

## **ABSTRACT**

**Iskandar, 2020. *Development of the Case Study -Project Based Learning Model Based on Visual Programming in the Vocational Education for Diploma III of Graphic Design.***

*Based on a preliminary studies and needs analysis conducted in the Visual Programming course, it was found that the learning problem was not optimal. This study aims to develop a Project-Based Learning Model based on Case Study Visual Programming in Vocational Education that is valid, effective and practical.*

*This type of research is Research and Development (Research and Development), development methods and procedures used to refer to the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation). The analysis technique uses the Aiken'V test, and validity uses expert testing and Focus Group Discussion (FGD). The practicality test is carried out on the application of products to students in the form of a product practicality questionnaire and to test the effectiveness of the product with the Two-Group Pretest and Posttest Design experiments.*

*The research findings ware a Project-Based Learning Model based on Case Study Visual Programming in Vocational Education, which is equipped with model books, teaching material books, lecturer manuals, and student manuals. Models and support systems meet the validity criteria, are based on research-and-development models (Research-Based Models) and are appropriate for use according to experts. The resulting model meets the practicality criteria with an average reliability value of 89.0 according to the lecturer and 71.6 according to the student. The results of the effectiveness test show that the results of the Case Study-based project-based learning model development project produce seven syntax models, namely, determining case studies, identifying problems, making project proposals, project designs, making projects, product trials, project report presentations. The Case Study based project-based learning model on the model book is valid criteria. The Case Study based project-based learning model is in teaching materials, lecturer manuals, practical student manuals and very practical.*

**Keywords:** *Case Study Model-Project Based Learning, Visual Programming, Vocational Education, Graphic Design.*

## ABSTRAK

**Iskandar, 2020. Pengembangan Model *Case Study-Project Based Learning* pada Mata Kuliah Pemrograman Visual Pendidikan Vokasi Diploma III Desain Grafis. Disertasi Pascasarjana Fakultas Teknik Universitas Negeri Padang.**

Berdasarkan studi pendahuluan dan analisis kebutuhan (*need analysis*) yang dilakukan pada mata kuliah Pemrograman Visual ditemukan masalah bahwa pembelajaran belum optimal. Penelitian ini bertujuan untuk mengembangkan sebuah Model *Case Study-Project Based Learning*. Pemrograman Visual pada Pendidikan Vokasi yang valid, efektif dan praktis.

Jenis Penelitian ini adalah Penelitian dan Pengembangan (*Research and Development*), metode dan prosedur pengembangan yang digunakan merujuk pada model ADDIE (*Analysis, Design, Development, Implementation and Evaluation*). Teknik analisis menggunakan uji Aiken'V, dan validitas menggunakan uji pakar dan *Focus Group Discussion* (FGD). Uji kepraktisan dilakukan penerapan produk ke mahasiswa dalam bentuk angket kepraktisan produk dan untuk menguji efektifitas produk dengan eksperimen *Two-Group Pretest dan Posttest Design*.

Temuan penelitian adalah sebuah Model *Case Study-Project Based Learning* Pemrograman Visual Pada Pendidikan Vokasi, yang dilengkapi dengan buku model, buku bahan ajar, buku pedoman dosen dan buku pedoman mahasiswa. Model dan sistem pendukung memenuhi kriteria validitas, disusun berbasis model penelitian dan pengembangan (*Research-Based Model*) dan layak digunakan menurut para pakar. Model yang dihasilkan memenuhi kriteria praktikalitas dengan nilai reliabilitas rata-rata 89,0 menurut dosen dan 71,6 menurut mahasiswa. Hasil uji efektifitas menunjukkan bahwa hasil dari penelitian pengembangan model *Case Study-Project Based Learning* menghasilkan tujuh sintak model yaitu, menentukan *Case Study*, identifikasi masalah, membuat proposal proyek, merancang desain proyek, membuat proyek, uji coba produk, presentasi laporan proyek. Model *Case Study-Project Based Learning* pada buku model berada kriteria valid. Model *Case Study-Project Based Learning* berada pada buku bahan ajar, buku pedoman dosen, buku pedoman mahasiswa praktis dan sangat peraktis.

**Kata kunci:** Model *Case Study-Project Based Learning*, Pemrograman Visual, Pendidikan Vokasi, Desain Grafis.