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PENGEMBANGAN E-MODUL BERBASIS BRAIN BASED LEARNING UNTUK MENINGKATKAN KETERAMPILAN BERPIKIR KRITIS PESERTA DIDIK

TESIS

diajukan untuk memenuhi sebagian syarat untuk memperoleh
gelar Magister Pendidikan Guru Sekolah Dasar

oleh

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Sebuah tesis yang diajukan untuk memenuhi salah satu syarat memperoleh
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PENGEMBANGAN E-MODUL IPA BERBASIS BRAIN BASED LEARNING UNTUK MENINGKATKAN KETERAMPILAN BERFIKIR KRITIS PESERTA DIDIK

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ABSTRAK

Latar belakang penelitian ini didasarkan pada pentingnya keterampilan berpikir kritis dalam menghadapi tantangan abad ke-21, terutama dalam konteks pembelajaran di sekolah dasar. Keterampilan berpikir kritis dianggap sebagai salah satu kompetensi esensial yang perlu dikembangkan sejak dini agar peserta didik mampu menganalisis informasi, memecahkan masalah, dan membuat keputusan yang tepat. Namun, pembelajaran yang berlangsung saat ini masih didominasi oleh metode konvensional yang kurang mampu memfasilitasi pengembangan keterampilan tersebut. Oleh karena itu, diperlukan inovasi dalam metode dan media pembelajaran yang mampu meningkatkan keterampilan berpikir kritis secara efektif. Penelitian ini bertujuan untuk mengembangkan E-Modul IPA berbasis Brain-Based Learning (BBL) sebagai salah satu solusi untuk mengatasi masalah tersebut, serta mengevaluasi efektivitasnya dalam meningkatkan keterampilan berpikir kritis peserta didik di sekolah dasar. Penelitian ini menggunakan pendekatan Design-Based Research (DBR), yang melibatkan beberapa tahap mulai dari analisis kebutuhan, perancangan, pengembangan, hingga evaluasi implementasi. Subjek penelitian adalah peserta didik kelas VI di Kabupaten Tasikmalaya yang dipilih secara purposif berdasarkan kriteria tertentu. Instrumen pengumpulan data meliputi angket untuk mengukur respon peserta didik terhadap penggunaan E-Modul, lembar observasi untuk menilai aktivitas belajar, wawancara mendalam dengan guru untuk mendapatkan perspektif pedagogis, serta tes keterampilan berpikir kritis yang dilakukan sebelum dan sesudah penggunaan E-Modul. Hasil penelitian menunjukkan bahwa E-Modul IPA berbasis BBL secara signifikan mampu meningkatkan keterampilan berpikir kritis peserta didik, terutama pada aspek analisis, evaluasi, dan penyelesaian masalah. Peserta didik juga menunjukkan peningkatan minat dan motivasi belajar yang berkontribusi pada partisipasi aktif dalam proses pembelajaran. Kesimpulannya, E-Modul IPA berbasis BBL merupakan media pembelajaran yang efektif dan inovatif untuk mengembangkan keterampilan berpikir kritis di tingkat sekolah dasar. Penelitian ini merekomendasikan integrasi lebih lanjut pendekatan BBL dalam kurikulum pendidikan IPA untuk mendukung pencapaian hasil belajar yang lebih baik.

Kata Kunci: E-Modul, *Brain-Based Learning*, Keterampilan Berpikir Kritis, Pembelajaran IPA, Sekolah Dasar

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ABSTRACT

The background of this study is grounded in the critical importance of developing critical thinking skills to meet the challenges of the 21st century, especially within the context of elementary education. Critical thinking skills are considered essential competencies that need to be nurtured from an early age to enable students to analyze information, solve problems, and make informed decisions. However, current educational practices are often dominated by conventional methods that are less effective in fostering these skills. Therefore, innovation in teaching methods and learning media is needed to effectively enhance critical thinking skills. This study aims to develop a Brain-Based Learning (BBL) Science e-Module as a solution to this issue and evaluate its effectiveness in enhancing the critical thinking skills of elementary school students. The research adopts a Design-Based Research (DBR) approach, involving several stages from needs analysis, design, development, to implementation evaluation. The subjects of this study were sixth-grade students in Tasikmalaya Regency, selected purposively based on specific criteria. Data collection instruments included questionnaires to assess students' responses to the e-Module, observation sheets to evaluate learning activities, in-depth interviews with teachers to gain pedagogical perspectives, and critical thinking skills tests conducted before and after the e-Module implementation. The findings indicate that the BBL-based Science e-Module significantly improved students' critical thinking skills, particularly in the areas of analysis, evaluation, and problem-solving. Additionally, students demonstrated increased interest and motivation in learning, contributing to active participation in the learning process. In conclusion, the BBL-based Science e-Module is an effective and innovative learning medium for developing critical thinking skills at the elementary school level. This study recommends further integration of the BBL approach into the science education curriculum to support the achievement of better learning outcomes.

***Keywords**: E-Module, Brain-Based Learning, Critical Thinking Skills, Science Learning, Elementary School*

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