The Art of Assessment: How to Create Effective Evaluations

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DuBard School for Language Disorders, The University of Southern Mississippi

- Founded 1962
- Clinical division of the Department of Speech and Hearing Sciences
- Full-time enrollment placement for 80 children with severe speech, language, and/or hearing disabilities
- Outclient therapy for children and adults with less severe disabilities
- Evaluation services
- National training site for the DuBard Association Method®

DuBard Association Method® Training Program

- Accredited since 1998 by the International Multisensory Structured Language Education Council (IMSLEC) (<u>www.imslec.org</u>)
- One of the first four training programs in the nation to be accredited by IMSLEC
- Accredited by the International Dyslexia Association (IDA) in 2012 (www.dyslexiaida.org)

Evaluations consist of:

- Formal tests
- Informal assessments
- Observations
- Case history
- Behaviors
- Reports of strengths and weaknesses

Reliability and Validity:

- Reliability the dependability or consistency of a test
- Validity the accumulated evidence that a test measures what it is supposed to measure

Grade Equivalent (GE) and Age Equivalent (AE) Scores:

- Not very useful, but widely used
- Most meaningful when the test is given at the right level and the score is not more than a year above or a year below a student's grade level

Components of a Comprehensive Language/Academic Evaluation at the DuBard School:

- Hearing and vision screenings
- Nonverbal mental ability
- Oral language
- Written language
- Articulation
- Phonological skills
- Rapid, automatic naming
- Word analysis

- Word recognition
- Reading fluency
- Reading comprehension
- Spelling
- Auditory memory
- Visual memory
- Motor-free visual perception
- Visual-motor integration

Hearing and Vision Screenings:

- Regulations from Mississippi Department of Education
 - Pure tone hearing screening
 - o Near and far vision screening

Ability:

- IQ testing developed over a period of time
- IQ tests don't all measure the same skills
- Tests used at the DuBard School:
 - Naglieri Nonverbal Ability Test Individual Administration (NNAT-I)
 - Universal Nonverbal Intelligence Test Second Edition (UNIT-2)
 - Comprehensive Test of Nonverbal Intelligence Second Edition (CTONI-2)
 - Test of Nonverbal Intelligence Third Edition (TONI-3)
 - Primary Test of Nonverbal Intelligence (PTONI)

Oral Language and Written Language (Reading and Written Expression):

- "Language is a code whereby ideas about the world are represented through a conventional system of arbitrary signals for communication."
 - o Bloom and Lahey, 1978, p. 4
- "Language is a complex and dynamic system of conventional symbols that is used in various modes for thought and communication."
 - American Speech-Language-Hearing Association. (1982). Language [Relevant Paper]. Available from <u>www.asha.org/policy</u>
- Language is a metalinguistic skill. We use language to think about, and teach about, language and its use
- Relationship between oral and written language:
 - Reading is a language-based skill.
 - The relationship between oral and written language is reciprocal.
 - Although related, oral language and written language are not the same.
 - Whether oral or written, language is a vehicle, a way to convey the curriculum, whether learning to read and write, learning about science, music, history, or any other subject.

Oral Language	Written Language
Transient and ephemeral	Permanent and more enduring
Rate of delivery: speaker	Rate of delivery: reader
Temporal sequencing is crucial	Spatial sequencing is crucial
May occur face to face	Often occurs when alone
More casual	Most sophisticated, complex, and formal aspect of language

• Language and the Pyramid:



- Foundations of language:
 - o Linguistic
 - Sociological
 - o Cognitive
 - Pedagogic
- Components of Language:
 - Form Phonology, Morphology, Syntax
 - Function Semantics
 - Use Pragmatics
- For written expression, a writer must:
 - Select a topic
 - Gather information
 - Plan; develop an outline
 - Organize material within an outline
 - Pay attention to the task at hand
 - Keep to the task
 - o Monitor progress; does outcome resemble plan?
 - Make changes as needed
- Components of writing:
 - o Conventional
 - o Linguistic
 - o Cognitive
- Oral language tests used at the DuBard School:
 - Clinical Evaluation of Language Fundamentals Fifth Edition Screening Test (CELF-5 Screening Test)
 - Clinical Evaluation of Language Fundamentals Fifth Edition (CELF-5)
 - Test of Language Development Primary: Fourth Edition (TOLD-P:4)
 - Preschool Language Scales Fifth Edition (PLS-5)
 - Oral and Written Language Scales Second Edition (OWLS-II)
 - Test of Auditory Comprehension of Language Fourth Edition (TACL-4)
 - Test of Pragmatic Language Second Edition (TOPL-2)
- Written language tests used at the DuBard School:
 - Test of Early Written Language Third Edition (TEWL-3)
 - Test of Written Language Fourth Edition (TOWL-4)

Articulation:

- Relationship between articulation problems, phonological awareness, and reading
- Articulation test used at the DuBard school:
 - Arizona Articulation Proficiency Scale Third Edition (AAPS-3)

Memory:

• Three essential processes: encoding, storage, retrieval



- Poor readers have a more difficult time forming accurate phonological representations, which makes it more difficult for them to hold onto information in working memory.
- Because of processing limitations, bits of data are lost. Both decoding and comprehension suffer.
- Children with weaknesses in phonological memory may encounter three main challenges:
 - Difficulty learning new words
 - Words not encoded properly are not available for subsequent development of phonological awareness
 - o Difficulty storing and processing individual sounds in words
- Memory and comprehension
 - Holding an idea in mind
 - Recalling information from long-term memory while holding information in shortterm memory
 - Holding onto parts of a task while completing a task
 - Keeping bits of new information together so they remain meaningful
 - Holding a long-range plan in mind while thinking about a short-range goal

- Memory and classroom activities
 - Following multi-step directions
 - o Remembering a question and finding the information needed at the same time
 - Keeping up with written language mechanics while putting ideas on paper
 - Decoding and blending a multisyllabic word
 - Rushing a task and completing it in a sloppy manner before forgetting what was required
- Memory tests used at the DuBard School:
 - Test of Auditory Processing Skills Third Edition (TAPS-3) (Auditory memory)
 - Wide Range Test of Memory and Learning Second Edition (WRAML-2) (Auditory and visual memory)

Phonological Awareness:

- Phonological awareness: a transitional stage of language development
 - Includes things such as rhyming and rhythm, alliteration, words in sentences, syllables in words, individual sounds in words
 - Some say phonological awareness can be measured by over 20 tasks that fall largely into three groups: sound comparison, phoneme blending, phoneme segmentation
- Studies have shown that intervention makes a difference. For children with phonological awareness weaknesses, interventions that include systematic, explicit phonological awareness instruction produce more growth in reading skills than interventions that do not contain this type of instruction.
- Differences between phonological awareness and phonemic awareness:

Phonological Awareness	Phonemic Awareness
Awareness of sound patterns in oral language	Ability to discriminate, remember, and manipulate individual speech sounds in words
Necessary for reading and spelling, but not sufficient	Permits children to understand the alphabetic principle

• <u>Alphabetic principle</u>: the understanding that words are made up of letters and letters represent sounds.

- Many believe learning to read begins with phonics but skill with sound-symbol correspondence doesn't develop without phonemic awareness.
- Phonological awareness tests used at the DuBard School:
 - Phonological Awareness Test Second Edition (PAT-2)
 - Comprehensive Test of Phonological Processing Second Edition (CTOPP-2)
 - Sometimes: Early Reading Skills subtest of the Wechsler Individual Achievement Test – Third Edition (WIAT-III)

Rapid, Automatic Naming:

- Rapid, automatic naming is the ability to access phonological information stored in longterm memory with precision, efficiency, and ease when given a series of things to name as quickly as possible
- The various components of naming speech represent the processes required for reading:
 - Visual attention to the stimulus
 - Discrimination of the stimulus
 - o Integration of visual input with stored representations
 - o Retrieval of labels
 - Motoric output in the form of articulation
- Rapid, automatic naming tests used at the DuBard School:
 - Rapid Automatized Naming and Rapid Alternating Stimulus Tests (RAN/RAS)
 - Comprehensive Test of Phonological Processing Second Edition (CTOPP-2)

Achievement:

- At the DuBard School, we typically use achievement tests to assess reading, math, and spelling.
 - Nonsense words
 - Real words
 - Oral reading fluency
 - Reading comprehension
 - o Spelling
 - Numerical operations
 - Math reasoning

- Achievement tests used at the DuBard School:
 - Wechsler Individual Achievement Test Third Edition (WIAT-III)
 - Woodcock-Johnson Tests of Achievement Third Edition (WJ-III)

Motor-Free Visual Perception:

- Types of perception:
 - o Visual
 - Auditory
 - o Tactile
 - o Gustatory
 - Olfactory
 - o Vestibular
 - Proprioceptive
- Not visual acuity
- What is visual perception?
 - MVPT-4 manual lists four definitions of visual perception; MVPT-4 is based on two of these definitions:
 - Subcategory of cognition representing comparatively low levels of general intelligence
 - Mental level existing between sensation and cognition
- Visual perception in everyday life
 - Visual perception deficits affect many aspects of daily living
 - o Functional mobility: walking, wheelchair use, driving
 - Sequencing letters and numbers presented visually
 - Differentiating between representations of the same object seen in various orientations
 - Judging distance between people and objects
 - Recognizing printed letters and words on a page
 - Research on the relationship between visual-perceptual skills and academic performance is less conclusive and may vary by diagnosis and the type of outcome measure used.
 - There is substantial research documenting an increased rate of visual-perceptual challenges in individuals with learning disabilities
- Motor-free visual perception test used at the DuBard School:
 - Motor-free Visual Perception Test Fourth Edition (MVPT-4)

Visual-Motor Integration:

- Beery found a significant correlation between copying geometric forms and academic achievement.
- Research has shown that higher levels of thinking and behavior require integration among sensory inputs and motor action, with emphasis on integration of sensory inputs and motor action.
- Visual-motor integration test used at the DuBard School:
 - Beery Test of Visual-Motor Integration (Beery VMI)



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