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Relationship between computational performance and number sense among sixth- and eighth-grade students in Taiwan.

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In dieser Studie wurden mit 17 Schülerinnen und Schülern an Zahlenaufgaben gearbeitet, so daß zum einen ihre Vorstellung von Zahlen und zum anderen ihre Fähigkeiten im schriftlichen Rechnen gezeigt werden sollten. Die Ergebnisse legen nahe, auch bei korrektem Ergebnis einer Rechnung die dahinterliegenden Prozesse zu beobachten.

This research provides information on the number sense of Taiwanese students in Grades 6 and 8. Data were collected with separate tests on written computation and number sense. Seventeen students were interviewed to learn more about their knowledge of number sense. Taiwanese students' overall performance on number sense was lower than their performance on written computation. Student performance on questions requiring written computation was significantly better than on similar questions relying on number sense. There was little evidence that identifiable components of number sense, such as use of benchmarks, were naturally used by Taiwanese students in their decision making. This research supports the need to look beyond correct answers when computational test results are reported. (Abstract)

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