

Enhancing Pre-Service Secondary Mathematics Teachers' Skills of Using the Geometer's Sketchpad through Lesson Study

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The purpose of this study was to enhance pre-service secondary mathematics teachers' skills of using the Geometer's Sketchpad (GSP) through Lesson Study. Twenty-four Lesson Study groups each comprising four or five pre-service secondary mathematics teachers who attended a mathematics teaching methods course in a local public university were set up in four tutorial groups. There were six Lesson Study groups in each tutorial group. For each Lesson Study group, qualitative data were collected through observations, written lesson plans and reflections, as well as GSP sketches. This paper discusses how Lesson Study has enhanced the pre-service secondary mathematics teachers' skills of using GSP in one of the selected Lesson Study groups that used GSP to teach the topic of 'Regular Polygons' in Form Three Mathematics. Analysis of their GSP sketches in the first, second and third lessons indicates that the participants of this Lesson Study group showed significant changes in their skills of using GSP to teach the topic.

Key words: Geometer's Sketchpad (GSP); Pre-service secondary mathematics teachers; Lesson Study; Regular polygons