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Timeline

The History of Mathematics Education

Year	Event
1800s	Elementary school mathematics consisted of arithmetic with whole numbers, decimals, and percents. Also included work with length, area, and volume. Math was considered a mental discipline and the teacher demonstrated and students used oral recitation to memorize their work. (Senk & Thompson, pg. 5)
1845	Horace Mann found the current levels of arithmetic discouraging and called for reform with more emphasis on teaching thinking. (Senk & Thompson, pg. 5)
1890	The beginnings of vocational and commercial high schools to better prepare students of occupations including work with algebra and geometry. (Senk & Thompson, pg. 6)
1890s	Creation of the Committee of Ten to research and report on curriculum for secondary schools. The Committee of Ten found both elementary and secondary schools to be "inadequate." (Senk & Thompson, pg. 6)
1900	Most students attended school until age 13 and less than 7% of 17 year olds went to high school. (Senk & Thompson, pg. 5)
1922	Textbooks starting considering the sequencing of tasks and to build on one another. Number facts and computation were at the core of the current curriculum. (Senk & Thompson, pg. 7)
1927-1928	Judd advocated that math is a general way of thinking and that the goal of mathematics education should be to "develop student' abilities to think. Changed the focus of teaching to a student-centered model. (Senk & Thompson, pg. 7)
1940s	Testing of recruits for WW II found "that many youths and young adults were ill prepared in mathematics" which was important for the engineering and technical support aspects of the war. (Senk & Thompson, pg. 7)
1958–1959	University of Illinois Committee on School Mathematics (UICSM) created mathematics textbooks with a focus on readying students for engineering and science programs in college. School Mathematics Study Group (SMSG) created materials geared for the top of each grade level. (Senk & Thompson, pg. 8)
1957-1970	*New Math* was introduced incorporating geometry and graphs into elementary curriculums and inequalities, solid geometry and trig for high school curriculums. The director of SMSG commented: 'The chief difference between and old and new programs is the point of view toward mathematics. No longer is computational skill the be-all and end-all of mathematics. Now there is an equal emphasis on understanding the basic concepts of mathematics and of their interrelationships i.e., the structure of mathematics.' (Senk & Thompson, pg. 8)
1969-1972	National Assessment of Education Progress (NAEP) created. First tests given in 1972 to establish a baseline but levels were still quite low. (Senk & Thompson, pg. 9)
1977	The National Council of Supervisors of Mathematics (NCSM) broadening the term "basic skills" to include: problem solving, applying mathematics, number sense, geometry, and data analysis. (Senk & Thompson, pg. 9)
1980	The National Council of Teachers of Mathematics (NCTM) releases *An Agenda for Action* stating the fundamental goal of school mathematics should be problem solving. (Senk & Thompson, pg. 9)

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1983	A call for increased requirements for all high school mathematics. Asking for equally challenging courses for both college prep and non-college prep tracks. (Senk & Thompson, pg. 10)
1987	McKnight and his colleagues find that in no test administered by the Second International Mathematics Study (SIMS) did U.S. score above the international average and in many cases actually scored significantly below. (Senk & Thompson, pg. 10)
1989	NCTM releases *Curriculum and Evaluation Standards for School Mathematics* supporting that all students need strong math skills. (Senk & Thompson, pg. 11)
1991	NCTM releases *Professional Standards for Teaching Mathematics* giving tools for teaching, evaluating teaching, and professional development for math teachers. (Senk & Thompson, pg. 11)
1995	NCTM releases *Assessment Standards for School Mathematics* showing multiple uses for assessing including progress monitoring, guiding instruction, evaluating student achievement and evaluating programs. Introduction of performance tasks into assessments. (Senk & Thompson, pg. 11)
1992-1998	National Science Foundation (NSF) holds annual conferences for development of instructional materials to support the NCTM standards. (Senk & Thompson, pg. 14)
1999-2000	Many disagreements started regarding the reform the mathematics curriculum including parents protesting fearing that their students would not be academically competitive with the new curriculums. (Senk & Thompson, pg. 16)
1999	Glenda Lappan, president of NCTM in 1999, adovcates: “We’ve had the longest running experiment in human history about whether rote memorization of facts and skills works. And it doesn’t. Students are coming to universities and into the workplace not understanding math. Why wouldn’t I want to try something new?” (Senk & Thompson, pg. 16)
2000	300,000 students in high school and over 3 million elementary and middle school students were using materials supported by NSF funds. (Senk & Thompson, pg. 15)