USE OF VIRTUAL LABORATORY MEDIA

TO IMPROVE STUDENTS PROCEDURAL KNOWLEDGE ON THE SUBJECT OF THE EXCRETORY SYSTEM

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ABSTRACT

This research was conducted based on the background of the low knowledge of procedural students of class XI 1 science of Kemala Bhayangkari senior high school on the subject of the excretion system caused by the lack of tools and praticum materials, so students are difficult to understand the material message delivered by the teacher. This study aims to determine the difference of procedural knowledge of students before and after using virtual lab media on the subject of excretory system in Kemala Bhayangkari senior high school. Research method chosen in conducting this research is experimental method with research design that used is *Pre-Experimental Design*. Type *Pre-Experimental Design* chosen *One Group Pret-test Post-test Design*. The population of this study were students of grade XI science of Kemala Bhayangkari senior high school and the sample of this study is also an experimental class that is class XI 1 science with the number of students as many as 20 people. The instrument used is a test that measures cognitive ability in the form of 20 multiple choice questions tailored to the achievement of previously piloted learning indicators. The results showed the average pretest score of 47,8 with the lowest score of 30 and the highest score of 60. While the average posttest value of 87,8 with the lowest score of 70 and the highest value of 100. The average value of N-Gain index is 0,77 while the t test is $t_{hit} > t_{tab}$ that is 13,24 > 2,71. Based on the data, it can be deduced that the pretest and final knowledge of the students shows significant differences (significantly different). With the data acquisition, it is seen that the students procedural knowledge on the subject of the excretion system can be improved by learning using virtual lab media.

Keywords: Virtual Lab Media, Procedural Knowledge, Subject Matter Excretion System