The "Pattern of Strengths and Weaknesses" (PSW) Approach

In this approach, an array of standardized data and classroom evidence are used to *evaluate* the student's profile to determine if there are c*onceptually and empirically related cognitive and academic weakness(es)* that exist in an *otherwise normal ability profile.* The Wayne RESA guidance for the determination of pattern of strength and weakness is based on the Aptitude- Achievement Consistency Model proposed by Flanagan, Ortiz & Alfonso (2007).

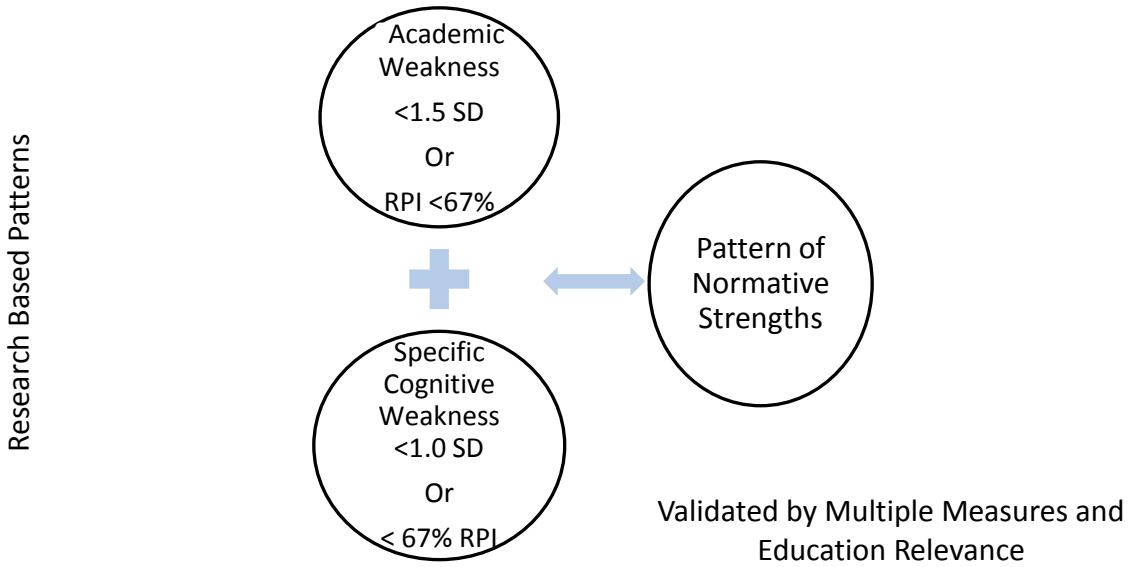
- This model documents low achievement in a specific area; identifies a deficit in a cognitive ability that is linked by research to the academic weakness; and provides a method to determine that most cognitive abilities are average or above.
- This model is based on Cattell-Horn-Carroll (CHC) intelligence theory. The CHC theory has a vast research base. Practitioners are not limited to any one test or group of tests. Based on presenting concerns, tests are selected to probe cognitive and academic skills.

- The aptitude-achievement consistency model has particular utility for discriminating between cases of borderline intellectual functioning (and mild mental retardation) and specific learning disability. The model discriminates between normally developing English Language Learners (ELL) students and ELL students with specific learning disability (SLD).

Examples of Pattern of Strengths and Weaknesses in Specific Learning Disability

The following graphic portrays the constellation of academic and cognitive skills that are considered when establishing a pattern of strength and weakness. The profile of normative test data and presenting information are analyzed for goodness of fit to research-based subtypes of specific learning disability. Academic area deficit is identified by normative deficit that is approximately 1.5 standard deviations or more below the normal range or, using Developmental Data, a Relative Proficiency Index less than 67% of age proficiency. Cognitive weakness is identified by evidence of Carroll-Horn-Cattell cluster scores that are approximately 1.0 or more standard deviations below the normal range. Academic and cognitive skills are analyzed by patterns of consistencies in the skills that describe the learning deficit. The normative strengths are then examined to complete the profile of the student's learning abilities. Again, the consistencies among academic and cognitive skills are established. The profile of strengths and weaknesses are then analyzed relative to evidence of normative strengths in general abilities. The test data analysis are then validated by considering the multiple

measures of student performance from parent input, teacher report, classroom measures, educational history, and other evidence of learning patterns. The outcome of the analysis must always be focused on educational relevance and lead to instructionally appropriate recommendations.



Model for analysis of pattern of strengths and weaknesses based on validity studies of specific learning disability.

The following graphic represent the patterns of strengths of weaknesses among academic and cognitive skills that have been established in research on types of learning disability and on validity studies on the relationship of academic skills to clusters of cognitive skills that align to the Cattell-Horn-Carroll (CHC) model of int