



Development of Interactive Microsoft Power Point Learning Media Based on Motion Graphics on Social Studies Subject Pluralism Material

Erlina Firdaus¹, Alya Fikriyah Dzihni Kusnanda¹, and Neka Tankira¹

¹ Faculty of Social Science and Political Science, Surabaya State University, Indonesia

erlinafirdaus.21004@mhs.unesa.ac.id

Abstract. This research is motivated by the use of various learning methods that are effective and in accordance with the needs of the modern generation. The urgency of applying this learning method in the educational environment is the demand for 21st century education, where teachers must be able to use technology to present various kinds of learning media. Teachers must be creative, master, and innovate by utilizing existing technology to be applied in the learning process. One of the approaches that is getting more attention is to increase the use of interactive presentation media, especially PowerPoint [PPT], as a medium for student understanding. The use of learning media is a strategic step to enrich the learning process in the classroom. In the era of information technology that continues to evolve, Interactive PowerPoint Learning Media [PPT] has emerged as an effective tool to facilitate more dynamic and participatory learning. This study aims to describe the design and determine the feasibility of developing interactive powerpoint learning media in social studies subjects.

The objectives of the application of learning media in the form of interactive PPTs include increasing learning effectiveness, increasing student involvement, facilitating understanding of concepts, building independent learning skills, assisting the evaluation process, increasing information retention, supporting diverse learning styles, encouraging creativity and facilitating access and distribution of learning materials. By integrating interactive PPT learning media into the learning environment, it can be expected that learning will become more dynamic, fun, and more effective. The results of this research will be launched in the form of articles and published on the website and in the form of products/prototypes/textbooks/learning tools. So that it can be used as a reference in the use of interactive and educational learning media by teachers in the process of teaching and learning activities in the classroom..

Keywords: Learning Media; Interactive PPT; Learning Technology.

1 Introduction

1.1 Background and formulation of the problem to be studied

In the teaching and learning process, it is inseparable from the learning environment, where the media plays a role as a tool to facilitate learning in the teaching and learning process, which helps teachers in conveying information and materials. As technology develops and the purpose of using technology becomes more complex, especially to make people's work easier in their daily lives. Digital technology is

One of the concrete examples in human life that will not be separated from the progress of the increasingly sophisticated times [1]. It should be understood that learning is a system whose set of components are interconnected to achieve goals. Some of these components include: [1] objectives, [2] learning materials/materials, [3] methods, [4] tools/media, [5] assessment. Because learning is a system, the success of learning depends heavily on the functioning of each component of effective interaction. Learning media can be interpreted as hardware or software used in the delivery of material by teachers to students in the learning process. In learning, media is expected to make the learning process more effective and efficient in accordance with learning objectives [2]. The application of educational technology advances must be realized in techniques that improve the quality of teaching. With the development of technology like this, there is a need for a change in the education system that supports learning in the digital era and is useful in solving Indonesia's education problems [3]. The current learning challenge is that boredom is the main problem in learning, so there needs to be a renewal that can be a solution to the right teaching and learning method activities to increase student learning motivation [4].

The learning process that motivates students is greatly influenced by various elements, one of which is that the learning environment used must be able to increase student learning motivation and be interactive when used. Educational technology is an ethical study and practice in facilitating learning and improving performance through the creation, use and management of appropriate learning processes and resources in the current era of technological advancement [5].

Improving the quality of education is one of the efforts that must be made consistently, because as time goes by the intellectual demands and quality of life are increasingly important, therefore education must also be adjusted to the demands of the times. Therefore, constructivist theory is able to overcome educational changes by prioritizing the cognitive aspect as much as possible rather than the aspect of individual potential. This is because constructivist learning theory prioritizes student performance over teacher performance in the learning process. This theory has the main urgency in making students more independent, creative, innovative, responsible, active and honest. The use of learning media supported by learning development based on constructivistic learning theory is considered effective in shaping learning motivation students [6].

Based on the results of observations made at Maarif Miftahul Ulum Bungah Gresik Junior High School, the advancement of learning technology in the school has not been able to help solve problems in terms of increasing students' motivation to learn, this is evidenced by the lack of interest of students in social studies learning, this condition

encourages researchers to innovate gadget-based learning media used by students to increase learning motivation. To achieve satisfactory learning motivation, teachers must also pay attention to methods or ways of guiding students in a comfortable and peaceful classroom, one of which is with digital media [7].

Various types of media can be used by teachers to help in the learning process in order to make the learning process optimal, media also has a role in overcoming boredom while learning. One of the applications that can be used as a learning medium is the Microsoft Power Point application. Microsoft Power Point is one of the software that can help compose material during presentations easily and effectively. Microsoft power point is also very easy to use by all people so that this Microsoft power point is widely used for presentations, teaching, and for making animations. The characteristics contained in interactive learning media lie in students, in addition to listening to the material explained, students are also indirectly invited to interact during learning activities [8].

Innovation in this teaching in the form of interactive Microsoft power point learning tools or media based on Motion Graphics is a laptop-assisted percentage media that can be made by teachers with subject matter to be taught to students. Microsoft power point media based on motion graphics is expected to be able to motivate students and be able to overcome students' learning difficulties so that they can increase students' mastery of concepts and learning interests. The use of Microsoft power point media based on Motion Graphics used as a learning medium can make learning more memorable so that students are more interested in colors, music and graphics. This media is very helpful for students to understand the information conveyed. Because, so far, social studies subjects have been considered complicated and difficult for students to understand. Microsoft power point media based on Motion Graphics is a media used to present subject matter with animation making techniques in which in this media there are graphics or visual elements in the form of images, text, audio and animation so as to produce a movement that is able to attract every people to see it. Through interaction with Microsoft Power Point based on Motion Graphic, a learner will increase their motivation to learn [9].

The limitations of components or modules used as learning media make one of the obstacles [10]. There is not yet one media facility that can meet all levels of school. Learning media facilities occupy a fundamental position as one of the learning designs, including in social studies learning, Microsoft Power Point interactive based on Motion Graphics was chosen because social studies learning in junior high school is still considered boring learning, so there needs to be interaction in social studies learning that is student-centered. In this situation, it is necessary to have social studies learning that is efficient and qualified in producing students who are agile in terms of increasing learning motivation, as well as dexterous, by using interactive power point media students are able to actively form a social studies learning atmosphere, especially in pluralism materials that are animated into the development of learning media. Interactive Microsoft Power Point which is packaged so that the interest of students can be used in the midst of the growth of technology in this era and forms a more active and student-centered social studies education learning.

In addition, the development of this media is expected to be able to strengthen the character of students, especially the cultivation of tolerance and multicultural education and plurality in schools in the face of cultural, racial, and religious diversity. Considering that Indonesia is a country that has a pluralistic ethnic, cultural, racial, religious, and linguistic background. Multicultural education and the cultivation of tolerance can be used as a strategic way to develop awareness of students' sense of nationalism. The way to deal with cultural pluralism in Indonesia is to apply the cultivation of tolerance. Based on the above background, several problems can be formulated as follows, 1] how feasible is the motion graphic-based learning media on pluralism material as a strategy to strengthen the cultivation of students' tolerance character?; 2] how is the practicality of interactive Microsoft Power Point-based learning media based on Motion Graphics on pluralism as a strategy to strengthen the cultivation of students' tolerance character?; 3] how effective is the interactive Microsoft Power Point learning media based on Motion Graphics on pluralism material as a strategy to strengthen the cultivation of students' tolerance character?

Based on the formulation of the problem, this study aims to develop interactive Microsoft Power Point learning media based on Motion Graphics on pluralism material as a strategy to strengthen the cultivation of tolerance characters students with criteria for feasibility, practicality, and effectiveness with the development of media based on constructivistic theory in accordance with the independent curriculum based on the student center. This study aims to measure feasibility, practicality, and effectiveness. This research is important to help students in mastering social studies learning materials, especially pluralism materials as a strategy to strengthen the cultivation of students' tolerance character. The benefits of this research include a] as a form of application and implementation of knowledge, learning experiences, and skills acquired during academic activities that have been carried out; b] provide understanding for educators in developing learning media to be more creative and innovative. The mandatory outputs of this research are research reports, International Conference Proceedings [ICSSL] and Copyright of Interactive Microsoft Power Point learning media based on Motion Graphic. Meanwhile, additional outputs are in the form of interactive Microsoft Power Point learning media based on Motion Graphic.

1.2 State of the art and novelty

Along with this research, there is a relevant research entitled "Development of Powerpoint-Based Interactive Mathematics Learning Media on Cone Materials" showing that the design of powerpoint-based interactive learning media is able to encourage students to construct concepts independently because concepts are presented through trigger questions and the addition of animation in the display, so that students are also actively involved in collecting information and thinking processes [11].

The relevant research is titled "Development of Interactive Powerpoint Learning Media in Science Subjects for Grade VI Elementary School Students" where the results of the research **show** that the interactive powerpoint learning media that has been developed is suitable for use in learning activities. The existence of an attractive media

display and practice feature makes this learning media able to motivate students in learning to stimulate their understanding of the material [12].

Furthermore, there is an opinion that has been expressed [13] in his research entitled "The Influence of Interactive PowerPoint Learning Media on Social Studies Learning Outcomes of Elementary School Students" that interactive PowerPoint learning media is the answer for teachers in creating positive learning, so that Students are enthusiastic in participating in every learning activity. Seeing this factor of student involvement, it is not surprising that interactive powerpoint learning media is able to improve student learning outcomes.

During the implementation of the learning process, the media is certainly an important component, considering that during the process, teachers certainly need tools that can build the continuity of learning efficiently and effectively [14]. Along with this, technological developments have contributed to improving the quality of education, so teachers as teachers must be able to innovate in developing learning media that are certainly tailored to the needs of students, especially digital-based media [15].

The presence of digitalization, especially in the use of android, has provided flexibility in the implementation of the learning process, where students can learn anywhere and anytime through access to digital-based learning media. Currently, one of the digital-based learning media that can be implemented is the Motion Graphic learning media [16]. As expressed by [17], motion graphic learning media is a media that integrates typography and videography through animation techniques. As revealed in the journal [16] that Motion Graphic media is considered to attract more attention to students, which can increase their focus and enthusiasm for learning. The existence of the learning video access feature is able to give a real impression of visualization, so that learning is more fun for students to do.

As expressed by Piaget [18], constructivism is a system that tries to explain that students as individuals try to acquire knowledge through efforts to adapt and improve their knowledge construction. It is similar to what Widodo explained in [18] where constructivism provides a basic assumption that students have prior knowledge that has an important role during the learning process. In this case, learning becomes a process of constructing knowledge from knowledge previously possessed by individuals. Along with this, constructivism as explained by Widodo emphasizes that learners are responsible for their learning process, so that teachers only play the role of facilitators [preparing the initial needs of students].

In the life of the nation and state, tolerance is an important indicator for implemented, considering that all components of the nation and state, both, individuals and communities will socialize with various differences in backgrounds, so it is important to instill the character of tolerance in individuals. As said by Halim in [10], tolerance is defined as meekness, leniency and patience that are oriented towards an open, open-minded and willing attitude. In essence, tolerance is an individual's attitude to respect each other in the midst of differences and diversity, so that the pluralism material that will be used in this media is expected to be able to foster and develop the character of tolerance in students.

Based on the three previous researches, it can be said that there has been a lot of researches that has studied or develop this interactive powerpoint learning media in the

learning process of students. However, there is not much research that can develop interactive powerpoint based on motion graphics that can bridge students in getting to know and implement the character of tolerance in them. Therefore, the focus of the problem that will be studied in this research is related to the implementation of interactive powerpoint learning media based on motion graphics to encourage the cultivation of tolerance characters has not been done much by previous researches. Seeing this, it can be concluded that the research to be carried out is classified as novel and has not been done much by previous researchers.

2 Research Method

This research is a research development [R&D] of the ADDIE model. The stages of this research include analysis, design, development, implementation, and evaluation activities. This research will be carried out in grade VIII of Maarif Miftahul Ulum Junior High School, Bungah, Gresik. This research will be carried out for 8 [eight] months. The subjects of this study are students of grade VIII of Maarif Miftahul Ulum Junior High School, Bungah, Gresik which totals 40 students.

The development procedure in this study uses the ADDIE model. Analyze. This stage aims to establish and define the learning conditions. This stage includes 5 [five] main steps, namely:

- a. **Assesment Instrument.** Assessment instruments are tools used to collect data in order to reveal the condition of the subjects to be assessed. At this stage, it has been explained according to the definition stage.
- b. **Curriculum Analysis.** This stage is useful in determining the basic competencies in the media to be developed. This stage is carried out because there is a possibility that not all competencies in the curriculum can be presented as learning media. In this research on the development of digital learning media, the subject of Curriculum 13 in grade VIII semester 1 of junior high school is taken on the Plurality of Indonesian Society.
- c. **Character Analysis of Students.** In connection with the development of digital learning media, the characteristics of students must be known to plan media that is in accordance with their potential academic skills. This research aims to develop media for students who are not happy with memorization lessons, such as social studies subjects.
- d. **Material Analysis.** Material analysis is carried out through identification of the material to be given, collecting and categorizing relevant materials, and systematically rearranging them. This media is developed according to the material that is found in Social Sciences Subject Class VIII Semester 1 Curriculum 13, namely Indonesian Community Plurality Material.
- e. **Formulation of Objective.** Learning objectives must be formulated first. Therefore, it is necessary to carry out an elaboration of basic competencies into more specific indicator sections and align with the subject matter of the material.

Design. The design stage is carried out after the needs analysis is over. This stage aims to produce a learning media design. The results of this design stage are called the

initial draft. This stage is carried out by creating learning media that are in accordance with the material and characteristics of students, selecting the form of presentation of learning media, and making media with a presentation design that has been prepared.

- a. **Media Selection.** At this stage, determine the appropriate and harmonious media in presenting natural resources and maritime materials that are in accordance with the learning media applied. The determination of media is adjusted to learning objectives, student characteristics, learning strategies, time, media usability, and teachers' ability to operate media. The media applied is the development of interactive Microsoft Power Point learning media that is suitable for presenting pluralism material that is in accordance with the characteristics of junior high school students in grade VIII.
- b. **Programming Selection.** At this stage, choose the basis of the method in making learning media, namely motion graphics. Motion graphics is a media that uses animation or moving images to convey messages and information or the creation of animated objects that are manipulated to look alive in several media building frames. This medium describes how graphic elements such as text, illustrations, and images are combined with animation and sound to create dynamic and engaging visual communication. This learning media will use the Android operating system built using the actionsript language on which every application runs on it.

Development. At this stage, the concept that has been prepared in the design stage is realized in the form of a product [media draft]. Media products are then assessed by validators [Material Experts and Media Experts]. Then improvements were made based on input from experts. After being revised, the product was tested on a limited basis to students to find out the feasibility of the media. The feasibility analysis of learning media was carried out descriptively. The results of assessment responses from media experts and material experts to determine the level of media feasibility using the Likert scale which is a qualitative scale in the form of a *checklist*.

Implementation. This stage is the stage where the Microsoft Power Point Interactive Learning Media Based on Motion Graphics that has been developed will be tested for feasibility and declared feasible by validators. Then the media will be aimed at students in real situations in the classroom. With the intention of carrying out simple and time-limited trial activities by carrying out teaching and learning activities on Social Science [IPS] study sources through the use of media that have been developed. This stage aims to determine the response of research subjects to the development of Interactive Microsoft Power Point Learning Media Based on Motion Graphics. The application of this media also aims to improve the media produced based on the user's point of view. The distribution of products was limited to Maarif Miftahul Ulum Junior High School, Bungah, Gresik.

Evaluation. This stage intends to complete the optimized media product. The response from educators and students is also an important consideration. All the letters of the acronym ADDIE are interconnected and interact with each other. The research subjects received treatment in the form of the application of learning media. Then at the end of the activity, the research subjects were given instruments to measure responses related to the learning media developed. The provision of this questionnaire

will be carried out once at the end of the trial activity meeting. The value of the student's response will be known in each aspect that has been determined through the formula:

In addition, to measure the success of the animation history media, based on Microsoft Power Point, interactive motion graphics, as a strategy to increase learning motivation, can be done by using pre-test and post-test tests.

3 Results and Discussion

Analysis. The results obtained during the analysis of assessment instruments, curriculum analysis, student character analysis, material analysis to goal formulation are used as considerations and guidelines in developing motion graphic-based interactive powerpoint media. The data needed to reveal the condition of the subject to be assessed was obtained through an assessment instrument, where the assessment was carried out offline by interviewing Dra. Nar'ah as a grade VIII educator of Maarif Miftahul Ulum Junior High School, Gresik. He revealed that digital-based learning media is currently not available at Maarif Miftahul Ulum Junior High School, Gresik. This is because the development of learning media has not yet been carried out by educators, especially the lack of ideas and the implementation of development that takes a long time. Thus, the learning media used at Maarif Miftahul Ulum Junior High School, Gresik until now is only available on certain platforms, such as Microsoft Power Point to Microsoft Word which can be accessed using internet facilities and computer devices in the laboratory.

Next, curriculum analysis is carried out with the aim of establishing basic competencies in the media to be developed. After the curriculum analysis was carried out, it was found that educators at Maarif Miftahul Ulum Gresik Junior High School still have not implemented digital-based learning media, where educators still use learning media in physical form. In addition, the strategies implemented by educators in developing and strengthening character or tolerance attitudes in students also still do not involve the use of digital-based learning media. Along with this, the character analysis of students at Maarif Miftahul Ulum Gresik Junior High School shows that students are inseparable from the presence of technology. However, the results of observations related to the character of tolerance possessed by Class VIII students of Maarif Miftahul Ulum Junior High School are also said to be high.

Seeing this, it can be said that educators at Maarif Miftahul Ulum Junior High School do not have a strategy to strengthen the character of student tolerance involving digital-based learning media. The analysis of the material in junior high school grade VIII, precisely in Social Sciences Subject Class VIII, KD 3.2 related to Socio-Cultural Change with indicators of factors causing the occurrence of multicultural society. Therefore, the researcher formulated the goal to deepen the material through the development of interactive learning media in the form of motion graphic-based interactive power points related to pluralism material as a strategy to strengthen the tolerance character of Grade VIII students of Ma'arif Miftahul Ulum Gresik Junior High School.

Design. The design stage is carried out after the needs analysis is over. This stage aims to produce a learning media design. The result of this design are called the initial draft. This stage is carried out by creating learning media that are in accordance with

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Media Selection. At this stage, determine the appropriate and harmonious media in presenting the Plurality of Indonesian Society material that is in accordance with the learning media applied. The determination of media is adjusted to learning objectives, student characteristics, learning strategies, time, media usability, and teachers' ability to operate media. The media applied is the development of interactive Microsoft Power Point learning media that is suitable for presenting pluralism material that is in accordance with the characteristics of junior high school students in grade VIII.

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Development. At this stage, the concept that has been prepared in the design stage is realized in the form of a product [media draft]. Media products are then assessed by validators [Material Experts and Media Experts]. Then improvements were made based on input from experts. Where the revision from experts is to clarify the use of buttons and develop this Indonesian Plurality material so that the discussion is wider. The following are the results of the revision based on suggestions and input from validators [Material Experts and Media Experts].



Fig. 1. Media

The development of the Indonesian Community Plurality material in this Motion Graphic-based Interactive Microsoft PowerPoint learning media is marked by the material that we present more completely than before. In this latest design, we also display various examples of diversity accompanied by supporting graphics such as animations

and images that can make it easier for students to better understand the material presented. In addition, there is also an example of the largest tribal map in Indonesia, namely the Javanese Tribe. On the next page of the art material, an art graphic is also displayed which when clicked will appear an explanation of each art. Then if you want to see an explanatory video related to the Plurality of Indonesian Society material, you can click the Video feature on the menu page and a video will automatically appear that can be played. After listening to the series of materials that we have packaged as concisely as possible but still include the core explanation, students can continue to the Games feature, where the Games feature if clicked will display questions that will be answered by students.

Impelementation. The implementation carried out refers to the media feasibility test, where the assessment of interactive Microsoft Power Point media based on Motion Graphics is carried out, including aspects of visual display and learning design that have been validated by the media expert validator, Dr. Hendri Prastiyono, M.Pd. which is carried out offline. Based on the assessment, the results were obtained; [1] the visual display aspect received a score of 73 out of a maximum score of 76 (96.05%); [2] the learning design aspect received a score of 51 out of a maximum score of 52 (98.07%), so that an average of 96.87% [Very Feasible] was obtained. The media validation carried out by Riyadi, S.Pd. M.A. on the interactive Microsoft Power Point media based on Motion Graphics obtained the results, namely: [1] the visual display aspect received a score of 73 out of a maximum score of 76 (96.05%); [2] the learning design aspect received a score of 50 out of a maximum score of 52 (96.15%), so that the average was 96.09% (Very Feasible). Furthermore, an assessment of pluralism material was also carried out by material expert validators, Dr. Khusnul Khotimah, S.Pd., M.Pd. and Katon Galih Setyawan, S.Sos., M.Sos. which includes aspects of material, language and presentation. The results of the assessment carried out are: [1] the material aspect received a score of 77 out of a maximum score of 80 (96.25%); [2] the language aspect received a score of 28 out of a maximum score of 28 (100%); and [3] the presentation aspect received a score of 31 out of a maximum score of 32 (96.875%), and an average of 97.14% [Very Feasible].

Then, the response to the use of Interactive Microsoft Power Point learning media based on Motion Graphics by students for offline learning can be seen through the results of student assessments which include aspects of material, language, presentation, visual display and learning design. Based on the graph above, it can be said that the results of the assessment by the students, namely: [1] the material aspect got an average score of 3.7 out of an average maximum score of 14.9 (93.26%); [2] the Language aspect received an average score of 3.4 from the average maximum score of 6.9 (86.53%); [3] the aspect of presentation received an average score of 3.4 from the average maximum score of 6.9 (86.53%); [4] the aspect of visual display received an average score of 3.6 from the average maximum score of 14.4 (90.38%); and [5] the learning design aspect received an average score of 3.6 from the average maximum score of 10.8 (90.38%).

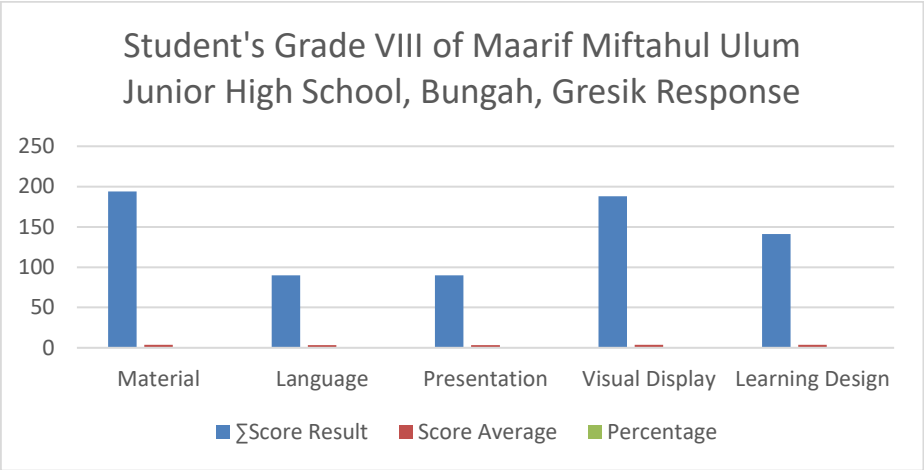


Fig. 2. Assessment result of Motion Graphic-Based Interactive

Furthermore, an assessment sheet is needed by social studies subject educators in Class VIII, namely Dra.Nar'ah on the interactive Microsoft Power Point learning media based on Motion Graphics which includes aspects of the material, language, presentation, visual display and learning design. Based on the graph above, it can be described that: [1] the material aspect obtained a score of 16 out of a maximum score of 16 [100%]; [2] the Language aspect received a score of 6 out of a maximum score of 8 [75%]; [3] the aspect of presentation obtained a score of 7 out of a maximum score of 8 [87.5%]; [4] the visual display aspect obtained a score of 14 out of a maximum score of 16 [87.5%]; and [5] the learning design aspect obtained a score of 8 out of a maximum score of 8 [100%], and the average showed 90% [Very Feasible]. Thus, it can be concluded that the interactive Microsoft Power Point learning media based on Motion Graphics on pluralism material is very feasible to use.

Evaluation. Interactive Microsoft Power Point media based on Motion Graphics which has been developed and revised based on the input that has been given, shows that the results of this media improvement are very feasible to be used as social studies learning media with pluralism material to strengthen the character of tolerance of Class VIII students at Ma'arif Miftahul Ulum Gresik Junior High School.

4 Conclusion

The procedure used in the creation of Motion Graphic-Based Interactive Microsoft Power Point learning media on the pluralism material of social studies subjects is an adaptation and modification of the steps of research and making the ADDIE model, including analysis, design, development, implementation, and evaluation. Based on the results of the feasibility test, the Microsoft Power Point Interactive Learning Media Based on Motion Graphics as a whole is considered very feasible to be applied to grade VIII students.

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