



## **Development of Smart App Creator 3 (SAC) Learning Media in Learning History to Increase Students' Interest in Learning at Senior High School 3 Magelang**

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### **ABSTRACT**

This research has: 1) the purpose of developing history learning media using the Smart App Creator 3 (SAC) application; and 2) to determine the feasibility of learning media using the Smart App Creator 3 (SAC) application. This research uses the Research and Development (R&D) method using the Analyze, Design, Development, Implementation, and Evaluate (ADDIE) model. This research was conducted at SMA Negeri 3 Magelang. The small group test subjects were 34 students, while the large group test subjects were 108 students. Data analysis used qualitative data (observation and interview) and quantitative data (questionnaire). The results of product development have produced history learning media based on the Smart App Creator 3 (SAC) application. The product was assessed by material experts and media experts with a score of 94 and 103 included in the criteria of good/worthy of use and the results of the large group trial scored 86 in high criteria so that the media is suitable for use in learning History at SMA Negeri 3 Magelang.

### **Keywords:**

economics.  
learning media; smart app creator; interest in studying history

### **INTRODUCTION**

Education is an important thing for humans to have as a basis for living life. Education is a conscious effort and systematically creates active teaching and learning activities for the development of self-potential through the attitudes required by the state. Education has a major role in determining human life. In another sense, education is a systematically organized effort in learning activities to influence students to achieve educational goals (Munib, 2004)

Teaching and learning activities that occur in schools require the role of students, teachers, and learning materials. Learning is a means for teachers to provide learning materials to students so that the interaction process occurs so that the material knowledge conveyed can be digested by students. Students can learn better if there is a smooth process of teacher and student interaction. Learning is the relationship between teachers and students in learning activities to convey material (Law Number 20 of 2003 article 1 paragraph 20).

All learning activities in schools from various subjects must have learning objectives, one of which is in history learning activities. History learning is a process of interaction in teaching and learning activities that study past events with present events that are interrelated (Li, 2017). The purpose of learning history is to increase the ability possessed by students in understanding history.

History learning that is currently carried out is of little interest to students. Based on the questionnaire distributed by researchers, some students consider history lessons as boring lessons because they only discuss memorization. In addition,





learning about past events tends to make students want to forget them. History learning is not considered important in the Social Science program and the Mathematics and Natural Sciences program.

History learning in the 2013 revised curriculum for high school level has many obstacles. Among these obstacles is that the material studied in learning history is quite broad, covering Indonesian history from understanding to contemporary history. Time in delivering learning materials by history teachers is limited so that it is not in accordance with the curriculum target (Supriatna, 2012). This is in accordance with the learning of history at SMA Negeri 3 Magelang, that the targeted material is a lot but the time to deliver the material is limited. Teachers must be good at managing time and delivering material to meet the expected goals (Paolini, 2015).

History learning at SMA Negeri 3 Magelang is still simple with teachers still using conventional methods, namely lectures, group discussions and peer-to-peer questions and answers. The sources used in learning history are textbooks issued by the government and student worksheets (LKS). Teachers use learning media only in the form of power points. There needs to be development in using the learning media used (Puspitasari, Juhadi, Suyahmo, Wijayanto, & Saadah, 2022).

In the learning process, the 4.0 revolution has a 4C foundation, namely creativity, critical thinking, collaboration and communication. Teachers at this time, need to apply 4C in the learning process. Teachers must have creativity in learning activities to increase students' critical thinking (Southworth, 2022). Teachers and students work together with good communication to achieve learning goals. The right learning media will help students in learning the learning material. There needs to be a change from teachers to be creative in every learning process.

Innovation efforts in educational media with Smart App Creator 3 (SAC) learning media can be the latest innovation in learning. Teachers must be able to keep up with the times so that students can be accepted easily and interestingly. Based on research conducted by Abdul Rouf (2022), it was found that class X students of SMA Negeri 1 Nalumsari Jepara were helped by the Smart App Creator 3 (SAC) media in learning history.

In Nurseto (2011) states that the requirements that must be met for learning activities are easy to see, interesting, simple, useful, and structured. The Smart App Creator 3 (SAC) application is easy to use because it can be accessed through the android that students have. Students are more interested in the application on the gadget than with the package book.

Based on interviews conducted with history teachers, Mr. Yoga Ardy Wibowo, S.Pd, the use of learning media is only in the form of power point. Students prefer media that can display visuals of the material at SMA Negeri 3 Magelang. It is necessary to develop learning media that can display visuals of the material but not in the form of power point. Smart App Creator 3 (SAC) is a media that can display images, text, video, and sound through each student's smartphone.

Interest in learning is the tendency of students to pay attention to various activities. Student activities that students are interested in and pay attention to continuously accompanied by pleasure will get a sense of satisfaction (Slameto, 2013).



Students who have an interest in learning history, will pay attention to learning history continuously. A sense of interest will lead to satisfaction by students in learning history.

The interest in learning history of SMA Negeri 3 Magelang students who refer to textbooks has low results. This is evident in giving random questionnaires to 36 students showing that 28 students (72.2%) have low interest in learning. The development of this media will be able to increase students' interest in learning because students will have a variety in learning, namely using smartphone applications. Smartphones can not only be used for social media, but can be used for positive learning activities.

The Smart App Creator 3 (SAC) application can be easily accessed by teachers and students. This application can be included in Google Play and downloaded via an Android smartphone. So that it can be flexibly used while at school or at home. Teachers are easier to provide an overview of the material to be given and students are easy to read from home. Researchers have conducted observations at SMA negeri 3 Magelang where most students use android smartphones. This media also has the advantage of being used as a learning evaluation tool using quizzes. History learning material is very broad in high school. This media is suitable because it can be a media that can accommodate comprehensive history learning materials. From this, the researcher raised the title "Development of Smart App Creator 3 (SAC) Learning Media in History Learning to Increase Student Learning Interest at SMA Negeri 3 Magelang".

## **METHOD**

In this study using the R&D method. The Research and Development (R&D) research method is a research method to produce a research product (Sugiyono, 2016). The product is then tested for feasibility. This research uses the ADDIE model which consists of Analysis, Design, Development, Implementation, and Evaluation (Benny, 2009: 125). Through the ADDIE model, this research is more systematic and carried out step by step so as to produce learning media.

This research was conducted at SMA Negeri 3 Magelang with a small-scale trial sample of 34 students, while the large-scale trial sample was 108. Data collection was done with several stages including observation, interview, and lifting. In the observation stage, researchers directly observed teaching and learning activities. The interview was conducted to obtain in-depth information related to the research, while the questionnaire was for expert validation related to the product developed. The questionnaires in the study consisted of media expert questionnaires, materials, small and large scale trials, and learning interest. For validation is divided into two namely content and construct. As for technical data analysis, namely media development and student learning interest.





## RESULTS AND DISCUSSION

### 1. Development Results

Media development uses the Smart App Creator 3 (SAC) application. The development objective is to produce learning media that can facilitate the process of teaching and learning activities in history subjects and increase student interest in learning at SMA Negeri 3 Magelang. The materials in this development product are the stages of historical research for class X, colonialism and imperialism for class XI, and the threat of national disintegration for class XII.

Stages in developing this application with the ADDIE model. Description of product development as follows:

#### 1) Analysis

The initial stage in conducting research and development with the ADDIE model is analysis. Researchers conducted a preliminary analysis and student analysis to search for problems in history learning activities at SMA Negeri 3 Magelang.

##### a. Initial Analysis

Initial analysis can be done by identifying various student problems in learning history. Based on the results of observations and interviews with Sri Sudalmi, S.Pd., M.Pd who is a history teacher at SMA Negeri 3 Magelang, there are problems in learning history experienced by students, namely (1) Students are more interested in learning media that are easy, effective, and efficient, (2) Students have low interest in using learning media, (3) Previous history lessons have never used media using the Smart App Creator 3 (SAC) application, and (4) Media helps convey material from the teacher.

From the problems found, it is necessary to get more attention in teaching and learning activities. Students are expected to easily understand the material presented by the teacher. The application of media using the Smart App Creator 3 (SAC) application will be a solution to the existing problems. Furthermore, researchers develop media because it has the advantage of clarifying material in the form of text, video images to support learning.

##### b. Student Analysis

The characteristics of students need to be analyzed to adjust to the design and development in history learning. Based on the results of the researcher's interview with Sri Sudalmi, S.Pd., M.Pd who is a history teacher at SMA Negeri 3 Magelang, several explanations were obtained about the characteristics of students, namely, (1) In learning history in class, students are often unfocused, (2) Students in participating in history learning activities are still low, (3) In the learning process, students erring use social media, and (5) In participating in the learning process, some students are not enthusiastic about using ordinary media.

From the results that the author has described above, it can be concluded that in learning history students experience difficulties. This is because history teachers are still fixated on textbooks and use simple media in compiling media and teaching materials. Based on this, the development of history learning media using the Smart App Creator 3 (SAC) application is offered. This media development aims to improve the professionalism of history teachers and overcome student learning problems.



2) Design

The information written in the analysis stage, then the next stage is design. This stage is the stage to create an overview of media development using the Smart Apps creator 3 (SAC) application. The following are the steps in making media, namely:

a. Flowchart

In explaining the flow of processes in learning media with the Smart App Creator 3 (SAC) application, it is assisted by Flowchart. Flowchart can be seen in the attachment.

b. Storyboard

The guide to designing the developed product to use the Smart App Creator 3 (SAC) application is assisted by creating a storyboard.

c. Collecting content

The content in this step was created with the canva application and collected from sources on the internet. The content in question are images and buttons. Images are created using the canva application. While buttons are taken from internet sources. Prototype (design) content is made based on the flowchart and design that has been made.

1) Title Text

This Smart App Creator 3 (SAC) application product is named "Si RaRa". Si RaRa is taken from the word History Learning System. This system aims to assist teachers in conducting history learning in the classroom.




**Figure 1.** App Title Text

2) Button

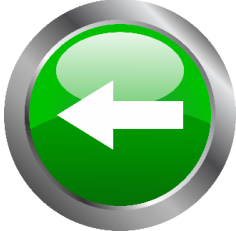

The button functions created in this application are described in the following table.

**Table 1.** Button Functions

No	View	Description
	Home	
1		Serves to go to the home page
2	Class Selection	Function to call students to choose classes according to conditions








No	View	Description
	<b>KELAS X</b>	
	Back	
3		Function to go to to the previous page
	Play a Song	
4		Function to play and turn off the song (sound)


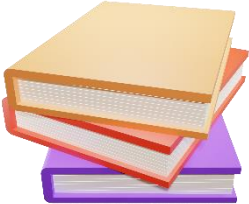
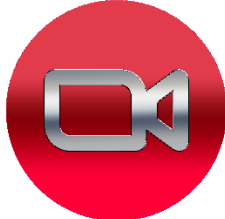

3) Images and Characters

This media does not provide images as templates. Therefore, researchers took pictures and characters from the internet. The images chosen are of course those that can be freely disseminated. The images and characters are described below:

Table 2. Images and Characters

No	View	Description
	Temple Icons	
1		The temple icon is used to clarify the material in class X material on the stages of historical research.
	Time Icon	
2		Time icons are used to clarify the material in class XI on the arrival of Westerners to Indonesia.
	Home Icons	
3		Home icons are used to clarify the material in class XII on the Threat of National Disintegration.
4	Note Icon	The note icon is used to show the Learning Outcomes/Learning Objective Pathway



No	View	Description
		
5	 Video Icon	The book icon is used to show Learning Materials
6	 Light Icon	The video icon is used to show history learning videos
7		The light icon is used to show Practice questions

#### 4) Making Materials

Making material is made in the form of text directly on the media. The material is adapted to the material taught at SMA Negeri 3 Magelang. The following are some of the materials delivered through this application, namely:





Tabel 3. Material

No Material display

Class XI Materials

1

**Kedatangan Belanda di Indonesia**

Pada mulanya pedagang Eropa membeli rempah-rempah di Konstantinopel, Turki. Kemudian Raja Turki Utsmani menguasai Konstantinopel dari tangan Romawi. Hal tersebut mengakibatkan adanya penjelajahan samudra oleh bangsa Eropa untuk membeli rempah-rempah ke daerah asalnya. Penjelajah berasal dari Portugis, Spanyol, Inggris dan Belanda. Portugis dan Spanyol berlayar sampai ke Indonesia dan bertemu di wilayah Maluku. Keduanya berakhir dengan peperangan yang dimenangkan oleh Portugis. Portugis menguasai Indonesia sebelum datangnya Belanda. Belanda datang ke Indonesia di bawah Cornelis de Houtman yang berlayar berlabuh di Banten. Pada tahun 1602 dibentuk VOC untuk menghindari persaingan dagang antar pedagang Belanda. VOC memiliki hak istimewa yaitu, monopoli perdagangan, mendirikan benteng, mencetak uang, menyatakan perang, mengangkat pegawai, dan mengadakan perjanjian. VOC mundur karena banyak pegawai yang korupsi. Akhirnya VOC dibubarkan tanggal 31 desember 1799.

2

**Masa Pendudukan Perancis**

Daendels merupakan gubernur Jenderal dari Belanda akan tetapi memerintah Indonesia atas perintah Perancis karena Belanda jajahan Perancis. Daendels menerapkan sistem kerja rodi (kerja paksa). Kebijakan ini sangat membatalkan bagi bangsa Indonesia. Tugas utama Daendels di Indonesia adalah mempertahankan pulau Jawa dari serangan Inggris. Akan tetapi Daendels berakap kasar sehingga digantikan Jan Williem Jansenn. Jansenn tidak dapat mempertahankan pulau Jawa dari serangan Inggris.

Kebijakan Masa Daendel antara lain:

- a. Membangun jalan dari Anyer sampai Panarukan
- b. membangun pabrik senjata dan benteng pertahanan
- c. prangor steteel
- d. memberlakukan kerja rodi

3

**Masa Pendudukan Inggris**

Pergantian pemimpin Indonesia dari Inggris ke Belanda tertuang dalam konvensi London. Van Den Bosch menerapkan program Tanam Paksa (cultuur Stelsel) untuk mendapatkan keuntungan yang banyak dalam waktu singkat. Rakyat menanam tanaman yang sudah ditentukan oleh Belanda, yaitu Kopi, The, Tembakau, dan Kina.

Aturan Tanam Paksa:

- a. Tanah yang diberikan tidak lebih 1/5
- b. Tanah bebas pajak
- c. Kelebihan hasil panen dikembalikan
- d. kegagalan panen menjadi tanggung jawab pemerintah
- e. Rakyat yang tidak memiliki tanah bekerja selama 66 hari





No Material display

4



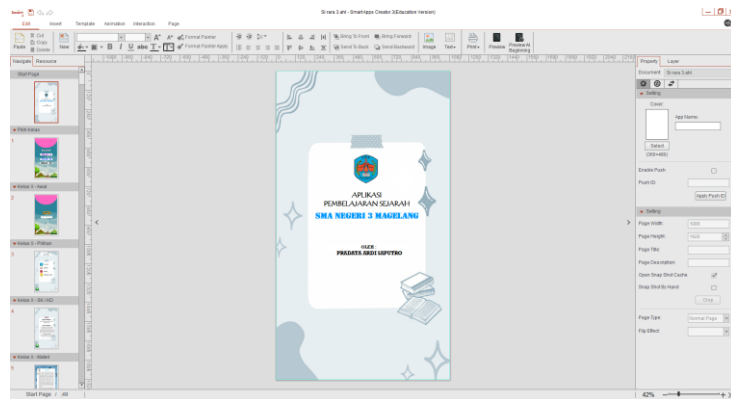
5) Combining Content

At this stage is combining content in one document in the Smart App Creator 3 (SAC) application. The following is the product display design in the Smart App Creator 3 (SAC) application.

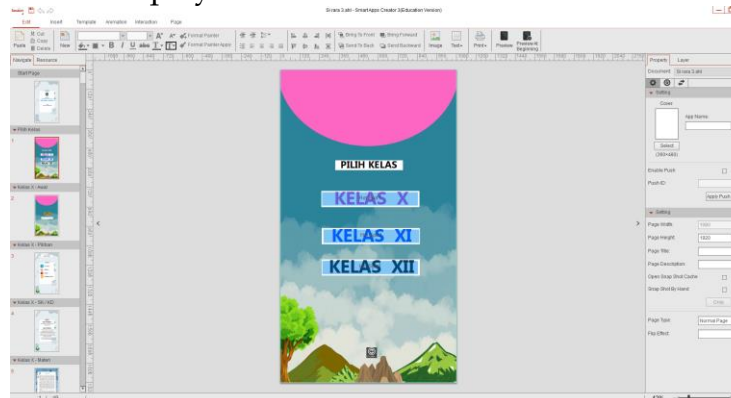
Table 4. Product Display

No Product Display

1 Initial View



2 Menu Display



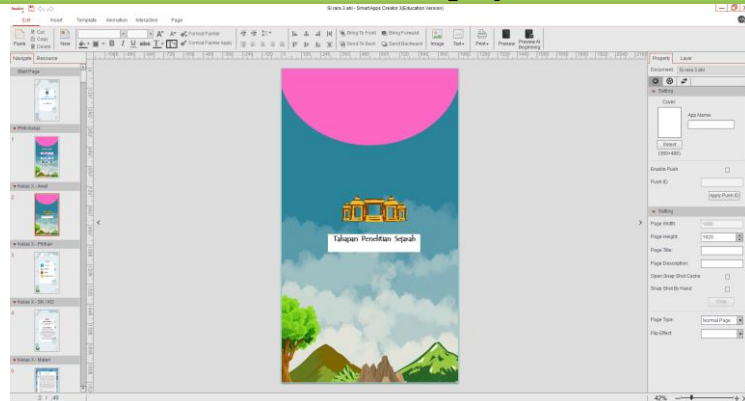
3 Class X Material Display



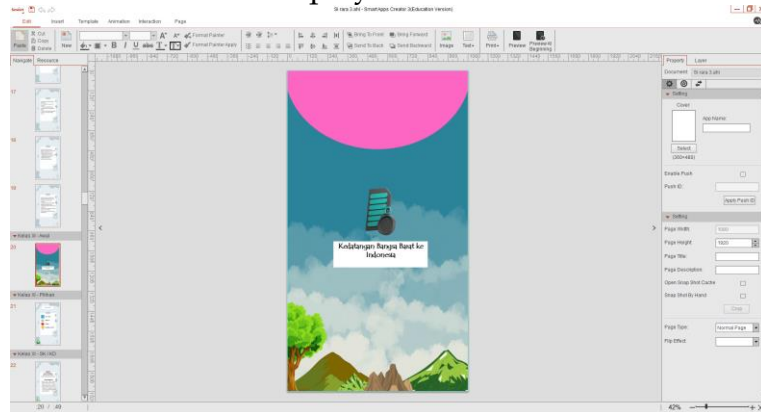


No

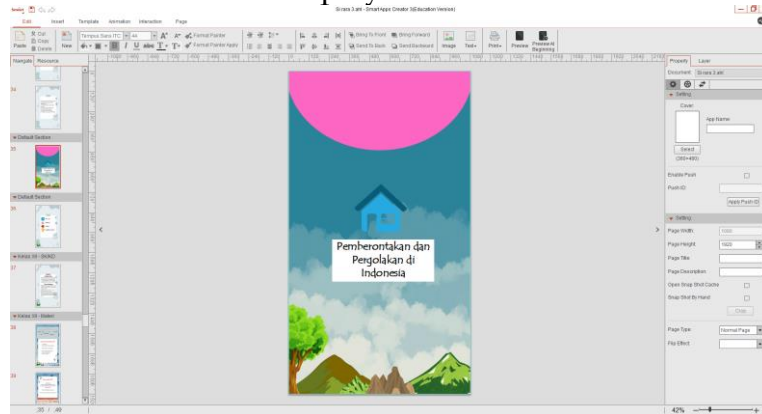
**Product Display**



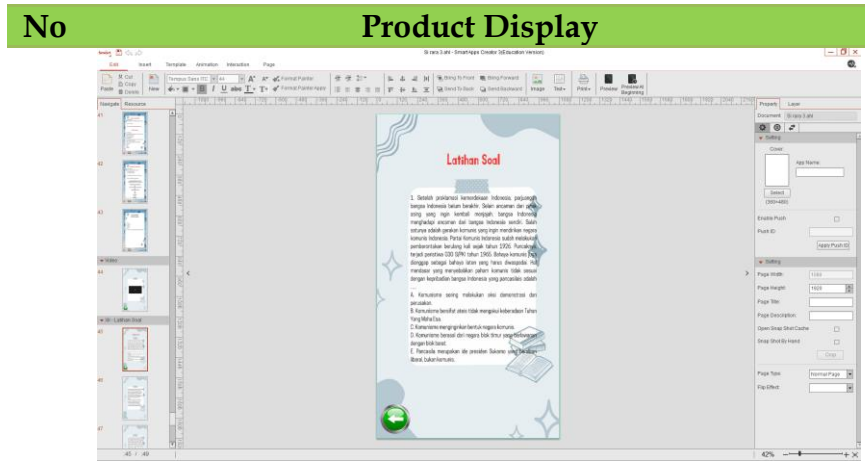
4 **Class XI Material Display**



5 **Class XII Material Display**



6 **Exercise Problem Display**



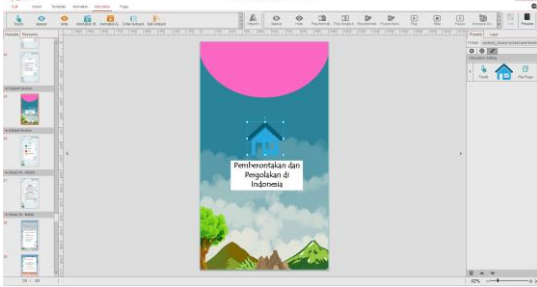
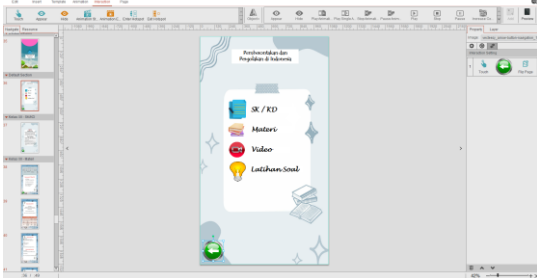
3) Development

a. Building Products

Table 5. Function assignment on product display

No	Function Granting Display	Description
1	Class Menu Button Function	Class button function to set the function on each class/level
2	Temple Icon Function	Temple icon function to set the function to class X material
3	Note Icon Function	The note icon function is for setting the function to CP/ATP
4	Home Icon Function	Home icon function to set the function to go to class XII material



No	Function Granting Display	Description
5		
		Back button function to set the function to the previous page

The application is then exported to an Android Application (Apk) file after merging. Then the file is uploaded to the google play store, so that it can be downloaded via the address:

<https://play.google.com/store/apps/details?id=com.sirara.smartapps>

b. Conduct Material and Media Expert Validation

The product that has been compiled, then carried out product testing to experts. Expert assessment to assess the validity of media products. Product validation was carried out by validating media experts and material experts. The two validators gave their assessment of the developed product.

**Table 6.** Material Expert

No	View	Description
1	Clarity of Learning Objectives	8
2	Language Usage	15
3	Suitability of material with syllabus	6
4	Correctness of the material	7
5	Contextuality	7
6	Completeness of supporting material	17
7	Attracts attention	9
8	Accuracy of sentences and terms	10
9	Appropriateness of evaluation with learning objectives	15
	Total	94

Based on the table above, the value of the aspects assessed gets a total score of 94 with a good assessment. Learning media gets a good assessment and is suitable for use with revision.



**Table 7. Media Expert**

No	Indicator	Total Value
1	Efficiency	8
2	Reliability	8
3	Ease of use of the guide	9
4	Accuracy of software selection	8
5	Guidance program packaging	10
6	Communicative	6
7	Creative	8
8	View	8
9	Use of sound	6
10	Use of color	6
11	Navigation icons	6
12	Picture/video	7
13	Text	6
14	Clarity of guidance in the use of media	3
15	Smoothness in media operation	4
	<b>Total</b>	<b>103</b>

From the table above, the value obtained by the total score of 103 is included in the good assessment. Based on the data from the material expert validation results above, the media received a good assessment and is suitable for use.

#### 4) Implementation

Implementation of media in the history learning process when media products have been declared feasible or very feasible. This is through an assessment conducted by experts so that there is a need for repeated confirmation. After everything is declared feasible, the next process is media implementation.

Media implementation was carried out at the small group trial stage with a total of 34 students. The class used was class XI SMA Negeri 3 Magelang. The research was conducted on Monday, August 24, 2023 at SMA Negeri 3 Magelang. Furthermore, the large group trial was conducted by making 108 students from class X, XI, and XII SMA Negeri 3 Magelang. The details are 36 students from class X, 36 students from class XI, and 36 students from class XII SMA Negeri 3 Magelang with different students from the small group trial. The large group trial was conducted on Monday, September 3, 2023. The purpose of the implementation stage is to determine the implementation of the use of media in the learning process.

##### a. Small Group Trial Results

The trial, which was attended by 34 students as a sample, aimed to get responses related to the media based on students in grades X, XI, and XII of SMA Negeri 3 Magelang before being used in a large group trial. The class used as a sample was 34 students of SMA Negeri 3 Magelang. At this stage of the trial there are two aspects to see how students respond, these aspects include material aspects and media aspects. The information about the assessment results submitted by students is as follows.





**Table 8.** Small Group Trial Results

Respondents	Total Value	Classification
R1	87	High
R2	87	High
R3	91	High
R4	76	Simply
R5	71	Simply
R6	88	High
R7	73	Simply
R8	94	High
R9	87	High
R10	87	High
R11	89	High
R12	97	High
R13	73	Simply
R14	83	High
R15	83	High
R16	74	Simply
R17	72	Simply
R18	88	High
R19	86	High
R20	87	High
R21	74	Simply
R22	76	Simply
R23	88	High
R24	87	High
R25	88	High
R26	87	High
R27	95	High
R28	94	High
R29	75	Simply
R30	87	High
R31	89	High
R32	88	High
R33	103	High
R34	120	High
Total	3095	
Average	86	High

Based on the table, it provides conclusions regarding the results of small group trials of media products that are being developed by researchers. The overall assessment concluded that this learning application product using Smart App Creator 3 (SAC) in the small group trial was included in the high classification with a score of 86.

b. Large Group Trial Results

Large group trials were conducted to obtain a collection of data in the form of student responses related to learning media using the Smart App Creator 3 (SAC) application. The class used as a sample has not studied material with topics according to the level. The number of respondents used was 108 students.



At this trial stage there are two aspects to see how students respond, these aspects include material aspects and media aspects. The information about the assessment results submitted by students in the large group trial is as follows.

**Table 9.** Large Group Trial Result

Respondents	Total Value	Classification
R1	94	High
R2	87	High
R3	90	High
R4	93	High
R5	104	High
R6	96	High
R7	97	High
R8	88	High
R9	89	High
R10	85	Simply
R11	100	High
R12	90	High
R13	92	High
R14	86	High
R15	97	High
R16	88	High
R17	99	High
R18	99	High
R19	96	High
R20	82	Simply
R21	93	High
R22	95	High
R23	98	High
R24	97	High
R25	94	High
R26	87	High
R27	88	High
R28	95	High
R29	99	High
R30	98	High
R31	93	High
R32	82	Simply
R33	91	High
R34	89	High
R35	98	High
R36	94	High
R37	98	High
R38	85	Simply
R39	100	High
R40	89	High
R41	100	High
R42	96	High
R43	96	High
R44	81	Simply
R45	78	Simply
R46	82	Simply
R47	100	High





Respondents	Total Value	Classification
R48	92	High
R49	94	High
R50	89	High
R51	90	High
R52	91	High
R53	99	High
R54	95	High
R55	95	High
R56	85	Simply
R57	90	High
R58	92	High
R59	99	High
R60	93	High
R61	94	High
R62	84	Simply
R63	86	High
R64	88	High
R65	103	High
R66	97	High
R67	91	High
R68	86	High
R69	87	High
R70	86	High
R71	97	High
R72	92	High
R73	97	High
R74	81	Simply
R75	79	Simply
R76	97	High
R77	105	High
R78	95	High
R79	93	High
R80	76	Simply
R81	87	High
R82	92	High
R83	99	High
R84	91	High
R85	91	High
R86	86	High
R87	89	High
R88	95	High
R89	84	Simply
R90	94	High
R91	99	High
R92	80	High
R93	98	High
R94	88	High
R95	83	Simply
R96	87	High
R97	90	High
R98	85	Simply
R99	91	High





Respondents	Total Value	Classification
R100	93	High
R101	84	Simply
R102	87	High
R103	87	High
R104	81	Simply
R105	81	Simply
R106	80	Simply
R107	81	Simply
R108	79	Simply
Total	9828	
Average	91	High

Based on the table, it provides conclusions regarding the results of the large group trial of learning application products using Smart App Creator 3 (SAC) that are being developed by researchers. The overall assessment concluded that this learning media product in the large group trial was included in the high classification with a score of 91.

#### 5) Evaluation

The evaluation stage is the final stage of the learning media development activity process. This stage is carried out after passing the media implementation process so as to obtain an overview of the condition data of the learning media used. The results obtained at the large group trial stage at SMA Negeri 3 Magelang had no revisions given by students. Therefore, this learning application product is ideal for learning history at SMA Negeri 3 Magelang.

### 2. Final Product Review

Learning media using the Smart App Creator 3 (SAC) application is suitable for use. Based on the material expert assessment, the value of the aspects assessed received a total score of 94 with a good assessment. Learning media gets a good assessment and is feasible to use with revision. Learning media experts gave a score of 103 including a good assessment. Based on the data from the material expert validation results above, the media received a good assessment and is suitable for use.

In the small group trial, the overall assessment concluded that the learning application product using Smart App Creator 3 (SAC) in the small group trial was included in the high classification with a score of 86. While the large group trial, the overall assessment concluded that this learning media product in the large group trial was included in the high classification with a score of 91. With these results, the product is suitable to be used to support learning in SMA Negeri 3 Magelang.

Research conducted by Khasanah & Rusman (2021) states that the development of media based on smart apps creator (SAC) based on the validator's assessment is suitable for use. The eligibility levels are 85% and 83% respectively (Khasanah & Rusman, 2021). Ansara, Okra, Efriyanti, & Musril (2023) added that in Islamic cultural material, media development using Smart App Creator (SAC) software is very effective for use in the learning process.

At the SMK level conducted by Hadinata (2023) in the history subject of media development using smart apps creator (SAC) received a very good response. In





addition, student interest and motivation have increased in classroom learning. Rezeki & Susanti (2023) in their research developed learning media based on smart app creator (SAC) on the material of the formation of the Indonesian government is effective to use and can improve student learning outcomes.

Susmianto (2022) in his research developed an android-based history smart apps creator (SACSEJ) learning media suitable for use as learning media. The material contained in his research is about the History of the Singhasari Kingdom. Besides being feasible to use in learning, the media from the development results using smart apps creator can also improve student learning outcomes (Septiani & Zakaria, 2022; Sirait & Apriyani, 2024; Surikno & Wahyuni, 2023; Syafira & Ahmad, 2023). Thus, the results of the development that have been carried out by researchers are relevant to the research study.

### CONCLUSION

The development of smart app creator 3 (SAC) learning media in learning history has produced a product. The product was developed using the ADDIE model which consists of analysis, design, development, implementation, and evaluation. Learning media with the smart app creator 3 (SAC) application was assessed by material experts with a score of 91 with good criteria while media experts scored 103 in good criteria. The assessment was carried out by 1 expert validator and 1 material validator. Therefore, the product developed by researchers is considered valid and feasible to use.

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