

WISC vs. Cross-Battery Assessment (XBA)

Recent research has identified the cognitive abilities important for academic achievement. The table below lists these cognitive abilities and identifies which areas of academic achievement they influence. Research has further revealed gaps in common intelligence tests such as the WISC. The table below also highlights those cognitive abilities that current and recent editions of the WISC measure. Currently, XBA is the most comprehensive measure of cognitive abilities available and is the approach employed at **Raise the Bar Psychology**. Dr Kate Jacobs and her team may start with a WISC but will then supplement with other tests in order to provide a truly comprehensive measure of all cognitive abilities important for achievement in both literacy and numeracy. Pinpointing exactly where cognitive strengths and challenges lie offers the capacity to provide specific recommendations and guidance to best support academic achievement.

Cognitive Ability	Academic Achievement Areas	WISC-IV	WISC-V traditional	WISC-V iPad	XBA
<u>Fluid reasoning</u> : Ability to reason and solve problems that are new	Reading Comprehension Math Calculation; Math Problem Solving Written Language	⊙	✓	✓	✓
<u>Comprehension Knowledge</u> : Depth and breadth of knowledge and reasoning, based upon previous learning experiences	Basic Reading; Reading Comprehension Math Problem Solving Written Language	✓	✓	✓	✓
<u>Visual Processing</u> : Ability to perceive items visually and process visual information	Math Calculation Written Language	✓	⊙	⊙	✓
<u>Short Term Working Memory</u> : Ability to remember and use auditory information within a short time period	Basic Reading; Reading Comprehension Math Calculation; Math Problem Solving Written Language	✓	✓	✓	✓
<u>Long Term Storage and Retrieval</u> : Ability to store and retrieve information from long-term memory	Basic Reading; Reading Fluency; Reading Comprehension Math Calculation; Math Problem Solving Written Language	✗	✗	✓	✓
<u>Processing Speed</u> : Ability to perform automatic cognitive tasks quickly when under pressure to maintain focused attention	Basic Reading; Reading Fluency Math Calculation; Math Problem Solving Written Language	✓	✓	✓	✓
<u>Auditory Processing</u> : Ability to hear phonemes (i.e. the sounds of language) distinctly and synthesise them into words	Basic Reading; Reading Fluency; Reading Comprehension Written Language	✗	✗	✗	✓

✓ = comprehensively measured

WISC = Wechsler Intelligence Scale for Children; XBA = Cross-Battery Assessment

⊙ = partly measured

✗ = not measured