

Chapter 1

Introduction

The history of mathematics education is a field of study that is both old and new. It is old because scholarly works in the field began to appear over 150 years ago. Schubring (2014a) refers to Fisch (1843), as possibly the first work on the subject published in Germany. In the United States the first dissertations on mathematics education (Jackson 1906; Stamper 1906) focused specifically on its history. For many decades later it was believed, however, that the only acceptable form of scholarship in mathematics education was one that employed statistical methods. Kilpatrick (1992) points out that the situation began to change only in the 1980s. Accordingly, in all this time the history of mathematics education remained marginal at best, and only the past few decades finally saw renewed interest in the subject (Furinghetti 2009a). This is confirmed by the recent publication of a two-volume work on the subject by Stanic and Kilpatrick (2003), the formation of a special topic study group devoted to the history of mathematics education at the International Congress of Mathematics Education (beginning in 2004); the publication of the *International Journal for the History of Mathematics Education*; the appearance of special conferences devoted to the history of mathematics education (Bjarnadóttir et al. 2009; Bjarnadóttir et al. 2012; Bjarnadóttir et al. 2015), and the publication of the *Handbook on the History of Mathematics Education* (Karp and Schubring 2014a), which in large part forms the basis of the present survey.

The aim of this survey is to outline the principal trends, methods, achievements, and remaining challenges. To be sure, we will not be able to cover everything; indeed, we could not list all the works—or even all the major works—in the history of mathematics education. In our discussion we will focus for the most part on relatively recent works, even though older, classic texts often retain their significance and the works we discuss make frequent references to them. Moreover, although in our research we consulted publications from a variety of different countries, our discussion will be largely limited to works written in English. Once more, one will readily find references to foreign-language literature in the works discussed here and in the aforementioned *Handbook* (Karp and Schubring 2014a); we also refer the reader to the international *Bibliography* (2004). It should be

emphasized that the present article is not so much a survey of existing literature as it is an attempt to outline areas and topics deserving further inquiry.

Moreover, it should be said at the outset that we take a broad view of our subject, just as today one takes a broad view of mathematics education in general. The history of mathematics education examines not only programs of study, teaching aids, and administrative (legislative) decisions governing the process of mathematics education, but also the full range of questions concerning all the participants of the educational process, including the biographies, the training and the opinions of educators and planners of mathematics education, the factors that influence them, the different forms and practices of mathematics education, public perceptions of mathematics education, etc. (Schubring 1988). At the same time, we are interested first and foremost in the phase of education that may be termed “pre-college” for lack of a better word (with the exception of “mathematics teacher education,” which, naturally, includes college training).

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