

IJORER: International Journal of Recent Educational Research Homepage: https://journal.ia-education.com/index.php/ijorer

Email: ijorer@ia-education.com

p-ISSN: 2721-852X; e-ISSN: 2721-7965 IJORER, Vol. 3, No. 1, January 2022 Page 71-87 © 2022 IJORER: International Journal of Recent Educational Research

## Profile of the Implementation of Discovey Learning Model in Science Learning

Mahyuddin Syaifulloh1\*, Sifak Indana2, Rudiana Agustini3

1,2,3State University of Surabaya, Surabaya, Indonesia





DOI: https://doi.org/10.46245/ijorer.v3i1.187

## Sections Info

Article history: Submitted: December 27, 2021 Final Revised: January 6, 2022 Accepted: January 7, 2022 Published: January 31, 2022

Keywords: Critical thinking Discovery learning Problem solving Science process skills Scientific literacy



## ABSTRACT

Research was conducted to describe and analyze the implementation of discovery learning model of science learning in Indonesia. This research method uses qualitative methods with using secondary data. The sample in this research is 30 articles published in international and national journals. Based on the analysis of 30 articles on scier learning using discovery learning model in Indonesia, it can be seen that the discovery learning model has a positive impact on student learning outcomes, it can improve students' critical thinking skills, students' science process skills, students' scientific literacy, aspects of problem solving skills, and also students' understanding of concepts. there are also several disadvantages of the discovery learning model, there are; it will be optimal if it combine with media or other methods, students will be confused if they do not get the instruction from the teacher, and it require a lot of preparation and learning duration. Based on the literature review of the implementation of the discovery 7 arning model in 2012-2021 that has been carried out, it can be concluded that the discovery learning model has a positive impact on science learning.

## INTRODUCTION

The essence of science learning lies in the scientific process (scientific method), the main point is that students do not just memorize concepts but students apply the scientific process in finding concepts. After students are able to apply the scientific process, it is hoped that students can find the answers of the daily natural phenomena. This is in accordance with the 2013 curriculum, science learning which was developed with a scientific approach, which emphasizes the scientific process. Yusuf & Wulan (2015) defined Natural Science is a science that is closely related to how to find out about nature systematically, so that science is not just mastering a whole of knowledge in the form of facts, consepts, or principles, but it is also a process of discovery. Therefore, it is hoped that science learning use the scientific process, it can develop students' thinking.

Teachers need to design and prepare appropriate learning processes so that students can apply the scientific process. The learning process that involves teachers and students is designed using a learning model. The learning model as a learning stage structure serves as a systematic procedural conceptual framework to provide a learning experience to students, in accordance with the objectives to be achieved (Chusni et al., 2021). According to Chusni et al. (2021) Science learning use a scientific process must include the investigative stages, and it can be found in the discovery learning model. The discovery learning model is defined as a learning process that involves students directly, so that they can use mental processes to find concepts through a series of data or information obtained through observation or experiments (Serefina & Luthfi, 2020). So students acquire knowledge that they through self-discovery.

**ORIGINALITY REPORT** 

18% SIMILARITY INDEX

8%
INTERNET SOURCES

20%
PUBLICATIONS

0%

STUDENT PAPERS

**PRIMARY SOURCES** 

Muhammad Minan Chusni, Sulistyo Saputro, Suranto, Sentot Budi Rahardjo. "The potential of discovery learning models to empower students' critical thinking skills", Journal of Physics: Conference Series, 2020

3%

Publication

Anggit Grahito Wicaksono, Widha Sunarno, Ashadi, Baskoro Adi Prayitno. "Research Trends of Discovery Learning from 2015 to 2019: A Bibliometric Analysis", Journal of Physics: Conference Series, 2021

2%

Ratu Betta Rudibyani, Ryzal Perdana.
"Enhancing higher-order thinking skills using discovery learning model's on acid-base pH material", AIP Publishing, 2018

2%

Publication

**Publication** 

S Sugiarti, D Ratnanigdyah. "Analysis of student science process skills on electrical material using discovery model", Journal of Physics: Conference Series, 2021

2%