SUMMARY OF CONTRIBUTION TO PANEL DISCUSSION ON THE PLACE OF THE HISTORY OF MATHEMATICS IN INITIAL AND IN-SERVICE TEACHER TRAINING

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Since mathematics and its history cannot be seperated, history should appear in some form everywhere in mathematics education, and all mathematics teachers should be able to make it appear. This puts great demands on the education of mathematics teachers, and even greater on their in-service education if one wishes to make history of mathematics more prominent in school mathematics than it has been in the past.

This has become more important than ever before in Denmark, since the ministry of education in 1988 issued new regulations for the upper secondary level, making it obligatory that every topic on the mathematics curriculum should be taught with due regard to its history. The teachers at this level are university educated, and the courses in history of mathematics at the universities have multiplied and are attended by more students than before, and also in-service courses on historical themes occur more often now for these teachers. But even if history of mathematics is not (yet) obligatory at the primary and lower secondary levels, one can register a growing interest for it both at the seminariums, where the teachers for these levels are educated, and among present teachers. Their in-service education is mostly taken care of at the Royal Danish School of Educational Studies, with its main branch in Copenhagen and its 8 provincial branches, and at the Copenhagen branch I have in the last ten to fifteen years been able to give many in-service courses on the history of mathematics, the shortest ones in the form of a full-time, one-week course of 28 hours in all, the longest ones covering a whole year (33 weeks) with three hours per week. In my courses I always try to include something about non-Euclidean geometry, because it might well have far-reaching consequences on the participants' understanding of what mathematics really is.

Teachers of mathematics are not and cannot be professional historians of mathematics, and I am not one myself. So we have to rely on secondary or even tertiary sources, and therefore there is a risk that we tell colourful but untrue historical anecdotes, or that we reproduce historical arguments whith wrong points or whith anachronistic twists etc. We should not misrepresent history, but can we completely avoid to do it? Maybe one could say that at least we should not knowingly misrepresent history. The best way to make history of mathematics attain its proper place in mathematics education is presumably through education and in-service education of mathematics teachers, through many courses in every country, and more summer universities like this one.

Référence

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