



Developing Audiovisual Learning Media Using Corel Video Studio Pro X10 on the Heritage of Palembang Darussalam Sultanate to Increase Students' Interest in Learning

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Abstract. This study aims to determine the results of the audiovisual learning media on the heritage of Palembang Darussalam Sultanate developed with Corel Video Studio Pro X10 and determine students' responses towards it along with the effectiveness of the developed learning media. This study was conducted in the history learning class X, SMA Negeri 13 Palembang. The use of audiovisual media in this manner is expected to help solve problems faced by the students. Corel Video Studio Pro X10 has easy and precise video processing/editing to provide satisfactory final results according to video needs. This study develops the heritage of Palembang Darussalam Sultanate material as the main topic in the developed learning media based on Corel Video Studio Pro X10 in history subjects by presenting more interesting material by adding animation and historical illustrations. That way it can overcome the problem of students' learning difficulties and can increase their overall interest in learning. The results of field trials, especially comparing the posttest and pretest results, show that the effectiveness of using such audiovisual learning media on the topic in hand is looking good. The students' average pretest score was 33.66%, while their average score at the posttest was 86%. There was a significant increase of 52.34%, meaning that an N-gain of 0.78 was obtained which was included in the high category. The results obtained indicate that the product developed in this study regarding audiovisual learning media based on Corel Video Studio Pro X10 on the heritage of Palembang Darussalam Sultanate has a significant, positive effect on students' learning interest and thus their learning outcomes.

Keywords: audiovisual · media · listening · Corel Video Studio Pro X10 · heritage of Palembang Darussalam Sultanate · history

1 Introduction

Education not only acts as a platform for success, but also as a provider of knowledge about social behavior, strengths, character, and self-esteem [1]. According to Estabrook, education is considered to be the most commonly studied determinant [2]. The development of the 21st century requires students to have several skills, one of which is problem

solving skill. Philosophy of education based on the idea of freedom can even be dogmatic as opposed to traditional education [3]. Problem solving skills are the skills of students to use their knowledge in selecting or predicting deductively various possible consequences of a phenomenon. There are several learning models that can improve problem solving skills [4].

The problem of improving the quality of learning in the era of globalization is one of the cornerstones in improving education, and there are several elements that are important in its use. The first part of the teaching and learning process is the media used. Human perception is multidimensional, including sight, hearing, touch, taste, and smell [5]. These two aspects are interrelated in the learning process. Good learning media can of course support the learning process. One of the characteristics of audiovisual media is its several advantages over other single-sense media such as image media, print media, and listening media in terms of clear, strong attraction for students [6].

The goal of listening experience is to provide guidance to students or collect information from various types of messages or genres such as voices, studies, directions, poems, songs, dialogues, debates, films, and so on [7]. Audiovisual media such as this can also train adults who need vocational, technical, or general education training but are unable to attend classes [8]. In the field of media studies, technology is inherent in many school-led professions and their curricula and must be adapted to meet the demands of interdisciplinary courses with the expansion of interdisciplinary professions [9]. Other most common audiovisual aids used in technology and class of society are visually projected [10].

The educational process that utilizes media technology and audiovisual content can support the improvement of learning technology through nonverbal communication in the digital era with an efficient approach [11]. Five years ago, Scott D. Thomson states that “the ability to map learning styles is the most scientific way we know of to individualize instruction” [12]. In history, there is a division of one subject that is similar to other subjects [13]. The emergence of various learning style models over the last 25 years has brought increasing attention to the idea that learners learn in a variety of ways, and one approach to teaching does not work for every learner or even most students [14]. Studies using the classroom as a reference or training situation are hardly comparable because a large number of different methods and media have been used in the classroom [15].

Learning materials that really fit the needs and tasks of students are really needed. Syllabus is not always available from textbooks, especially for vocational schools [16]. Materials that utilize inquiry teaching strategies and activities are not only to teach content but also to develop students’ abilities to conduct and understand inquiry [17]. Implementing a new curriculum to bring about school improvement is a very complex process [18]. Individual curricular programs and innovations vary with respect to teacher needs, but must be able to do so in a way that might affect the type of professional development that also benefits the teachers [19]. The development of new curricula is a common event in countries around the world [20].

The influence of teacher beliefs on curriculum implementation is explored in two different contexts [21]. Changes are needed in teaching behavior as well as in beliefs, attitudes and understanding [22]. Implementation of the curriculum requires practice of the syllabus and subjects that are officially determined [23, 24]. This study will present

historical material in the form of an interesting video with local historical material in the surrounding environment. Therefore, material about local history, especially the South Sumatra region, will be raised.

The development of Islam in Palembang goes hand in hand with the development of Islam Palembang Darussalam Sultanate. The process of Islam's entrance in Palembang shows two dynamic differences related to geo-cultural differences among the people of Palembang [25]. Sociological and historical understanding related to all history and historiographical experience becomes very important. The existence of religious and economic social networks is very important for the sustainability of the role and function of Muslims in trading activities and their overall relations with the role of the local kingdom [26]. South Sumatra has a long history, so learning local history in schools cannot be fully guaranteed due to limited resources. Based on the observations that I have made in one of the high schools in the city of Palembang according to the 2013 curriculum, group guidance based on the character values of the Palembang Darussalam Sultanate for high school students in Palembang is accommodated to introduce the characters of previous figures so that the students have self-awareness as Palembang local residents [27].

Teaching has a profound impact, one of which is to change traditional teaching modes, teaching content, and teaching methods, resulting in fundamental changes in all educational concepts, teaching theories and even the education system [27]. Corel Video Studio Pro X10 has easy and precise video processing/editing features so that it can provide satisfying final results, adjusts video needs with the transition function, combines several clips into one with the overlay function, processes audio through the dubbing function by recording audio of various formats, and importing compatible video and audio with various media [28]. The main aim of this study is to develop audiovisual learning media using said application on the topic of historical heritage of the Palembang Darussalam Sultanate with hopes to increase students' interest in learning at SMA Negeri 3 Palembang [29].

2 Methods

This study uses a Development Research approach which is a process to develop a new product or improve an existing one that can be accounted for, which along with the direction of the development method is used in this study to develop a learning media in the form of audiovisual material using Corel Video Studio Pro X10 to increase students' interest in learning at SMA Negeri 3 Palembang.

Soenarto gives a limitation on development research as a process to develop and validate products that will be used to assist the learning process. This development and research study will produce a product in the form of materials, media, and learning strategies [30].

This study uses a research and development approach model according to Hannafin and Peck. The Hannafin and Peck approach model is a product-oriented procedure as the basis of research, one example of which is videos, modules, or multimedia to support productivity in learning. Hannafin and Peck's model has three phases in the development procedure, namely the needs analysis phase, the design phase, and the development and implementation phase.

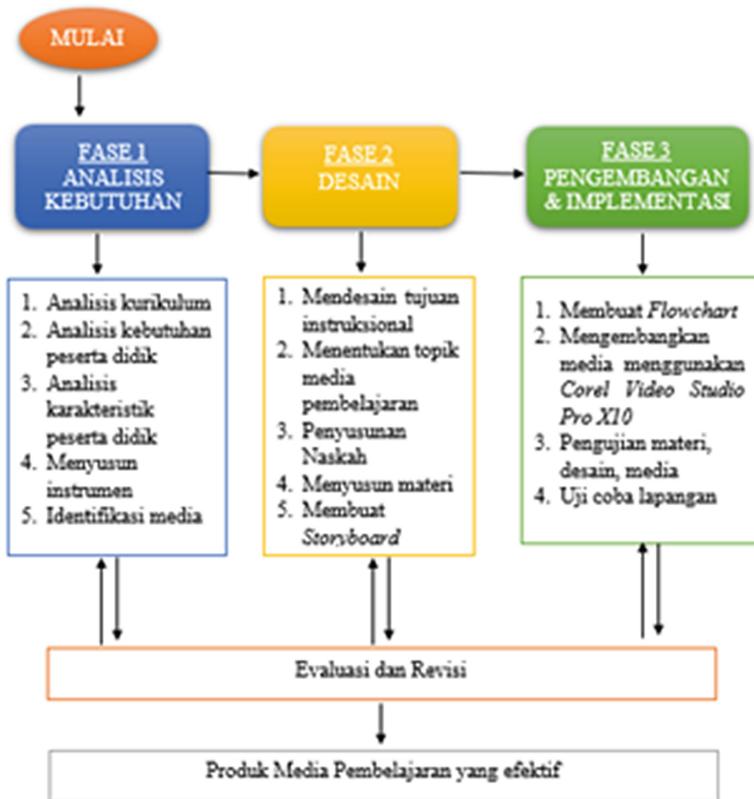


Fig. 1. Hannafin and Peck Design Model

The figure below shows the three phases in the Hannafin and Peck development model (Fig. 1).

At the testing stage, there will be an evaluation of the material, design and media by experts of related fields to get valid results on the developed learning media. Furthermore, the product that has been validated will be tested on students to determine the effect of using the resulting product. During this stage, pretest observations were carried out on students in class X Social 3 at SMA Negeri 13 Palembang. It reviews the needs of students for the use of learning media as a tool to understand history learning materials.

The second stage is the design stage which is carried out after conducting a needs analysis and concluding the results which contain designing the developed audiovisual learning media. One of the steps at this stage is to make learning videos and their functions that will be shown to students. This stage is carried out to facilitate translation into implementation.

The development and implementation stage is the stage of starting the “hard” work to produce the finished product. This stage consists of (1) making a flowchart, (2) developing the intended learning media, (3) testing the material, design, and media, (4) field trials, and (5) evaluation and revision.

The results of the development were then implemented on the research subject, namely students of class X Social 3 SMA Negeri 3 Palembang. After that, a posttest was carried out as a form of testing the students' improvement in their learning outcomes after receiving media assistance that had been developed in this study.

3 Result and Discussion

The term learning media has been defined as a physical means through which instructions are presented to students. Under this definition, any physical means of instructional delivery, from direct instructors to textbooks to computers and so on, would be classified as instructional media. It may be wise for practitioners in the field to adopt this point of view. However, in most discussions of the history of instructional media, the three main means of teaching prior to the 20th century (and still the most common today) are teachers, whiteboards, and textbooks have been categorized separately from other media. In order to clearly illustrate the history of the media, this point of view will be used in this article. Thus, instructional media will be defined as physical means, other than teachers, whiteboards, and textbooks, through which instructions are presented to learners [31]. Learning media are all forms of information carriers that can be used to record, store, preserve, transmit, or retrieve information for teaching and learning purposes. They are materials used by practice teachers and trainees to present, illustrate, and explain teaching positions. Educators have long been aware of the intrinsic value of instructional media in the teaching and learning process [32].

Students' learning styles in the teaching and learning process will affect the use of media by teachers because students learn more effectively when the content encourages choice of modality [33]. Learning styles that are not in accordance with the demands of the field will affect students' social adaptation to educational institutions. Classical learning media used by teachers, such as whiteboards, slide projectors, videos, and others, of course cannot meet the "one size fits all" criteria because they have the "one size does not fit all" nature due to their partial characteristics, especially when, in using them, the teachers does not consider the student's learning style. As a result, the media used is not in accordance with the student's learning style. In connection with this, the learning media used must be in accordance with the student's learning style [10].

Conversely this study uses audiovisual media using Corel Video Studio Pro X10. This hearing and vision aid will be designed as a learning video in the form of images, audios, texts and video footages with documentation under the topic of the historical heritage of Palembang Darussalam Sultanate. By using these props, students can easily understand the material. Corel Video Studio is a video editing software package for Microsoft Windows. Corel Video Studio is one of the most widely used Corel products by the Indonesian people. Corel Video Studio is software that is used to edit photos, but is currently developing into various media such as animation, video, sound and text alike. Corel Video Studio is a very good quality video management software. Corel Video Studio Pro X10 is designed for use on computers running Windows 7, Vista, or Windows 10 operating systems. Corel Video Studio Pro X10 can edit videos created by Divicams, digital cameras, cell phones, or other devices. In addition, Corel Video Studio Pro X10 can combine images, music, text, and sound. Corel Video Studio Pro X10 has



Fig. 2. Analysis of Students' Characteristics

quite complete features such as transition effects, titles, video cropping, video and photo combinations and music [34].

Needs analysis is the initial stage in the research process for developing audiovisual learning media based on Corel Video Studio Pro X10. Analysis of the characteristics of students is needed to develop a learning system on the basis of circumstances and to design and develop media that can help the learning process of students appropriately. The stages of the process of analyzing the characteristics of students are carried out to identify and determine the individual qualities of each student in terms of needs and characteristics to determine the specifications and qualifications of suitable media as a learning tool.

I conducted a curriculum analysis, in which Curriculum 2013 is a learning concept as a system and a broad learning approach to students. The goal is that students have better attitudes, skills, and knowledge competencies so as to produce creative, innovative, and productive students in their learning process (Fig. 2).

After carrying out the process of analyzing the characteristics of students, I arranged instruments ranging from selecting the material to be discussed to selecting the media to be used in the learning process of the history subject at SMA Negeri 13 Palembang. I then determined the concept of learning using audiovisual learning media based on Corel Video Studio Pro X10 in presenting history learning material so that it can foster students' interest in learning.

After compiling the instrument, I carry out the process of identifying the media that will be developed and implemented based on the pre-research stages that have been carried out previously. The results of the pre-study can be concluded that students need an interactive learning media that can provide information in history learning so that it is more interesting, effective and can provide more knowledge by adjusting to students' learning styles.

The topic material chosen in developing this audiovisual learning media based on Corel Video Pro X10 is Masjid Agung Sultan Mahmud Badaruddin Jayo Wikramo. The main purpose in choosing this topic (as well as developing the learning media in general) is to promote local wisdoms of Palembang along with educating the local cultural wealth to students and educators alike. Below is the materials map regarding the topic chosen in this developed audiovisual learning media based on Corel Video Studio Pro X10 (Fig. 3).



Fig. 3. Materials Map

In designing the material map herein, considerations were taken following the lesson plans and core materials to be given to students in this study program. The material map is made to set guidelines in discussing and explaining the chosen topic, to focus on it and as such to limit the scope of the developed audiovisual learning media within the set guidelines. Masjid Agung Sultan Mahmud Badaruddin Joyo Wikramo is chosen as the main topic in this audiovisual learning media to strengthen the knowledge regarding local wisdom of Palembang on both students’ and educators’ sides, following educational regulations set in the 2013 curriculum along with its core competencies, learning goals, learning indicators and time schedule.

The next stage, namely conducting expert validation, is the most important stage because the learning media that has been produced will be assessed directly by experts or competent people in certain fields to see the validity and feasibility of learning media before being applied to students. The following table shows the expert validators in charge of validating the development process of learning media (Table 1).

Based on validation results it can be concluded that the product of audiovisual learning media using Corel Video Studio Pro X10 on the historical heritage of Palembang Darussalam Sultanate material got an average of 4.47 with a very valid category. This is based on the opinion of Sugiyono [29] regarding the category of the level of validity for the range of values from 4.21 to 5.00 which is included in the very valid category, meaning that it is feasible to be tested with several revisions given by each expert which aims to improve learning media to make it more acceptable by students. The following are the results of validation from experts for learning media.

First, the validation results from material experts are used to see the opinions and expert judgments on the material of the Sultan Mahmud Badaruddin Joyo Wikramo Sultanate Mosque as a Palembang Darussalam Sultanate heritage which is used as the main material in the developed audiovisual learning media. Dr. Muhammad Idris, M.Pd.

Table 1. List of Expert Validators

No.	Name	Occupation
1	Dr. Muhammad Idris, M.Pd. (Materials experts)	History Lecturer at Universitas PGRI
2	Kms. Gerby Novario, S.Pd. (Design expert)	Teacher at MAN 1 Palembang
3	Dwi Suseno Wati, M.Pd. (Media expert)	Teacher at SMP Negeri 4 Talang Kelapa
4	Akhmad Rizqi Turama, S.Pd., M.A (Language expert)	Lecturer at Universitas Sriwijaya

Acts as an expert in learning media materials. Appointment of Dr. Muhammad Idris, M.Pd. as the material validator was based on his extensive experience in the field of history education.

Aspects assessed by material expert are the appropriateness of content and presentation. The results of the expert's assessment of the material showed an average value of 4.76 with very valid category with a range of values from 4.21 to 5.00. In addition to conducting assessments, the material expert also provided opinions and suggestions on the material used in this study. Opinions and suggestions given by expert validators are analyzed for later improvement. The following are the results of improvements that have been made in accordance with comments and suggestions from the material expert (Table 2).

Second, at the expert validation of instructional design, Kms. Gerby Novario, S. Pd., a teacher at MAN 1 Palembang, acts as the validator to assess and provide comments and suggestions on instructional design. Appointment of validator Kms. Gerby Novario, S. Pd. as a learning design expert was based on his experience in making learning designs, as well as him being a teacher at MAN 1 Palembang.

Some aspects assessed by the design expert are clarity of learning objectives, media compatibility with support for learning approaches, presentation techniques, support for presentation, presentation of learning, conformity with the level of student development, coherence and integration between learning activities. All this means that the assessment score obtained at the design stage was 4.27 with very valid category with a range of values from 4.21 to 5.00. In addition to providing an assessment of instructional design, Gerby Novario also provided comments and suggestions on the learning design. The following are the results of improvements that have been made in accordance with the comments and suggestions of instructional design expert (Table 3).

Third, at expert validation of the media, Dwi Suseno Wati, M.Pd., a teacher at SMP Negeri 4 Talang Kelapa, acts as the validator to conduct assessments, provide comments and suggestions on the media on the learning media of the Sultan Mahmud Badaruddin Jayo Wikramo Grand Mosque as a relic of the Palembang Darussalam Sultanate. Appointment of validator Dwi Suseno Wati, M.Pd. as a media expert was based on his experience in technology because he is a graduate of S2 Educational Technology, Universitas Sriwijaya.

Table 2. Results of Improvements Following Comments and Suggestions from the Materials Expert

Before revision	Comment from the expert
 <p>The slide features a dark background with a title box at the top center containing the text "B. KESULTANAN PALEMBANG DARUSSALLAM". To the right of the title is a white circle with a question mark. Below the title, there are two cartoon illustrations of kings. The king on the left is wearing a green and gold robe, while the king on the right is wearing a purple and red robe. Text blocks are present, but the text is small and partially obscured by the illustrations.</p>	<p>There should be a real image of the said figure, in this case the King himself.</p>
After revision	Description
 <p>The revised slide maintains the same layout but replaces the cartoon king on the left with a realistic portrait of a man wearing a traditional Indonesian headpiece (blangkon). The cartoon king on the right remains. The text blocks are now more clearly visible and legible.</p>	<p>The picture of the mentioned King is added alongside the textual explanation.</p>

There are several aspects that are considered by media experts, namely graphics, coloring, and interactivity. The assessment score obtained at this stage was 4.30 with very valid category with a value range of 4.21–5.00. As for what media experts do, apart from providing an assessment, are providing comments and suggestions for the media. The following are the results of improvements that have been made in accordance with the comments and suggestions of the media expert (Table 4).

Fourth, at the expert validation on language Ahmad Rizqi Turama, M.Pd., acts as the validator to evaluate and provide comments on the language elements in the learning media being developed. The appointment of the validator Ahmad Rizqi Turama, M.Pd., M.A. was based on his work as a lecturer in the Indonesian Language Education Study Program, Faculty of Teacher Training and Education, Universitas Sriwijaya.

The aspects assessed by the language expert are the appearance of the language and the its appropriateness. Based on the results of the language validation stage, the developed audiovisual learning media using Corel Video Studio Pro X10 has a score of 4.58 with very valid category with a value range of 4.21–5.00. The language expert also provided suggestions and comments on language elements in learning media. The following are the results of improvements that have been made according to the suggestions and comments from the language expert (Table 5).

Table 3. Results of Design Expert Validation Improvement

Before revision	Comment from the expert																						
<p style="text-align: center;">RENCANA PELAKSANAAN PEMBELAJARAN (RPP)</p> <p>Sekolah : UPT SMA Negeri 13 Palembang Mata Pelajaran : Sejarah Indonesia Kelas/Semester : XI IPS 3 Genap Materi Pokok : Kerajaan-Kerajaan Islam Alokasi Waktu : 2 x 45 Menit</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #d9ead3; text-align: center;">Kompetensi Dasar</td> <td style="background-color: #d9ead3; text-align: center;">Indikator</td> <td style="background-color: #d9ead3; text-align: center;">Kompetensi Dasar</td> <td style="background-color: #d9ead3; text-align: center;">Kemampuan Dasar</td> </tr> <tr> <td>1.1 Mengidentifikasi Keragaman Kebudayaan masyarakat masyarakat dan kebudayaan pada masa kerajaan Islam di Sumatera Selatan dan menjabarkan corak-budaya-budaya yang muncul berbeda pada lakhsape masyarakat masa kini</td> <td></td> <td>1.1.1 Memahami Baku Penanggalan Kerajaan Islam di Sumatera Selatan Discovery Masjid Agung Sultan Mahmud Badaruddin Jaya Wilkromo</td> <td></td> </tr> <tr> <td>4.1 Menerapkan hasil belajar tentang konsep penanggalan kerajan masa rana Masjid Agung Sultan Mahmud Badaruddin Jaya Wilkromo</td> <td></td> <td>4.1.1 menerapkan hasil belajar tentang konsep penanggalan kerajan masa rana Masjid Agung Sultan Mahmud Badaruddin Jaya Wilkromo</td> <td></td> </tr> </table> <p>A. Tujuan Pembelajaran Melalui pembelajaran Discovery Learning dengan menggunakan informasi dari berbagai sumber belajar, penyediaan informasi dan menyajikan informasi, diharapkan peserta didik dapat aktif selama proses belajar mengajar berlangsung, memiliki sikap ingin tahu, aktif dalam mendiskusikan pengetahuan dan berkolaborasi untuk dalam menyelesaikan masalah, mampu berpartisipasi, menghormati sesama dan kritik, dan dapat menyajikan hasil belajar berupa rangkuman Penanggalan Kerajaan Islam di Sumatera Selatan: Khazanera Masjid Agung Sultan Mahmud Badaruddin Jaya Wilkromo</p>	Kompetensi Dasar	Indikator	Kompetensi Dasar	Kemampuan Dasar	1.1 Mengidentifikasi Keragaman Kebudayaan masyarakat masyarakat dan kebudayaan pada masa kerajaan Islam di Sumatera Selatan dan menjabarkan corak-budaya-budaya yang muncul berbeda pada lakhsape masyarakat masa kini		1.1.1 Memahami Baku Penanggalan Kerajaan Islam di Sumatera Selatan Discovery Masjid Agung Sultan Mahmud Badaruddin Jaya Wilkromo		4.1 Menerapkan hasil belajar tentang konsep penanggalan kerajan masa rana Masjid Agung Sultan Mahmud Badaruddin Jaya Wilkromo		4.1.1 menerapkan hasil belajar tentang konsep penanggalan kerajan masa rana Masjid Agung Sultan Mahmud Badaruddin Jaya Wilkromo		<p>On the target learning outcome, use direct, strong and clear language that easily explains the intended target.</p>										
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Mata Pelajaran	Sekolah	Kelas/Semester	Materi Pokok	Alokasi Waktu																			
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1.1 Mengidentifikasi Keragaman Kebudayaan masyarakat masyarakat dan kebudayaan pada masa kerajaan Islam di Sumatera Selatan dan menjabarkan corak-budaya-budaya yang muncul berbeda pada lakhsape masyarakat masa kini		1.1.1 Memahami Baku Penanggalan Kerajaan Islam di Sumatera Selatan Discovery Masjid Agung Sultan Mahmud Badaruddin Jaya Wilkromo																					
4.1 Menerapkan hasil belajar tentang konsep penanggalan kerajan masa rana Masjid Agung Sultan Mahmud Badaruddin Jaya Wilkromo		4.1.1 menerapkan hasil belajar tentang konsep penanggalan kerajan masa rana Masjid Agung Sultan Mahmud Badaruddin Jaya Wilkromo																					

After all validations have been done, field trials were then carried out to the students of class X Social 3 SMA Negeri 13 Palembang. The samples were taken on Thursday, April 8, 2022 with an allocation of 2 x 45 min (from 09.00 to 10.30) to apply the developed audiovisual learning media on the historical heritage of Palembang Darussalam Sultanate. First, I conducted a pretest to students with 10 multiple choice questions, which aims to determine the initial knowledge of the students. The average score they obtained at the pretest session was 33.66. The average results are obtained based on calculations from the opinion of Atmojo.

Table 6 shows that the results of the pretest from all students of class X Social 3 who were categorized as not achieving the KKM (Minimum Completeness Criteria) or inadequate were 28 students with an average of 33.66. Thus, it is apparent that their understanding and knowledge of the material presented is still very low.

After the pretest was carried out, I began to present the newly developed audiovisual learning process to the students with other variables being the same. The process of delivering material is done using face-to-face learning with help of a projector. Students are asked to observe and listen to the delivery of material using the developed learning media. I acted as a facilitator and guide for students during the learning process.

Table 4. Results of Media Expert Validation Improvement

Before revision	Comments from the expert
	<p>Use standard fonts at bigger size for the texts.</p>
After revision	Description
	<p>The font type and its size have been changed following suggestions from the media expert.</p>

After the students were presented with the new approach using the developed audio-visual learning media, a posttest was carried out to determine their change in knowledge and learning perception. The result of this posttest can be seen in Table 7.

Table 7 shows that the posttest results obtained by students of class X Social 3 who are categorized as having reached the minimum completeness criteria has improved where as many as 29 students got an average score of 86 which belong to the medium category. This increase in learning outcomes is due to variations in learning media that have not previously been applied to them.

In addition, with the help of this sort of learning media, it can increase students' understanding and knowledge of the material presented which at first was relatively abstract to become more concrete because the media used is designed with menu choices that suit the needs and desires of the students.

The increase in student learning outcomes was proven from the pretest and posttest scores which increased by 52.34%. This shows that learning using audiovisual media made with Corel Video Studio Pro X10 is in line with constructivist theory where students have prior knowledge and are stimulated by new knowledge so that new information can increase their individual knowledge.

Based on Table 8 and Fig. 4, it can be seen that the recapitulation of the pretest scores includes students who failed the test by 30%, the score of students who fall into the not enough category is 53.33%, the scores of students in the enough category is 10%, the score in the good category is 6.66%, and finally there are no students in the very good

Table 5. Revisions on the Language Aspect Following Comments and Suggestion from the Expert

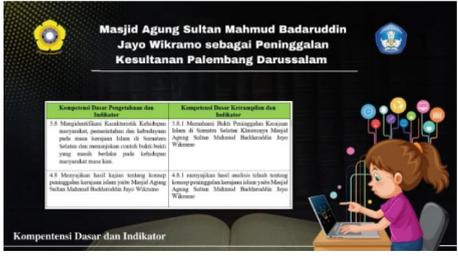
Before revision	Comment from the expert
	<p>Capitalizations on joining words should be omitted and use small first letter.</p>
After revision	Description
	<p>Capitalizations on joining words have been revised into using small first letters.</p>

Table 6. Students' Pretest Results

Score range	Category	Number of students
0 – 67	Inadequate	28
67 – 100	Adequate	2
Total		30 Students

Table 7. Students' Posttest Results

Score range	Category	Number of students
0 – 67	Inadequate	1
67 – 100	Adequate	29
Total		30 Students

category. On the pretest, the highest score was obtained by NU students with a score of 80 and AS with a score of 70, so it can be concluded that only 2 students achieved the minimum completeness criteria score.

Table 8. Results of Pretest Score Recapitulation

No.	Score rane	Number of students	Total (%)	Category
1.	0 - 20	9	30%	Fail
2.	21 - 40	16	53,33%	Not enough
3.	41 - 60	3	10%	Enough
4.	61 - 80	2	6,66%	Good
5.	81 - 100	-	0%	Very good

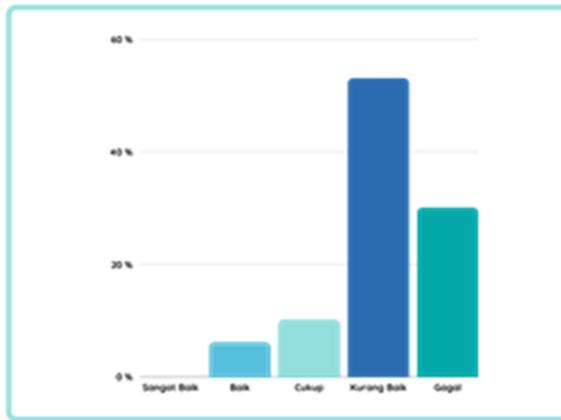


Fig. 4. Diagram of the Recapitulation Results of Students' Pretest Scores

Table 9. Results of Posttest Score Recapitulation

No.	Score range	Number of students	Total (%)	Category
1.	0 – 20	-	-	Fail
2.	21 – 40	-	-	Not enough
3.	41 – 60	1	33,33%	Enough
4.	61 – 80	13	43,33%	Good
5.	81 – 100	16	53,33%	Very good

Based on Table 9 and Fig. 5, it can be seen that there are no students who failed the test, including no students who got not enough score. Furthermore, the number of students who fall into the enough category is 33.33%, students in the good category is 43.33%, and students in the very good category reach a percentage of 53.33%. Overall, the students who got the highest score of 100 were 7 people.

A significant increase in learning outcomes can occur due to the encouragement factor that makes students motivated. I tried to make an innovation in order to overcome

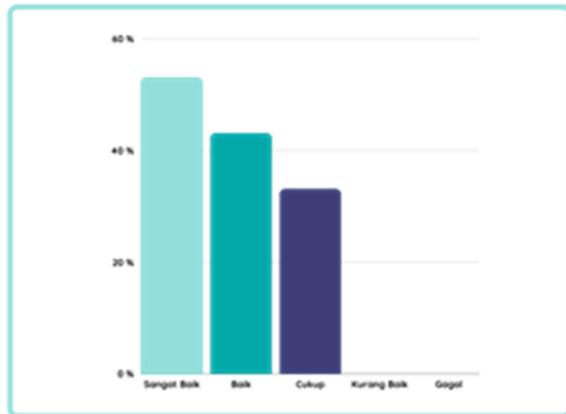


Fig. 5. Diagram of the Recapitulation Results of Students' Posttest Scores

Table 10. Comparison of Students' Score Results

Average		Increase	Gain index	Category
<i>Pretest</i>	<i>Posttest</i>			
33,66	86	52,34%	0,78	High

the problems faced by students in learning and teaching activities. With the existence of audiovisual learning media based on Corel Video Studio Pro X10, students are able to understand and obtain information according to their needs. It is proven by the result of both pretest and posttest scores. From the average result, there is an increase of 52.34%, so that it can be obtained an N-gain of 0.78 which is categorized as high.

Based on the pretest and posttest results obtained by the students in the application of the developed audiovisual learning media, they experienced an increase in their scores of 20, 20, 40, 50—there were even students who did not experience an increase at all. Based on the table showing the comparison of the students' scores between the pretest and posttest can be seen a significant increase. This of course cannot be separated from the various factors that are different for each student.

Overall, in the comparison of pretest and posttest scores, it can be concluded that students experienced a significant increase. The increase in their scores is 40, 50, 60, even up to 80. This means that the average value of the pretest is 33.66 and the average posttest is 86. From the average results, the percentage increase is 52.34% with an N-gain index value of 0.78.

The impact of the effectiveness of using the developed audiovisual learning media is seen from the comparison of the results students obtained during the pretest and posttest. The following is a table comparing the pretest and posttest scores of students in class X Social 3 SMA Negeri 13 Palembang (Fig. 6).

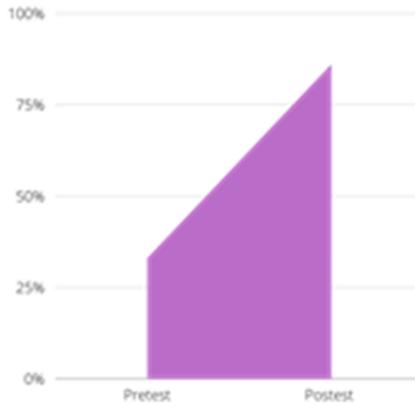


Fig. 6. Comparison Diagram of Students' Score Results

Table 10 shows that the students' scores increased significantly. The average score of the pretest shows a number of 33.66, while the average posttest score is 86, so it has an increase of 52.34% with a gain index of 0.78 which is categorized as high.

4 Conclusion

Based on the explanation above, there was an increase in the pretest score against the posttest after the application of the developed audiovisual learning media based on Corel Video Studio Pro X10 on the historical heritage of Palembang Darussalam Sultanate, meaning that students followed the lesson well. As such, learning is a series of combinations of the presence of educators and students, teaching materials, and adequate facilities to create an effective learning atmosphere.

The use of the developed audiovisual learning media in this study has proven to show an effectiveness on students' learning outcomes. This is evidenced by the score comparison before and after using the developed audiovisual learning media. Students tend to understand better if the material is packaged in media that is able to stimulate and attract their learning interest. According to Schram, learning media is a technology designed to transmit information from the sender of the message to the recipient of the message, which in the sense of learning is educators to students. Information designed through technology can affect students' interest in learning. It can be said that this study shows that the development of audiovisual materials based on Corel Video Studio Pro X10 on the historical heritage of Palembang Darussalam Sultanate can provide new concepts of knowledge gained by students that have an impact on their learning outcomes.

Based on research conducted in this study with the type of product development research in the form of audiovisual learning media based on Corel Video Studio Pro X10 at SMA Negeri 13 Palembang in class X Social 3 on the topic of historical heritage of Palembang Darussalam Sultanate, it can be concluded that:

1. The developed audiovisual learning media has been proven valid after going through the expert validity test phase and field trials to determine the practicality of the product. The validation results obtained in the material aspect was 4.76, learning design aspect 4.27, media aspect 4.30, and finally the language aspect 4.58. The results of the validity test of the experts returned with an average score of 4.47 which was categorized as very valid. It can be concluded that the audiovisual learning media developed in this study is suitable for use in history learning.
2. The results of the field trials show the effectiveness of using the audiovisual learning media developed in this study by looking at students' learning outcomes during pretest and posttest stages. The mean score of the students' pretest was 33.66%, while the average score of the posttest was 86%. There was a significant increase of 52.34%, so that an N-gain of 0.78 was obtained which was included in the high category. The results obtained indicate that the product developed in this study has a significant effectiveness on students' learning interest and thus their learning outcomes.

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