turnitin unesa1

Similarity [80]

DPE

Document Details

Submission ID
trn:oid:::3618:112387967

Submission Date
Sep 15, 2025, 7:13 PM GMT+7

Download Date
Sep 15, 2025, 7:21 PM GMT+7

File Name
Turnitin_80.pdf

File Size
116.3 KB

1 Page

535 Words

3,121 Characters

26% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- Bibliography
- Quoted Text
- Cited Text
- Small Matches (less than 8 words)

Match Groups

12 Not Cited or Quoted 26%
Matches with neither in-text citation nor quotation marks

0 Missing Quotations 0%
Matches that are still very similar to source material

0 Missing Citation 0%
Matches that have quotation marks, but no in-text citation

0 Cited and Quoted 0%
Matches with in-text citation present, but no quotation marks

Top Sources

26% Internet sources
4% Publications
0% Submitted works (Student Papers)

Integrity Flags

0 Integrity Flags for Review

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

Match Groups

- **12** Not Cited or Quoted 26%
  Matches with neither in-text citation nor quotation marks
- **0** Missing Quotations 0%
  Matches that are still very similar to source material
- **0** Missing Citation 0%
  Matches that have quotation marks, but no in-text citation
- **0** Cited and Quoted 0%
  Matches with in-text citation present, but no quotation marks

Top Sources

26% Internet sources
4% Publications
0% Submitted works (Student Papers)

Top Sources

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

1	Internet	journal.i-ros.org 10%
2	Internet	www.jurnal.stituwjombang.ac.id 4%
3	Internet	discovery.researcher.life 2%
4	Internet	e-journal.stkipsiliwangi.ac.id 2%
5	Internet	e-journal.undikma.ac.id 2%
6	Internet	ijmaberjournal.org 2%
7	Internet	ijel.amikveteran.ac.id 2%
8	Internet	siakad.univamedan.ac.id 2%

Journal of Current Studies in SDGs
Homepage : https://journal.i-ros.org/index.php/JOCSIS
Email : jocsis@i-ros.org

e-ISSN 3089-7564
Vol. 1, No.3, August 2025

Implementation of STEAM-Based Project-Based Learning to Improve Critical Thinking Skills to Support SDG 4

Valencia Fidelia Soetra[1*], Dwikoranto[1], Lindsay N. Bergsma[2]

[1]State University of Surabaya, Surabaya, Indonesia
[2]Tilburg University, Tilburg, Netherlands

DOI : https://doi.org/10.63230/jocsis.1.3.80

Sections Info
Article history:
Submitted: August 20, 2025
Final Revised: August 31, 2025
Accepted: August 31, 2025
Published: September 15, 2025

Keywords:
Critical thinking;
Literature review;
Project Based Learning;
SDG 4;
STEAM.

ABSTRACT

Objective: *The purpose of this study is to analyze the Implementation of STEAM-Based Project Based Learning to Improve Students' Critical Thinking Skills in High School.* ***Method:*** *The method used is a literature review which is included in qualitative descriptive research, with the population used in writing this article being several sources of articles from various accredited national and international journals.* ***Results:*** *Based on some of the literature that has been reviewed, the application of the STEAM-based Project Based Learning model is very effective to be applied to education in Indonesia because learning is not only centered on the teacher, but students also play an active role in learning activities. This learning model can also improve problem solving skills well. This learning model can also be used with various learning media.* ***Novelty:*** *The integration of STEAM and Project-Based Learning to improve the critical thinking skills of high school students in Indonesia provides a valuable gap in its effectiveness for the development of the 21st-century curriculum, while also supporting the achievement of Sustainable Development Goal 4 (Quality Education) by promoting inclusive, equitable, and future-oriented learning practices.*

INTRODUCTION

Sustainable Development Goal 4 (SDG 4) emphasizes the importance of inclusive and equitable quality education for all, and promotes lifelong learning. The use of educational technology is key to achieving this goal, as it enables broader access, personalized learning, and the development of 21st-century skills. Education plays a vital role in improving the quality of Human Resources (HR) to support a good thinking process (Irmayanti et al., 2023; Santika, 2021; Abdulah, 2020). In the 21st century, there are six abilities that students need to master, namely the 6Cs, which include Communication, Collaboration, Critical Thinking, Creativity, Character, and Citizenship (Wahyuni, 2022).

Critical thinking is a thinking process that, when applied correctly, can be useful for systematically assessing complex ideas, thereby facilitating the solution of problems more easily (Arifin, 2020; Muti'ah, 2020; Lintangesukmanjaya et al., 2024). Critical thinking skills are one of the basic capitals that are very important for everyone and are a fundamental part of human development that must be trained along with a person's intellectual development (Bahari & Yuliani, 2021; Mayarni & Yulianti, 2020). Therefore, students are expected to possess good critical thinking skills (Lestari, 2021; Sari, 2023).

Based on the results of the Program for International Student Assessment (PISA) research, the science literacy of students in Indonesia in 2000, 2003, 2006, 2009, 2012, and 2015 achieved a score of 393, 395, 395, and 395, respectively. Scores of 393, 395, 395, 383,