ABSTRACT

Learning methods with face-to-face or learning in the classroom is the way in providing the most comprehensive learning materials which would be taught to students. However, face-to-face method is very time-consuming exercise for the provision of material and at the same time. For topic subjects that require a lot of exercises, such as the topic conversion unit length, unit weight and the currency conversion, face to face is not enough to make the students better understand the material being taught in school. If teachers are required to provide additional exercises and then check the students' answers, then the time required will be very long. In fact, practice questions, the topics above, has a pattern of the same questions and answers, so that the process can be automated questions varied. With the background of this issue, the authors compile the final project to create an application that generates exercises automatically and examination answers quickly, for the topic conversion of weight, long objects and currency values, platform used is Microsoft Excel and Visual Basic for application, and implementation of many of the systems ITS (Intelligent Tutoring system) that will assist students in learning these topics. Based on test results, it has been able to generate application exercises in above topics automatically and quickly.

Keywords: Automatic Math, Unit Conversion, Intelligent Tutoring System, Microsoft Excel, Visual Basic for Application