A Message of Congratulation on Behalf of the International Commission on Mathematical Instruction

Hyman Bass¹

School of Education, University of Michigan, 610 East University Avenue, Ann Arbor, MI 48109-1259, USA; Email: hybass@umich.edu

Bernard R. Hodgson²

Département de Mathématiques et de Statistique, Université Laval, Québec G1K 7P4, Canada; Email: bhodgson@mat.ulaval.ca

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Editor's Note: On the occasion of the publication of the 100th issue (Vol. 42, Number 2) of the Journal of the Korea Society of Mathematical Education Series A: "The Mathematical Education", Professors Hyman Bass (President of the International Commission on Mathematical Instruction) and Bernard R. Hodgson (Secretary-General of ICMI) together send a message of congratulation to the Korea Society of Mathematical Education (KSME).

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INTRODUCTION

We are pleased and honored to respond to an invitation from the Editor-in-Chief of the Journal of the Korea Society of Mathematical Education Series A: "The Mathematical Education" to contribute to this journal on the occasion of the publication of its 100th issue. We are happy to use this opportunity to voice, on behalf of the International Commission on Mathematical Instruction (ICMI), words of congratulation to the Korea Society of Mathematics Education (KSME) and also to reflect briefly on these key terms just uttered: Mathematics, Education, and Korea.

¹ President of the Korea Society of Mathematics Education (ICMI).

² Secretary-General of ICMI.

As Bass (2000, p. 3) said at the opening of ICME-9, in Makuhari, Chiba, Japan, Mathematics as a discipline has a long history, emerging from many cultures. It is truly international, even universal, in character. Mathematicians throughout the world have a fundamentally common understanding of the nature of mathematics and of its central problems and methods. Research mathematicians working on a mathematical problem, be they in Africa, Asia, Australia, Europe, or the Americas, are part of a cohesive intellectual community that communicates fluently.

INTERNATIONAL ASPECT

Education is similarly a universal and fundamental function of every society. It provides for the enculturation of young children into socially responsible, culturally fulfilling, and economically productive adulthood. But, unlike mathematics, the universality of education is marked not by cohesion and uniformity, but by a diversity of form, of organization, of culture as rich as that of life itself. The traditions and goals of education, the organization and culture of schools and classrooms, the professional culture of teachers and teaching, all of these things vary profoundly from one country or region to another, as TIMSS (Third/Trends in International Mathematics and Science Study) for example has vividly illustrated.

In the expression mathematics education, we thus join the name, mathematics, of a universal and intellectually coherent discipline, with the name, education, of an institution that is socially defined and varies greatly with culture and tradition. This difference is sometimes a source of tensions, as we have witnessed in contemporary debates between disciplinary mathematicians and education professionals.

As our world grows more tightly knit by modern communication, economic globalization, and other forces, mathematics education faces new challenges, and there is a greater desire to create some sense of international community in the study, practice, and improvement of mathematics education. In particular, there is great interest in learning more about educational practices in countries, such as Korea, which have shown the highest student achievement performance in the TIMSS study, and in understanding the possible links of these successes with the preparation and professional development of teachers. There is also an important need to address new issues, such as those raised by the development of technology. As a result of all these influences, there has been a substantial increase in many countries in both reflection and action on mathematics education issues, and in this connection the International Commission on Mathematical Instruction (ICMI) may play a role in bringing different cultures together and facilitating exchange of views and experiences.

ICMI is one of the principal organizations dedicated to study and improvement of mathematics education at the international level. On the one hand, it fosters international communication and cooperation among mathematics educators worldwide. On the other hand, as a commission of the International Mathematical Union (IMU), ICMI sustains strong connections between disciplinary mathematics and mathematics education.

ICMI was established at the fourth International Congress of Mathematicians, held in Rome in 1908 so analogously to the journal *The Mathematical Education*, ICMI will thus soon have the opportunity of celebrating a special power of ten. The initial mandate of ICMI was to do a comparative study of the similarities and differences in the secondary school teaching of mathematics among various countries. But the Commission has expanded its objectives and activities considerably over the years, so that the general aims of ICMI can now be described as offering researchers, practitioners, curriculum designers, decision makers and others interested in mathematical education, a forum promoting reflection, collaboration, exchange and dissemination of ideas and information on all aspects of the theory and practice of contemporary mathematical education, as seen from an international perspective.

There are two primary activities of ICMI. First are the International Congresses on Mathematical Education (ICME) which ICMI sponsors each four years. The last one, ICME-9, was held in 2000 in Makuhari, Japan, with an important role being played in its scientific program by Asiatic countries. It will be followed by ICME-10 in Copenhagen, in July 2004, to which all members of the Korean mathematics education community are wholeheartedly invited. The second important ICMI activity is the series of ICMI Studies. These are projects of roughly three years duration that address some currently important issue or topic in mathematics education. An international program committee convenes a conference of invited contributors, and from this is produced a published volume which represents the state of the art of research and practice in the focus area of the study and intends to promote discussion and action in connection with the given theme. One ICMI Study currently in progress should be of particular interest to the Korean mathematics education community: Study 13 is entitled Mathematics education in different cultural traditions: A comparative study of East Asia and the West. The related Study conference took place in Hong Kong in October 2002 and the resulting volume should appear within the next two years.

In order to achieve its objectives, ICMI aims at fostering the collaboration and exchange of views between as many countries as possible, and in this connection the Asiatic countries, and especially Korea, are in a position to bring a unique and important contribution. For a number of years, Korea has been an important member of the ICMI community. This is reflected in the internal activities organized by and for Korean educators, in the numerous contacts of Korea with other countries in the region, as

testified for instance by the success of EARCOME-1 held in Chungbuk in August 1998 (cf. Park, Choe, Shin & Kim 1998), and more generally in the global interest and eagerness of the Korean mathematics education community in supporting ICMI activities. ICMI particularly welcomes the forum offered to the various components of the mathematics education community in Korea by the establishment in 1996 of the Korean Sub-Commission of ICMI (KSICMI).

CONCLUSION

As it should be clear from these brief remarks, ICMI warmly welcomes the increasing participation of Korea in the international community of mathematics education, of which the one hundredth issue of the journal *The Mathematical Education* is an important milestone, and occasion for paying tribute.

REFERENCES

Hyman Bass (2000): Presidential Address at the Opening Ceremony of ICME-9. *ICMI Bulletin* 49, p. 3.

H. S. Park, Y. H. Choe, H. Shin & S. H. Kim (Eds.) (1998): Proceedings of the First ICMI-East Asia Regional Conference on Mathematics (held at Korea Nat. Univ. of Education, Cheongju, Korea, 17-21, Aug. 1998), Vols. 1-3. Seoul: Korea Soc. of Math. Education. MATHDI 1999a.00489