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Nota di contenuto	Mathematical Problem Posing Practices and Research: 1970-2010. - Problem Posing From a Modelling Perspective.- Conceptualizing Problem Posing Via Transformation.- Developing a Problem-Posing Pedagogy From the History of Mathematics.- On the Relationship Between Problem Posing, Problem Solving and Creativity.- Is Problem Posing a Tool for Developing Mathematical Creativity? -- Using Digital Technology for Mathematical Problem Posing -- Problem Posing in Mathematics – The Relevance of Philosophy for Children (P4C). - Problem Posing as Lenses for Understanding and Improving Students' Learning of Mathematics.- Examining Problem Posing in Different Grade Levels: How Students Posed Problems-To-Solve.- Problem Posing by Way of Mediated Activity at Grades Four and five.- Enhancing the Development of Chinese Fifth-Graders' Problem Posing and Problem Solving Abilities, Beliefs and Attitudes: A Design Experiment. - If You Don't Know Why Do You Ask?.- Problem Posing to Provide Students with Content Related Motives to Proceed.- Providing Elementary Students with Opportunities to Pose problems Through Data Modeling -- Mathematical Problem Posing Activities Using Computers.- An Investigation of High School Students' Mathematical Problem Posing in the United States and China.- Studying the Evolution of Problem Posing in Relatively Constrained Situations.- Mathematical Problem Posing in Chinese Classrooms.- Problem Posing as a

Pedagogical Strategy: A Teacher's Perspective".- Problem Posing as a Motivational Tool in Primary School Teachers Training.- In-Service Mathematics Teachers as Composers of Problems for Their Teaching: A Preliminary Study.- The Poznan Theater Problem: Exploring Problem-Posing and Problem-Solving in the Route to Self-Guided Discovery in Developmental Mathematics Classes.- Problem Posing in a Collegiate Geometry Class.- From Proof to Investigations and Back to Proof in Geometry.- Developing the Problem Posing Abilities of Prospective Elementary and Middle School Teachers -- Conceptualizing Problem Posing Through Teachers' Thinking in Posing Mathematical Word Problems.- Problem Posing in the Training of Prospective Elementary Teachers: A Review.- Problem Posing as an Integral Component of the Mathematics Curriculum: A Study with Prospective Middle-School Teachers.

Sommario/riassunto

This international review offers current findings on the art and science of problem posing and its multiple contributions to mathematics teaching, learning, training, and curriculum design. Diverse perspectives on problem posing frame the concept as a springboard for scientific inquiry and the process as a means to promote mathematical understanding across the primary and secondary grades. Problem posing is demonstrated as enhancing students' problem-solving skills, bolstering knowledge retention, and improving attitudes toward mathematics, and the book provides evidence-based strategies for its integration into both classroom work and teacher education. This information is particularly critical as mathematics-based knowledge continues to dominate technology and the sciences. Among the topics covered: Using digital technology for mathematical problem posing. Problem posing as a tool for identifying and developing mathematical creativity. Problem posing as providing students with content-specific motives. What high school teachers mean when they say "I pose my own problems." Problem posing as a motivational tool in primary school teacher training. Problem posing as an integral component of the mathematics curriculum. For mathematics educators as well as mathematics education researchers, Mathematical Problem Posing brings clarity and innovative understanding to a central element in the continuing progress of the field.
