Mapping Secondary School Students' Digital Learning Readiness in Mathematics Learning based on Digital Literacy Competency

by Wahyu Setyaningrum, Heri Retnawati, Ponco Handayawati, Kana Hidayati, Maria Ulfah

ABSTRACT

The rapid development of technology has an impact on the ability and readiness of individuals, especially students, to utilize this technology. The importance of utilizing digital technology has become an important concern at the international level. One institution that consistently pays attention to technology is the Organization for Economic Co-operation and Development (OECD). The OECD, through the Program for International Student Assessment (PISA), has launched a Learning in the digital world program by 2025. This program focuses on individual competence in utilizing technology to solve various real-world problems. This competency is often known as digital literacy. Digital literacy is also starting to receive attention from the Indonesian government. The Ministry of Communication and Information and the Katadata Insight Center (KIC) in 2021 carried out digital literacy measurements where it was found that the Indonesian Digital Literacy Index was 3.49 on a scale of 1-5. The survey results show that strengthening digital literacy is still very necessary. Efforts to strengthen digital literacy can be carried out in an integrated manner in learning at school, one of which is mathematics learning. As an initial stage of strengthening digital literacy in mathematics learning. Therefore, this research is aimed at conducting a survey and mapping of digital literacy competencies of junior high school students in order to determine their readiness for digital learning.

To achieve the research objectives, this research uses a survey method using closed and open questionnaires. The survey results were then analyzed quantitatively. The subjects of this research were junior high school students from three schools representing low, medium and high strata in terms of student academic achievement. The results of the analysis show that students' digital literacy competence in mathematics learning is generally in the low category. The low level of students' digital literacy skills shows that students are not ready to face digital learning in mathematics learning.

The output of this research is a scientific article submitted (submitted) to an international journal (Journal on Mathematics Education) and a national journal indexed by SINTA 2, namely the Pythagorean journal which has been published and published in December 2023. The TKT achieved in this research is TKT Level 2.

Kata Kunci: Digital Learning Readiness, Mathematics Learning, Digital Literacy Competency