ABSTRACT

Dini Nurlaili. 2023. *DEVELOPMENT OF WORKSHEET BASED ON PROBLEM SOLVING LABORATORY (PSL) ASSISTED BY POCKETLAB ON WAVES ON A STRING TO TRAIN SCIENCE PROCESS SKILLS*

The background of this development research is that the teaching media used to support learning at MA Persis Cempakawarna are less attractive to students for learning, the implementation of learning in the laboratory is constrained due to limited tools and practicum materials, and students have difficulty understanding the concept of waves on a string. The aims of this study were (1) to describe the validity level of electronic student worksheets (e-LKPD) based on PocketLab-assisted Problem Solving Laboratory (PSL) about waves on a string and (2) to describe the level of practicality of electronic student worksheets (e-LKPD) based on PocketLab-assisted Problem Solving Laboratory (PSL) about waves on a string. This study used the Research and Development (R&D) method with a 4-D development model (Define, Design, Developt, Disseminate) which is limited to the develop stage. The population of this study were all students of class XI MIPA MA Persis Cempakawarna Tasikmalaya. The research sample was taken using the saturated sample technique. To measure the eligibility of the E-LKPD, validation was carried out by an expert validator. The data analysis technique used in processing the validation results was Aiken's V index. The results showed that the percentage of product validity based on experts is 83.5%, with a very valid category. The average percentage of practicality based on educator responses is 90%, and students are at 89.56% with very practical criteria. The developed E-LKPD based on PocketLab-assisted Problem Solving Laboratory (PSL) about waves on a string meets very valid and practical criteria for use in the learning process.

Keywords: E-LKPD, PocketLab, Problem Solving Laboratory, Science Process Skills