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. 2, No. 5, September 2021
Page 536-556

The Development of Two Stay-Two Stray Cooperative Learning Instrument on Respiratory System to Improve Scientific Literacy Skills

Sylvani Kumala Ulinnuha[1], Muslimin Ibrahim[2], Utiyah Azizah[3]
[1,2,3]Pascasarjana Universitas Negeri Surabaya, Surabaya, Indonesia

Check for updates

DOI : https://doi.org/10.46245/ijorer.v2i5.139

Sections Info
Article history:
Submitted: July 21, 2021
Final Revised: August 13, 2021
Accepted: September 15, 2021
Published: September 30, 2021
Keywords:
Scientific Literacy
Respiratory System
Two Stay-Two Stray

ABSTRACT

Science literacy is an ability to understand, communicate science through oral or written, apply and analyze the current scientific issues in society. This study aims to produce a valid, practical and effective learning tool, and has been carried out using the 4D (Define, Design, Development, and Disseminate) method; however, the Disseminate one wasn't carried out. The examination was limited in using one group pretest-post test design. The study was conducted within two meetings with 16 who were doing online learning. The data retrieval used a validated instrument. RPP tools with very decent results, LKPD tools (Student Worksheets) with very decent results, and test kits (Pre-test and post-test) with very decent results. As the result, the learning method shows to be very decent, effective, and practical, while the items of the method used are included in the sensitive category ≥0.30.

INTRODUCTION

Herdiani (2013) states that according to PISA (Program for International Student Assessment) scientific literacy is an ability to use a scientific skill, such as identifying questions and drawing conclusions based on the evidence. The skill is used to make decisions and changes related to nature through human activities. Nurjannah et al (2017) also has a similar definition of scientific literacy, in which scientific literacy is someone's ability to solve and analyze current scientific issues in society scientifically. This can be interpreted that someone who has scientific literacy skills is someone who is able to apply scientific concepts to various natural phenomena that occur in everyday life. In this study, the discussed science literacy is an ability to understand, communicate science through oral or written, apply and analyze the current scientific issues in society. The low level of scientific literacy causes students to be less responsive to developments and problems exist especially the one that related to natural phenomena, local advantages, and problems in the surrounding environment.

Through an interview with one of the Biology teachers at Senior High School 14 Surabaya, the school only implemented 15 minutes of reading as a literacy activity before the teaching and learning activity, according to the *Gerakan Literasi Sekolah* (GLS) or school literacy movement on habituation stage. Science literacy activities in school have not been included in learning achievement. The implementation of GLS has been going well, even though it is still in the habituation stage; before the teaching and learning activity starts, students will read books other than school subject books for 15 minutes. In this activity, the teachers act as role models. There is no assessment in this activity.

4._139-Article_Text-1338-2-15-20210813.doc

ORIGINALITY REPORT

16%	11%	11%	2%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	jurnal.fkip.unila.ac.id Internet Source	1%
2	eprints.uny.ac.id Internet Source	1%
3	RA Rahmi, A Samsudin, H Imansyah. "The development of PDEODE*E task based three stay two stray on static fluid", Journal of Physics: Conference Series, 2019 Publication	1%
4	Nora Indrasari, Parno Parno, Arif Hidayat, Endang Purwaningsih, Herlina Wahyuni. "Designing and implementing STEM-based teaching materials of static fluid to increase scientific literacy skills", AIP Publishing, 2020 Publication	1%
5	Indra Himayatul Asri, Yuniar Lestarini, Nurul Fajri. " The Influence Of (TS-TS) Cooperative Model On Problem Solving Ability ", Journal of Physics: Conference Series, 2020 Publication	1%

www.iosrjournals.org