

## **Mathematics teachers' preparation program: Determining the balance between contents in mathematics and pedagogy**

### **ABSTRACT**

Teacher educators in the university need to know what types of knowledge and what levels of knowledge acquisition are necessary to become effective mathematics teachers; and what contexts are most conducive to learning how to teach. One theoretical model of teacher knowledge suggests seven domains of teachers' professional knowledge: knowledge of subject matter, pedagogical content knowledge, knowledge of other contents, knowledge of the curriculum, knowledge of learners, knowledge of educational aims, and general pedagogical knowledge (Shulman & Grossman, 1988; Wilson et al., 1987). Graham et al. (2000) found that in most institutions, content courses are typically taught in the mathematics departments and methods by the faculty of education. He asserted that division may foster a perspective that methods are unrelated to content or that content is more important than method. A study was conducted to identify the emphasis in the contents of the mathematics education curriculum in Malaysian universities. Based on the types of mathematics education programs offered, students preparedness to become teachers are revealed based on their confidence to teach, pedagogical content knowledge, views of mathematics, aspects that need be emphasized in teaching and their perceived importance of aspects to be incorporated in teaching.

**Keyword:** mathematics, program, pedagogy