

Preface

At a time when there seemed to be a slight lull in the “revolution” in school mathematics, it seemed appropriate to undertake a history of mathematics education. Accordingly, in December 1966 this book was proposed to the Editor by the Yearbook Planning Committee of the National Council of Teachers of Mathematics—a committee composed of M. Vere DeVault, John F. Devlin, Jack E. Forbes, Adrian L. Hess, Joseph N. Payne, and L. Doyal Nelson (chairman). They asked that it be ready for the semicentennial celebration of the National Council of Teachers of Mathematics in 1970.

The committee suggested: “The emphasis of the book should be on the historical origin of the content, methodology, and course sequences existing in the United States and Canada rather than on the chronological aspects of the topic. It is expected that the yearbook would also delineate the important issues and problems which need to be resolved in the coming decades.”

The editorial committee for this book was then selected and met in Ann Arbor, Michigan, in June of 1967. It prepared a plan and budget which were approved by the Publications Committee and the Board of Directors of the National Council of Teachers of Mathematics. President Donovan A. Johnson notified the editorial committee of the Board’s approval in October of 1967.

The editorial committee enlisted a few additional writers and together they met in Chicago in November of 1967 to elaborate and review the original outline and prepare a work schedule.

Many friendly, exciting, and vigorous debates developed. There is neither time for nor value in recounting most of these, but one in particular typifies our problems. The editorial committee originally planned that one Part of the book would be devoted to the development of major themes in content, such as number, proof, and function through grades K–12. A second Part was planned to trace a

parallel story of the development of pedagogical problems and devices, such as the problems of individual differences and the use of laboratory and discovery techniques in teaching, again to cover the K-12 span.

This plan was initially accepted by the enlarged writing team because of their general agreement that it is a highly desirable trend to diminish the distinction between elementary and secondary school programs and to place great emphasis and stress on the need for articulation and continuity over the entire span, grades K-12. However, when our outlines were further elaborated and work was begun, difficulties were encountered. Practicality was given precedence over a desire to encourage articulation. These Parts were reorganized into the present Parts Two and Three, separated on the basis of grade level rather than on the basis of content and teaching problems. The motives for this change were several: (1) the elementary-secondary distinction has been significant in the history we were trying to write, and we were not trying to change the past; (2) the readers we seek are still strongly oriented this way and might be more able and inclined to follow our story than if it were consolidated; (3) the writers themselves tended to be better informed and more confident of their knowledge and views at one level or the other rather than over the entire K-12 range.

There were other caveats suggested by the authors as we discussed and wrote. For example: the distinction between "forces" and "issues" is rarely sharp and varies with the time and the topic; which forces and issues are more important or more inclusive is a function of the authors' viewpoints as well; and finally the amount of space allotted to each force or issue occasionally had to be dictated by an editor.

In a historical undertaking that tries to be analytical as well as factual it is particularly difficult to acknowledge, or even to define, all one's sources of aid and ideas. Our extensive bibliographies are intended to do this as well as to be an aid to persons with further interest in our story. There are two especially important sources not adequately covered by a bibliography, however—our own teachers and our students. The Editor, for example, profited more than the bibliography reveals from work with Raleigh Schorling and Louis C. Karpinski.

Several groups of graduate students have indirectly helped by stimulating thought and gathering data. At Ohio State University a group of graduate students in mathematics education prepared a paper, "The Evolving Mathematics Curriculum in the United States since 1890," which was interesting and helpful. This group included Carl V. Benner, Sister Lenora Carmody, Charles McNerney, Lloyd Merick, John

C. Peterson, Richard L. Price, H. Marks Richard, David Robitaille, and Susan Stock. A paper on the history of mathematics curricula in the United States, written by George P. Richardson for Professor E. G. Begle of Stanford University, was read by the Editor with interest and profit. Kristina Leeb-Lundberg sent us outlines of a thesis, "The History of Mathematics in the Kindergartens of the United States." Other persons, whose theses are listed at the end of our bibliography and who either corresponded or conversed with us, are Lewis J. Berenson, Robert G. Clason, and John D. Hancock.

Professor Jerry P. Becker of Rutgers University made available to us a manuscript, "A Historical Survey of Attempts to Improve School Mathematics in the United States," which he had prepared for a junior-senior high school teacher institute in the summer of 1968.

Professor Frederick L. Goodman of the University of Michigan read Part One critically and made helpful suggestions.

Finally, our appreciation goes to those persons who have made this book a reality: Charles R. Hucka, who directs the Council's publishing program; Julia A. Lacy, who supervised the editorial process; Dorothy C. Hardy, who did the major copy editing; and Colleen Clark, Karen Craig, and Lois G. Saunders, who gave substantial help at various stages of production.

The Editors and Authors

(Members of the editorial committee are indicated by asterisks.)

Arthur F. Coxford, Jr.,*	Houston T. Karnes*
<i>Associate Editor</i>	Louisiana State University
The University of Michigan	L. Doyal Nelson*
Douglas H. Crawford	University of Alberta
Queen's University	Alan R. Osborne*
F. Joe Crosswhite	The Ohio State University
The Ohio State University	Douglas J. Potvin
M. Vere DeVault	Loyola College
The University of Wisconsin	Solberg E. Sigurdson
Harold P. Fawcett*	University of Alberta
The Ohio State University	J. Fred Weaver*
E. Glenadine Gibb	The University of Wisconsin
University of Texas	F. Lynwood Wren
Phillip S. Jones,* <i>Editor</i>	San Fernando Valley State
The University of Michigan	College