



## NEEDS ANALYSIS FOR THE DEVELOPMENT OF E-MODULES AS TEACHING MATERIALS

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*Peer-review under responsibility of 3<sup>rd</sup> Asia International Multidisciplanry Conference 2019 editorial board  
(<http://www.utm.my/asia/our-team/>)*

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## Research Highlights

Modules are media or means of learning designed systematically and interestingly to achieve the competencies expected and used independently (Hamdani, 2011). There are several characteristics of the module including 1) *Self Instructional*; 2) *Self Contained*; 3) *Standalone*; 4) *Adaptive*, and 5) *User-Friendly*. (Depdiknas, 2008). However, the modules that have used so far are still textbook. Utilization of information technology in learning will create an interesting and meaningful learning process for students. (Makki.B, 2012). Need analysis is needed to find out what teaching materials are needed by students to assist in the learning process. So, teaching materials that will be developed must be by the characteristics of students. (Smaldino.S, 2008). One of the information technology-based teaching materials is E-Module. Based on the results of several studies explaining positive student respondents to the E-Module because E-Modules are considered more attractive, there are multimedia elements which will make learning more interesting. (Johnson Lim Soon Chong, 2005).

## Research Objectives

The purpose of the study was to determine the need for E - Modules as teaching materials that can help students better understand lecture material. From this analysis, it is expected to be able to provide an overview of the teaching materials needed by students and become the basis for the development of E-Modules.

## Methodology

The research is a qualitative descriptive study. Samples were taken randomly as many as 40 students and 5 lecturers at the University of Baturaja Technology Education study program 2018/2019 academic year. Data collection techniques used in the form of a questionnaire (questionnaire) needs analysis for students and for lecturers and interviews with lecturers on answers to surveys that are complete to use as research data.

## Results

Analysis of E-module requirements is divided into two, namely as follows:

### Needs Analysis for Students

The material offered as an answer choice in the questionnaire is all the material taught in the lecture. About 67% of students lack interest in theory courses. And 33% of students like theory courses. Teaching materials demanded by students are more varied with a percentage of 82%, meaning not only in the form of textbooks but also in the form of e-books.

### Needs Analysis for Lecturers

The results of the needs analysis given to lecturers are as follows:

1. Students are active in searching for literature on topics that will be studied using electronic devices such as mobile phones, laptops, and others.
2. The usual learning model to teach includes Problem Based Learning (PBL), discussion and lectures.
3. Students do not have too much interest in theoretical subjects
4. Teaching materials need to be developed to facilitate learning understanding such as e-books, E-modules, web-based, mobile learning in others. The teaching material in it contains theory and also work procedures. So that students not only understand the theory but also understand the application of the methods that have studied.





## Findings

About 82% of students are interested in more varied teaching materials based on technology. One teaching material that can be chosen is E-Module. The teaching material in it contains theory and also work procedures. So that students not only understand the method in text only but can learn learning materials with multimedia stretching on the E-Module, such as images, sound, and video.

## Acknowledgement

This research work supported by the Ministry of Research, Technology & Higher Education, Indonesia (Penelitian Dosen Pemula/PDP Scheme) and the Department of Educational Technology, Universitas Baturaja.

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