AN INSTRUMENT OF THE IMPLEMENTATION OF SCIENCE AUTHENTIC ASSESSMENT IN IMPLEMENTING CURRICULUM 2013

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Abstract—The study aims to make evaluation instrument of implementation science authentic assessment, were: 1) to determine Aiken's V score at evaluation instrument validity, and 2) to determine reliability score at evaluation instrument. The study was part of evaluation research using the CIPP Stufflebeam evaluation model. The research instruments were teacher's questionnaires, students' questionnaires, document check list, observation sheets, and interview guideline. The instruments were validated using Aiken's V and limited trial. The Aiken's V analysis result is valid if has Aiken's V score more than 0.82 with seven validator (rater) and number of rating categories 5. The results of the limited trial were to know the instrument reliability. The item reliabilities were analyzed with alpha Cronbach estimate. The reliability was done on 250 student respondents. The result of reliability is reliable if has the alpha Cronbach score 0,7. The results of this research are (1) the score Aiken's V teacher's questionnaires obtained is 0.997, students' questionnaires 0.997, document check list 0.999, observation sheets 0.999, and interview guideline 0.999. (2) The reliability score of teacher's questionnaires is 0.807, students' questionnaires is 0.79, and observation sheets 0.968. The instruments are valid and reliable to take the research data.

Keywords: Instrument implementation, curriculum 2013, science authentic assessment,

I. INTRODUCTION

Science is a way that gives us knowledge about the world. Science is always applied in everyday life. Science methods include observation, hypotheses, and predictions [1]. Science is implementing experimental activities, so that science can be used to maintain a healthy life. Itself science should have a dimension to create a way of thinking learners, the way to conduct an investigation, the street becomes the body of knowledge, and thus forming the interaction between technological and social [2]. Science here develops the scientific process to shape the mindset of learners and require special assessment techniques to be scalable nature of the science.

Science teaching received by students in Indonesia has become a benchmark of the progress of education in Indonesia, so the curriculum is turned into a required curriculum 2013. Curriculum 2013 emphasizes teachers must implement authentic assessment in learning. Authentic assessment is included in the education section. Education is promoting the creation of a study group to reflect the ability of high-level skills in learning lab [3]. Thus the authentic assessment is expected to create learners who are environmentally conscious and able to apply the scientific method.

Rating covers all ways of knowing the data about individuals [4]. Such data may include assignments and tests. Such data will provide information about individuals. The individuals are learners. The assessment process can be defined as the collection of evidence about the achievement of learners in the form of assignments and final test.

The good judgment has an assessment procedure. The assessment procedures help the teachers in identifying strengths and weaknesses of the program, monitoring the behavior of learners and motivate learners [5]. The assessment is an authentic assessment. The authentic assessment must run continuously so that active learners can be honed well and accommodated its development by the teacher.

The authentic assessment is measure aspects of knowledge, skills, and attitudes. The assessment in science teaching that measure aspects of knowledge using technical written tests and oral tests, while