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Large-scale student assessment studies measure the results of processes of knowledge acquisition: evidence in support of the distinction between intelligence and student achievement.

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Summary: Given the relatively high intercorrelations observed between mathematics achievement, reading achievement, and cognitive ability, it has recently been claimed that student assessment studies (e.g., TIMSS, PISA) and intelligence tests measure a single cognitive ability that is practically identical to general intelligence. The present article uses three lines of reasoning to show that the outcomes of schooling can and must be conceptually distinguished from the intelligence construct. First, the conceptual differences between student assessments and tests of cognitive ability are delineated. Second, results from construct validation studies providing strong empirical support for the multidimensionality of the achievement measures applied in large-scale educational assessments are reported. Third, data supporting the differential development of educational outcomes in different domains are presented.

Classification: C30

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