

Research Brief Supplement

Fall 2016



The PRI Middle School
Follow-Up Study is a
longitudinal project
investigating math
achievement and
cognitive abilities in an
urban sample of
children from lowincome families. For
more information,
please visit our project
website: https://my.vanderbilt.edu/mathfollowup/

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Participants in the PRI Middle School Follow-Up Study were part of an earlier project, which examined the effects of an early math curriculum, *Building Blocks*, on students' math knowledge and math-related skills development from pre-k through 1st grade. Between the early study and the follow-up study, students have been directly assessed at seven timepoints:

Early Study Assessment Timepoints

- Fall Pre-K
- Spring Pre-K
- Spring Kindergarten
- Spring 1st Grade

Follow-Up Study Assessment Timepoints

- Spring 5th Grade
- Spring 6th Grade
- Spring 7th Grade

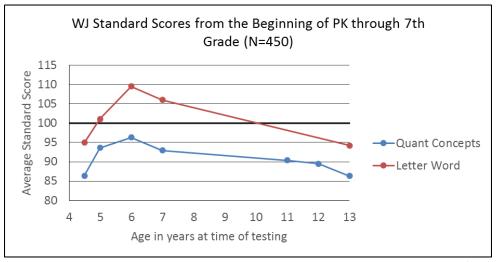
Woodcock Johnson Scores Across Years

The following chart illustrates how students' scores on two Woodcock-Johnson subtests—Quantitative Concepts (math) and Letter-Word ID (verbal)—have changed over time.

Because these are standard scores, the expected score at each timepoint is 100.

On average, students made dramatic gains on both the math and verbal measures between the fall and spring of their pre-k year. This means that participants in our sample were learning at a faster rate than what would be expected by simply getting a year older. Students continued to make gains into kindergarten, nearly approaching the expected score of 100 on the math subtest and surpassing the expected score of 100 on the verbal subtest.

Following kindergarten, however, students' WJ standard scores began to decrease, meaning that their rate of learning was slower than what was expected. This trend has continued at each successive assessment timepoint. At the end of 7th grade, students' math and verbal standard scores are, on average, nearly identical to what they were upon entry into pre-k.



<u>Note</u>: Letter-Word ID was only given in fall of PK, spring of PK, spring of Ist grade, and spring of 7th grade. <u>Note</u>: Our final analytic sample includes 519 students. This graph shows the scores over time only for those 450 students who were tested at all possible timepoints.