

## ABSTRACT

### **Kurniati Agustia, 2018. *Developing An Instructional Model Blended Learning On Appropriate Technology Course.***

*Based on observations, the problems that exist are the number of students in appropriate technology courses, quite a number of competencies in appropriate technology courses that contain concepts and projects, and the unavailability of learning models in appropriate technology subjects. The purpose of this study is to produce a valid, practical and effective blended learning model to be used in the field.*

*The method used is research and development (Research and Development) with the ADDIE development model. The research subjects were students of the FT-UNP Electrical Engineering Education in appropriate technology courses. The primary data type is where the data is given by lecturers and students. The instrument for collecting data is in the form of a questionnaire. Descriptive data analysis techniques to describe the validity, practicality and effectiveness of the blended learning learning model.*

*The results obtained from this development research are as follows: (1) Produce a blended learning model that combines face-to-face learning and online learning in appropriate technology courses. (2) The results of the analysis of validity to the expert learning model obtained an average aspect of  $0.86 > 0.667$ , media experts obtained an average aspect of  $0.83 > 0.667$ , and experts in learning materials obtained an average of  $0.85 > 0.667$ . So it was concluded that the blended learning learning model in the Appropriate Technology course was declared valid. (3) The results of the practical analysis of the blended learning learning model from the lecturers' response is 0,85 and in the very practical category. The average practicality of the blended learning learning model from student responses was 0,8817 with a very practical category. (4) The effectiveness of learning assessed from the results of the pretest and posttest obtained a gain score of 0.38 with a moderate category, it can be concluded that the blended learning learning model was declared effective. The motivation of student responses to blended learning is 0,9150 with a very effective category. The average value of learning independence responds students to blended learning by 0,9019 with a very effective category. Based on the findings of this study it was concluded that the blended learning learning model is valid, practical and effective to be used as a blended learning model in the Course of Appropriate Technology.*

**Keywords:** *Learning Model, Blended Learning, Validity, Practicality, Effectiveness.*

## ABSTRAK

**Kurniati Agustia, 2018. Pengembangan Model Pembelajaran *Blended Learning* Pada Mata Kuliah Teknologi Tepat Guna. Tesis. Program Pascasarjana Fakultas Teknik Universitas Negeri Padang.**

Berdasarkan observasi, permasalahan yang ada yaitu jumlah mahasiswa pada mata kuliah Teknologi Tepat Guna cukup banyak, kompetensi mata kuliah teknologi tepat guna yang mengandung konsep dan proyek, serta belum tersedianya model pembelajaran pada mata kuliah teknologi tepat guna. Tujuan penelitian ini untuk menghasilkan model pembelajaran *blended learning* yang valid, praktis dan efektif agar layak digunakan di lapangan.

Metode yang digunakan adalah penelitian dan pengembangan (*Research and Development*) dengan model pengembangan ADDIE. Subjek penelitian adalah mahasiswa Pendidikan Teknik Elektro FT-UNP pada mata kuliah teknologi tepat guna. Jenis data yaitu data primer dimana data yang diberikan oleh dosen dan mahasiswa. Instrumen pengumpul data berbentuk angket. Teknik analisis data deskriptif untuk mendeskripsikan validitas, praktikalitas dan efektifitas model pembelajaran *blended learning*.

Hasil yang diperoleh dari penelitian pengembangan ini sebagai berikut: (1) Menghasilkan sebuah model pembelajaran *blended learning* yang menggabungkan pembelajaran tatap muka dan pembelajaran *online* pada mata kuliah teknologi tepat guna. (2) Hasil analisis validitas kepada ahli model pembelajaran diperoleh rata-rata aspek sebesar  $0,86 > 0,667$ , ahli media diperoleh rata-rata aspek sebesar  $0,83 > 0,667$ , dan ahli materi pembelajaran diperoleh rata-rata  $0,85 > 0,667$ . Maka disimpulkan bahwa model pembelajaran *blended learning* pada mata kuliah Teknologi Tepat Guna dinyatakan valid. (3) Hasil analisis praktikalitas model pembelajaran *blended learning* dari respon dosen sebesar 85% dengan pada kategori sangat praktis. Rata-rata nilai praktikalitas model pembelajaran *blended learning* dari respon mahasiswa sebesar 88,17 % dengan kategori sangat praktis. (4) Efektifitas pembelajaran dinilai dari hasil *pretest* dan *posttest* didapatkan nilai *gain score* 0,38 dengan kategori sedang maka dapat disimpulkan bahwa model pembelajaran *blended learning* dinyatakan efektif. Motivasi respon mahasiswa terhadap pembelajaran *blended learning* sebesar 91,50 % dengan kategori sangat efektif. Rata-rata nilai kemandirian belajar respon mahasiswa terhadap pembelajaran *blended learning* sebesar 90,19% dengan kategori sangat efektif. Berdasarkan temuan penelitian ini disimpulkan bahwa model pembelajaran *blended learning* ini valid, praktis dan efektif untuk dimanfaatkan sebagai model pembelajaran *blended learning* pada mata kuliah Teknologi Tepat Guna.

**Kata Kunci:** Model Pembelajaran, *Blended Learning*, Validitas, Praktikalitas, Efektivitas.