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Supporting Latino first graders’ ten-structured thinking in urban classrooms.

Year-long classroom-teaching experiments in 2 predominantly Latino low-socioeconomic-status (SES) urban classrooms (1 English speaking and 1 Spanish speaking) were designed to support 1st-graders’ thinking of 2-digit quantities as 10s and 1s. A model of a developmental sequence of conceptual structures for 2-digit numbers (the UDSSI triad model) is presented to describe children’s thinking. By the end of the year, most of the children could accurately add and subtract 2-digit numbers that require trading (regrouping) by using drawings or objects and could give answers by using 10s and 1s on various tasks. Their performance was substantially above that reported in other studies for U.S. 1st graders of higher SES and for older U.S. children. Their responses looked more like those of East Asian children than those of U.S. children in other studies. (orig.)

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