

Mughnil Muhtaj. 2020. Pengembangan *Game* Edukasi Menggunakan Robot *Line Follower* Pada Materi Gerak Lurus. Skripsi, Program Studi Pendidikan IPA, Fakultas Ilmu Pendidikan, Universitas Trunojoyo Madura. Pembimbing 1: Ana Yuniasti Retno Wulandari, dan Pembimbing 2: Nur Qomariya.

ABSTRAK

Penelitian ini bertujuan untuk mengembangkan *robot line follower* sebagai media pembelajaran IPA. Pengembangan *Game* Edukasi *Robot Line Follower* menfokuskan pada materi gerak lurus kelas VIII SMP/MTs. Desain pengembangan yang digunakan adalah ADDIE (*Analyze, Design, Develop, Implement, dan Evaluate*). Subjek penelitian ini sebanyak 12 siswa, karena media game edukasi menggunakan *robot line follower* diujicobakan secara *online* (Daring). Instrumen yang digunakan adalah lembar validasi ahli media, ahli materi, guru IPA, dan angket respons siswa. Berdasarkan hasil penelitian dapat disimpulkan bahwa: (1) Analisis aspek media memperoleh nilai validitas sebesar 87,5% dengan kriteria sangat valid dan reliabilitas sebesar 95,24% dengan kriteria reliabel. Analisis aspek materi memperoleh nilai validitas sebesar 93,06% dengan kriteria sangat valid dan reliabilitas sebesar 96,04% dengan kriteria reliabel, sehingga media *game* edukasi *robot line follower* layak digunakan oleh siswa dalam pembelajaran dengan materi gerak lurus, (2) Hasil respons siswa menghasilkan persentase sebesar 88,54% pada aspek minat siswa, 77,08% pada aspek pemahaman siswa, dan 77,60% pada aspek ketertarikan siswa. Rata-rata persentase respons siswa diperoleh nilai sebesar 81,07% dengan kriteria baik. Oleh karena itu media *game* edukasi *robot line follower* sangat efektif digunakan sebagai media pada materi gerak lurus

Kata kunci : model ADDIE, respons, *robot line follower*

Mughnil Muhtaj. 2020. *Developing Educational Game Using Line Follower Robot on Straight Motion lesson. Research paper, Program Study of Science Education, Faculty of Education, University Trunojoyo of Madura. First advisor is Ana Yuniasti Retno Wulandari, and the second advisor is Nur Qomariya.*

ABSTRACT

The purpose of this research was to develop line follower robot as a media to learn science. The development of Educational Game of Line Follower Robot focused on the straight motion material of the eighth class of junior high school. The development design used ADDIE (Analyze, Design, Develop, Implement, and Evaluate). The subjects of this study were 12 students, because the media of Educational Game using line follower robot was trialled by online. The instrument that was used is a sheet of validation for media experts, material experts, science teachers, and student response questionnaires. Based on the results of the study it can be concluded that: (1) Analysis of aspects of the media to obtain the value of the validity of 87.5% with the criteria very valid and reliability of 95.24% with the criteria of reliable. The analysis of the material aspects of obtaining the value of the validity of 93.06% with the criteria very valid and reliability of 96.04% with the criteria of reliable, so that the media educational game line follower robot worth used by students in learning the material straight motion, (2) the Results of student responses to produce a percentage of 88.54% on the aspect of interest of the students, 77.08% in aspects of student understanding, and 77.60% in aspects of student interest. The average percentage of student responses obtained a value of 81.07% with good criteria. Therefore media educational game line follower robot is very effectively used as a medium on the material straight motion.

Keywords: model ADDIE, respons, robot line follower