DEVELOPMENT OF MOTION GRAPHICS AS SOCIAL STUDIES LEARNING MEDIA ON *INDISCHE PARTIJ* MATERIAL

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ABSTRACT

Social studies learning activities in general still do not take advantage of the use of technology-based learning media because of the limited number and type of media as well as the limited ability of the teacher. The learning media used by teachers is still textual in nature, that is, it only comes from textbooks so that it makes students' interest and motivation in learning social studies, especially historical material, to be low. To overcome these problems, developed innovative technology-based learning media, namely motion graphics. The aim of this research is developing motion graphics teaching media and testing the feasibility of IPS teaching media on Indische Partij material. The method used in this study uses an R&D approach with the ADDIE model. The product trial process was carried out in class VIII SMP PGRI 1 Kesamben. ADDIE's stages for developing teaching media include 1) Analysis, 2) Design, 3) Development, 4) Implementation, and 5) Evaluate. The feasibility test results from the expert validator show a percentage of 95.45%. for material validation, 90.62% for language validation, and 95.45% for media validation. While the test results on students obtained an average value of 89.10%. Based on these averages it can be stated that motion graphics products as social studies learning media are "very feasible" to be used in learning activities and can be disseminated without going through revisions.

Keywords: motion graphics media, *Indische Partij*, social studies learning

ABSTRAK

Kegiatan pembelajaran IPS secara umum masih belum memanfaatkan penggunaan media pembelajaran berbasis teknologi karena adanya keterbatasan jumlah dan jenis media serta keterbatasan kemampuan dari guru. Media pembelajaran yang digunakan oleh guru masih bersifat tekstual yakni hanya bersumber dari buku paket sehingga membuat minat dan motivasi belajar siswa pada pembelajaran IPS khususnya materi sejarah menjadi rendah. Untuk mengatasi permasalahan tersebut, dikembangkan media pembelajaran inovatif berbasis teknologi yaitu motion graphics. Tujuan penelitian ini adalah untuk mengembangkan media ajar motion graphics dan menguji kelayakan media ajar IPS pada materi Indische Partij. Metode

yang digunakan dalam penelitian ini menggunakan pendekatan R&D dengan model ADDIE. Proses ujicoba produk dilakukan di kelas VIII SMP PGRI 1 Kesamben. Tahapan ADDIE untuk mengembangkan media ajar meliputi 1) Analisis, 2) Desain, 3) Pengembangan, 4) Implementasi, dan 5) Evaluasi. Hasil uji kelayakan dari validator ahli menunjukkan persentase sebesar 95,45%. untuk validasi materi, 90,62% untuk validasi Bahasa, dan 95,45% untuk validasi media. Sedangkan hasil ujicoba pada siswa diperoleh nilai rata-rata sebesar 89,10%. Berdasarkan rata-rata tersebut dapat dinyatakan bahwa produk motion graphics sebagai media pembelajaran IPS "sangat layak" untuk digunakan dalam kegiatan pembelajaran dan dapat disebarluaskan tanpa melalui revisi.

Kata kunci: *motion graphics, Indische Partij, pembelajaran IPS*

A. INTRODUCTION

Social Sciences is learning that integrates concepts from various branches of social sciences and humanities (Wiradimadja, 2021). The basic goal of IPS is to form a personality "*good citizen*" and serves to instill a spirit of nationalism (Galuh Mahardika & Nur Ramadhan, 2021). Social sciense learning plays an important role as a foundation of knowledge and character recognition of nationalism (Dwintari, 2018). One of the ways to develop students' nationalist character is through historical material in social studies subjects. This nationalism character needs to be developed because it is considered crucial in producing young people who are moral, have patriotism and comply with applicable laws (Sulistyowati et al., 2019).

Even though social studies learning plays an important role in life, in practice social studies learning in schools are still often found problems. Herijanto (2012) states that social studies learning in general is still delivered without any contextual teaching media so that they do not stimulate students' interest and motivation to learn. Even though in today's learning activities, the teacher as an educator is more permitted to use innovative learning media so that it can increase student motivation in learning (Alannasir, 2016); (Wijaya, 2018). What's more, so far many teachers present social studies learning only emphasizing memorization and more concerned with results than processes and there are no teaching media that make it easier for students to learn material that is less contextual. Especially historical material that requires students to memorize the names of figures, years of occurrence and events. Angela & Triadi (2022) and Sayono (2015) in their research also mentioned that students' enthusiasm for social studies subjects, especially historical material, is currently rated low. They added that

this was due to students' assumptions that historical material was a boring and uninteresting topic. In addition, the majority of teachers dont develop innovative teaching media where students' history learning media is only textual in nature from textbooks.

Interest in learning can be interpreted as interest, enthusiasm, and attention to learning. The existence of interest can have a positive influence on academic learning and certain fields of study for individuals (Nurhasanah & Sobandi, 2016). Apart from interest, motivation is also a determining factor for student success in learning because it functions as a driving force for achieving good results (Rahman, 2021). Motivation as the main factor in learning functions to underlie, generate, and drive learning activities so that with high motivation students will achieve optimal learning results. According to Astutik (2015), student learning motivation is not fixed, sometimes increasing and sometimes decreasing. So that learning motivation can be stable at a good level, it can be done with various efforts, one of which is the use of innovative and interesting learning media. Learning media psychologically makes it easier for students in learning activities because the media can present things that are abstract in nature to be more real so that it is effective and efficient (Supriyono, 2018). In general, the use of media in learning activities can foster interest and motivation in student learning and develop values in students for the better.

Problems regarding low student interest and learning motivation also occur at SMP PGRI 01 Kesamben. These problems occur when students learn social studies Indische Partij material. The social studies teacher at the school stated that this condition was due to historical material about Indische Partij considered too abstract without visualization and also not contextual by students. The difficulties experienced by students are in terms of describing historical events, so they cannot understand the material being taught properly. Finally, this makes them passive when learning activities take place. Based on the results of interviews with social studies teachers for grade 8, the root cause of the low interest and motivation in student learning, especially in historical material, is influenced by the absence of relevant media to support this learning. The learning media used by teachers so far is still based on one type of media, namely textbooks. In addition, teachers also have not utilized technology-based learning media because of the limited ability and availability of learning media. The results of the analysis of the learning styles also show that students have an audio-visual learning style so they want to use video-type learning media in learning activities in the classroom.

21st century learning requires teachers to be able to follow and balance technological advances in order to increase the efficiency and effectiveness of learning (Ramdani et al., 2019). In this regard, a teacher is required to have material knowledge, pedagogic skills and the use of technology (TPACK ability). TPACK is a skill that must be possessed by teachers, namely teachers because can be utilized by teachers to support students in understanding learning content (Rahmadi, 2019). Teachers can integrate TPACK into learning activities by compiling technology-based teaching media to

maximize mastery of the material and student learning engagement (Nevrita et al., 2020). Moreover, based on the results of analysis activities, it is known that the majority of students at SMP PGRI 01 Kesamben have an audio-visual learning style. This is proven when a learning video is shown, students look more interested and enthusiastic. Problems regarding the low interest and motivation of student learning must of course be solved by the teacher, because it is feared that it will affect student learning outcomes in the long term. Teachers play an important role in choosing learning media where they must be able to determine the type of media to be used so that it can provide a good stimulus to students (Mukarromah & Andriana, 2022). Based on the analysis of these problems, the researcher developed the media motion graphics as a student learning media to solve problems regarding the low interest and motivation of student learning.

Motion graphics is defined as a branch of graphic design science that displays videos or animations with driven 2D or 3D designs (Hidayat, 2021). The existence of these technological innovations will certainly facilitate teaching and learning activities carried out by teachers because the learning process becomes more interesting and can foster students' positive attitudes towards the material as well as learning outcomes (Sadikin & Hakim, 2019). Motion graphics can be used in most subjects. In this research, motion graphics used as social studies learning media on organizational *Indische Partij*. Media selection motion graphics based on the characteristics of this media in accordance with the characteristics of the material and students, where the *Indische Partij* material that is quite complex and requires visualization in the form of animation and fits the learning style of students who focus on the senses of sight and hearing. In addition, this media is also flexible because it has an MP4 format so that it can be broadcast on smartphone as well as laptops.

Motion graphics can be used as a learning medium in the learning process because it has an attraction that increases student learning enthusiasm and facilitates the process of delivering material by the teacher (Yuwono & Khotimah, 2020). Motion graphics as a learning medium is quite effective in improving student learning outcomes (Mahardika & Mustaji, 2020). The novelty of this research is the delivery of interactive material with an innovative visual display and made as attractive as possible. The difference between this study and previous research lies in the material presented in the media, software used to develop the media, and the final format of the media. For software which is used in developing media, in previous research using Photoshop, FL Studio 21, and Audacity while in this research using Adobe Illustrator, Adobe Premiere Pro, and Adobe After Effect. Then the final format of the media in previous studies using *Compact Disk* (CD) while in this research the media motion graphics have MP4 format uploaded to YouTube. Based on the explanation in this introduction, this study aims to develop learning media motion graphics and test the feasibility of motion graphics as social studies learning media on *Indische Partij* material for 8th grade junior high school students.

B. RESEARCH METHOD

The research was conducted at SMP PGRI 01 Kesamben which is located in Sumberbendo Hamlet, Bumirejo Village, Kesamben District, Blitar Regency. The subjects in this study were 8th grade students of SMP PGRI 01 Kesamben. The method used in this study uses an R&D approach (Research and Development) with the ADDIE model that includes Analysis, Design, Development, Implementation and Evaluate. The ADDIE research model was chosen because this model has characteristics for developing media types motion graphics as well as having systematic steps and are appropriate in the development of a need for educational products. The ADDIE research model is also dynamic, effective and supports the performance of the program itself (Warsita et al., 2013).
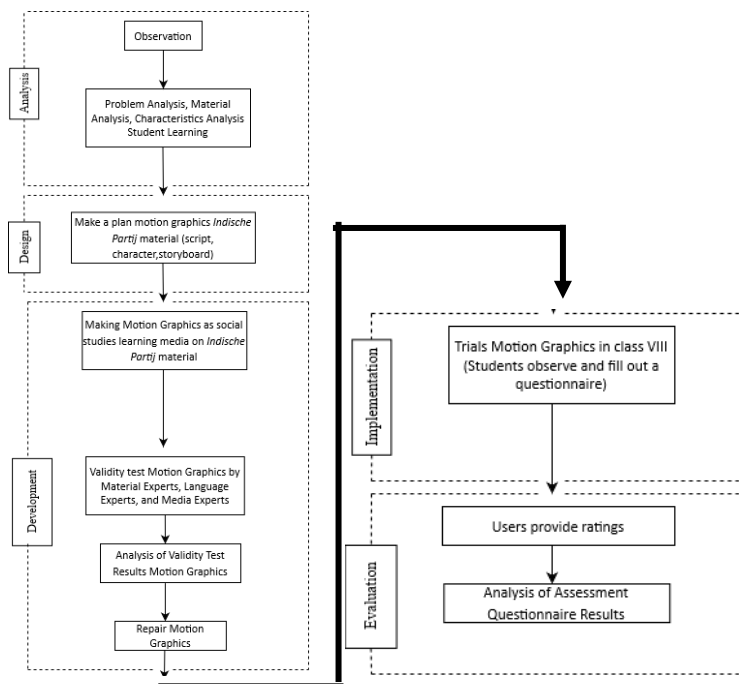
Figure 1. Flow chart of research and development steps

Stages in the ADDIE development model, namely 1) Analysis, divided into problem analysis, material, and student learning characteristics, 2) Design, arranges a material design consisting of concepts and contents of teaching media, 3) Development, start to develop learning media. At this stage a validation process was also carried out by experts consisting of material experts, language experts and media experts whose suggestions from experts were then used as a guide for product revision by researchers, 4) Implementation, media development products will be applied to test subjects, class VIII students of SMP PGRI 1 Kesamben, 5) Evaluat, evaluating all stages of development and providing conclusions on the results of obtaining the media feasibility level.

The data collection technique in this study used a questionnaire which was used to carry out validation tests filled in by expert validators and the responses of the test

subjects, where the questionnaire has been declared valid. The research data is quantitative and qualitative data. Quantitative data was obtained from the results of the questionnaire assessment of expert and subject validation. While qualitative data obtained from the results of suggestions or opinions of validators and research subjects. The validation questionnaire uses a Likert scale with a value of 1-4 . The Likert Scale assessment criteria are shown in table 1.

Table 1. Likert scale assessment criteria

Category	Score
Very Good	4
Good	3
Not Good	2
Very Not Good	1

Source: Arikunto (2021)

The values obtained from the questionnaire are then added up and the percentage sought to determine the feasibility level of the product using the following calculation:

$$P = \frac{\sum X}{\sum xi} \times 100\%$$

Information:

P : The percentage of eligibility sought $\sum xi$: The ideal total scoring score

$\sum X$: Total scoring score   100% : The constant

The score from the validation calculation is then analyzed based on the product criteria described in table 2.

Table 2. Media feasibility assessment criteria (Arikunto, 2021)

Persentase (%)	Validity Level	Information
81 – 100	Very high	Very feasible for use and disseminated without going through revisions
61 – 80	High	Eligible for use and distribution with revisions Minor
41 – 60	Enough	Decent enough to use and disseminate through revision
21 – 40	Low	Not worthy of use and dissemination and necessary partial revision
0 – 20	Very low	Very unfit for use and dissemination as well need to be completely revised

C. RESULT AND DISCUSSION

Motion Graphics as Social Studies Learning Media on *Indische Partij* Material

In overcoming problems regarding the low interest and motivation in student learning as well as keeping up with technological developments, the researchers developed a motion graphics as Social Studies learning media. The use of learning media is carried out

in order to foster new students' interests and desires, have a psychological impact, and generate motivation and learning stimulation (Febrita & Ulfah, 2019). The following describes the stages of developing motion graphics media for social studies *Indische Partij* material.

a. Analysis

At this stage the researcher conducted problem analysis, material analysis, and analysis of student learning characteristics. The three analyzes were carried out through field observations and interviews with social studies teachers. The results of the problem analysis found that students' interest and motivation in social studies subjects, especially historical material, was low because the learning media used by teachers were only textbooks so students quickly got bored. In addition, teachers still do not take advantage of the use of technology-based learning media because of the limited number of media in schools and the abilities of the teachers themselves. The next stage is to do material analysis. Facts in the field found that in social studies subject matter about *Indische Partij* which is contained in KD 3.4 is considered too abstract so that students feel confused and have difficulty in visualizing historical events which ultimately makes them passive when learning activities take place. The final stage is to analyze the characteristics of students' learning styles. The results of this analysis show that students at SMP PGRI 01 Kesamben have an audio-visual learning style, so media such as a video is needed. In line with the results of the three analyzes, researchers developed motion graphics because it has audio-visual characteristics and according to student learning needs. Motion graphics choosen as a learning media because has its own charm that is able to increase student enthusiasm and motivation and facilitate the process of delivering material by the teacher
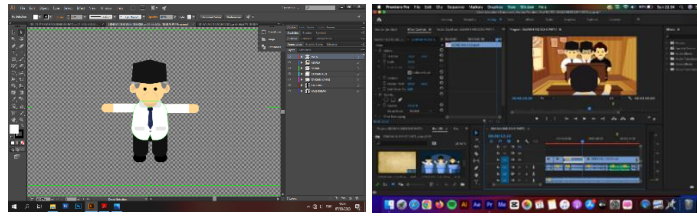
b. Design

The second stage is the design stage which is the design process in making media motion graphics. At this stage the researcher compiles scripts, figures, and storyboard. As for the contents motion graphics as social studies learning media that includes understanding, founding figures, background, goals, roles, and dissolution of the organization. The researchers developed the material by taking from various reference sources such as books and internet literature. The product design developed has the MP4 format.

c. Development

At this stage the researchers carried out the realization of the design stage, namely starting to develop learning media. The first step in the development stage is to create a character or figures and storyboard into a structured animated movement. Next, fill in the sound in accordance with the script that has been prepared. Products that have been developed are then uploaded to YouTube social media (can be accessed at: link https://youtu.be/HT9mgx13IwU). The process of developing this media uses assistance from software Adobe Illustrator, Adobe After Effect, and Adobe Premiere Pro.

Figure 2. Character design and motion animation creation

After the motion graphics product has been successfully developed, a feasibility test is carried out by the validators consisting of material experts, language experts and media experts. The validation process is carried out to determine the feasibility as well as the responses and criticisms submitted by the validators. At this stage there are several improvements based on suggestions and input from expert validators. The revision process is carried out until the motion graphics product is said to be good and suitable for use and testing.

d. Implementation

The results of the assessment and product revisions based on criticism and suggestions from expert validators form the basis for the implementation phase. At this stage the media development product will be applied to the test subjects, namely class VIII students of SMP PGRI 01 Kesamben, a total of 30 students. After the motion graphics learning media was tried out, students then filled out a response questionnaire to find out the level of feasibility of the media being developed.

e. Evaluate

The evaluate stage includes the overall evaluate of the ADDIE stages and provides conclusions on the results of obtaining the media feasibility level. This stage is carried out at the end of the trial so that the evaluate results can be used to determine the feasibility of learning media. This stage is also used to see whether the product being developed is successful and in accordance with the objectives.

Product Feasibility Test/Validation Results

1. Feasibility Test Results by the Material Validator

The first validation stage is material validation which aims to provide an assessment of the suitability and accuracy of the material presented in the learning media motion graphics. The validation results by material experts are listed in table 3.

Table 3. Results of the material validator assessment

No.	Assessment Component	Score (X)
1.	Suitability of the material with Basic Competency	4
2.	Material suitability with indicators	4
3.	Suitability of learning objectives	3
4.	The truth of the material aspect	4
5.	The material is easily understood by students	3
6.	Suitability of material with learning media	3
	Score Total ($\sum X$)	23
	Percentage	95,83%

The score obtained from the calculation of the material validator is 23 with a total percentage of 95.83%. Thus, based on the feasibility of the media in table 4, the product motion graphics can be classified as "very feasible" to be followed up as social studies learning media at the SMP/MTs level. The results of the assessment of the material validator state that the learning media in terms of material is quite clear, informative and appropriate and appropriate for use in learning activities. The material presented in learning media must be appropriate so as not to deviate from the purpose and discussion. Assessment results from the material validator, motion graphics has fulfilled one of the eligibility criteria of learning media, namely technical feasibility. According to Mais (2016) technical feasibility related to media quality, which can provide sufficient information for users. Reviewed based on cybernetic learning theory, learning media motion graphics this facilitates and helps provide learning information to students so that it is declared very feasible to be applied to the learning process. This cybernetic learning theory focuses on processing information systems so that it can facilitate the delivery of learning material to be delivered to students (Salim & Maryanti, 2017). The use of media in learning is carried out as a way to achieve learning objectives by utilizing digital-based learning media, one of which is through motion graphics.

In development research motion graphics in this case, the material validator advises the researcher to add more background material because according to him there are still some parts of the material that have not been included. But the material validator also states that the researchers are given the freedom to take these suggestions or not. Regarding the suggestions given, the researcher did not take these suggestions because the suggestions were optional and the media had been declared very feasible without going through revision. In addition, the material validator also provides input to improve the writing of the Indonesian Trade Sarekat organization name because it is considered inaccurate where the correct writing is Sarekat Islam. At the material validation test stage, the learning media products developed have been revised or improved and declared very feasible referring to the suggestions given by the material validator. Improvements according to suggestions from the material validator can be seen in Figure 3.

Figure 3. View before (left) and after repair (right

Based on the assessment components in table 3, media motion graphics developed is generally stated to be very feasible because the material presented in it is in accordance with the Basic Competencies, indicators, and learning objectives, and can provide accurate and reliable learning information. Learning material is a very important

aspect of the entire curriculum which must be prepared so that learning activities can achieve the target. These targets must be in accordance with the Competency Standards and Basic Competencies that will be achieved by students which means that the specified material should be material that really supports the achievement of Competency Standards, Basic Competencies and indicators (Ramda, 2017). Deep material development motion graphics this is in accordance with the principles of material development related to relevance (appropriateness) and andadequacy (adequacy). In line with the opinion of Aunurrahman (2009) learning materials should be relevant to achieving competency standards and basic competencies and should be adequate in helping or facilitating students to master the basic competencies being taught.

The feasibility of material aspects in developing learning media is important because it relates to the accuracy of delivering messages or information to students. Information presented in learning media must be accurate and reliable with the intention of avoiding misunderstandings by students in translating information. Learning information is *Indische Partij* material has also been presented concisely so that it is easily understood by students and contains reliable information in accordance with the subject matter.

2. **Feasibility Test Results by the Language Validator**

The next stage is the assessment of linguistic aspects involving language expert lecturers. The purpose of doing language validation is to provide an assessment of the suitability aspects of the language used in accordance with the rules of the Indonesian language. The results of the language validator assessment are listed in table 4.

Table 4. Result of the language validator assessment

No.	Assessment Component	Score (X)
1.	The language used is clear and easy to understand	4
2.	The language used is simple and to the point	4
3.	The language used is communicative	4
4.	The language used represents the information to be conveyed	4
5.	Writing is legible	3
6.	The language style and sound pronunciation used are standard	3
7.	The terms used are easy to understand and appropriate to the topic	3
8.	Pronunciation does not contain elements of SARA	4
	Score Total ($\sum X$)	29
	Percentage	90,62%

Source: author research result

The results of the calculation of the language validator from the 8 assessment components obtained a score of 29 with a percentage of 90.62% so that the product motion graphics categorized as "very feasible" as social studies learning media for class VIII in SMP/MTs. In general, the assessment of the language validator explains thatmotion graphics made for IPS learning media on the *Indische Partij* material already fulfills informative linguistic elements and interesting content. The language used is aligned with the level of student development so that it makes it easier for students to understand the material presented. Referring to the results of the assessment of the

language validator, on the media motion graphics there are still writing errors in prepositions and placement of punctuation marks. The following is an example of a sentence that is considered inappropriate in the use of prepositions based on linguistic rules.

Figure 4. The writing of prepositions before and after is corrected

According to the language validator, the writing of the word "among them" in Figure 5 is considered inappropriate because the use of the word 'in' as a preposition should be written separately. Use of language in motion graphics media as a whole it has been conveyed in clear and simple sentences so that it is easily understood by students and the language used has represented the learning information to be conveyed to students. In general, the style of language used is standard and easy for listeners to understand because the language is structured in a straightforward/concise manner so that it can be accepted reproductively by other parties (Suryaman, 2012). In essence, the use of language in accordance with linguistic rules in developing a media also influences the quality of the resulting media (Burhan Eko, 2010). In addition, using the right language will make it easier for users to understand the intent and meaning of each word used in the media (Panjaitan et al., 2021). Language is a very important aspect of a teaching material because it will make it easier for teachers and students when learning. Therefore, the use of language in developing media must be paid close attention so that it does not lead to multiple interpretations and makes it easier for users to learn and understand information.

3. Feasibility Test Results by the Media Validator

The media validation test aims to provide an assessment of the appearance or presentation of the learning products developed. The media validation results are listed in table 5.

Table 5. Media validator assessment results

No.	Assessment Component	Score (X)
1.	Communicative, in accordance with the message and acceptable to the target's wishes	4
2.	Simple and alluring	4
3.	Ease of operation	4
4.	Audio (narration, *sound effect*, *back sound*, music) is clear and appropriate	4
5.	Visual attractiveness (*layout design*, *typography*, color)	3
6.	The attractiveness of mobile media (animations, transitions, *movie*)	4
7.	Suitability *layout* picture (layout)	3
8.	Creative in the following ideas pouring ideas	4
9.	Affective, efficient, and interactive	4

10.	Stability/ease of use and access	4
11.	Reliability	4
	Score Total ($\sum X$)	42
	Percentage	95,45%

The results of the calculation of the media validator obtained a score of 42 with a percentage of 95.45% so that the product motion graphics *Indische Partij* material is categorized as "very appropriate" as social studies learning media for class VIII in SMP/MTs. In general, the assessment of the media validator states that the presentation and content of the developed media is good and interesting. Apriliani et al., (2021) expressed interest motion graphics. From the media aspect, it is believed that it can increase the attractiveness of student learning because the product developed consists of a combination of writing, sound, images, and animation which makes students not feel bored. This statement is supported by the research of Fardany & Dewi (2020) which explains that the use of interesting animations in learning activities in the classroom will greatly help increase the effectiveness of learning so that students experience increased learning outcomes. In addition, animation can generate enthusiasm and motivate students to participate in the learning process because students become more aware and understand the content of the material.

In developing media motion graphics material *Indische Partij,* there are still some errors such as writing organizational spelling and animation layouts that still need improvement. The first criticism and suggestion from the media validator was to change the name of Budi Utomo's organization to "Boedi Oetomo" because they had to use the old spelling. The second suggestion is an improvement on the layout of the red and white flag animation that covers the character's face so that the size must be reduced. Improvements were then made in accordance with the suggestions given by the validator so that the product could be better. Improvements can be seen in Figures 5 and 6.
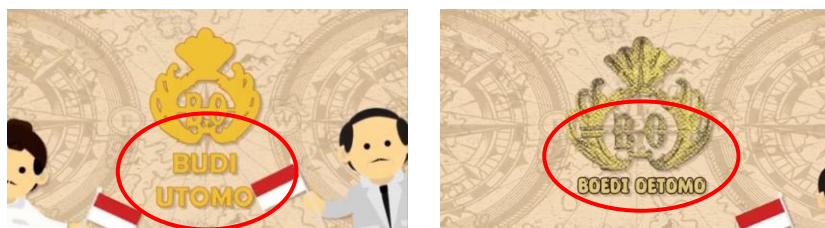

Figure 5. Writing spelling before (left) and after revision (right)
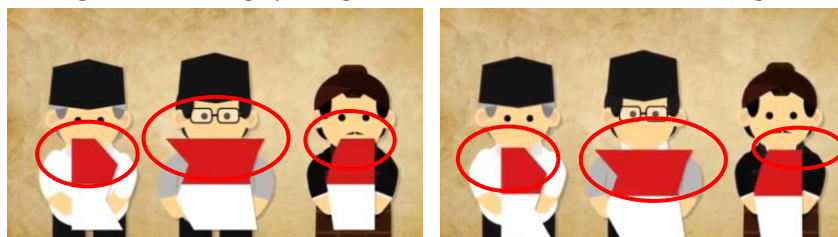

Figure 6. Animation layout before (left) and after revision (right)

Media motion graphics it's well deserved for its audio and visual appeal. Regarding the selection of colors used in the media, it is appropriate and sufficient because the colors used have the intensity to give the desired impact. This is supported by Arsyad's statement (2013) that color in a good medium gives the impression of emphasis to build cohesiveness so that it can attract students' attention and make students focus on the material presented. Besides that, this motion graphics is a combination of text, images and audio which is classified as a type of audio-visual media. According to Dale's cone of experience theory, material presented in audio-visual form can make students understand more and also be able to remember what they are learning up to 30% compared to just reading a textbook (10%) or listening to audio (20%), so it can be said that the motion graphics media has higher effectiveness than visual media and audio media which is strengthened by Dale's cone of experience theory.

Motion graphics as social studies learning media in this study visualize material with animation and characters as well as the addition of audio in it which is able to attract students' learning interest. The concept of animation is arranged according to the needs so that things that are difficult to condition directly in front of students can be replaced by using animation. In line with this, Utami (2011) argues that animation can form a movement that can help explain the sequence of events. The audio and visual aspects in learning media are of particular advantage because they allow material to be conveyed in the form of a complete narrative (Pamungkas et al., 2018). Widiyasanti & Ayriza, (2018) also stated that learning that utilizes animated videos with moving images and sound can attract students' attention and make learning activities more effective than conventional learning in increasing student motivation.

In the opinion of Sidarta & Yunianta (2022) in their research, learning that students participate in while watching videos with animated elements is more meaningful because the process that occurs is not only remembering or simply transferring material from teacher to student but also providing independent learning experiences. This statement is in line with research by Fisabilillah & Sakti (2021) which explains that the use of animated videos is more effective in increasing student learning motivation. Animated videos as learning media can also be used by teachers to present problems and can increase the level of effectiveness of learning (Rebowo, 2014). In this development research, the product is packaged as attractively as possible with the help of animated characters and the use communicative language so that through this product the teacher can build mastery of student material step by step. The use of animated video media helps ease the teacher's task. What is no less important is motion graphics also acts as a flexible learning medium in supporting student learning activities and is able to illustrate concepts so that students get long-term memory of the material or knowledge conveyed.

Product Trial Results

Product motion graphics as social studies learning media on *Indische Partij* material tested on 30 grade VIII students at SMP PGRI 01 Kesamben. This product trial aims to determine the feasibility, practicality, and attractiveness of the product motion graphics developed by researchers. Furthermore, the recapitulation data of the trial results for students is presented in the following tabular form.

Table 6. Recapitulation of test results to students

Interval Class	Category	Frequency	Percentage (%)
43 – 52	Very feasible	26	86
33 – 42	Feasible	4	14
23 – 32	Not feasible	0	0
13 – 22	Very unworthy	0	0
Amount		30 students	100

As for the acquisition of trial scores, it showed that as much as 86% of students' responses to learning motion graphics media this stated "very feasible" and as many as 14% stated "feasible". In general, based on the results of the student responses, an average percentage of 89.10% was obtained so that the product motion graphics declared "very feasible" to be used in social studies material learning activities *Indische Partij* and can be disseminated. From the results of the assessment that has been obtained, it is concluded that there is a positive response in the form of comments and suggestions given by students towards the finished product motion graphics can be used in social studies learning activities in class because it can increase student learning interest. Student responses stated that they were more enthusiastic when using motion graphics in learning activities it is also reinforced by Mashuri (2020) where students look enthusiastic while learning because they grow an interest in learning when learning animated video media is applied. This is also supported by the statement of Sya'bania et al., (2020) which states that learning using animated video media can attract students' attention because there is a stimulus to think so as to make learning activities more memorable. The opinion that has been presented is reinforced by Dale's cone of experience theory that the use of audio-visual media in learning activities has the effectiveness of increasing students' memory and understanding by up to 30%.

Discussion

Motion graphics developed is said to be successful in increasing feelings of pleasure, interest, involvement, attention, and enthusiasm for student learning seen from the questionnaire indicators which include aspects of function and benefits, visual media, typography, language, programming, and audio media. In addition, product motion graphics which are uploaded on YouTube social media provide benefits to students because they can be used independently at home when repeating material that is not clear. For qualitative data in the form of comments and suggestions from test subjects, learning media motion graphics considered to make it easier for students to learn because the media is presented with interesting animated elements and the

material is presented using communicative and straightforward language so that students can more easily accept the material. The material presented is also easy to understand with an interesting animation design so it is not boring and can foster student learning motivation. Judging from the visual aspect of the media and layout, Media is said to be interesting and helps students in clarifying or understanding information. This statement is supported by the opinions of Atmawarni (2012) and Wati (2016) that the use of animation and images can be used as reinforcement for information presented in learning media, placement layout also makes it easier for students to receive information so that it is very effective for adding to student learning systems that are limited by space and time. From the aspect of typography, the arrangement and size of the text on the media is also correct so that it makes it easier for students to read it. This is in line with Munir (2012) statement that good typography selection can make readers obtain maximum reading comfort. In the audio aspect, the media is also stated to be very feasible so that the use of audio is in the form of background and narration does not interfere with the student learning process, precisely the presence of audio in learning media is able to solidify the delivery of material and liven up the atmosphere of learning activities in class.

Based on the test results, the developed product can be said to be in accordance with what was disclosed by Dale (1997) in the cone of experience theory that media motion graphics bring a positive influence on the implementation of learning activities. This is because motion graphics as a learning media can increase student interest and motivation to learn. According to Ernanida & Al Yusra (2019) learning experiences do not always begin with direct experience but can be adapted to the interests of students. Therefore, in selecting media, it is necessary to consider the characteristics of students, the carrying capacity of the environment, and an analysis of learning style trends to support the effectiveness of learning activities. Dale classifies learning experiences into several levels, ranging from the most concrete to the most abstract.

According to the cone of Dale's experience, the higher the top of the cone, the more abstract the media conveying information will be. According to Dale, the learning experience carried out by reading is only able to increase student understanding by 10% and by listening by 20%. In contrast to the learning experience that is carried out by viewing videos has a higher percentage in increasing student understanding. The use of audio-visual media namely motion graphics in social studies learning *Indische Partij* material based on Dale's cone of experience theory, can improve students' comprehension and memory up to 30% than just reading or listening. Jalilah (2021); Wijaya (2020) also argues that audio-visual media provides many benefits in learning activities. For example, the material that students learn becomes clearer and easily captured by the five senses which are then processed by the brain. The use of audio-visual media can also attract children's interest in learning and train their brains to form critical thinking and imagination skills so that they become more creative (Nurdiyanti, 2019). The selection of learning media is a benchmark in learning activities, because if

the media used by the teacher is interesting, creative, and innovative it will be able to create a pleasant learning atmosphere so that it can increase interest in learning and make it easier for students to understand a material (Rachmawati et al., 2023).

D. CONCLUSION

Based on the result and discussion, it is found that in this study the researchers have succeeded in developing product in the form of motion graphics as social studies learning media on I*ndische Partij* material with stages 1) Analysis which includes problem analysis, material analysis, and analysis of student learning style characteristic, 2) Design includes the preparation of script, characters, and storyboards, 3) Development, namely developing products by starting to make animated movements using several software where after the product is finished the feasibility test is carried out by validators starting from the aspects of material, language, and media, 4) Implementation, application of product to test subject, and 5) Evaluate of the research stages from analysis to implementation. From the result of the product feasibility assessment by validators from both material experts, language experts, and media experts, this motion graphics product declared very feasible so that it can be test on clas VIII students at SMP PGRI 01 Kesamben, a total 30 children. The result of the feasibility test on students, learning media get the category "very feasible". This shows that this learning media development product can be used is social studies learning activities because it can meet the learning needs of students and can be disseminated to the public. Motion graphics produced add to the variety of learning media options that can be utilized by teachers in the classroom which can foster student interest and motivation to learn because it contains interesting audio-visual elements. For further development research can develop similar learning media with types of educational games.

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