PENGEMBANGAN GAME EDUKASI BERBASIS *PROBLEM BASED LERNING* MATERI ALAT PERNAPASAN MANUSIA DAN HEWAN PADA KELAS V SD

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ABSTRAK

Penelitian ini bertujuan menghasilkan dan mengimplementasikan pengembangan game edukasi berbasis *problem based learning* pada mata pelajaran ilmu pengetahun alam materi alat pernapasan manusia dan hewan pada kelas V SD dan mengetahui respon dari peserta didik terkait pengembangan game edukasi berbasis *problem based learning* materi alat pernapasan manusia dan hewan pada kelas V SD. Penelitian ini menggunakan jenis penelitian dan pengembangan atau *Resea and Development* (R&D) dan model pengembangan yang digunakan dalam penelitian ini yaitu ADDIE *(Analyze, Design, Development, Implementation, Evaluation)*. Penelitian ini dilakuakan pada kelas V sebanyak 25 peserta didik sebagai subjek penelitian dan seorang guru kelas V. Pengambilan data pada penelitian ini menggunakan angket istrumen penilaian. Untuk uji kevalidan pengembaangan game eduaksi berasal dari ahli isi dan ahli media yang memperoleh sekor rata-rata sebesar 1,00 dari masing-masing ahli dengan kriteria sangat valid. Untuk uji efektivitas menggunakan rumus N-Gain yang memperoleh sebesar 0,80 sehingga termasuk ke dalam kategori "Efektif". Selain itu, hasil perhitungan uji respon peserta didik memperoleh nilai rata-rata respon sebesar 70, 28 yang termasuk kedalam kategori "Sangat Positif" sedangkan hasil perhitungan respon guru memperoleh nilai rata-rata sebesar 48 termasuk ke dalam kategori "Sangat Positif". Dengan

demikian, pengembangan game edukasi berbasaias *Problem Based Learning* materi alat pernapasan manusia dan hewan pada kelas V SD di SD Negri 2 Abang Batudinding valid dan efektif untuk digunakan dalam pembelajaran IPA.

Kata Kunci: Pengembangan Game Edukasi, ADDIE, *Problem Based Learning,* Alat Pernapasan, Manusia, Hewan

DEVELOPMENT OF AN EDUCATIONAL GAME BASED ON *PROBLEM-BASED LEARNING* ON HUMAN AND ANIMAL BREATHING SYSTEMS FOR GRADE V

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ABSTRACT

This study's purpose is to produce and implement the development of an educational game based on *Problem-Based Learning* on human and animal breathing systems for grade V science class and also wants to know students' responses about the game. The study uses Research and Development (R&D), and the development model used in this research is ADDIE (Analyze, Design, Develop, Implement, and Evaluate). This study was done in a 5th-grade class with 25 students as the research subjects and one teacher in a grade V science class. The data in this research was collected using questionnaires. To test the validity of educational game development content, media experts gave a score of 1.00 from each expert, from each expert with the criteria of very valid. For the effectiveness test, the N-Gain formula resulted in a score of 0.80, which is categorized as "Effective." Besides that, the student response test showed an average response score of 70.28, which is categorized as "Very Positive" while the teacher response test resulted in an average score of 48, which falls into the "Very Positive" category. Therefore, the development of the Problem-Based Learning educational game on the topic of human and animal respiratory systems for 5th grade at SD Negeri 2 Abang Batudinding is valid and effective for use in science learning

Keywords: Educational game development, ADDIE, *Problem-Based Learning*, Breathing System, Humans, Animals.