

APPLICATION OF STEAM LEARNING METHODS TO INCREASE STUDENT CREATIVITY AND INNOVATION

Opan Arifudin *

STIT Rakeyan Santang, Indonesia

E-mail: opan.arifudin@yahoo.com

Sepriadi Bumbungan

Politeknik Amamapare Timika, Indonesia

E-mail: sepriadibumbungan@gmail.com

Ika Kartika

Institut Agama Islam Nasional Laa Roiba, Indonesia

E-mail: ikakartika3065@gmail.com

Abstract

This research aims to explore the application of the STEAM (Science, Technology, Engineering, Arts, and Mathematics) learning method and its impact on increasing student creativity and innovation. The literature review method was used to collect and analyze various previous studies that examined the effectiveness of the STEAM approach in education. The findings show that the STEAM method makes a significant contribution to the development of critical thinking, problem-solving, and collaborative skills. In addition, the integration of arts in STEM learning encourages students to think more creatively, generate innovative ideas, and face challenges more flexibly. This conclusion confirms that the application of the STEAM method not only enriches students' learning experiences but also prepares them to become innovative and adaptive individuals in the future. The implications of this research suggest that educational systems should adopt STEAM methods more widely to maximize students' creative and innovative potential.

Keywords: STEAM Learning Method, Creativity, Student Innovation

INTRODUCTION

Creativity in education is often defined as the ability to generate new and useful ideas, while innovation refers to the implementation of those ideas into useful solutions or products. This ability is important for students because it encourages them to think outside traditional boundaries and develop the critical thinking skills needed to face challenges in the real world (Kersanszki et al., 2024).