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# Hits and myths of cross battery assessment

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# The Hits & Myths of Cross-Battery Assessment

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## Abstract

The increased use of the cross-battery approach has resulted in the misunderstanding and misuse of this research-based tool. The purpose of this article is to provide practitioners with a more pointed approach in conducting cross-battery assessments, while highlighting the common pitfalls. Additionally, the authors provide suggestions for appropriate use of this assessment process.

## Introduction

Cross-battery approach, when used appropriately, is an effective assessment technique. The purpose of this article is to provide guidance in using this research-based tool. Specifically, the article recommends a more pointed approach in conducting cross-battery assessments and highlights the common pitfalls. Finally, positive aspects are reviewed and suggestions are provided for appropriate use of cross-battery assessment.

The reauthorization of Individuals with Disabilities Education Improvement Act (IDEA 2004) has resulted in a paradigm shift returning to the roots of the definition of learning disabilities (LD) as "a disorder in one or more of the basic psychological processes" (Federal Register, 1977, p. 65083 as cited in Dehn, 2006; IDEA, 2004, 300.8). A major component of this legislation is that school districts are no longer required to use a discrepancy based model in identifying students with LD (Hyatt, 2007). Instead, school districts now have an option to use a process to determine whether students are resistant to scientifically-based instruction; or districts may determine eligibility through the documentation that the child demonstrates a pattern of strengths and weaknesses in performance, achievement, or intellectual development (IDEA, 2004). As such, many districts are using an integrated framework approach for the identification of students with LD which combines the key concepts of response-to-intervention (RtI) and psychological processing approaches.

## Psychological Processing with Implementation of Cross Battery Approaches

Historical and current definitions of LD have defined learning disability as "a disorder in one or more of the basic psychological processes" Psychological processes, [also identified as cognitive processes], are patterns of cognitive strengths and weaknesses that adversely impact particular areas of academic achievement (Cheremie, 2007; Scruggs & Mastropieri, 2002). Thus, proponents of cognitive assessment argue that to be identified with LD a child must demonstrate a deficit in one of the basic psychological processes that leads to unexpected academic underachievement (Dehn, 2006). "Cognitive processing refers to all mental operations by which sensory input is perceived, transformed, stored, retrieved, and used" (Dehn, 2006, p. 2). They do not include processes that are purely sensory or motoric; however, they are employed whenever people think, reason, learn, problem solve, or store and retrieve information (Dehn, 2006).

all CHC broad and narrow abilities they are viable tools for evaluation personnel to use when assessing children through the use of cross battery assessment (Alfonso, et al. 2005).

*Myth 2:* Batteries should not be crossed due to differing norms. The original use of norms should be utilized unless the factor score that is being evaluated is non-unitary (significant variance among the subtest scores) or the primary instrument lacks the representation of the broad ability being evaluated (Dehn, 2006; Flanagan, et al., 2007). In either case evaluation personnel may want to consider the use of crossing batteries to obtain accurate scoring information about the ability being evaluated.

*Myth 3:* Results of cross battery assessment is the only piece of information used to determine eligibility. IDEA requires the Multidisciplinary Team to consider multiple measures of assessment when determining eligibility. A Multi-Method Assessment approach to data collection and analysis includes the collection of formal data obtained from norm-referenced tests of cognitive processes and achievement (Schultz & Stephens, 2009). In addition to the norm-referenced measures, the multidisciplinary team must consider informal data, such as parent reports, parent and student interviews, teacher information, observations (Sattler, 2008), curriculum-based measurements, and other data collected during the Response-to-Intervention (RtI) process.

### **Avoiding the Pitfalls of Cross-Battery Assessment**

Although cross-battery assessment, when used appropriately, is a valid tool to utilize when determining eligibility, there are three main pitfalls associated with this approach. Following are three examples of common pitfalls.

*Pitfall #1:* An overreliance on norm-referenced data when determining eligibility. Due to the use of the severe discrepancy model and overreliance on norm-referenced measures when making eligibility decisions, informal measures have often been de-emphasized (Mather & Gregg, 2006).

In order to avoid the overreliance on the use of norm-referenced measures, multidisciplinary teams should approach the interpretation of assessment results through the use of holistic data analysis. The holistic approach of data analysis is to ensure that the decisions concerning eligibility, instructional implications, and learner profiles are based on data that has been carefully examined in a way that is logical and consistent. Each data source has its unique value and should converge to strengthen decisions. Conflicting data needs to be reconciled within an explanatory framework (Gall, Gall, & Borg, 2005). Sound decisions cannot be made with incomplete or conflicting data that cannot be explained. If the answer does not lie in the data, additional questions must be asked. The use of professional/clinical judgment to help guide an individualized education planning (IEP) team to make the most appropriate eligibility recommendation is embedded in the holistic approach of data analysis (Rueter, 2008; Schultz & Stephens, 2009).

*Pitfall # 2:* A lack of professional judgment when making eligibility decisions. Due to the overreliance on standard scores and mathematical approaches (e.g., discrepancy model), limited emphasis has been placed on the use of professional judgment when making eligibility decisions. "Although the formula method may have some appeal because it requires less competence and judgment, the fact remains that reducing an important diagnostic decision to a mathematical equation gives a false sense of objectivity to a contrived procedure that is still essentially subjective" (Simpson & Buckhalt, 1990, p. 274).

The inclusion of professional judgment into the analysis of data will assist the multidisciplinary team in avoiding the overreliance on standard scores alone. According to Schalock and Luckasson (2005), "professional judgment is a special type of judgment rooted in a high level of professional expertise and experience; it emerges directly from extensive data. It is based on the professionals' explicit training, direct experience with those with whom the professionals are

- Mather, N., & Gregg, N. (2006). Specific learning disabilities: Clarifying, not eliminating, a construct. *Professional Psychology: Research and Practice*, 37(1), 99-106.
- Mather, N., & Wendling, B. J. (2005). Linking cognitive assessment results to academic interventions for students with learning disabilities. In D. P. Flanagan & P. L. Harrison (Eds.), *Contemporary intellectual assessment* (pp. 269-294). New York: Guildford Press.
- McGrew, K. S. (2005). The Cattell-Horn-Carroll theory of cognitive abilities: Past, present, and future. In D. P. Flanagan & P. L. Harrison (Eds.), *Contemporary intellectual assessment* (pp. 136-181). New York: Guildford Press.
- Rueter, J. A. (2008). Procedure for specific learning disability determination. Justin, TX: Northwest Independent School District.
- Rueter, J. A., Stephens, T. L., & Kinnison, L. (2008). Consultants to early intervening teams: The changing roles of evaluation personnel within an integrated model framework. *DiaLog*, (37)3, 14-19.
- Sattler, J. M. (2008). *Assessment of children: Cognitive foundations* (5th ed.). San Diego: Sattler.
- Schultz, E., & Stephens, T. (2009). Framework for specific learning disability determination. Unpublished manuscript.
- Schalock, R. L. & Luckasson, R. (2005). *Clinical Judgment*. Washington, DC: American Association on Mental Retardation.
- Scruggs, T. E., & Mastropieri, M. A. (2002). On babies and bathwater: Addressing the problems of identification of learning disabilities. *Learning Disability Quarterly* 25, 155-168.
- Simpson, R. G., & Buckhalt, J. A. (1990). A non-formula discrepancy model to identify learning disabilities. *School Psychology International*, 11, 273-279.
- Woodcock, R. W., McGrew, K. S., & Mather, N. (2001). *Woodcock-Johnson III*. Itasca, IL: Riverside.