

**PENGEMBANGAN *LEARNING MANAGEMENT SYSTEM* (LMS)  
BERBASIS PEMBELAJARAN METAKOGNITIF UNTUK  
MENINGKATKAN KEMANDIRIAN DAN KEMAMPUAN BERPIKIR  
KRITIS SISWA KELAS IV SD PADA MUATAN IPAS MATERI GAYA**

**Oleh**

**Ni Kadek Septiari, NIM 2111031046**

**Program Studi Pendidikan Guru Sekolah Dasar**

**Jurusan Pendidikan Dasar**

**ABSTRAK**

Studi ini dilatarbelakangi oleh rendahnya tingkat kemandirian dan kemampuan berpikir kritis peserta didik di sekolah dasar. Penelitian ini memiliki empat tujuan utama, yaitu: (1) mengembangkan prototipe *Learning Management System* (LMS) berbasis pembelajaran metakognitif, (2) menganalisis validitas isi LMS, (3) mengevaluasi respons siswa terhadap LMS, dan (4) mengukur efektivitas LMS berbasis pembelajaran metakognitif dalam meningkatkan kemandirian serta kemampuan berpikir kritis siswa SD pada muatan IPAS dengan materi gaya. Penelitian ini menggunakan model pengembangan ADDIE. Subjek penelitian adalah LMS berbasis pembelajaran metakognitif, sedangkan objek penelitian mencakup validitas isi media, desain pembelajaran, isi materi, respons siswa, dan efektivitas media. Pengumpulan data dilakukan melalui kuesioner dan soal esai. Hasil penelitian menunjukkan bahwa: (1) LMS berbasis pembelajaran metakognitif memperoleh indeks validitas sebesar **0,995** yang termasuk dalam kategori validitas isi tinggi, (2) desain pembelajaran LMS memperoleh indeks validitas sebesar **0,984** dengan kualifikasi validitas isi tinggi, (3) isi materi LMS memperoleh indeks validitas sebesar **0,986** dengan kualifikasi validitas isi tinggi, dan (4) uji-t berkorelasi menunjukkan nilai signifikansi (2-tailed) sebesar 0,000 atau  $p < 0,05$  pada taraf signifikansi 5%, baik untuk kemandirian maupun kemampuan berpikir kritis siswa. Dengan demikian, LMS berbasis pembelajaran metakognitif terbukti efektif dalam meningkatkan kemandirian serta kemampuan berpikir kritis siswa sekolah dasar.

**Kata Kunci:** Kemandirian, Kemampuan Berpikir Kritis, *Learning Management System*, IPAS

**DEVELOPMENT OF A LEARNING MANAGEMENT SYSTEM (LMS)  
BASED ON METACOGNITIVE LEARNING TO IMPROVE THE  
INDEPENDENCE AND CRITICAL THINKING ABILITY OF IV CLASS  
PRIMARY STUDENTS ON THE CONTENT OF SCIENCE MATERIALS**

**By**

**Ni Kadek Septiari, NIM 2111031046**

**Elementary School Teacher Education Study Program  
Department of Basic Education**

**ABSTRACT**

*This study was motivated by the low level of independence and critical thinking abilities of students in elementary schools. This research has four main objectives, namely: (1) developing a Learning Management System (LMS) prototype based on metacognitive learning, (2) analyzing the validity of the LMS content, (3) channeling student responses to the LMS, and (4) measuring the effectiveness of an LMS based on metacognitive learning in increasing the independence and critical thinking abilities of elementary school students in science content with style material. This research uses the ADDIE development model. The research subject is an LMS based on metacognitive learning, while the research objects include media content validity, learning design, material content, student responses, and media effectiveness. Data collection was carried out through questionnaires and essay questions. The research results show that: (1) LMS based on metacognitive learning obtained a validity index of 0.995 which is included in the high content validity category, (2) LMS learning design obtained a validity index of 0.984 with high content validity qualifications, (3) material content LMS obtained a validity index of 0.986 with high content validity qualifications, and (4) the t-test showed a significance value (2-tailed) of 0.000 or  $p < 0.05$  at the significance level. 5%, both for students' independence and critical thinking abilities. Thus, an LMS based on metacognitive learning has proven to be effective in increasing the independence and critical thinking abilities of elementary school students.*

*Keywords: Independence, Critical Thinking Ability, Learning Management System, IPAS*