Assessing the Assessment

by Carmen Tercilla, MBA, IECA Associate Member (FL)

During the November 2014 IECA National Conference, educational psychologist and IECA member, **Laura Seese**, PhD (CT), presented a pre-conference workshop on psycho-educational testing. This focused on helping IECs increase their understanding of testing methodologies and how student ability and performance are connected. Following are highlights of the presentation.

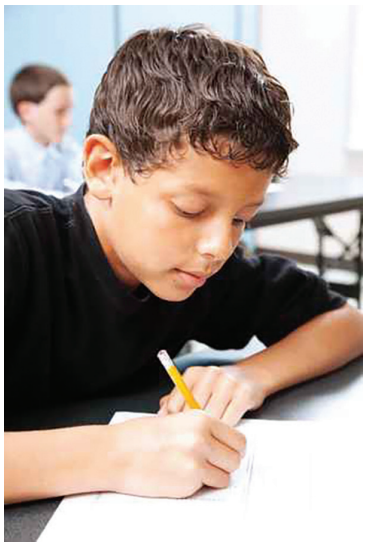
What Is Assessment and Why Is It Important to IECs?

A comprehensive psycho-educational evaluation is designed to examine a wide variety of abilities. These include intellectual, academic, language, social, emotional, behavioral, and independent living skills. The primary focus for school-age clients is often their intellectual abilities and educational achievement—as a way of measuring cognitive strengths and weaknesses. In addition to overall IQ, intelligence tests explore innate abilities for short-term and long-term memory, attention, speed, and auditory and visual processing based on how well the client remembers facts, can organize a visual field, or assemble a puzzle. On the other hand, educational tests such as the Woodcock-Johnson Tests of Achievement (WJ-III) measure what has been learned in school for such skills as reading, writing, spelling, and math.

Seese explained that psychological assessment focuses on problem solving and decision making. The main objective of the assessment is to provide valuable information to answer specific questions that will help IECs make relevant recommendations for their clients. During an assessment, the evaluator will integrate data from various areas and evaluate the individual within a problem situation, using the information generated by the assessment to formulate alternative solutions to the problem.

When IECs recommend an evaluation, they should seek an assessor who is an excellent clinician, an expert in human behavior, and able to interpret the test scores within the context of the individual's life. Because many factors impact the results of an assessment, it is important to consider aspects related to the evaluator that may have an influence, such as their familiarity with the test materials, skill in administration, level of prompting, and their particular scoring style. Seese shared the results of research studies that concluded that verbal reinforcement and friendly conversation can bring increases of up to 13 IQ points on average. Additional factors that can affect test scores include environmental factors, such as noise or heat in the testing room, or issues affecting the examinee, such as test anxiety or physical status.

Who Should Conduct the Assessment?



How can an IEC decide on the appropriate referral for who should conduct the assessment? Specialists have their particular areas of expertise. Educational psychologists focus on learning and looking at the impact of disabilities on learning, memory, attention, and emotional functioning in the school setting. They track the efficacy of educational interventions that are put in place. Clinical psychologists look for alleviation of human problems with particular attention to emotional and behavioral challenges. The neuropsychologist is the expert on the structure and function of the brain and addresses the relationship between the brain and behavior. Forensic psychologists conduct court-ordered assessments and work with the juvenile and family courts. When determining who might be the right evaluator for your client, consider factors that may affect rapport with the examinee, such as personality, age, and experience. Desired outcomes can also play a significant role. For example, a neuropsychologist could be the best alternative if you anticipate that specific medications will be part of the strategies.

continued

What Are the Guidelines for Analyzing the IQ Test Scores?

Seese provided an excellent approach to reviewing IQ tests results, such as the Wechsler Intelligence Scale for Children® (WISC) and Wechsler Adult Intelligence Scale (WAIS), and recommends a step-by-step process following a top-down review to facilitate understanding the data. She emphasized that the same approach can also be used for tests like the Woodcock-Johnson Tests of Achievement-Revised (WJ-III).

In her five-step approach, the first step looks into the Full Scale IQ (FSIQ). The FSIQ is the most reliable and valid score. It is considered the first step because it provides the overall context for evaluating other abilities as well as performance on other tests. The FSIQ ultimately serves as a global estimate of overall mental ability, presenting the person's relative standing in comparison to same-age peers.

The second step looks into the Verbal (VIQ) and Performance (PIQ) abilities. IECs must note the difference between the VIQ and PIQ (the Verbal Comprehension Index and Perceptual Reasoning Index). A statistically significant difference is a 15-point difference, 1 standard deviation. This difference may be the result of cognitive style, sensory deficits, information processing, or speed.

The third step explores subset variability within scales. IECs should pay attention to how the individual subtests deviate from the average VIQ or PIQ and, as Seese suggests, "examine the data behind the scores." For example, is a low score on Block Design the result of an inability to create designs or an inability to create them within the designated time limits? She also offered a guideline for strengths and weaknesses that are three or more points above/below the mean and emphasized that some inter-test scatter is to be expected.

In the fourth step, the inter-subtest and intra-subtest variability is examined, looking at how each individual subtest deviates from the overall mean. As items become more challenging, some students demonstrate ability to pass easier items and fail during more difficult ones, while others fail easy items yet are able to pass hard ones possibly signaling attention or memory deficits.

The last step is the qualitative analysis, which focuses on the responses themselves, particularly for Information, Vocabulary, Comprehension, and Similarities. Content may reflect social issues or problems with psychological functioning.

Enhanced Test

David Wechsler originally developed the Wechsler Intelligence Scale for Children or WISC in 1949. In 2003, the fourth edition of the WISC was released and is currently used to determine the intellectual strengths and weaknesses of children ages 6–16. The WISC-IV consists of four different indexes, each with their own subtests. On October 2014, Pearson published the latest version of the test, the WISC–V, and promises a tool "redesigned, retooled, and revamped, with a number of improvements to provide a more comprehensive picture of a child's abilities."

The enhancements made to WISC V include:

- The test continues to be available in traditional paper and pencil, but Pearson now offers a new digital format. Examiners may administer the test utilizing tablets. Through the Q-Interactive and the Q-Global portions of the WISC-V, tests are administered and scored online with an iPad which can impact the child's experience with the test.
- There are significant changes to the testing time. The FSIQ can now be computed 25 minutes faster than with the WISC-IV. For the 7 core subtests in the new version (versus 10 in the WISC-IV), the WISC-V takes 10 minutes fewer to administer.
- There is increased coverage of cognitive processes, important to specific learning disability (SLD) identification and intervention.
- WISC-IV has four components to IQ, which include Verbal Comprehension, Perceptual Reasoning, Working Memory, and Processing Speed. With the WISC-V, there are now five components as well as two new indexes, with Visual Spatial replacing Perceptual Reasoning and Fluid Reasoning. In addition, the test offers new composite scores for Quantitative Reasoning, Auditory Working Memory, Naming Speed, Symbol Translation, and Storage/Retrieval.
- Simplified, briefer instructions with reduced vocabulary level and modernized content with visual stimuli are features of the WISC-V. Colors in the test materials have also been changed to reduce the impact for students who might be color blind.

As of the date of this article, few evaluators have made the switch from WISC-IV to WISC-V; however, Seese shared that guidelines require implementation of new tests (which have updated norms) within one year of publication.

Seese's pre-conference workshop provided an excellent outline for how to approach the psycho-educational evaluation. We learned the importance of looking for a pattern that illustrates important information about a student's learning style, detailed by specific strengths and weaknesses. IECA's pre-conference workshops offer a unique opportunity to dig deeper into topics of interest. The LD Committee coordinates workshops before every national meeting to cover relevant topics that help all IECs better serve the needs of students with learning differences.

Carmen Tercilla can be reached at carmen@ctcollegetactics.com

Reprinted from IECA's April/May 2015 Insights Newsletter