

# Contents

Preface	xi
Acknowledgments	xiii

## I Beginnings of the Art of Teaching Mathematics

(1828–1890)

Comment	1
<b>William Slocomb</b>	
<i>The American Calculator</i> (1831)	3
Comment	13
<b>Warren Colburn</b>	
<i>First Lessons in Arithmetic</i> (1825)	14
“Teaching of Arithmetic” (1830)	24
Comment	38
<b>Charles Davies</b>	
<i>The Logic and Utility of Mathematics</i> (1850)	39
<i>University Arithmetic</i> (1870)	62
Comment	69

**Edward Brooks**

<i>The Philosophy of Arithmetic</i> (1880)	70
<i>Mental Science and Methods of Mental Culture</i> (1883)	76

Comment	91
---------	----

**Wentworth [Mathematical Series]**

<i>How to Teach Number</i> (1885)	93
-----------------------------------	----

**Levi Seeley**

<i>Grube's Method of Teaching Arithmetic</i> (1888)	100
---	-----

**W. M. Welch**

<i>How to Organize, Classify and Teach a Country School</i> (1889)	112
---	-----

**William James**

<i>The Principles of Psychology</i> (1890)	118
--	-----

**2**

**Emergence of National Organizations as a Force  
in Mathematics Education**

---

(1891–1919)

Comment	127
---------	-----

**National Education Association**

<i>Report of the Committee on Secondary School Studies</i> (1893)	129
---	-----

<i>Report of the Committee of Fifteen on Elementary Education</i> (1895)	142
--	-----

Comment	151
---------	-----

**James A. McLellan and John Dewey**

<i>The Psychology of Number</i> (1895)	152
--	-----

Comment	163
---------	-----

**James A. McLellan and A. F. Ames**

<i>The Public School Arithmetic for Grammar Grades</i> (1902)	164
---	-----

Comment	168
---------	-----

**William W. Speer**

<i>Primary Arithmetic</i> (1897)	169
----------------------------------	-----

<b>National Education Association</b>	
“Report of Committee on College-Entrance Requirements” (1899)	189
<b>American Mathematical Society</b>	
“Report of the Committee of the Chicago Section of the American Mathematical Society” (1899)	195
Comment	210
<b>David Eugene Smith</b>	
<i>The Teaching of Elementary Mathematics</i> (1900)	211
<b>John Perry</b>	
<i>Discussion on the Teaching of Mathematics</i> (1901)	220
<b>Eliakim Hastings Moore</b>	
“On the Foundations of Mathematics” (1902)	246
<b>J. W. A. Young</b>	
<i>The Teaching of Mathematics in the Elementary and the     Secondary School</i> (1906)	256
<b>David Eugene Smith</b>	
<i>The Teaching of Arithmetic</i> (1909)	274
<b>International Commission on the Teaching of Mathematics</b>	
<i>Mathematics in the Elementary Schools of the     United States</i> (1911)	280
<i>Mathematics in the Public and Private Secondary Schools     of the United States</i> (1911)	328
<b>3</b>	
	<b>The “1923 Report” and Connectionism in Arithmetic</b>
	<hr/> <b>(1920–1937)</b>
Comment	361
<b>National Education Association</b>	
<i>The Problem of Mathematics in Secondary Education</i> (1920)	363

**Mathematical Association of America**

*The Reorganization of Mathematics in Secondary Education*  
(1923) 382

Comment 460

**Edward L. Thorndike**

*The Psychology of Arithmetic* (1924) 461

**Frederick B. Knight**

*in Twenty-ninth Yearbook of the National Society for  
the Study of Education* (1930) 478

**George D. Birkhoff and Ralph Beatley**

“A New Approach to Elementary Geometry” (1930) 495

**William A. Brownell**

“Psychological Considerations in the Learning and the  
Teaching of Arithmetic” (1935) 504

4

**Prewar and Postwar Reforms**

---

(1938–1959)

Comment 531

**Progressive Education Association**

*Mathematics in General Education* (1938) 534

Comment 567

**Leo J. Brueckner**

*in Child Development and the Curriculum* (1939) 568

**Carleton Washburne**

*in Child Development and the Curriculum* (1939) 577

**Mathematical Association of America**

**and National Council of Teachers of Mathematics**

*The Place of Mathematics in Secondary Education* (1940) 586

**National Council of Teachers of Mathematics**

“The Second Report of the Commission on Post-War Plans” (1945)	618
---	-----

**University of Illinois Committee on School Mathematics**

“The University of Illinois School Mathematics Program” (1956)	655
---	-----

**College Entrance Examination Board**

<i>Program for College Preparatory Mathematics</i> (1959)	664
---	-----