Yolida, B. 2025. Pengembangan Pengembangan Program Pembelajaran melalui Pendekatan STEAM-EDP untuk Menstimulasi Keterampilan *Creative Problem Solving* (CPS) Mahasiswa dalam Mata Kuliah Pengetahuan Lingkungan. Disertasi. Promotor: Prof. Dr. Abdurrahman, M.Si. Kopromotor: Dr. Dina Maulina, S.Pd., M.Si. Program Studi Doktor Pendidikan, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Lampung.

ABSTRAK

Penelitian ini bertujuan untuk mengembangkan program pembelajaran melalui pendekatan STEAM-EDP. Perbaikan program melalui perbaikan sistem dan proses diwujudkan dalam sintaks pembelajaran. Program pembelajaran ini menghasilkan perangkat dan model pembelajaran untuk menstimulasi CPS mahasiswa. Jenis penelitian ini menggunakan penelitian campuran (*Mixed Method Research*), yaitu menggunakan penelitian kuantitatif dan kualitatif. Desain penelitian yang digunakan adalah *embedded experimental design*. Proses penelitian ini melibatkan model R and D (*Research and Development*). Sistematika pengembangan *instructional design* sebagai acuan pengembangan program pembelajaran. Data dikumpulkan melalui metode kualitatif dan kuantitatif. Pengumpulan data kualitatif diilakukan tiga tahap, yaitu studi pendahuluan, validasi, dan implementasi program. Data kuantitatif dikumpulkan melalui tes CPS. Data dianalisis melalui *mixed method*. Hasil penelitian menunjukkan bahwa program pembelajaran melalui pendekatan STEAM-EDP mampu menstimulasi CPS mahasiswa dengan hasil uji *effect size* berkategori besar (validitas dan reliabilitas berkategori tinggi). Respon mahasiswa terhadap pembelajaran berkategori sangat tinggi. Dengan demikian, penelitian ini menghasilkan program pembelajaran melalui pendekatan STEAM-EDP dan program ini mampu menstimulasi CPS mahasiswa. Kebaruan dalam penelitian ini adalah dihasilkannya program pembelajaran melalui pendekatan STEAM-EDP dengan produk berupa perangkat pembelajaran dan model pembelajaran Primmer.

Kata Kunci: CPS, Mahasiswa, Pendekatan STEAM-EDP, Pengetahuan Lingkungan, Program Pembelajaran

Yolida, B. 2025. *The Development of a Learning Program through the STEAM-EDP Approach to Enhance University Students' Creative Problem Solving (CPS) Skills in the Environmental Knowledge Course. Promoter:* Prof. Dr. Abdurrahman, M.Si. *Co-promoter:* Dr. Dina Maulina, S.Pd., M.Si. *Doctoral Program of Education, Faculty of Teacher Training and Education, University of Lampung.*

Abstract

This study aims to develop a learning program through the STEAM-EDP approach. Program improvement was carried out through system and process enhancements, which were actualized in the form of learning syntax. The developed learning program produces instructional tools, and a learning model designed to stimulate students' Creative Problem Solving (CPS) abilities. This study employed a mixed methods research design, integrating both quantitative and qualitative approaches. The research design utilized was the embedded experimental design. The research process adopted the Research and Development (R&D) model. The instructional design development followed a systematic framework as the basis for developing the learning program. Data were collected using both qualitative and quantitative methods. Qualitative data were gathered through three phases: preliminary study, program validation, and implementation. Quantitative data were obtained through CPS tests. Data analysis was conducted using mixed methods. The findings indicate that the learning program developed through the STEAM-EDP approach effectively stimulated students' CPS abilities, as evidenced by a large effect size and high validity and reliability scores. Student responses to the learning program were categorized as very high. Thus, this study successfully produced a learning program using the STEAM-EDP approach, which has proven effective in stimulating CPS among students. The novelty of this study lies in the development of a STEAM-EDP-based learning program, which includes both instructional tools and the Primmer learning model.

Keywords: Creative Problem Solving (CPS), University Students, STEAM-EDP Approach, Environmental Knowledge, Learning Program