



CRAFTING MATHEMATICS PROBLEMS FOR 21ST CENTURY EDUCATION

Associate Prof. Dr. Zaleha Ismail
Department of Educational Science, Mathematics and Creative Multimedia
Faculty of Education
Universiti Teknologi Malaysia

E-mail: p-zaleha@utm.my

21st century mathematics learning experiences are expected to encourage students to be creative, innovative, critical, and good problem solvers. The usual procedural and artificial mathematics problems no longer can support the new 21st century learning spirits. Too often teaching in the mathematics classrooms have been designed for instructional efficiency that is content oriented, and not to sustain authentic learning. Authentic learning experiences which can provide students' ownership of their learning path with choice, application, discovery, struggle, success, and feedback can be driven by quality mathematics problems. A new framework on crafting mathematics problems is needed. Some examples of realistic problems will be shared and discussed. The participants of the workshops will be guided to attain some skills on how to select as well as create problems that can engage students to be productive and active.