Using Mobile Technology Applications (Apps) when Teaching and Learning Geometry in Junior Secondary School Mathematics Education in Sri Lanka

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The purpose of this study is to explore the factors influencing the use of mobile Apps by pre-service mathematics teachers with a focus on the pedagogy approaches when teaching geometry to year 10 students in Sri Lanka. In the last decade, there has been a rapid development of mobile Apps and their adoption for mathematics education has been widely discussed in the research literature (Calder & Larkin, 2016; Carr, 2012) and the interpretive paradigm is selected as the philosophical and methodological underpinning of the study. Study has followed mixed method approach with two phases and suggested data collection methods are case studies, survey, per-post geometry test, interviews and documentary analysis. The purposive sample of 60 mathematics pre-service teachers, two mathematic lecturers from two pre-service teacher education institutes in Sri Lanka will be participated in the study. The data analysis will involve constant comparative methods, descriptive statistic and ANOVA.

2018. In Hunter, J., Perger, P., & Darragh, L. (Eds.). Making waves, opening spaces *(Proceedings of the 41st annual conference of the Mathematics Education Research Group of Australasia)* pp. 745. Auckland: MERGA.