MINSU KIM* (minsu.kim@ung.edu), Oakwood, GA 30566. *The effectiveness of 5 minute preview video lectures using Smart Board, Camtasia Studio, and Podcasting on mathematical achievement and mathematics self-efficacy.

The purpose of this study is to examine the effectiveness of 5 minute preview video lectures for each lecture using podcasting in terms of mathematical achievement and mathematics self-efficacy in intermediate algebra and college algebra courses at a university. Data from 128 students in six sections was collected for two semesters through first and final exams, questionnaires, classroom observation checklist, and the Mathematics Self-Efficacy Scale. The findings indicate no significant difference on the mathematical achievement and mathematics self-efficacy between the control group who did not watch the preview lectures and the treatment group who watched the preview lectures while the treatment group slightly developed their mathematics self-efficacy and abilities for mobile technology. In addition, the treatment group was significantly satisfied with the preview lectures. When the treatment group was divided into intermediate low and high subgroups based on the first exam, the intermediate low subgroup significantly improved their mathematical achievement. (Received August 30, 2013)