Symposium on Elementary Maths Teaching (SEMT)

Jarmila Novotná, Hana Moraová

Can we do more to support pre-service and in-service primary school teachers and their educators in their struggle for more effective, interesting and challenging mathematics teaching? Are 5–12 year old pupils' attitudes to mathematics and their needs and abilities different? Should more attention be paid to the teaching methods, contents and activities used in teaching these pupils? Does this group of pupils have any special needs? Are there any cognitive and psychological limits and boundaries that must be respected? What is their prior experience with mathematics which they enter primary school with and which can be built on? Are there any special tools and aids that can be successfully used for this specific target group? These are just some of the questions that made Czech primary school mathematics educators and researchers realize that the platform for the discussion of these issues was far from satisfactory as other international scientific events did not specialise in this age range, in consequence of which there was lack of space for discussing the questions specific for this age group.

The answer to this need is the conference *Symposium on Elementary Maths Teaching* (*SEMT*) which focuses on the teaching of mathematics to this group, i.e. children within the age-range 5–12 years.

SEMT is a biannual conference. As the 11th Symposium was held in August 2011, it is easy to calculate that the 1st SEMT took place in August 1991. A child, when conceived, has two parents. Our child, SEMT, also has two parents – two colleagues from Charles University in Prague, Michaela Kaslová and Jarmila Novotná. Conceived in 1990, SEMT was born in 1991 as the only conference focusing on the teaching and learning of elementary mathematics. SEMT has also had a number of aunts, uncles and friends supporting its development. The child has been gradually growing up, developing and assimilating new ideas, meeting new people, both from the Czech Republic and abroad, who helped its development.

Each SEMT focuses on one important central topic of elementary mathematics teaching. The development from general topics towards more specific problems of elementary mathematics teaching can be easily recognised from the main topics of all eleven SEMTs:

- 1991: The teaching of mathematics to elementary mathematics pupils
- 1993: The changing face of elementary mathematics
- 1995: Geometry and word problems for elementary mathematics
- 1997: Assessment and evaluation

- 1999: How the world of mathematics emerges from everyday experiences of children
- 2001: What is meant by the competence and confidence of people involved in the teaching of elementary mathematics
- 2003: Knowledge starts with pre-conceptions
- 2005: Understanding the environment of the classroom
- 2007: Approaches to teaching mathematics at the elementary level
- 2009: The development of mathematical understanding
- 2011: The mathematical knowledge needed for teaching in elementary schools

SEMT brings together elementary teachers, pre-service and in-service teachers and teacher educators and researchers from all over the world. This is reflected in both the participants attending and those giving lectures and workshops. The SEMT community has been gradually growing and the conference can now boast a relatively stable community of regular participants, while attracting the attention of newcomers from very distant corners of the world. The community involves colleagues from most countries in Europe, the Middle East, Japan, Australia and America. The mix of nationalities and the return of many old friends contribute considerably to the warmth and friendliness, which epitomises the SEMT conferences.

The multicultural background of the participants adds to the vibrancy of the symposium and the vigour of the interchanges between participants. This sharing of different perspectives on mathematics teaching has always been a strong and most attractive aspect of SEMT, as we gain greater understanding of our own practice through learning about the practice of others. The multi-nationality basis of SEMT conferences makes the participants realize that no problem or issue is a problem of just one institution or country. Discussions with fellow participants quickly make the participants realize that many of the most pressing matters are common for many countries. The sole chance to discuss the issues in this colourful community helps and sometimes even provides a solution.

The range of new ideas for helping teachers to make mathematics both a meaningful and an enjoyable subject presented and exchanged in the SEMT history is enormous. The number of formats for presentation, including plenary lectures, discussion groups, research reports, short oral presentations and posters provide enough space for both renowned and world-wide respected researchers and freshmen to share their ideas, research results and concerns. It has also helped new colleagues/post-graduate students to present their first papers to a discerning but appreciative international audience.

As on all international conferences, the contributions of the participants are published in the conference proceedings. Prior to this, there is a reviewing process in which all the contributions are reviewed by an international board. For those who attended SEMT, the proceedings act not only as a reminder of their SEMT experience. As the proceedings are available already at registration, the participants are given the chance to select among the different programmes in parallel sessions according to their interest. Moreover, the proceedings help those who do not feel very confident about their English to follow the oral presentations with textual support.

However, the proceedings are also meant for those who for any reason could not participate at the conference but are interested in the topic and the contributions. The number of copies of the proceedings has been gradually growing not only in reaction to the growing number of conference participants but also to answer the demand of the wider academic and research community. The evidence of the quality and reputation of the proceedings is its acceptation by Web of Knowledge in 2005.

SEMT has become an important international event with a high scientific as well as social standard. With the conference venue in the very centre of Prague, SEMT offers its participants unforgettable social and cultural experiences. The conference organizers are well aware of the fact that it is often during informal meetings that the ideas are born and so they pay equal attention to the organization of a conference dinner, a welcome party and a trip. Good food, live music, historical surroundings all foster nice atmosphere and prepare grounds for making friends and starting new cooperation.

It is hard to say how many times an event has to take place before it can be called traditional (it seems that it is generally agreed that to speak of a tradition of an event, it suffices if it takes place twice). However, there is no doubt that the biannual conference of the Symposium on Elementary Mathematics Teaching is now a well-established tradition as SEMT ’11 was already the eleventh conference.

The growing importance of contributions to the SEMT programme is also documented by the publication of the special issue of the *Mediterranean Journal for Research in Mathematics Education*, whose Volume 8, No. 1 in 2009 (guest editors Jarmila Novotná and Demetra Pitta-Pantazzi) contains augmented texts of selected plenary lectures from SEMT 2005 and 2007.

SEMT’s future looks promising. SEMT ’13 will be held in Prague at the Faculty of Education of Charles University in August 2013. Its theme is “Tasks and tools in elementary mathematics”. SEMT ’13 plenary speakers whose lectures we will have the pleasure to follow are: Olive Chapman (Canada): Engaging Children in Learner-Focused Mathematical Tasks; Rose Griffiths (United Kingdom): Working with children in public care who have difficulties in mathematics; Joanne Mulligan (Australia): Inspiring young children’s mathematical thinking through pattern and structure; Jennifer Young-Loveridge (New Zealand): What matters in mathematics learning to students: A tool for international comparisons.

We hope that the number of participants will yet again exceed one hundred and look forward to their valuable contributions, observations, remarks and ideas.

For a more detailed information about the conference see http://kmdm.pedf.cuni.cz.

prof. RNDr. Jarmila Novotná, CSc.
Charles University in Prague, Faculty of Education
jarmila.novotna@pedf.cuni.cz

PhDr. Hana Moraová,
Charles University in Prague, Faculty of Education
moraova@seznam.cz