Reflective thinking practices among secondary school Mathematics Teachers.

ABSTRACT

The purpose of the study was to identify the practice of reflective thinking among secondary school mathematics teachers in the teaching and learning process. Reflective thinking in the study encompasses four constructs which are retrospective and predictive thoughts, critical inquiry, problem solving skills and acceptance and use of feedback. The study also identified factors affecting the practice of reflective thinking. This is a descriptive correlational study. The respondents of the study consisted of 147 mathematics teachers from 19 secondary schools in a district in Negeri Sembilan, Malaysia. They were selected using multistage sampling which involved simple random sampling and cluster sampling. Results of the study reveal that mathematics teachers practise reflective thinking moderately. However a strong emphasis was found on retrospective and predictive thoughts among teachers, while moderate practice was shown in the critical inquiry construct, problem solving skills and acceptance and use of feedback. Pearson correlation analysis showed significant positive relationships among reflective thinking practices with internal learning orientation ($r=0.46$, $p<0.01$) and efficiency in problem solving ($r=0.43$, $p<0.01$). .Multiple regression analysis revealed four factors which significantly affect reflective thinking practices, namely time constraints, teachers perception of mathematics learning, external learning orientation and skills in problem solving.

Keyword: Reflective thinking practices; Secondary school; Mathematics Teachers.