ABSTRACT

Devi Nurazizah. 2026. ***The Implementation of an AR-Based PjBL E-Worksheet in Biology Learning on the Insect Concept to Enhance Students' Information Search Skills. Supervised by*** **Dr. Ida Yayu Nurul Hizqiyah, S.Pd., M.Si. and Dr. Fitri Aryanti, S.T., M.Pd.**

The advancement of information technology has expanded students' access to various sources of information. This development requires students to possess information search skills to effectively identify, select, and utilize information during the learning process. These skills are particularly important in ecosystem learning, which demands a comprehensive understanding of concepts and strong analytical abilities. Limitations in searching for and processing information may lead to conceptual misunderstandings. Therefore, this study aimed to analyze the effectiveness of implementing an Augmented Reality (AR) based Project-Based Learning (PjBL) e-worksheet on students' information searching skills (search skills). This research employed a quantitative approach using a pre-experimental method with a one-group pretest-posttest design and a one-shot case study. The sample consisted of 30 students from class X-3 at SMA Pasundan 2 Bandung, selected through purposive sampling based on digital accessibility. The results showed that the average percentage of students' information search skills reached 83%, which was categorized as good, while the distribution was dominated by the very good category at 57%. The N-Gain analysis was predominantly categorized as high, accounting for 66% of the students. These findings indicate that the implementation of an AR-based PjBL e-worksheet positively improved students' information search skills and conceptual understanding.

Keywords*: augmented reality, ecosystem, e-worksheet, search skills, project based learning*