Critical thinking skills for Chinese teachers: a study of mathematics teachers’ perceptions

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Abstract:

Keywords: critical thinking, gender, teaching experience, mathematics education, teachers’ perceptions

Teachers’ perceptions of critical thinking may affect the enhancement of students’ critical thinking abilities either positive or negative (Ozkan-Akan, 2003). Teachers who perceive that students can develop critical thinking skills which connected with individual’s experience, intention, and learning needs, may show students that there is often more than one solution to a problem, and would actively encourage students in learning of critical thinking in their class (Choy, 2003). This study examines the definition of critical thinking espoused by teachers in China, with the purpose of finding more about teachers’ gender, teaching experience and their perceptions of critical thinking skills in their teaching, expecting to provide significant insights on how critical thinking defined in different culture.

Methodology: quantitative and qualitative research methods

In this study, independent T-test was applied. Gender was taken as a variable. There was no significant difference between male and female in their answer to the definition of critical thinking. Compared with teachers who had rich teaching experiences, teachers who had fewer years teaching experiences might not have enough strategies in their teaching especially incorporate critical thinking.

For future research, there is a need to examine obstacles toward critical thinking in China, how to implement critical thinking across curriculum, how to integrate critical thinking into current education reform, comparative teaching strategies about critical thinking, the relationship between mathematics achievement and critical thinking, and infusion method in promoting students’ critical thinking.