

**ZMATH 2016e.00496**

**Norton, Anderson; Boyce, Steven; Phillips, Nathan; Anwyll, Tessa; Ulrich, Catherine; Wilkins, Jesse L. M.**

**A written instrument for assessing students' units coordination structures.**

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Summary: Units coordination refers to students' abilities to create units and maintain their relationships with other units that they contain or constitute. In recent research, units coordination has arisen as a key construct that mediates opportunities for student learning across several domains of mathematics, including fractions knowledge and algebraic reasoning. To date, assessments of students' stages of units coordinating ability have relied upon clinical interviews or teaching experiments whose time-intensive nature precludes opportunities for conducting large-scale studies. We introduce a written instrument that teachers and researchers can use with large populations of students. We report on the reliability and validity of assessments based on the instrument.

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*Keywords:* educational diagnosis; assessment; written instrument; research; interviews; tests; validity; reliability; lower secondary; fractions; multiplicative reasoning; number sequences; units coordination  
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