Exploring Elementary School Teachers' Mathematical Knowledge for Teaching in asynchronous peer discussion environment

The purposes of this research were establishing one internet space with asynchronous peer discussion intention based on mathematics curriculum transformation, supporting elementary school teachers sharing and discussing their perspectives about mathematics curriculum transformation. Therefore, we established the mathematical knowledge for teaching growth model for web-based learning environment. In this study, data were gathered from all information made by elementary teachers on the internet space, all information made by elementary teachers for the perception instruction, and interview discourse of teachers. The findings of the research supported elementary school teachers viewing their own perception for mathematical knowledge for teaching and improving their mathematics teaching. Finally, we provided mathematics educators an approach to train elementary teachers' mathematical knowledge for teaching through web-based environment.

Key words：Curriculum transformation, Mathematical knowledge for teaching, Web-based learning