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"Strengthening the Ties Between Education and Research"

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THE EFFECT OF IMPLEMENTATION OF J2ME-BASED MOBILE ENCYCLOPEDIA "CHEMISTCLOPEDIA" AS INDEPENDENT CHEMISTRY LEARNING MEDIA FOR SENIOR HIGH SCHOOL STUDENTS

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ABSTRACT

The improvement of Information Communication Technology (ICT) affects the development of learning media, including chemistry learning media. Mobile chemistry media have not been much developed yet unlike the increase of the use of mobile phone in Indonesia. This research aims to measure the effect of the use of Chemistry encyclopedia called Chemistclopedia application to high school students chemistry learning. The Chemistclopedia application is on the topic of chemical elements, and was field-tested to 30 high school students at SMAN 1 Sedayu, Bantul, Yogyakarta. The data about student's learning interest, attitude, motivation, independence, flexibility and style were collected using a set of questionnaire and analyzed using descriptive statistic. This study shows that 87.60% of the students strongly agreed (SA) with the use of *Chemistclopedia* application because it can affect students' learning interest, learning motivation, learning independence, learning flexibility, learning attitude and learning styles of Chemistry.

Keywords: java 2 micro edition (J2ME), chemistry, learning media, Chemistclopedia, mobile application.