Mathematics, Society and Education Lecture Series: "Beliefs about Mathematics and the Learning of Mathematics

Date: 12 Nov 2025 (Wed) **Time:** 10:00 -11:30

Venue: Auditorium, University Gallery (E1 Basement Floor)

Language: English

Registration: Online Registration (https://go.um.edu.mo/xop7vsdu or

Enquiries: Mr. Alex CHEN (Email: fed_event@um.edu.mo / Tel: 8822-4575)

Speaker:

Prof. Zalman USISKIN, Professor Emeritus, the University of Chicago. His work has focussed on the secondary school mathematics curriculum. His interests cover all aspects of mathematics education, with particular emphasis on matters related to curriculum, instruction, and testing; the selection and organization of content; the teaching and learning of mathematics; international mathematics education; teacher education in mathematics; the history of mathematics education; and educational policy.

Early in his career, he became known for his curriculum development work in geometry, with real-world applications of mathematics, and in using the latest technology into the materials. Ideas gleaned from these studies were among those incorporated in the secondary school materials developed in the University of Chicago School Mathematics Project, which he directed for over three decades.

He is the author of over 150 published articles and co-author or co-editor dozens of books, including a mathematics textbook for teachers. He has received lifetime achievement awards from many organizations, including NCTM and NCSM in the United States and the International Society for the Design and Development of Education. In 2014, NCTM published a book of 38 of his papers, the only time they have published a book devoted to the writings of one person.

Abstract:

We live much of our lives based on beliefs, and beliefs tend to be difficult to change even in light of evidence to the contrary. This presentation discusses beliefs centered around mathematics itself, about learners of mathematics, about teaching learners of mathematics, and about what it is we want to teach and what we want learners to learn. Mathematics is a large and varied discipline, and so are our students and their teachers, so it is not a surprise that beliefs are typically not applied uniformly throughout the world at all levels, from the intended curriculum to what is taught in classrooms and what is learned by students.

What do we do when our beliefs run counter to the beliefs of others, or to the prevailing beliefs? Sometimes there exists data that sheds light on the issues raised by conflicting beliefs.

Though centered around mathematics, these ideas stimulate our thinking about other areas of knowledge, and to other endeavors.