

ZMATH 2002f.04950

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The impact of the Interactive Mathematics Program on student learning.

Senk, Sharon L. et al., Standards-based school mathematics curricula. Mahwah, NJ: Erlbaum (ISBN 978-0-8058-4337-8/hbk; 978-0-8058-5028-4/pbk). Studies in Mathematical Thinking and Learning Series, 375-398 (2003).

Development of the Interactive Mathematics Program (IMP) began in 1989 with initial funding from the California Postsecondary Education Commission, and it continued in 1992 with major funding from the National Science Foundation (Schoen, 1993). The curriculum is designed to be aligned with the core curriculum recommended in the Curriculum and Evaluation Standards (National Council of Teachers of Mathematics [NCTM], 1989). IMP was one of the first high school mathematics curricula to try to embody the vision of the NCTM Standards. Students who complete the 4-year IMP are to be prepared both for the continued study of mathematics in college and for the world of work (Fendel, Resek, Alper, & Fraser, 1997, 1998, 1999a, 1999b). The problem-based curriculum incorporates traditional branches of mathematics that include algebra, geometry, and trigonometry, as well as topics that have been given little attention in the traditional high school program, especially statistics and probability. Students learn to experiment, investigate, ask questions, make and test conjectures, reflect, and accurately communicate their ideas and conclusions.

Classification: D34