

# E-Module Based on Ncesoft Flip Book Maker for Primary School Students

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## Abstract

The purpose of this study is to develop a prototype of e-module based on Ncesoft Flip Book Maker in thematic learning. The research and development method used is the Dick, Carrey and Carrey model. Out of the 10 stages in this model, the researcher stopped at the 7th stage, namely developing and selecting learning material. The subject of this research is a group of fifth grade elementary school students in Indonesia who are involved in 2013 curriculum thematic learning. The result of this developmental research is producing an e-module prototype using the Ncesoft Flip Book Maker application. The development of e-module based on Ncesoft Flip Book Maker can help educators to develop other learning e-modules that are versatile and can support other needs.

**Keywords:** e-module, Ncesoft Flip Book Maker, thematic learning.

## 1. Introduction

The advance technology and information in Indonesia is one of the challenges in education. The process of transferring skill and experience in formal education can be obtained quickly by utilizing the development of information technology [1], [2]. Rapid technological development is making a change in increasing popularity of traditional teaching in the classroom towards the use of computers, tablets and the internet [3] - [5]. This is what needs to be taken into consideration that innovation in technology needs to be done in classroom learning.

Preliminary study was conducted in the fifth grade of an elementary school in Malang, Indonesia shows thematic learning has not been implemented well. Teaching materials designed are not in accordance with the needs, environmental conditions, characteristics of students and have not utilized technology. It is widely recognized that students in Indonesia have many different backgrounds [6]. Students have differences from various factors, unique ways of managing information in their learning processes such as level of readiness for learning, age, intelligence, level of motivation, interests and skills, characteristics, cognitive style, and learning style [7], [8]. In addition, teachers do not use technology in learning. The interview results indicate that children are interested in IT. The teachers must have the skills, content, learning management to change the class and utilize technology [9].

Therefore, it is necessary to develop a module for students. The module has a variety of learning activities that are tailored to the abilities of each student. Students learn more when information is presented in various variations [10]. The compiled modules are developed in the form of e-books. An e-book is an electronic book that has several components that are not found in physical books [11]. Through this development can be implemented as an

electronic-based system that contributes an interesting learning process.

The use of e-book application has been widely studied and used in various fields. Several previous studies analyzed E-Book applications [12]. The advantages of using e-books: easy to download, cheap as a learning tool, and effective in attracting students' attention to language learning [13]; fun and increasing children literacy [14]. Usefulness in administrative services [15], [16]. Platform [17], [18]. There are various e-book file formats that are sometimes not compatible with other formats. Compatible file formats are an important issue for e-book applications. Researchers develop an e-book with different programs and content. Researchers focused on making e-books with Ncesoft Flip Book Maker in thematic learning. Ncesoft Flip Book Maker is software that has functions that can be opened in book form. This software can change the appearance of PDF files to be more attractive like a book in digital form.

This research is expected to develop an e-module based on Ncesoft Flip Book Maker on thematic learning in class V Elementary School. The limitation of this study stopped at the e-book prototype based on Ncesoft Flip Book Maker.

## 2. Method

Development of e-module based on Ncesoft Flip Book Maker is using Dick, Carey and Carey model. The research stages are shown in Figure 1 below.

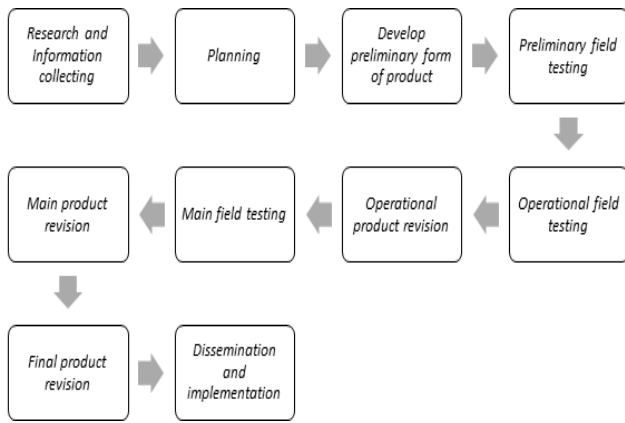


Fig. 1: Flow Chart of Learning Design Model of Dick, Carey & Carey [19].

The development procedures are as follows: (1) Identifying learning objectives, (2) learning analysis, (3) students and context analysis, (4) formulating specific learning objectives, (5) developing assessment instruments, (6) developing learning strategies, (7) developing and choosing learning material, (8) designing and conducting formative evaluation of learning, (9) revise learning material. This research has been carried out until the seventh step, namely developing and selecting learning materials. Analysis of learning, students and context analysis is done by field observations of fifth grade teachers and students in Malang, Indonesia. Then, the researchers conducted a literature study related to thematic learning and technological development. The next stage is designing the e-module prototype using the Ncesoft Flip Book Maker application.

### 3. Result and Discussion

#### 3.1. Research Procedure of Flip Book-Based E-module Development

This development research stops at the stage of developing and selecting learning material. At this stage produce a prototype of elementary school grade V thematic e-module using the Ncesoft Flip Book Maker application. This research was conducted to meet the needs and increase students' reading interest in learning. The research and development stage can be seen in Figure 2.

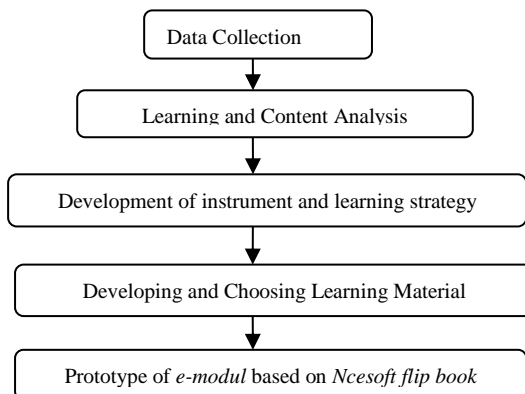


Fig. 2: The Flow Chart of e-module development by Ncesoft Flip Book Maker

This developmental research began by collecting data related to thematic learning and also using e-books based on Ncesoft Flip Book Maker. Data collection was carried out by means of literature studies and field studies. Literature study is done to learn concepts or theories about e-books. Field studies related to planning learning with e-books, conducted through interviews and observations of teachers and students. The next step is to analyze the data that have

been collected. Determine and develop instruments and strategies that will be used in learning. Develop and choose learning material. At this stage, researchers began developing e-modules using Ncesoft Flip Book Maker to produce the desired prototype.

#### 3.2. Procedure of E-Module Making by software Ncesoft Flip Book Maker

The modules that have been compiled are then changed in the form of e-modules using Ncesoft Flip Book Maker. The module manufacturing process using Ncesoft Flip Book Maker is presented in Figure 3 below.

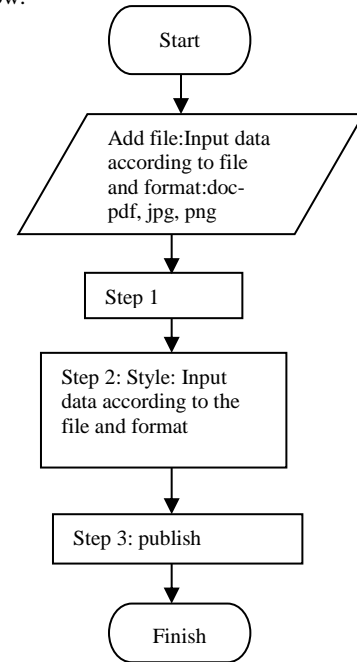


Fig. 3: The Flow Chart of e-module development by using Ncesoft Flip Book Maker

The flow chart explains how the module changes in the form of an e-module. The procedure for making e-books using the Ncesoft Flip Book Maker application will be presented in Figure 4. The e-book making begins with opening the Ncesoft Flip Book Maker software.

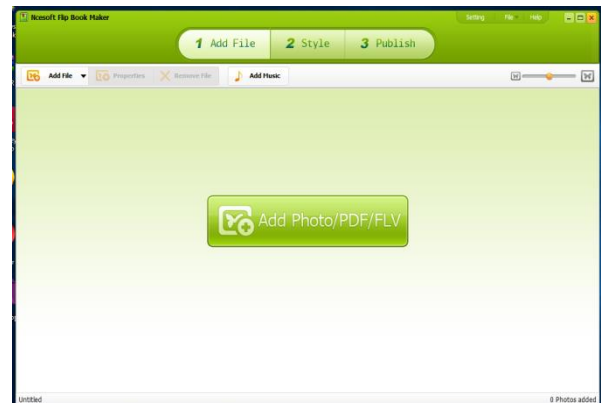


Fig. 4: Initial Display of flip book software

The next step is to input the module file that will be used (the file has been changed first into pdf format). In the middle part of the Ncesoft Flip Book Maker application, click the add photo / PDF / FLV menu. Select the file to upload. The procedure is presented in Figure 5 below.

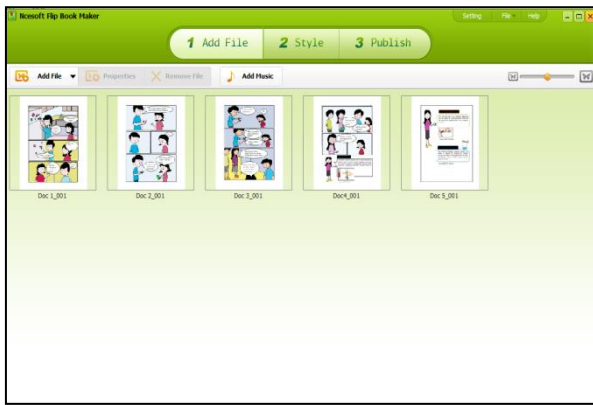


Fig.5 : Display of uploaded file

The next stage is selecting the style that will be used as a design for the module's attraction. On the top menu of the Ncesoft Flip Book Maker application, select and click style. At the bottom of the Style menu there are two sub menus (styles and effects). Choose 'style' to create a book display design and the 'effect' to give effect to the module. The procedure is presented in Figure 6 below.



Fig.6 : Selection of 'style' and 'effect' on the e-book

The last stage is publishing. This stage publishes e-book made in the form of SWF, EXE, HTML, EMAIL. This e-module is created in the form of an EXE file. The procedure is shown in Figure 7 below.



Fig.7 : Display of the e-book before publishing

### 3.3. E-Module Prototype Based on Ncesoft Flip Book Maker

This developmental research resulted in an e-module prototype based on Ncesoft Flip Book Maker. The student module entitled e-module based on Ncesoft Flip Book Maker, is limited to 1 learning with the title of 'objects around my home environment'. This module component consists of: opening (title, preface, module user instruction, module section, and table of contents), main part (concept map, news, hope box, learning exploration, let's practice,

assignment, conclusion, final learning test, and the final part (mini vocabulary, assessment guide). The form of e-modules based on Ncesoft Flip Book Maker is seen in Figure 7 below.

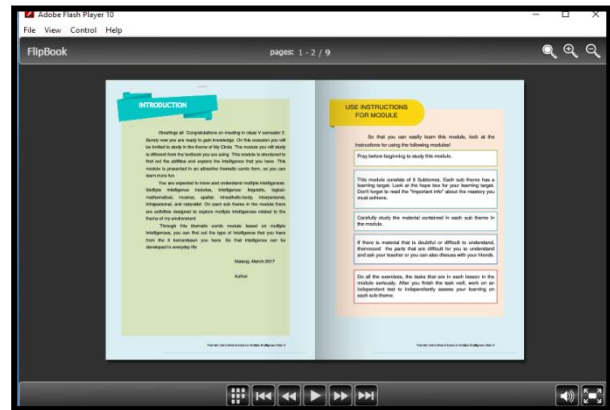


Fig. 8: Display of introduction in e-book based on Ncesoft Flip Book Maker including the toolbars

Figure 8 is a form of the introduction of the e-module which contains the preface, instructions for using e-modules, e-module section. To continue reading or loudspeakers, press the toolbar provided.



Fig. 9: Display of content in e-book based on Ncesoft Flip Book Maker including toolbars

Figure 9 is a content section. The contents section contains material to be taught in accordance with the learning indicators. This E-module also contains questions to measure students' abilities in learning through e-module based on Ncesoft Flip Book Maker.

### 3.4. Discussion

The development of this e-module uses the Flip Book Maker application. Ncesoft Flip Book Maker is software for creating an easily applicable e-book. The modules are arranged in the form of PDF, JPG, PNG and process them with templates that have been provided to produce an interesting e-module to be presented. Practical methods and innovative techniques for understanding information linking textual knowledge and technology help readers to be active in the learning environment [20].

The development and selection of a module from the printed version to be modified into e-book has advantages. E-book makes the readers easy to access digital content, it has easier distribution and purchase, simple backup and storage, becoming the breakthrough solution to monotonous printed books, providing techniques to achieve two-way interactivity, can add multimedia, can be read on different devices, capability to adjust the size [21], [22]. E-book is a form of technology that has effective and relevant content and features [23], [24]. The content is all types of audio or

visual material including speech, text, music, animation, photos, or video and any different combinations [4].

## 4. Conclusion

This developmental research produced a prototype of e-module based on Ncesoft Flip Book Maker in thematic learning. The e-module preparation procedure consists of several stages: the first stage is developing research used. The second stage is compiling e-modules using the flip book application (changing the doc format in pdf, jpg, png, inserting images until publishing in exe format. The third stage is describing the form or contents of the e-book based on the flip book that has been made. The components of the e-module based on Ncesoft Flip Book Maker consist of: opening (title, preface, module user instruction, module section, and table of contents), main part (concept map, news, hope box, learning exploration, let's practice, assignments, conclusions, final learning tests, and the final part: assessment guidelines). Forms of prototypes of e-module based on Ncesoft Flip Book Maker can help other researchers in developing e-books in different contents. For educators, it can be used to develop materials teach to be taught.

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