ABSTRACT

The basic of programming is a very crucial competency for bachelor students in Information Technology major. However in reality many students find it difficult to understand the basic principles of programming due to the gap between high school curriculum and bachelor degree curriculum. These difficulties faced by students also worsened by the instant life style happened nowadays where many students expect to see fast result first, before they gain interest in knowing the process. Game-Based Learning adds fun factors when learning programming subjects so that students will gain more interest and resulting in deeper understanding of programming concept compared to conventional methods. This paper describes the experience of Department of Information Technology at Ciputra University in applying Game-Based Learning for Object Oriented Programming subject using Alice and statistical data of informal observations are summarized to show evidence of student performance as a result of this learning.

Keywords: Alice, Game-Based Learning, Higher Education, Java, Object Oriented Programming