi level medical model for treatment which are as follows:

- Primary interventions include quality instruction in the general education classroom. At this level, all students are screened to identify students who may be at an increased risk for academic difficulties or learning disabilities. In addition, progress monitoring assessments are implemented for students who may be at risk to ensure that they are responding to the instruction provided at the primary level.
- Secondary interventions are implemented when progress is not adequate at the primary level. Secondary interventions may include small group supplemental instruction. Recommendations for the length of the intervention at this stage may vary from approximately 8 weeks to 15-20 weeks.
- Tertiary interventions are the final level in the process and are intensive in nature. If a student does not respond at this level, he or she is referred for a full evaluation for possible identification as having a learning disability. The data from all three levels are evaluated by the multidisciplinary team and can be used as part of the identification criteria.

Assessing specific components of a learning disability:

- Exclusion: The exclusion component is a major component in state criteria for identifying learning disabilities. The following exclusions seem appropriate in view of the federal regulations:
  i) Mental retardation (intellectual disability), as evidenced by a score of not less than minus 2 standard deviations on an individual test of intelligence, with interpretation by a certified psychologist.
  ii) Blindness or partial sight, as evidenced by visual acuity in the better eye with best possible correction of 20/70 or better.
  iii) Deafness or impaired hearing, as evidenced by auditory acuity of no more than 30 dB loss in the better ear unaided, and speech and language learned through normal channels.
  iv) Physical disabilities, no evidence of a primary physical disability directly related to the student's problem area.
  v) Emotional disturbance so severe that a therapeutic program is needed.
  vi) Environmental, economic and cultural factors, educators should ensure that the student is being instructed and tested in the student's native language and it should be

determined whether the student has had sufficient experience to benefit from general education.

- Academic achievement: the assessment of academic achievement continues to be a major factor in identifying students with learning disabilities. Academic achievement problems usually are interpreted within the ability/ achievement discrepancy factor. Common areas of assessment are reading, mathematics and written expression. Some achievement tests are specific to a skill area such as reading or mathematics, whereas others include a battery of tests that measure across academic areas. One of the most widely used batteries of tests for identifying students with learning disabilities is the Woodcock-Johnson III tests of Achievement.
- Language achievement: language is evaluated by standardized tests in listening comprehension and oral expression. In language assessment, it is important to distinguish between the production of oral language (i.e. a student's voice quality and articulation) and the linguistic qualities of oral expression. Moreover, language assessment can focus on receptive abilities (listening comprehension) or expressive abilities (oral expression).
- Process: the process component is a factor in identifying individuals with learning disabilities. Types of processing which may be assessed are as follows:
  - Visual: Perception (discrimination and closure), memory, association, reception.
  - Auditory: perception (discrimination and closure), memory, association, reception.
  - Haptic (sense of touch): tactile, kinesthetic.
  - Sensory integration: visual-motor, auditory-motor, auditory-vocal, visual-auditory (vocal)
  - Motor: gross and fine motor skills.
- Discrepancy: To determine if a discrepancy exists, typically a student is given an achievement test and a test of intellectual ability (IQ test), and the tests are reviewed to determine if a severe discrepancy exists between the student's achievement and his or her intellectual ability.

Assessment for instruction: The data gathered in the identification process (of determining whether or not a learning disability exists) are not relevant to teaching. Thus, further assessments are needed to determine specifically the content to teach.

- Assessment for what to teach: The guidelines for what to teach are as follows:
  - ➢ Determine the scope and sequence of skills to be taught: The teacher must understand the scope and sequence of specific curricula. Scope and sequence guides organize the sequence of skills into component areas and present the major skills in each area. This type of list helps the teacher grasp the total content or sequence and see it in a hierarchical or logical way. For each skill listed in a sequence, the teacher can develop a device or procedure for assessing it.

➤ Decide what behavior to assess: This process follows four stages (i) select the curriculum area (ii) conduct assessment across a wide span of skills (iii) note problem areas, and (iv) conduct specific skill assessment. This is useful in determining what curriculum skills the student has and has not mastered.

➤ Select an evaluation activity: The teacher has many choices in selecting evaluation activities: commercial tests, curriculum tests, portfolios, criterion referenced skill inventories and checklists, and teacher-made instruments. As the decision is made, several factors are considered, including purpose, cost, time and relevance of the activity or test for classroom instruction.

➤ Administer the evaluation device: the initial assessment involves evaluating both a wide span of skills and specific skills. As this procedure involves much decision making (e.g. identifying problem areas, noting error patterns, and selecting specific skills for assessment), it is usually conducted by the teacher or a diagnostician. After the initial assessment is completed and instructional objectives are determined, procedures for monitoring progress are established.

➤ Determine specific short and long range instructional objectives: After administering the assessment, the teacher must analyze the data and create instructional objectives. Good objectives specify the target behavior in observable terms, delineate the conditions under which the behavior occurs and describe the criterion for successful performance. Short term objectives should contribute directly to the mastery of long term objectives.

- Assessment for how to teach: The first step in determining how to teach is to identify the major areas of assessment: expectation factors (learner, teacher, peer and parents expectations), stimulus events (noise, temperature, lighting, instructional arrangement, techniques or materials), response types (verbal, verbal-motor, motor), and subsequent events (verbal praise, physical approval, evaluation events). After each area has been assessed and viewed as a whole, a profile may be written. The profile can display numerous patterns and supply a simple list of suggestions for designing an individual program. Assessment areas guide teacher observation. An instructional plan based on an assessment for determining how to teach should be viewed as an estimate. Thus, teachers determine what and how to teach everyday during school. The initial assessment of what and how to teach helps establish the initial teaching plan.

The Individualized Education Program: Once it is determined that a student has a learning disability, assessment focuses on instruction. This process is guided by the development and implementation of an individualized education program (IEP) for each student with a disability between the ages of 3 – 21. IDEA 2004 requires that the IEP be developed by an interdisciplinary team. The IEP team includes the students parents, not less than one general education teacher, not less than one special education teacher, a representative from the local education agency (i.e. the school district), an individual skilled at interpreting and explaining

evaluation data, an expert in a particular area selected at the discretion of the school or parent and the child as appropriate. The IEP provides written documentation of the services that are to be provided for the child with a disability.