



Digital Era for Quality Education: Effectiveness of Discovery Learning with Android to Increase Scientific Literacy

Uswatun Karimah^{1*}, Titin Sunarti², Munasir³
^{1,2,3} State University of Surabaya, Surabaya, Indonesia



DOI: <https://doi.org/10.46245/ijorer.v4i6.437>

Sections Info

Article history:

Submitted: October 23, 2023

Final Revised: October 30, 2023

Accepted: October 31, 2023

Published: November 07, 2023

Keywords:

Android;

Discovery Learning;

Scientific Literacy;

Quality Education.



ABSTRACT

Objective: This study analyzes the effectiveness of discovery learning models integrated with Android. **Method:** The method used is the literature review method. A literature review is a type of research used to collect data and information from various references. This research analyzes 20 national and international articles that can be accounted for. The articles used are articles published in 2018-2023. The steps taken in this study are identifying topics, finding and selecting appropriate articles, analyzing and synthesizing literature, and concluding. **Results:** Based on the results of research and analysis, it can be supposed that (1) the application of the discovery learning model can improve students' scientific literacy; (2) The use of Android in learning can improve students' scientific literacy. **Novelty:** This research reveals that integrating discovery learning learning models with androids can improve students' scientific literacy. This discovery invites researchers, educators, and governments to develop and facilitate discovery learning integrated with Android.

INTRODUCTION

The phenomenon of digital use in human life in the Industrial Revolution 4.0 is increasing sharply. This phenomenon can be found in various people's daily lives (Abdullah, 2019). The Industrial Revolution is closely related to the development of the 21st century. The development of the 21st-century world is marked by the use of information and communication technology in all aspects of life. Technology connects the world and transcends geographical barriers so that the world becomes borderless. One of the areas that became the foundation in realizing this was education. Education is always closely related to learning in schools. Technology develops in various fields to meet human needs in life. Everyone must have critical thinking skills, master technology, communicate, collaborate, and connect knowledge with the natural world (Anggriani et al., 2020). The World Economic Forum identifies skills required in the 21st century, including scientific literacy.

The Organization for Economic Cooperation and Development (OECD) (2019) states that scientific literacy is based on three main competencies, namely: explaining scientific phenomena or issues scientifically (explaining, identifying, and evaluating explanations of several developing technologies and natural wonders that occur); designing and evaluating scientific investigations: creating procedures for answering scientific questions, designing scientific studies, and assessing the results of such experiments; and interpret evidence and data scientifically: analyze various data presented in multiple forms such as graphs, tables, and diagrams, evaluate the correctness of information facts and data scientifically, and conclude based on the analysis of these scientific data and facts.

15. 437-Article Text-Uswatun.docx

ORIGINALITY REPORT

13%

SIMILARITY INDEX

12%

INTERNET SOURCES

6%

PUBLICATIONS

2%

STUDENT PAPERS

PRIMARY SOURCES

1	journal.ia-education.com Internet Source	6%
2	jppipa.unram.ac.id Internet Source	1%
3	www.researchgate.net Internet Source	1%
4	www.ei.binsarhutabarat.com Internet Source	1%
5	garuda.kemdikbud.go.id Internet Source	1%
6	download.atlantis-press.com Internet Source	<1%
7	ejournal.iainbengkulu.ac.id Internet Source	<1%
8	ejournal.undiksha.ac.id Internet Source	<1%
9	ojs.ikipmataram.ac.id Internet Source	<1%