

Development of Learning Media Hören A2WEB-Based

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Abstract

This research is entitled Development of Learning Media Hören A2 Website based. The background of this research is the low skills of students in the Hören A2 course (listening skills level A2) due to the lack of learning media. The purpose of this research is to produce a website-elearning learning media product using the ADDIE development model (Analysis, Design, Development, Implimentation, Evaluation). At the Design stage, an outline of the website content is made, the preparation of the website framework. In Development, website creation, website packaging and presentation, quiz design, testing by media experts and material experts are carried out. At the implementation stage, tests were carried out on small and large classes and at the evaluation stage, it included indicators of media success that evaluated each stage of development. Making media using Articulate Storyline 3 software which consists of material text, images, videos, audio, animations, practice questions and quizzes.

Keywords

development; learning media; Hören A2; website



I. Introduction

Listening skill (hoeren) is an important element in learning German. These skills involve the emotional elements of students to further enhance the five senses of hearing, increase the power of logical concentration and guess the meaning by hearing the sound. This listening skill is the basis for the development of other skills, such as speaking skills. Mastery of listening skills will be able to help facilitate mastery of speaking skills. Listening skills are the ability to identify and understand what other people are saying.

Based on the results of observations in the class on the Hören A2 course (listening skills level A2), there are still many students who experience difficulties in the learning process which have an impact on student achievement. The main difficulties faced by students are in the form of unfamiliar words and intonations which make it difficult for students to understand the Hören A2 course. The difficulty of students in learning German can be seen during the teaching and learning process using the Studio Express A2 book. The Studio Express A2 book is a mandatory book used in this course, where the contents are in the form of text, audio without any video that makes it easier for students to understand the conversations in the text and audio. This is an obstacle for students. If you only follow Hören A2 learning with Studio Express A2 Books without using additional media, it is very difficult for students to learn German, especially in Hören A2 learning. This makes students feel bored and bored so that Hören A2's learning achievement is low.

German language learning should be delivered through various media. One of them is e-learning that complements learning, especially during the Covid 19 pandemic. This media has an attraction for students in learning German, especially Hören A2 learning, because the media involves the five senses of hearing and sight. By using video media in the learning process, students can use the five senses of sight by seeing color, appearance, shape, and movement. Therefore, video learning media is considered effective in learning

German because it can stimulate students' motivation and thinking power, eliminate students' boredom, and help the learning process so that it is not monotonous. Motivation are drives that initiate a person's behaviour to act in a certain way. For someone to act either positively or negatively depend on incentives that is available (Takwate, 2021). Purwanto in Khairani (2020) which states that "motivation is a conscious effort to influence a person's behavior so that he moves his heart to act to do something so as to achieve certain results or goals". According to Mc Donald in motivation (Kompri in Irhamna, 2020) is a change in energy in a person's personality which is marked by the emergence of affective (feelings) and reactions to achieve goals, so that the emergence of motivation in individuals can be realized or not.

One of the e-learning media that can be used as an alternative as a teaching medium is learning media using a website. The advantage of this website is that it can be used online or offline so that students can study anywhere without space and distance restrictions. One of the audio-visual media that can be used as an alternative as a teaching medium is video learning media with Articulate Storyline 3 software. The advantage of this application is that it is able to combine all media elements such as text, video, animation, exercises, questions, quizzes, images and sound into a single unit. integrated presentation in the form of video. Thus, information or messages are easy to understand because when the learning process takes place it can involve many senses and organs.

Based on the thoughts that have been expressed above, this study intends to develop a website-based Hoeren A2 learning media where the website contains learning videos and practice questions to complement existing books and it is hoped that the media can increase motivation in studying Hoeren A2 courses.

1.1 Formulation of the Problem

Based on the identification of the problems described above, this research problem is:

1. How is the website development process for the Hören A2 course?
2. How is the quality of the website created according to media experts, material experts and students?

1.2 Research Objectives and Contributions

a. Research Purposes

1. To create a website for the Hören A2 course.
2. To find out the quality of the website created by media experts, material experts and students.

b. Research Contribution

The contributions that can be expected from this research are:

1. For Lecturers
Provide input to lecturers so that they can use this website so that they can improve the quality of learning in order to improve activities and learning outcomes in the Hoeren A2 course.
2. For Students
As a motivation for students so that they have a desire to learn and can make it easier to understand Hoeren A2 courses. In addition, it is also a reference material for students to be able to conduct relevant studies.

3. For Researchers

As an added value for the author to improve educational knowledge in theory and application or practice by using the website to facilitate student understanding in learning Hoeren A2.

II. Review of Literatures

2.1 Development Research

Development research is an attempt to develop an effective product in the form of learning materials, learning media, learning strategies to be used in schools, not to test theories. Development research is needs analysis and can test the effectiveness of the resulting product so that it can function in the wider community (Sugiyono: 2016). In development research, one of the development models is known, namely the ADDIE model. The ADDIE development model is a learning design model based on an effective and efficient systems approach and an interactive process, namely the results of the evaluation of each phase can bring learning development to the next phase. The end result of one phase is the initial product for the next phase.

2.2 Definition of Learning Media

Media learning comes from the word medium (Latin) which means intermediary or introduction. Learning media is a tool that can channel messages, can stimulate the thoughts, feelings, and willingness of students so that they can encourage the creation of a learning process in students. This is in accordance with what Heinich, Molenda, Russel (1996) stated that A medium (plural media) is a channel of communication, examples include film, television, diagrams, printed materials, computers, and instructors. (Media are communication channels including film, television, diagrams, printed materials, computers, and instructors).

2.3 Articulate Storyline 3

Articulate Storyline 3 is software for creating web-based interactive learning media (HTML5) that can be accessed on various devices such as laptops, PCs, tablets and smartphones. This software also has features such as timelines, videos, images, animations and others that are easy to use. Articulate Storyline software is e-learning software that contributes to interactive learning. This software can plan storyline projects, create presentations with all the different tools and elements, can consist of media such as audio and video, use the quiz feature and then publish the created project.

2.4 Courses Hoeren A2

The Hoeren A2 course is a course studied by students in semester 3 to semester 4. This course aims to train students' listening skills. In this course, students use the Studio Express A2 handbook.

2.5 Research Roadmap

The following is a research roadmap that has been carried out and will be carried out by the research team.

Table 1. Roadmap

2019	2020	2021
Studio B2 Book Learning Design Using	Learning media development <i>Hörverstehen</i>	Hoeren Learning Media Development

Windows Movie Maker on Students' Listening Skills in German Language Education Study Program	<i>fur Anfänger</i> Website Based	AIWebsite Based
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III. Research Method

3.1 Research Method

This research is a development research that aims to develop learning media made with a website in the Hoeren A2 course in the German Language Education Study Program. In the development of this media using the ADDIE model (in Tegeh & Kirna, 2010). The selection of this model was based on the consideration that this model was easy to understand, besides that this model was developed systematically and based on the theoretical foundation of the developed learning design.

This model is structured programmatically with systematic activities in an effort to solve learning problems related to learning media that are in accordance with the needs and characteristics of children. Tegeh & Kirna (2010) stated that the stages of development research on the ADDIE model are:

1. Analyst (Analysis)
2. Design
3. Development (Development)
4. Implementation / execution (Implementation) and
5. Evaluation/feedback (Evaluation).

3.2 Data and Data Sources

The data and data sources taken from this research are all from the themes in the Studio Express A2 book

3.3 Research Sites

The research was conducted in the German Language Study Program.

3.4 Stages of Research

In accordance with the chosen model, the analysis carried out includes all the material in the Studio Express A2 book. Design includes: objectives, methods, and evaluation. Development is carried out by producing products in the form of learning video media. The implementation was carried out by validating experts and testing learning media using the website at the German Language Education Study Program. Evaluation is carried out in a formative manner at the product development stage according to the model used.

The five stages of the development procedure can be seen in the chart of the stages of development as follows:

- 1) The analysis phase includes the following activities:
 - a) Conducting competency analysis required of students
 - b) Analyze the characteristics of students about the learning capacity, knowledge, skills, attitudes that students have and other related aspects
 - c) Conduct material analysis in accordance with competency demands.
- 2) Phase II Design is carried out with the following terms of reference:
 - a) Who is learning designed for? (learners).
 - b) What skills do you want to learn? (competence).

- c) How can the subject matter or skills be learned well? (learning strategies).
 - d) How do you determine the level of mastery of the lesson that has been achieved (assessment and evaluation).
- 3) The third stage is development activities which include collecting interactive multimedia-based learning media/materials, making illustrations, typing, and so on. Then proceed with the preparation of interactive multimedia-based learning media with the help of the required software.
 - 4) The fourth stage of activity is implementation. The results of the development are applied in learning to determine the effect on the quality of learning which includes effectiveness, attractiveness, and learning efficiency.
 - 5) The last stage is to conduct an evaluation which includes formative evaluation and summative evaluation. Formative evaluation is carried out to collect data at each stage

3.5 Research Designs

The method used in this study is a quasi-experimental method with a quantitative approach. The research design used was Pre-Test and Post-Test Control with one type of treatment. Arikunto 1993: 276) describes the research method as follows:

Table 2. Research Model

Group	Pretest	treatment	Posttest
E	Q1	X	Q2
K	Q1	-	Q2

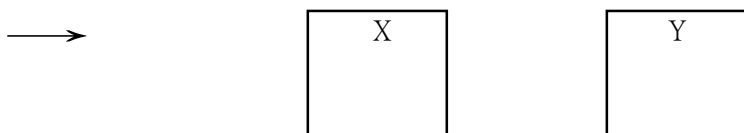
Information:

- E : group experiment
- K : control group
- X : treatment
- Q1 : *pre-test*experimental group
- Q2 : *post-test*experimental group

3.6 Research Variables

In this study there are two kinds of variables, namely the independent variable which is denoted as (X) and the dependent variable which is denoted as (Y). The independent variable is also called the influencing variable or the causal variable. In this study, the variable is the use of website learning media (X).

Furthermore, the dependent variable is also called the dependent variable, which is meant in this study is Hoeren A2 (Y) learning.



Description:

- X : the use of website media is notation X
- Y : Hoeren A2 learning is Y . notation

3.7 Data Collection Method

The data collection technique used by the researcher in this study was a test. "Test is a tool or procedure used to find out or measure something in an atmosphere, with predetermined ways and rules (Suharsimi, 2010: 53). The data collection technique used in this study was a pre-test and a post-test of Hoeren A2's learning achievement. The initial test was conducted to determine the learning achievement of the students before being given treatment and the final test to determine the learning achievement of the students after the treatment.

3.8 Research Instruments

The type of research instrument in this study is the Hoeren A2 test in the form of multiple choice questions consisting of options a, b, c, and d. Then form the question with the answer ja oder nein (yes or no). This question is in the form of an oral discourse and is heard through a laptop and active speakers. The test instrument was made by the researcher based on the syllabus used as a learning guide for Hoeren A2 in the Unimed German Language Education Study Program. The assessment of the test is done by giving a score of one (1) for the correct answer and zero (0) for the wrong answer (Nurgiyantoro: 2013).

3.9 Research Procedure

The procedures carried out in the study are as follows:

a. Pre-Experiment Stage

At this stage the researcher prepares the material that will be used for the experimental class, prepares the RPS (semester learning plan) then the researcher prepares the questions that are used as instruments and conducts instrument trials.

b. Pre-test Stage

This stage is carried out before the experimental stage with the aim of knowing the initial abilities of students in both classes and later compared with the results achieved by students after being given treatment, so that it can be seen whether there is a significant difference in learning achievement between the experimental class and the control class.

c. Experiment Stage

This stage is called the treatment stage. In this stage the lecturer carries out the process of teaching and learning activities by providing treatment using the website in the experimental class, while in the control class the Hoeren A2 learning activities are carried out using conventional media.

d. Post-test Stage

After the treatment or experiment stage, a post-test was then given to the two groups whose instruments were the same as the pre-test. The post test aims to measure the Hoeren A2 learning achievement of students after being given treatment.

3.10 Research Data Analysis

After the data in the study was proven to be normally distributed and the variance was homogeneous, then the T-test analysis technique was carried out (Arikunto: 2018). T-test was used to test the difference in learning achievement between classes taught using the website and classes taught using conventional media. Here is the T-test formula

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{S^2}{n^1} + \frac{S^2}{n^2}}}$$

Information :

T : the coefficient you are looking for

\bar{X}_1 : the average value of the experimental group

\bar{X}_2 : the mean value of the control group

N : number of subjects, S^2 : estimated variance

If the results of the T test show a significant difference between the learning achievement of the experimental class and the control class, the effectiveness of the use of this media can be calculated by looking at the results of the pre-test and post-test.

3.11 Research Paths

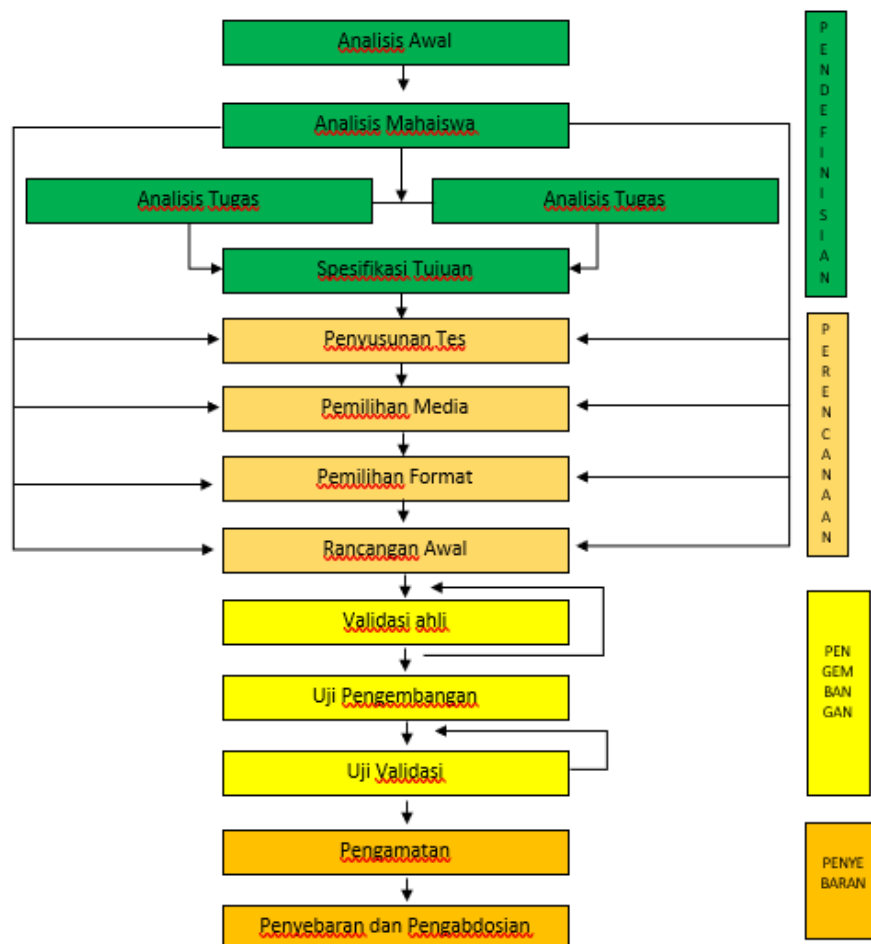


Figure 1. Research Flow

IV. Discussion

The results of the research data analysis show that:

- a. The use of video media in the experimental class is very functional, challenging memory, concentration, and most importantly students can understand and capture the material presented. The use of video media in learning really attracts the attention of students because it depicts a piece of events or events chronologically and directly so that students do not just imagine or guess. So of course the use of video media can attract student responses. With the various benefits of video media, the use of video media is very necessary in learning so that students do not feel bored and learning is not monotonous. This is in line with the benefits of video media proposed by Arsyad (2010: 49-50) namely being able to focus attention and maintain attention, being able to follow directions, trains analytical skills, determines the meaning of context, can sort out relevant information or ideas from irrelevant information, and can summarize, restate, or recall information. Thus the video media is very necessary in the learning process.
- b. Video media that involves two senses, namely the senses of hearing and sight simultaneously greatly assist students in digesting, and processing information, as well as imagining in the minds of students. In addition, the use of video media can make students feel challenged, respond more positively, and be more passionate. Unlike the case with students who use conventional media, they tend to do other things, are not enthusiastic, and do not respond to the material and even complain because they do not understand what is being conveyed. Therefore, video media can help lecturers in
The learning process is how to convey information through the senses of sight and hearing. Then learning will not run monotonously.
- c. Learning requires repeated practice, this is because learning achievement is related to the process of listening, thinking, concentrating on obtaining information, how to get used to hearing foreign sounds or terms, then digesting and becoming new information for students.
- d. The assumption and suggestion that German is difficult and unattractive is also because it requires high concentration and full attention and the limited vocabulary possessed by students. So the use of diverse and interesting media is a solution to overcome learning problems in students. The use of interesting media, one of which is video media, will greatly help students in the learning process so that the learning process is not boring and can eliminate students' assumptions that German is not interesting and difficult, besides that video media can help lecturers in delivering learning materials.

V. Conclusion

Other factors are needed to support Hören A2's learning achievement including motivation, interests and talents, learning environment, school facilities, and lecturers as facilitators and motivators in the classroom. Because the above factors are interrelated with each other, the success of learning can be achieved. Thus, the results of this study can support and prove theories about video media as described previously. It is hoped that learning through the use of this media can create educative interactions between lecturers and students so that the teaching and learning process can be more effective and can improve students' German learning outcomes.

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