

Development of learning materials based on FlipBook contents to support blended learning learning process at IKIP Budi Utomo Malang

Agusti Mardikaningsih¹, Praharisti Kurniasari²

^{1,2}IKIP Budi Utomo Malang, Malang, Indonesia

E-mail: ¹dhiekadana147@gmail.com; ²kurniasaripraharisti@gmail.com

Abstracts. The purpose of this study was to find out the process of developing steps and to know the feasibility and validity of flip book-based teaching materials in the design and learning strategies at Budi Utomo IKIP. This development research uses the ADDIE Model. The ADDIE model is a general learning system model and is one of the models in product development, the application of the ADDIE model in learning design facilitates a learning environment adapted to existing problems. Each stage in the ADDIE model has an evaluation so that each stage will affect the next stage. The results of the study show that overall the interactions that occur in the blended learning process using flip book teaching materials are quite satisfying. This means that there is a significant process of interaction between teachers and students. Based on the trials that have been done to material experts, media experts and students, it can be concluded that flip-book teaching materials support blended learning with each percentage of (1) material experts (96.2%) with valid/feasible criteria, (2) Media experts (95%) with valid / feasible criteria, (3) Individual students (97.5%) with valid / feasible criteria, (4) Small group students (94.5%) with valid / feasible criteria, (5) Large group students (93%) with valid / feasible criteria. Student learning outcomes have also shown mastery learning (80.9%). This shows that flip-book teaching material as a support for blended learning is successful in providing a positive effect on student learning outcomes.

Keywords: learning materials based on flip book, blended learning

Introduction

Technology develops rapidly and always changes continuously as well as at the IKIP Budi Utomo campus which in the new academic year gradually leaves the learning process using paper, new students and lecturers will be given gadget facilities. With existing facilities, lecturers are required to create teaching methods that are easy and can be understood quickly.

The method of using technology in learning is indeed familiar to others, it is seen that there may even be many who have implemented it but we must keep in mind that none of the teaching methods are the best or perfect but there are only methods that are right to use. Every teaching method and process always requires teaching materials that are by the curriculum that has been set.

Blended learning consists of blended words and learning. So that blended learning is defined as learning that combines or mixes between face-to-face learning (face to face = f2f) and computer-based learning (online and offline). Thorne (2003) describes blended learning as "It represents an opportunity to integrate the innovative and technological advances offered by online learning. The main purpose of blended learning is to facilitate learning by providing various learning resources by paying attention to the characteristics of students in learning

Based on the observations and experiences that I did while the researcher taught the Design and Strategy courses of the Budi Utomo IKIP student learning were still confused, difficulties and even lacked the initiative to find references to teaching materials in accordance with the existing curriculum so that researchers wanted to utilize the IKIP Budi Utomo facility that had

been good by developing Teaching Materials as supporting blended learning that is tailored to the existing curriculum.

Teaching material as a support for blended learning is a teaching material in the digital version, where the teaching materials can be opened through electronic devices such as computers, mobile phones or gadgets. The advantages of Flip-Book-based teaching materials are (1) In terms of prices that are cheaper than ordinary book teaching materials, (2) Flip-Book is also environmentally friendly, using Flip-Book we have saved paper produced from trees and also save ink because the Flip-Book does not use ink, (3) the Flip-Book is not damaged as long as it is not exposed to a virus. (4) Flip-books are easy to carry and have a relatively small size. With the gadget facilities that we already have we can bring hundreds or even thousands of Flip-Book teaching materials needed during the lecture process. (5) We can save time and place. (6) The Flip-Book delivery system is very fast. We can make Flip-Book deliveries in minutes.

The hope of researchers with the development of Flip-Book-based teaching materials in supporting blended learning lectures can facilitate the learning process by existing facilities and curriculum.

Method

This development research uses the ADDIE Model. The ADDIE model is a general learning system model and is one of the models in product development, the application of the ADDIE model in learning design facilitates a learning environment adapted to existing problems. Each stage in the ADDIE model has an evaluation so that each stage will affect the next stage. There are 5 stages in the ADDIE model:

1. Analyze (Analysis)

To produce good teaching materials, an analysis is needed. among others; (a) determine the objectives to be achieved, (b) identify the material needed, (c) analyze the abilities and characteristics of students, (d) identify the sources/materials that are available.

2. Design (Design)

An important step in design is how one designs the teaching materials that are suitable for the learning objectives

3. Develop (Development)

Is a production stage where everything that has been made in the design stage becomes real.

4. Implement (Implementation)

At this stage, the teaching material is ready to be used in the teaching and learning process. The activities carried out are preparing teachers and students in using the media. The purpose of the implementation in the ADDIE stage is to guide students to achieve the goals of students,

5. Evaluate

The important concept of the stages of evaluation of the ADDIE model is how a learning designer can evaluate the entire model from the beginning to the end.

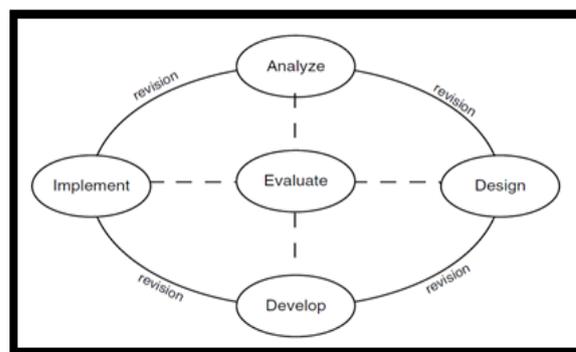


Figure 1. ADDIE Development Model

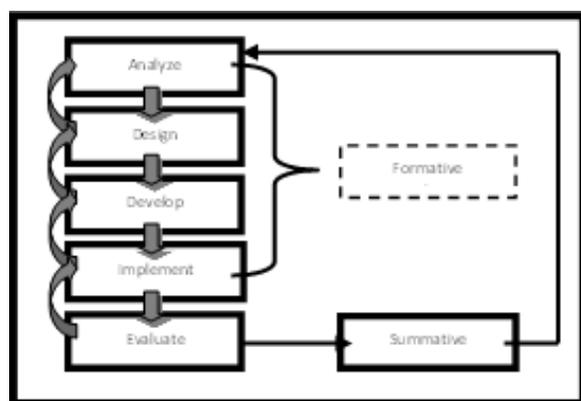


Figure 2. Stages Evaluation in the ADDIE Model (Steven J. McGriff 2000: 9)

It was mentioned earlier that the features of the ADDIE Model are that each phase of the

phase has an evaluation process; (1) formative evaluation functions to determine progress in each stage, preparing feedback that will be carried out at the next stage. Formative evaluation in the form of observation, interview, validation etc; (2) summative Evaluation serves as a determination of the last achievement of each stage.

Result and Discussion

The results of the study show that overall the interactions that occur in the blended learning process using flip book teaching materials are quite satisfying. This means that there is a significant process of interaction between teachers and students. Based on the trials that have been done to material experts, media experts and students, it can be concluded that flip-book teaching materials support blended learning with each percentage of (1) material experts (96.2%) with valid/feasible criteria, (2) Media experts (95%) with valid / feasible criteria, (3) Individual students (97.5%) with valid / feasible criteria, (4) Small group students (94.5%) with valid / feasible criteria, (5) Large group students (93%) with valid / feasible criteria. Student learning outcomes have also shown mastery learning (80.9%). This shows that flip-book teaching material as a support for blended learning is successful in providing a positive effect on student learning outcomes.

Conclusion

The development of teaching materials adapted to the curriculum with the blended learning process needs to be developed again not only limited to the course of Design and Learning Strategies so that collaboration between teachers is needed to develop appropriate teaching materials. There needs to be another trial about the content as a support for the blended learning process.

References

- Arif S, Sadiman. et. al. 2002. Media Pendidikan, Pengertian, Pengembangan dan Pemanfaatannya. Jakarta: Raja Grafindo Persada.
- Arikunto, Suharsimi. 2006. Prosedur Penelitian Suatu Pendidikan dan Praktik. Jakarta: PT Rineka Cipta

- Arsyad, Azhar. 2002. Media Pembelajaran Jakarta:PT Raja dan Kebudayaan, Direktorat Jenderal Pendidikan Tinggi
- Prawiradilaga, dewisalma. 2008. Prinsip disain Pembelajaran Kencana Media Group: Jakarta
- Sue-Jen Chen. 2007. Instructional Design Strategies for Intensive Online Courses: An Objectivist-Constructivist Blended Approach. Volume 6, Number 1, Spring 2007.
- Uno, Hamzah B., Perencanaan Pembelajaran, 2006, Bumi Aksara PT: Jakarta
- Bangun Perpustakaan Grafindo Persada.
- Asyhar, Rayandra. 2012. Kreatif Mengembangkan Media Pembelajaran: Referensi Jakarta
- Arifin,Zainal.2012. Evaluasi Pembelajaran (Prinsip, Teknik, Prosedur): PT Remaja Rosdakarya
- Billinghurst (2002). Handbook of Augmented Reality:Boca Raton Florida
- Branch, RM. 2009.Intructional Design: The ADDIE Approach: Department of Educational Psychology and Instructional Technology University of Georgia
- Joyce,Bruce. 2009. Models of Teaching: Pustaka Pelajar
- Munandir.1987. Rancangan Sistem Pengajaran: Departemen Pendidikan Ebook di Komputermu Menggunakan Calibre <http://bimapedia.blogspot.co.id/2013/01/bangun-perpustakaan-ebook-di-komputermu.html>, diakses 20 Juli 2017, pukul 14.15.
- Pengertian, fungsi, dan kekurangan kelebihan dari Flip-Book. Diakses dari <http://www.kumpulanmateri.com/2015/05/pengertian-fungsi-dan-kekurangan.html>, diakses 2 Agustus 2017, pukul 11.40.