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Reasoning and sense making.

Teach. Child. Math. 16, No. 5, 284-291 (2009).

Summary: In late 2009, the National Council of Teachers of Mathematics released "Focus in High School Mathematics: Reasoning and Sense Making" (NCTM 2009). This new NCTM policy publication is designed to offer guidance for high school mathematics teachers in providing focus and coherence that parallels what "Curriculum Focal Points for Prekindergarten through Grade 8 Mathematics: A Quest for Coherence" (NCTM 2006) offers to elementary and middle school teachers, although in quite different ways. Rather than identifying important mathematical topics to be taught, the new book suggests that high school math must focus on reasoning and sense making. Teachers of elementary school grades might wonder, What does this have to do with them? The answer quite simply is, Everything! In this article, the authors stress that reasoning and sense making should be a significant focus not only for high school mathematics but also across all grades. Placing the focus of mathematical instruction on reasoning and sense making will help teachers ensure that they maintain a broad focus on student thinking throughout the mathematics program, not just on specific skills that they want students to develop. (Contains 4 figures.) (ERIC)

Classification: D32 D33

Keywords: goals of mathematics education; thinking skills; reasoning; primary education; lower secondary; holistic approach; mathematical concepts