APPLICATION OF SCIENCE LITERATION ASSESSMENT STANDARD IN INTERNATIONAL BENCHMARKING TESTS SCIENCE LEARNING IN THE FIRST MEDIUM SCHOOL

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ABSTRACT

In the face of the 4.0 industrial revolution or the disruption era, "new literacy" was needed in addition to the old literacy. Literacy is used as capital to take part in people's lives. New literacy includes data literacy, technology literacy and human literacy. Data literacy is related to the ability to read, analyze and make thinking conclusions based on data and information (big data) obtained. Related to this, the lessons study was carried out to improve the literacy of Natural Sciences teachers (IPA), especially when associated with international benchmarking surveys. The purpose of the lessons study is to improve the professional competence of science teachers in the development of science literacy assessments with international benchmarking survey standards (PISA) in order to compete in the event of disruption (Education 4.0). Stages of research conducted include; (1) improving teacher science literacy, especially the ability to develop assessments based on international benchmarking surveys (PISA), (2) applying a standardized assessment of international mapping benchmarking for measurement measures based on international benchmarking surveys in science learning classes, (3) conducting evaluations and actions further increasing teacher literacy in the development of standard international benchmarking survey assessments. The approach taken in this activity is Lesson study, an approach, to make learning improvements, which will be carried out with a focus on Mlati Junior High School 2 Sleman, DIY. These learning improvements are carried out through collaborative processes between teachers, through collaborative steps with teachers to plan (plan), observe (observe), and reflect (lessons) on learning (lessons). The results of lesson study indicate an increase in the ability of teachers to develop assessments based on international benchmarking surveys, and their application in the classroom. The results of the first cycle obtained an average value of 76.7431 and cycle 2 obtained an average value of 78.8444. Based on the results of the two cycles, it showed that KKM completeness was set at 75. The results of analysis with Rasch models with provisions for acceptance limits ≥ 0.77 to ≤ 1.30. In the first cycle assessment, the output of the INFT MNSQ Quest = 0.99 with a standard deviation of 0.14. On cycle 2 assessment the output results from the INFT MNSQ Quest average = 0.99 with a standard deviation of 0.14. The two results are based on the results of the analysis. It can be seen that all the items in question are in accordance with the Rasch Model.

Kata Kunci: *Lessons study, scientific literacy, international benchmarking, professional competence, science teachers*