ASSESSMENT AS LEARNING DEVELOPMENT IN VIRTUAL PRACTICE BASIC PHYSICS AS A PROCESS AND COGNITIVE SKILLS ASSESSMENT INSTRUMENT IN ONLINE LEARNING

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ABSTRACT

The objectives of this study are (1) to analyze and compile assessment as learning in basic physics virtual practicum to measure process skills and cognitive abilities in online learning, (2) to analyze the results of the application of assessment as learning in basic physics virtual practicum to measure process skills and cognitive abilities, on online learning, and (3) analyzing the effectiveness of the application of assessment as learning in the basic virtual physics practicum to measure process skills and cognitive abilities in online learning. This study uses a Research and Development (R & D) model with 4-D (Four D) stages which have been modified by researchers based on the needs of field conditions during the study. The results of this study are an assessment as learning instrument consisting of peer-to-peer assessment and self-assessment in Basic Physics II practicum on online learning with 10 items each with assessment indicators for titles, objectives, and theoretical basis, (2) tools and materials, (3) experimental procedures, (4) data presentation, (5) data analysis, (6) discussion, and (7) conclusions that are declared content valid based on the Aiken formula and empirically based on the Rasch model. The results of measuring process skills and cognitive abilities with the assessment as learning instrument in the Basic Physics II practicum on online learning for students of the S1 Science Education study program are the average assessment score between friends is 34.0741 and the average score is 34.5432. The results of the independent sample t test of the application of assessment as learning consisting of peer assessment and self-assessment in the Basic Physics II practicum in online learning is 0.160 or greater than 0.5 which indicates there is no significant difference in the application of assessment as learning consisting of peer assessment and self-assessment in the Basic Physics II practicum.

Kata Kunci: assessment as learning, process skills, cognitive abilities, virtual practicum