

**PENGEMBANGAN MEDIA PEMBELAJARAN BERBASIS *E-LEARNING*
PADA MATA KULIAH HIDROLOGI DI PROGRAM STUDI
PENDIDIKAN TEKNIK BANGUNAN FAKULTAS TEKNIK
UNIVERSITAS NEGERI JAKARTA**

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Jakarta
2019

ABSTRAK

Penelitian dan pengembangan ini bertujuan untuk merancang dan mengembangkan media pembelajaran berbasis *e-learning* yang diterapkan pada mata kuliah Hidrologi dengan menggunakan media yaitu Moodle. Penelitian ini menerapkan metode *Research and Development* (R & D) dengan model pengembangan mengacu pada model penelitian Borg dan Gall. Analisis data yang digunakan untuk validasi data ahli yaitu dengan menerapkan formula Aiken's V dan untuk penilaian dari mahasiswa menggunakan rumus nilai rata-rata. Hasil dari validasi ahli media memperoleh persentase kelayakan sebesar 77%, kemudian dari ahli materi sebesar 88% dan dari mahasiswa sebesar 74,7%. Ketiga penilaian tersebut termasuk dalam kategori "Layak" dan dapat disimpulkan bahwa media pembelajaran ini layak digunakan pada mata kuliah Hidrologi di Program Studi Pendidikan Teknik Bangunan Universitas Negeri Jakarta.

Kata kunci: Media pembelajaran, *E-Learning*, Moodle, Penelitian dan pengembangan (R&D), Hidrologi

**THE DEVELOPMENT OF E-LEARNING BASED LEARNING MEDIA FOR
HYDROLOGICAL COURSES IN THE BUILDING ENGINEERING
EDUCATION STUDY PROGRAM AT THE FACULTY OF ENGINEERING,
STATE UNIVERSITY OF JAKARTA**

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ABSTRACT

This research and development aims to design and develop e-learning based learning media that are applied to the Hydrology course using media namely Moodle. This study applies the Research and Development (R & D) method with a development model referring to the Borg and Gall research model. Data analysis used for expert data validation is by applying the Aiken's V formula and for the assessment of students using the average value formula. The results from the media expert validation obtained a percentage of eligibility by 77%, then from the material experts by 88% and from the students by 74.7%. The three assessments are included in the "Eligible" category and it can be concluded that the learning media is suitable for use in the Hydrology course in the Building Engineering Education Study Program at the State University of Jakarta.

Keywords: *Learning media, E-Learning, Moodle, Research and development (R & D), Hydrology*