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Prompting the use of online application on smartphone (integral calculator) in learning integration techniques

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Abstract

The bondage of smartphone should be overcome wisely. In fact, students could not be separated from smartphone in the class. Therefore, as an educator we can use it to create a learning process of integration using application in the Internet. This study aims to develop classroom activities that support engineering students for learning integral using Integral Calculator in Internet. Design research was chosen as an appropriate method to achieve the goals since this study will provide a descriptive learning evidence how the students use the application to understand integration technique. Around thirty-eight engineering students in Adisutjipto College of Technology that divided in 10 groups involved in this study. The teaching experiment result of cycle 1 showed that only a few students knew about Integral Calculator before this study. At the first, they were amazed and thought it was very useful to find the answer. Later on, when they asked to understand the steps given by this application they found some difficulties. However, with small clue they can understand it. In other words, this application really helpful for students to get the calculation of integral problems, but students still need guidance from teacher or friends to process the steps. Therefore, the use of integral calculator fits best for classroom activities while teacher or group discussion could lead students to comprehend integral techniques.

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