# DEVELOPMENT OF ADOBE FLASH MULTIMEDIA-BASED INTERACTIVE LEARNING MEDIA ON THE TYPE OF EMPLOYMENT IN SOCIAL SCIENCE LEARNING SUBJECTS AT GRADE IV SD

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# PENGEMBANGAN MEDIA PEMBELAJARAN INTERAKTIF BERBASIS MULTIMEDIA ADOBE FLASH PADA MATERI JENIS JENIS PEKERJAAN MATA PELAJARAN IPS DI KELAS IV SD

| ARTICLE HISTORY | ABSTRACT |
|---|---|
| | **Abstract:** *This paper discusses the development of adobe flash multimedia-based interactive media in social science learning subjects, especially on the learning material of the employment types at grade IV. The research method used by the author is Research and Development (R&D), which consists of the stages of problem analysis, data collection, product design, product design validation, product revision, and product testing. To test the feasibility of this learning video, the validation test was applied by media and material experts. The product was tested with the research subject, which involved 20 fourth-grade students of SDN Bama 3. Based on the validation results regarding interactive learning media based on adobe flash multimedia the validation from media experts was categorized as "very feasible" with a percentage of 86%, percentage of material experts' validation was 94%, which was in the "very feasible" category, and the percentage from respondents who were intended for students achieved 91.4%, which was in the "very decent" category. Thus, it can be concluded that interactive learning media based on adobe flash multimedia is "very feasible" to use in social science learning subjects on the learning material of employment types.* |
| | *Keywords: adobe flash multimedia, interactive learning media, social science learning subject* |
| | **Abstrak:** Tulisan ini membahas pengembangan media interaktif berbasis multimedia *adobe flash* pada pelajaran IPS, khususnya materi jenis-jenis pekerjaan di kelas IV. Metode penelitian yang digunakan oleh penulis yaitu penelitian dan pengembangan (R&D), yang meliputi tahapan analisis masalah, pengumpulan data, desain produk, validasi desain produk, revisi produk, dan uji coba produk. Untuk menguji kelayakan dari video pembelajaran ini, maka dilakukan uji validasi ahli yang dilakukan oleh ahli media dan ahli materi. Uji coba produk dilakukan dengan subjek penelitian yang melibatkan 20 peserta didik kelas IV SDN Bama 3. Berdasarkan hasil validasi didapatkan bahwa media pembelajaran interaktif berbasis multimedia *adobe flash* dinyatakan "sangat layak" oleh ahli media dengan persentase 86%, persentase dari ahli materi 94% yang termasuk dalam kategori "sangat layak", serta responden yang diberikan peserta didik mendapatkan persentase 91,4% yang termasuk dalam kategori "sangat layak". Berdasarkan hasil penelitian, dapat disimpulkan bahwa media pembelajaran interaktif berbasis multimedia *adobe flash* "sangat layak" digunakan dalam pembelajaran IPS pada materi jenis-jenis pekerjaan.<br><br>**Kata Kunci:** *multimedia adobe flash, media pembelajaran interaktif, IPS* |

## INTRODUCTION

Based on the facts obtained through interviews with class IV teachers and observation of class IV student learning that at SDN BAMA 3 they have not used interactive media to support the success of the learning process at SDN BAMA 3 tend to still use monotonous media such as pictures in student books and only sample pictures on paper, and at SDN BAMA 3 it is relatively rare to use multimedia-based media even though the SD has Infocus facilities available. Therefore the researcher concluded that at SDN Bama 3, especially in class IV, it requires interactive learning media that is different from usual in order to generate enthusiasm. learning for students and in the learning process is not monotonous, it can produce a lively atmosphere but achieves the learning objectives, namely students get good grades. Based on the results of the needs analysis that the researchers did, it was found that there was still a lack of use of learning media in social studies subjects at SDN BAMA 3, the availability of learning media was lacking, the variety of available media had not fully met the needs of the learning process, there were only a few media that could be used in certain materials. In addition, the teacher's creativity has not emerged in the use of media, the teacher only uses media in the form of pictures and student books. The media in schools is rarely used so that the learning process is less interesting. This is supported by observations made during the learning process in class VI that without the use of media, students are not focused and bored. During the learning process, it was also found that some students were noisy and fell asleep in class. As a result, students become less active, therefore the teacher needs a variety of media that can serve the needs of students according to the diversity of learning types and can arouse students' interest in participating in the learning process. Media that is capable of covering all aspects from images and sound to being able to display motion. Along with the rapid development of science and technology, especially learning technology now brings great influence and benefits to educational institutions, especially in the process of delivering learning. Learning technology seeks to design, develop, and utilize various learning resources so that it can facilitate and facilitate an educator at school to learn Warista (2008: 57) with the available technological facilities it is not wise if it is not used to support success in teaching and learning activities in class , especially computer-based media in making multimedia-based interactive media.

Multimedia can develop sensory abilities and attract students' attention and interest, stating that people are only able to remember 20% of what is seen and 30% of what is heard and 80% of what is seen, heard, and done at once. Multimedia can present information that can be seen, heard, and done so that multimedia is very effective in becoming a complete tool in the teaching process for students by educators in learning. Lots of computer software that is deliberately created to produce multimedia in

complementing teaching and learning activities such as "Macromedia Flash" or what is now called Adobe Flash. Adobe Flash is a computer software specifically designed by Adobe Flash and is a standard application program for professional authoring tools used to create interactive and dynamic animations, web and applications. In the considerations that have been stated above, the authors conducted research. Adobe Flash interactive learning media is media created to make students more active in class and understand more about the material types of work, this media is very beneficial, this is because during the learning process in class students become more focused on learning and paying attention in the future because in the future learning media are available which are very interesting so as to arouse students' curiosity. Then students easily understand learning material because Adobe Flash interactive media has many features and images that are very interesting for students, students are required to come forward to participate in running the features in Adobe Flash learning media and when the material is finished at the end student learning provided questions that must be answered by students and get a score that is in accordance with the results answered.

**THEORITICAL REVIEW**
**A. Learning Media**

Learning media is a means of infrastructure that can be used to convey information to students at school. Media comes from Latin and is the plural form of the word "Medium" which literally means "intermediary", namely the intermediary between the source of the message (a source) and the recipient of the message (a receiver) (Heinich, et al in Hermawan, (2007: 3). The word media in Arabic is wasaai which means intermediary or delivery of messages from the sender to the recipient of the message (Arsyad, 2013: 4).While the word media in "learning media" literally means intermediary or introduction, while the word learning is defined as a condition that is created to make someone do something to learn (Riana, 2007: 5). So learning media is defined as a vehicle for conveying messages or learning information to condition a person to learn. Meanwhile, in the Big Indonesian Dictionary (KBBI) (2005: 726) educational media are the tools and materials used in the learning process. teaching or learning According to Mc.Luhan (Wibawa, 1991: 7) media are all message channels that can be used as a means of communication from one person to another who is not in front of him. Romiszowski (Wibawa, 1991: 8) argues 7 media are message carriers originating from two message sources (which can be people or objects) 7 media are message carriers originating from a message source (which can be people or objects) to a message recipient. As Bruner has stated (Aisyah, 2007: 6) that in the learning process students should be given the opportunity to manipulate objects or props that can be tampered with, so that students can understand IPS concepts well, for example in mathematical concepts, material Lessons need to be presented by paying attention to the stage of cognitive development so that knowledge can be visualized in the mind (cognitive structure) of the student.

According to Gagne and Bringgs (Rahardjo, et al 2006: 6) who say that media are various types of components and all physical tools in the student environment that can present messages and be able to stimulate students to learn. Meanwhile, learning media according to Kemp & Dayton (Arsyad, 2007:

19) can fulfill three main functions if the media is used for individuals, groups.

## B. Multimedia

Multimedia refers to the presentation of material using words and pictures. Multimedia comes from the word multi which means many or various and the word media means a tool to convey messages, therefore multimedia means a combination of various media such as text, graphics, audio-visual, in a tool Mudlofir (016; 155)

## C. Computer-Based Learning

Media The strategy to improve the quality of learning in schools is by updating or innovating in the teaching and learning activities carried out. One way that can be used is by having media that can utilize computer technology.

## D. Adobe Flash

Adobe Flash is a computer software specially designed by Adobe and is a standard application program for professional authoring tools used to create interactive and dynamic animations, web and applications. Wandah (2017: 29).

## RESEARCH METHODS

### A. Research Methods and Design

The method used in this study is the research and development method (Research and Development) is a step-by-step process of developing a new product or perfecting an existing product. Research and development methods are used to produce certain products and test the effectiveness of these products (2010: 407)

### B. Research Design

The development research design that will be pursued leads to the development design produced by Sugiyono (2014: 294) and is modified to include 7 steps, namely problem analysis, data collection, product design, design validation, design revision, product testing and final results.

### C. Data Collection Techniques

Data collection techniques used in this observation are observation, interviews, questionnaires, documentation,

### D. Research Instruments

Instruments are tools or facilities used by researchers in collecting data so that their work is easier or the results are better or in the sense that it is more economical, complete and systematic so that it is easy to process (Arikunto, 2006: 160) The instrument used in this research is a questionnaire given to lecturers advisors, media experts, and material experts

### E. Data Analysis Techniques

The data obtained through the assessment instrument at the time of testing and analyzed using descriptive, qualitative. This analysis is intended to describe the characteristics of the data on each variable. With this it is hoped that it will make it easier to understand the data to facilitate the analysis process then the results of data analysis are used as a basis for revising the media product that is being developed. B. Student Response Assessment Sheet The user response assessment sheet uses a questionnaire which responds to students to find out student responses regarding the development of interactive learning media based on Adobe Flash multimedia

### F. Indicators of Success

The indicator of success in this study is the completion of the development of interactive learning media based on Adobe Flash multimedia.

### G. Research Instruments

Based on the data collection techniques above, a research instrument is needed as a means of collecting data.

According to Sugiyono (2015: 156), research instruments are measuring instruments such as tests and questionnaires that are used by researchers to collect data in a study.

## RESULTS AND DISCUSSION
### A. Research Results

This study aims to produce interactive Adobe Flash media on types of work in class IV of elementary school semester I
1. Problem Analysis This stage is the first step that must be done. This step covers.

2. Data Collection Data collection is done by conducting literacy studies and needs analysis. Literacy studies are carried out by collecting journals, articles as well.
3. Product Design Collection The products developed are in the form of those intended for class IV Elementary School in Social Sciences subject in semester I.

At this stage, the results in the form of materials needed in making Adobe Flash interactive media include source books related to Adobe interactive learning media Flash.

**Table 1. Average Expert Validation Score**

| Validator | Persentage (%) | Information |
|---|---|---|
| Dr Lukman Nulhakim | 86 | Very Worth it |

Based on the table data from the results of the media expert validation above, the results of the validator's assessment with a percentage of 86% are included in the very feasible category, indicating that interactive Adobe Flash media based on the type of work material is included in the very feasible category, the average results obtained from the validator expert i.e. 86% which belong to the very decent category, but this Adobe Flash media is not completely perfect because there

is a deficiency of 14% of which there is no name of the guide to the profile and some of the visual aspects that need to be replaced a. Media Expert Validation Results This validation was seen from three aspects, namely aspects of content feasibility, presentation, and language feasibility. This feasibility test was carried out by a lecturer at FKIP, Sultan Ageng Tirtayasa University, namely Mr. Damanhuri, MP.d as a material expert:

**Table 2. Average Expert Validation Score**

| Validator Name | Persentage (%) | Information |
|---|---|---|
| Damanhuri, M.Pd | 94 | Very worth it |

Based on the validation table data above, the results of the assessment with a percentage of 94% are classified as "very feasible". The data proves that this Adobe Flash media is very worthy of viewing based on the table data results from the validation of the media experts above, the results of the validator's assessment with a percentage of

86% are included in the very feasible category indicating that interactive Adobe Flash media based on the type of material - the type of work entered into the very feasible category, the average result of the validator expert is 86%, which is classified as a very feasible category, but this Adobe Flash media is not fully perfect because there is a deficiency of

14%, including there is no supervisor's name on the profile and there are some visual aspects that need to be replaced a. Media Expert Validation Results This validation was seen from three aspects, namely aspects of content feasibility, presentation, and language feasibility. This feasibility test was carried out by a lecturer at FKIP, Sultan Ageng Tirtayasa University, namely Mr. Damanhuri, MP.d as a material expert:

**Table 3. Average Expert Validation Score**

| Validator Name | Persentage (%) | Information |
|---|---|---|
| Damanhuri, M.Pd | 94 | Very worth it |

Based on the validation table data above, the results of the assessment with a percentage of 94% are classified as "very feasible". The data proves that Adobe Flash media is really worth seeing.

**Table 4. Results of Student Response Data Analysis**

| Information | Aspect | | | | NP (%) |
|---|---|---|---|---|---|
| | **IM** | **B** | **P** | **K** | **Total** |
| **Score** | 152 | 35 | 141 | 38 | 1830 |
| **Final Score %** | 95% | 87,5% | 88% | 95% | |
| **∑ Average** | | | | | **91.40%** |
| **Eligibility Criteria** | | | | | **Very worth it** |

(Ket. IM: Isi/Materi, B: Bahasa, P: Penyajian, K: Kegrafikan)

Based on the table above, the results of students' responses to Adobe Flash learning media obtained an average final score of 91.4% which is included in the "very good" category. The results of the needs analysis based on the research conducted by the researchers stated that teachers are only focused on textbooks and worksheets. Even though there are many other alternatives that teachers can do to activate students in class, like we can take advantage of technology that has developed in the current era, such as laptops and applications that are capable of making learning media. This Adobe Flash development research aims to make it easier for teachers and students in learning activities because teaching media using video is able to make it easier for teachers to explain material to students and teachers do not need to make media in large sizes so that they can reach one class. In addition, students' attention will be more focused and they will not feel bored when learning using videos.

This is in accordance with the theory put forward by Hamalik in Arsyad (2015:19-20) that learning media has several uses including: 1) generating new desires and interests, 2) generating motivation and stimulating teaching and learning activities, 3) helping students improve understanding , and 4) support the success of teaching and learning activities. The achievement or success of developing Adobe Flash interactive learning media can be proven through expert validation (media and material) and student response questionnaires. The validation test that has been carried out by media experts obtains a score with a percentage of 86% which belongs to the "very feasible" category. After the media is declared feasible and has been revised according to the recommendations of experts, the next step is to try it out. This product trial was carried out from October 11 to October 19, 2021. This product trial was carried out on students in class IV at SDN BAMA 3, a total of 20 students. After students are encouraged to watch the video, then students fill out a response questionnaire. This is done to determine the response of students to the media being developed. The results of students' responses to the media that the researcher developed were with a percentage value of 91.4% on the content or material aspect, 87.5% on the language aspect, 88% on the presentation aspect and 95% on the graphic aspect. This was obtained because the students responded well to Adobe Flash interactive learning media. set before. It is hoped that this media can help teachers when teaching learning in class and students are always enthusiastic in participating in learning.

**CONCLUSIONS AND RECOMMENDATIONS**

The conclusions that can be drawn from this study based on the formulation of the problem are: 1. What is the feasibility of interactive learning media based on Adobe Flash multimedia in class IV SDN BAMA 3? Adobe Flash multimedia-based interactive learning media is "very feasible" to use. This is proven by the validation test. The validation carried out was validation to media experts, and obtained a percentage value of 86% belonging to the category ". 2. How is the user's response to interactive learning media based on Adobe Flash multimedia in class IV SDN BAMA 3? User responses to interactive learning media based on Adobe Flash multimedia are very enthusiastic in participating in learning activities such as students becoming more active in asking and answering questions that have been provided by researchers in the learning media. And raises students' curiosity, then students become more understanding after learning to use interactive learning media based on Adobe

Flash multimedia It is suggested to further researchers to be able to develop interactive learning media based on Adobe Flash multimedia on the material types of work or other subjects.

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