

DEVELOPING LEARNING MEDIA THROUGH MACROMEDIA FLASH APPLICATION FOR ENGLISH PHONOLOGY CLASS

Much Deiniatur

English Department, Institut Agama Islam Negeri Metro
deiniatur@gmail.com

Abstract

The purpose of this study is to develop a learning media model using the Macromedia Flash application to be used in English Phonology learning and to determine the feasibility of appropriate Macromedia Flash-based learning media to support English Phonology learning. This research is a Research and Development Research (R & D) with stages (1) Stages of Analysis, namely Identifying the objectives of Learning Media and Identifying Student Characteristics; (2) Design Stages, namely Designing learning materials and Designing learning media design using the Macromedia Flash program; (3) Production stages, namely Producing learning materials, Authoring materials, and Editing learning materials; (4) Evaluation Stages, namely Material Expert Review, Media Expert Review, and Test on students. The results show that the English Phonology learning media products have met the rules of research and development and are effectively used in the learning process for Students of the English Language Department of IAIN Metro Lampung.

Keywords: Media, Macromedia, Flash, Phonology.

1. INTRODUCTION

Every human being uses language to communicate with others, language is also a tool for expressing human ideas and desires. Without human language it will be difficult to socialize with others. Therefore it is very important for humans to learn languages, both mother tongue (local language), second language (Indonesian), and foreign languages (English). People who learn foreign languages will find some problems in language. These problems include the sound system, vocabulary, and different grammar. Difficulties faced by students are a natural thing, because since he was young he had spoken with his mother tongue system. The organ of speech has become accustomed to reciting mother tongues

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Published in: <http://ejournal.stkipmpringsewu-lpg.ac.id/index.php/smart>

JurnalSMART : Journal of English Language Teaching and Applied Linguistics.

that are different from English. Students will have difficulty changing their habits in producing sound by their speech organs. If a student wants to learn about foreign languages, one of them is English, the student will learn to speak the language. He must try to be able to speak like a native speaker. This can be obtained by imitating what is spoken by native speakers continuously until the pronunciation is perfect and can be understood by native speakers. In addition to imitating, students must also learn theories about Phonetics, which is the study of the mechanisms for producing sounds from organs of speech. Students will know how to produce sound properly and correctly, and be able to identify and correct errors of pronunciation made by himself and his friends. Therefore, it is very important for English students to learn and be familiar with Phonetics.

English Phonology is one of the courses found in the first semester of the IAIN Metro English Language Education Department. This course is one of the basic subjects that is very important in developing oral language skills, namely listening and speaking. English Phonology learns about pronunciation or pronunciation mechanisms in English, the object of this study is often also called Phonetics. Students must master good pronunciation so they can speak English well. Speech errors can cause misunderstandings, because different sounds mean different meanings. So by mastering good pronunciation, native speakers will also understand what is said by the Student. the lecturer is very influential on the pronunciation skills of the students. The role of the lecturer in learning Pronunciation is as a manager of learning activities, as a motivator, facilitator and model. Pronunciation instructors must be able to design good learning activities, namely by choosing interesting material, providing continuous training, monitoring training and student learning progress, and must also be an example or model of how to pronounce English properly and correctly.

During this time the Researcher who is the Lecturer in the English Phonology course uses several books that contain material with quite a lot of training material. According to research researchers, this is still insufficient, so researchers also have to look for additional materials needed such as various kinds of video and audio obtained by downloading from the Internet. In addition, researchers as lecturers also still have to work hard to provide examples of how to

say the exercises in them. This was felt to be quite heavy and tiring for lecturers while teaching, and viewed from the side of the students the modeling of this method was not sufficient, because the example of speech could only be heard once or twice, so students would quickly forget. Students need a model of speech that can be heard at any time needed, while lecturers need tools that can ease their work. This problem will be overcome by the availability of appropriate learning media.

Although researchers while teaching English Phonology often use computers that contain audio-visuals. English Phonology or pronunciation material and exercises have also been offered on the internet. But unfortunately, not all lecturers and students have been able to carry out this activity. In addition, time can also be an obstacle because the amount of material available, sometimes not limited, that has not been selected and arranged in accordance with the needs of the lecture. Seeing these problems the researchers developed a multimedia model through the Macromedia Flash application to be used in English Phonology learning by applying the steps of development research.

Phonology is a branch of the study of linguistics. Linguistics (Linguistics) is the study of language. The study of linguistics is divided into two, namely internal and external studies of a language. Internal language studies include studies of language sound (phonology), word order (morphology), sentence form (syntax), and discourse (discourse). Whereas external language studies include the use of language such as sociolinguistics (the use of language as a tool of social interaction), psycholinguistics (language as a symptom of psychology), neurolinguistics (language related to the brain), and ethnolinguistics (language related to ethnicity) (Abdul Chaer, 2007:16). The field of linguistics that studies, analyzes, and discusses the sequence of sounds of language is called phonology (Abdul Chaer, 2015:102). Moreover, Ramelan (2013:1) in his book English Phonetics provides a definition that Phonology is the study of speech sounds. In the study of phonology there are two main studies namely Phonetics and Phonetics. Phonetics is a branch of Phonology that examines the sound of language regardless of whether the sounds have a function as a differentiator of meaning or not. While phonemic is a branch of phonological study that studies the

sound of language by paying attention to the function of the sound as a differentiator of meaning (Abdul Chaer, 2015:102).

Soenjono dardjowidjojo (2009:14) stated that Phonology is different from phonetics because the focus of the study is different. In phonetic studies we study formation, production, and sound perception, whereas in phonology we study how sound is used in speaking. In the English Phonology course, researchers as lecturers focus on the study of phonology in the object of English Phonetic studies, mainly emphasizing the aspect of sound exiting from the utterances. The Phonetic Study actually addresses two main branches, namely Articulatory Phonetics and Acoustic Phonetics. Articulatory Phonetics which is the main focus of the English Phonology course has the understanding that this study studies how the mechanism of human speech works in producing the sound of language, and how sound is classified. While the Acoustic Phonetics is not reviewed in lectures, because this study requires electronic devices that are expensive and impractical to be taught in class. Acoustic Phonetic the sound of the language investigated by the frequency of vibrations, their amplitude, and other characteristics of sound (Ramelan, 2013:1).

Learning media is a tool used to help the learning process. Media can be used to stimulate thoughts, feelings, attention and ability or learning skills so that it can encourage the learning process to be more effective and efficient. According to Arief Sadiman (2012: 6), the word media comes from Latin which is the plural form of the word medium which literally means intermediary or introduction. Learning media is everything that can channel messages, can stimulate the thoughts, feelings, and willingness of students so that they can encourage the creation of learning processes in students (Nunuk and Leo, 2012:137). Learning media is a messenger technology that can be used for learning purposes. This means that the learning media is a physical means for delivering subject matter. Learning media is a means of communication in print and listening, including hardware technology (Rusman, 2013:160).

Along with the development of information technology, a media is formed that can combine various elements such as text, images, animation, sound, video or what is now better known as multimedia names. Multimedia is a combination

of several media used in the learning process, serves to channel messages (knowledge, skills and attitudes) and can stimulate students' choices, feelings, attention and willingness so that the learning process intentionally occurs, aims and is controlled (Daryanto, 2013:52).

The media has benefits in the learning process, it can be as a messenger from the teacher to students so that they can understand the learning material well, so that the objectives of learning can be achieved. The use of media in the learning process is able to provide many benefits. With the use of learning media, the problem of space and time limitations can be overcome. Interesting media can also make students enthusiastic in following the teaching and learning process in the classroom. Nana Sudjana and Rivai (2011:2) stated that learning media has benefits, they are:

- 1). Teaching will attract students' attention so that it can foster learning motivation.
- 2). The teaching material will be more clearly defined so that it can be better understood by students, and allows students to master the teaching goals better.
- 3). The method of teaching will be more varied, not merely verbal communication through the narrative of words by the teacher, so that students are not bored and the teacher is not exhausted..
- 4). Students do more learning activities, because not only listen to the teacher's description, but also other activities such as observing, doing, and demonstrating

In the era of information technology, there are many emerging software that can be used to develop multimedia learning, such as Microsoft Office Power Point, Corel Presentation, Macromedia Flash or Adobe Flash, Director MX. Multimedia development using Macromedia Flash software as a substitute for multimedia presentations that were previously more popular using Microsoft Office Power Point is considered to be more effective, because flash is one of the most reliable animation creation programs. The advantage of flash compared to other programs is in terms of file size from small animations (Daryanto, 2005:9).

Macromedia Flash, which has now been acquired by Adobe Flash, is software that has the ability to draw and animate it as well as easy to learn. Adobe flash is not only used in making animations, but nowadays adobe flash is also widely used for other purposes such as in making games, presentations, building

web, learning animations, even in filmmaking. In this study, the researcher developed learning media using Macromedia Flash 8. Macromedia flash is widely used by web designers because it has capabilities that are superior in displaying multimedia, a combination of graphics, animation, sound, and user interactivity (Nur, 2010:1).

2. RESEARCH METHODS

This research is a Research and Development study. The Research and Development (R & D) method aims to produce new products through the development process. In this case research and development research is a process in developing a product and testing the validity of the product being developed. R & D research is basically developing a product, both new products and the development or improvement of existing products to be more effective.(Endang Mulyatiningsih, 2013:161). The researcher developed the product in the form of teaching materials for English Phonology courses using the Macromedia Flash 8 application. The research location is the English Language Department of IAIN Metro which is located at Jalan Kihajar Dewantara No.15 A, Iringmulyo, Metro Timur District, Metro City, Lampung Province. The stages of research and development that have been carried out are as follows:

1. Stages of Analysis
 - a. Identify the objectives of Learning Media
 - b. Identifying Student Characteristics.
2. Designing stages
 - a. Design learning materials
 - b. Design learning media design using the Macromedia Flash 8 program.
3. Production stages
 - a. Producing learning material
 - b. Authoring material
 - c. Editing Learning material
4. Evaluation Stages
 - a. Material Review
 - b. Media Expert Review

c. Test on students (Borg and Gall, 1989:772)

To find out the quality of multimedia produced, the assessment sheet provided by the expert team is very important to analyze. Data is used as a basis for revising the deficiencies of the product. Quantitative data in this study is data obtained through trial activities. Quantitative data analysis techniques using descriptive statistical analysis, while the assessment used by the expert team is to use a scale with very good criteria (5), good (4), enough (3), poor (2), and very poor (1) (Riduwan, 2009:39).

3. FINDINGS AND DISCUSSION

Research findings

1. Stage of Product Development

The development of learning media using the Macromedia Flash program has the procedure steps that have been carried out, namely:

a. Stages of Analysis

This stage is a preliminary activity before determining the concept of making Macromedia Flash learning media. Activities carried out include:

1) Identifying the objectives of Learning Media

The purpose of developing learning media using Macromedia Flash 8 is as a learning media that will be used by Lecturers of English Phonology courses at the IAIN Metro English Language Department. In addition to the English Phonology course, this Media can also be used for other subjects such as Introduction to Linguistics, Pronunciation, speaking, and Listening.

From the results of interviews with several lecturers of the IAIN Metro, English Language Department, it was found that most lecturers only used Power Point and there were no lecturers who used Macromedia Flash as a Learning Media. As stated by Andianto, he used ordinary Power Point when teaching Syntax courses because Power Point can help in explaining Lecture Materials. Unlike Leny Setiana who teaches Listening Courses, she uses MP3 and Videos to teach Listening who need Audio when teaching.

2) Identifying Student Characteristics.

In the development of Macromedia Flash learning media user analysis is needed, this aims to determine how the characteristics and characteristics of students during the learning process. The experience of researchers when teaching English Phonology courses, students tend to feel bored if they only listen to explanations from lecturers. The lecturer will also feel tired if you have to give an example of good and correct English pronunciation. By using this learning media, students will pay more attention to the material effectively and pleasantly.

b. Design Stage

The design stage is an activity that must be carried out before determining the initial product design concept of learning media using Macromedia Flash. The initial activities that have been carried out include:

1) Design learning materials:

- a). Determine Competency Standards in accordance with the curriculum.
- b). Making Semester Syllabus and Learning Plans.
- c). Determine the material to be used.
- d). Determine reference books that are in accordance with the material.
- e). Make an evaluation.

2) Designing learning media designs using Macromedia flash

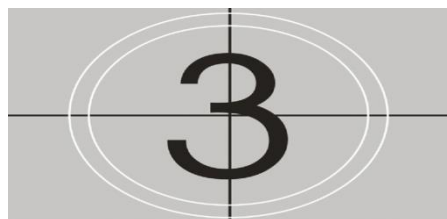
Collect material (materials in the form of graphics, images, sound, pictures, animations, videos, and presentations

c. Production Stages

The results of this study are the realization of interactive learning media for English Phonology courses. This learning media is in the form of flash (swf) and html so that this media can be run through adobe flash player.

The display of English Phonology learning media programs using Flash is as follows:

1) Intro Display



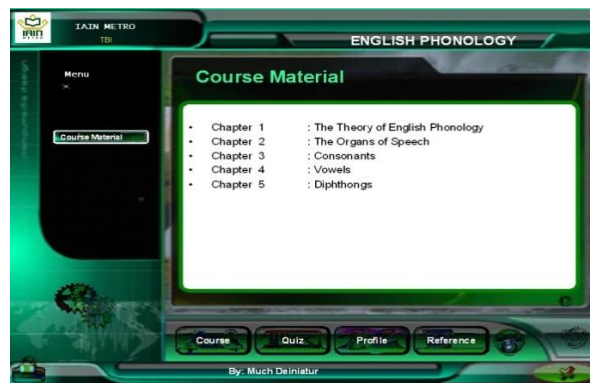
The picture above shows the display time needed to enter the intro page. The calculation starts from numbers 3 to 1.

2) Display of the Home Menu



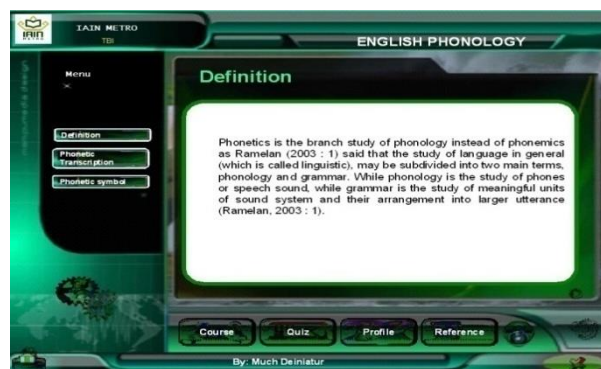
The picture shows the display of the home menu which has several choices, namely the option to return to the intro, enter the main learning media menu or choose Exit to close the learning media.

3) Display of the Main Menu



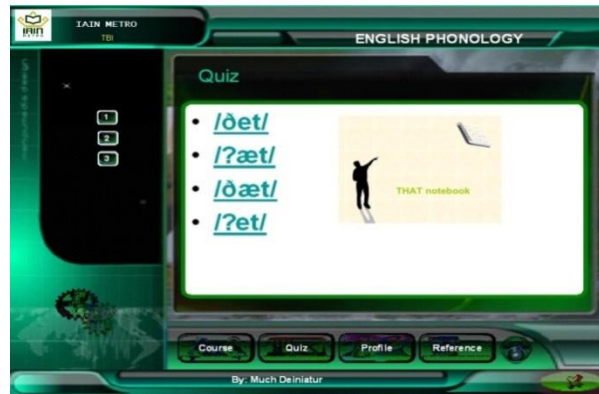
The picture above shows the main menu display which has several choices, namely (1) course menu which is the content of material from (Chapter 1-5), (2) Quiz menu, (3) Teacher Profile menu, (5) Reference menu.

4) Display of Chapter 1: The Theory of English Phonology



The picture above shows the menu display in Chapter 1: The Theory of English Phonology, in this section Chapter 1 material contains material about (1) Definition, (2) Phonetic Transcription, and (3) Phonetic Symbols.

5) Display of Quiz



The picture above shows the appearance of the quiz menu. Quiz shaped Multiple choice consisting of four Phonetic symbol options for the pronunciation of a word indicated by an image. If you choose the right and wrong answers, you will have different voices. Then after completing the quiz, the score will appear on a scale of 10-100.

a. Evaluation Stages

1) Data Analysis of Material Aspect Validation Results

Validation of material experts was carried out by Dr. Umi Yawisah, M. Hum, Senior Lecturer at the IAIN Metro English Language Department. He is a Doctor of applied Linguistics.. In addition, he also taught English Phonology courses.

Based on the results of the material aspects validation, it can be seen the quality of the instructional media material developed. This validation aims to determine the suitability of the material needed by students. Material aspects related to material suitability with Competency Standards, Accuracy of material coverage, Material truth, Up to date material, Digestibility of materials, Submission of coherent material, Useful material, Depth of material, Weighted material, Interesting material, Ease of material delivery, Evaluation for measuring student ability, student involvement in learning

activities, accurate learning resources, and quality feedback (can motivate students).

In the notes of suggestions and comments, the material expert suggested to the researcher to immediately apply this media to the students. In addition, material experts gave criticism to add competency standards to one of the slightest.

The score obtained is 4.60. Based on the conversion qualitative values are included in the excellent category.

2) Data Analysis Results of Media Aspect Validation

Validation of media experts is carried out by Dliayul Haq, M.E.I. He is a computer expert and Lecturer in Information and Communication Technology (ICT) Courses at IAIN Metro. In addition, he is an expert in the field of learning media, especially experts in Macromedia Flash applications. Based on the results of the media aspect validation, it can be seen the display quality and learning media programs developed. The media aspects include: font selection, font size, color, graphics, background selection accuracy, image display, animation, music accompaniment, sound, screen design, language usage, navigation, button consistency, clarity of usage instructions, ease of use, efficiency layer usage, text efficiency, speed, anticipating possible student responses.

Based on advice from media experts, there are several writings that must be corrected, improve videos, and quizzes. When viewed from the scores obtained, the learning media in the good category is 4.05.

3) Test Results on Student trying.

Based on the results of the trials on students it is used as the basis for knowing the scope and suitability of the material with the needs of students. These aspects are related to the clarity of the instructions for using the program, the readability of text / writing, the quality of the image display, the presentation of animation, the composition of the background, the selection of background, music support, navigation, clarity of competency standards and basic competencies to be mastered, clarity of learning instructions, ease of understanding sentences in text / writing, ease of understanding the material /

content of the lesson, the accuracy of the order of presentation, the scope of practice / delivery of quizzes, the role of learning media to add insight and knowledge, clarity of feedback / response, increase interest in learning

The data obtained from the results of trials on students were then converted into a scale of 5. Based on the data processed, with 17 items validated by 33 students where the number who chose the category was very good there were 79 who voted, the categories were 272 who chose, enough categories there are 167 who choose, there are 12 categories that choose poor, and there are 10 categories that are very poor.

Based on the average score obtained is 3.60, the learning media is included in the good category after being tested on students.

Discussion

Development of learning media using Macromedia Flash is packaged in the form of Compact Disk (CD). The development uses the Macromedia Flash 8 program that has been published in the form of extensions (.swf), (.exe) and HTML. This learning media contains material about English Phonology for Students of the English Language Department of the 1st Semester of IAIN Metro.

This learning media has been validated by material experts and media experts and has followed suit in the stages of development. The results obtained by the material expert validation were 4.60, the results of the validation by media experts were 4.05, and the results of tests on students were included in the good criteria with an average score of 3.60. As a result of product development, this learning media has strengths and weaknesses. The advantages include: (1) a different view of the learning media used before, this learning media is an interactive learning media, where the learning media can be used by students anytime and anywhere, (2) Presentation of the material displayed by displaying several animations , and the provision of quizzes and summaries also become the main attraction on learning media using this Macromedia Flash 8 program, (3) having interactive and consistent navigation buttons to make it easier for students to easily explore each slide, (4) the program characteristics that contain size very small file so this program is very profitable if

it is loaded up to the internet, (5) This program also has autorun file and is immediately executed / running because it has been published to the .Exe format. So, the Macromedia Flash 8 program does not need to be installed first in the computer to be used, (6) Can be used for independent learning.

In addition to the above advantages, the weaknesses of this learning media are: (1) the limited subject matter presented in this media, namely the material of learning media only covers the subject with material The theory of English Phonology, Consonants, Vowel, Diphtongs, and Quiz. (2) The number of quizzes or practice questions is lacking. This is due to the difficulties that the researchers have in making Quiz. (3) This program can only be run using a computer, so students who do not have a computer or laptop will have difficulty using it.

This learning media is interactive learning media designed for individual learning, but lecturers must also continue to provide explanations to help accelerate student understanding. Because the lecturer must continue to provide explanations to accelerate student understanding so students can improve their learning achievement in the English Phonology course.

4. CONCLUSION

Based on the results of data analysis and discussion can be concluded as follows:

a. The development of learning media using Macromedia Flash has gone through stages, namely: (1) analysis phase, at this stage identification of learning media objectives and student characteristics, (2) design stage, at this stage what is done is developing story boards, determining layouts, designing block diagram and collect materials in the form of graphics, images, sound, picture, animation, determine the application program to be used etc., (3) the production stage, at this stage organizing layouts, designs, and materials already prepared to become a learning media product, (4) the evaluation stage, at this stage it has been evaluated and assessed by a team of material experts and media experts. The results of the development of the Macromedia Flash 8 program are packaged in Compact Disk (CD).

b. The quality of learning media products in the English Phonology course at the IAIN Metro English Language Department was reviewed based on the assessment of material experts, media experts, and the results of Student trials were aspects of material feasibility based on the assessment of the material experts were very good with a mean score of 4.60. The aspect of media feasibility is based on the assessment of media experts in a good category with a mean score of 4.05. The results of trials to students are categorized well with a mean score of 3.60. So that it is feasible to be used by students and lecturers for learning media in the class.

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