Development of Audio Visual Learning Media Based on Canva Application on Students Learning Interest in Geography Learning in Class X IPS SMAN 2 Dayun, Kabupaten Siak

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Abstract. This study aims to find out and analyze the development, feasibility and practicality of Canva based learning media in geography learning in class X IPS SMAN 2 Dayun, Siak Regency. The method used in this research and development 4D (Four-D Models) includes 4 stages, namely: Define, Design, Development. The results of study are: (1) the development of Canva based learning media is carried out by media testing by experts consisting of education experts, media experts, linguists, IT experts, then distributing questionnaires to experts then processing data using the SPSS application to get Interaclass Coefitien Correlation (ICC). From data processing, the ICC result is more than 0,50, so it can be concluded that the level of validation is adequate; (2) the development of canva based learning media can be declared very feasible after processing the data, feasibility can be measured using a questionnaire, questionnaire obtained from the teacher's response questionnaire with respondens of 2 geography teacher's can be obtained a total score of 357 with a mean of 4.58 and a percentage level of 92% with the predicate "very good"; (3) the development of canva based learning media can be stated to be very practical after processing data. From the results of the study, the data obtained using student response questionnaire were processed using Microsoft Exel so that from processing the data obtained 2829 and obtained a mean of 4.57 and a percentage of 91% with the "very practical" category.

Keywords: Learning media · canva · interest to learn

1 Introduction

Education is very important for generation of the younger generation, in the advancement of good education science and increasing knowledge of human resources in a country, especially the unitary state of the republic of Indonesia. Every teacher and student appreciates understanding technology because it is so smart and sophisticated todey in an effort to raise the standart of education. Providing learning materials such as learning media, teaching is one of the good, effective teaching techniques, and following technological advances, as a tool or intermediary in the learning process learning media can be considered and students in order to realize effective and technology-based learning [1].

The impact of the rapid advancement of technology on education cannot be separated from the era of globalization. In order to improve the quality of education. The world of education must continue to adapt to technological advances. Teaching materials are needed that can change the learning process in the classroom into activities that encourage student involvement, foster teaching creativity in producing interesting media and do not take much time to make. Whereas the media serves as a vehicle for disseminating knowledge [2].

The learning method is one of the important elements in learning. The dynamics of interesting learning is largely determinet by the method used by the teacher during the learning process [3]. Therefore, the learning method is a decisive element in the learning system to make learning more interesting and make it easier for students to understand the teaching content delivered by the teacher.

The use of learning media greatly benefits from this technology. Modern technology is available in the form of applications that can be used in education. Canva is a program that can be used in media creation. A platform for graphic design called Canva is used to create social media graphics, documents, posters, presentations and other visual content. In addition, the software many design examples that can be used. There are two categories of services offered by Canva: free and paid. Using Canva's graphic design tools, you can quickly and easily create and design a variety of imaginative designs. There are many versions of Canva, including online, android, and iphone. Canva can be producet both offline and online. Design everything from brochures to films, presentations, advertisements and infographics, Canva can help you understand course material [4].

According to Nasution in [5], the following are some of the benefits of using learning media as a tool, namely: (1) Learning that attracts students' attention and inspires them to learn. (2) Teaching materials are clarified to help students understand their meaning and achieve learning objectives well and can master the material. (3) Varied learning methods and not merely verbal communication through the teacher's spoken words so that students do not get bored and teachers do not run out of energy. (4) Students are involved in additional learning activities because they do not only listen to the teacher'sexplanation.

Febliza and afdal (2015:50) in [6], Explain that using media with sound and image components is known as the use of audio-visual media as teaching aids, using the senses of sight and hearing in the process of absorbing learning material.

Based on teacher interview observation at SMAN 2 Dayun, Kabupaten Siak on September 26,2021. At this time the school has conducted limited face-to-face learning (PTM) and classroom are also only filled with half of the total students then the lesson hours are reduced from the usual lesson hours. During the learning process the teacher in the classroom used learning media, namely books, teaching aids such as maps, globes and also conducting discussions. Since the outbreak of the COVID-19, there have been many impacts on students, such as decreased interest and learning activities Therefore, it is necessary to have supporting materials such as audio visuals to help students understand the materials in textbooks and students to grow interest in learning, then geography learning is very broad in scope of the material being studied. The sheer amount and scope of content studied shows that the learning process in the classroom is really a bit new based on face-to-face time. In addition to connecting communication between

teachers and students, the media is also believed to be able to give students a new perspective on what they are learning about geography. They access media anywhere and anytime, with more sophisticated content than what they learn in class with limited time.

Learning is carried out in the planning, implementation and evaluation stages by educators and then applied through classical meetings supported by appropriate media, tools, and materials. The task of the teacher as a learner is to control or direct the skills and knowledge that wiil be mastered by students. Then students also play an active role in carrying out teacher intructions and completing learning objectives which are reflected in indicators of competency achievement [7].

Interest helps with concentration and will energize the learning effort. A person's learning ability will increase if it is positive it will also help him not to forget what he has learned easily, the material will feel very heavy if you learn to feel unhappy [8]. Learning geography in high school aims to design and help students develop their understanding of geographical phenomena in complex social, environmental and regional contexts [9].

2 Methods

2.1 Types of Research

This study uses research and development (R&D). According to Sugiono (2013:407) [10], research and development is a research method used to produce certain products and test the effectiveness of these products. Research and development used is the 4D model. According to Thiagarajan (1974) in [11], states that 4D research and development is an extension of Define, Design, Development, and Dissemination. The purpose of this study was to create audio-visual learning materials based on the Canva application for the geography class of class X IPS at SMAN 2 Dayun, Kabupaten Siak. In the following, the research her describes the research and development procedure.

2.2 Research Time and Location

This research was conducted at SMAN 2 Dayun, Kabupaten Siak. The time of the research was carried out in the event semester of the 2021/2022 academic year in class X SMAN 2 Dayun.

2.3 Population/Sample/Research Trial Subject

The subjects of this research trial were students of class X IPS 1 and X IPS 2. SMAN 2 Dayun, Kabupaten Siak. For the academic year 2021/2022. Respondents used in the study were teachers and students. For this reason, more details regarding the number of test subjects in this study can be seen in the Table 1.

2.4 Types and Sources of Data

The data used in this study are primary data sourced from questionnaire validation sheets distributed to respondents. And secondary data is data obtained from ready-made data, which has been collected and processed by other parties. Secondary data was obtained from the geography subject teacher of class X IPS SMAN 2 Dayun, Siak Regency.

Tabel 1. Research Trial Subject

No	Kelas	Jumlah
1	X IPS 1	28
2	X IPS 2	27

2.5 Data Collection Technique

Obsevation. To obtain data the researchers conducted observations. Observation in this study were to make observations about students, the materials used and school conditions for the development of Canva audio-visual learning media.

Questionnaire Uestionnaire is a data collection technique that is done by giving a set of questions or written statements to respondents to answer. This method is used to collect data on student responses to the learning media used by the teacher (sugiyono,2013:199) [10] the questionnaire in this study was needed to obtain response data from media experts, material experts, teachers and tudents to see their views on the development of learning media designed using the canva application in geography subjects.

Documentation. According to Sugiyono (2017:240). Documentation is a record of events that have passed. This documentation can be in the form of writings, picturest and monumental works of someone. In this study, it is in the form of photos during product validity testing activities as well as notes on suggestions from media experts, material experts, teachers, who use media and students.

2.6 Data Analysis Technique

Development Media Audio Visual Canva. The development of this learning media uses qualitative data collection techniques, namely by conducting interviews. According to siswanto (2011:58) interview is a way of collecting data by asking questions to respondents directly. This is done byinterviewing the use of questions quidelines that are arranged based on the importance of the problem to be studied. Therefore, a validation analysis of Canva's audio-visual media was carried out.

The development of Canva application-based geography learning, media or media products wiil be adapted to the 4D model development procedure, namely Define, Design, Development, and Dissemination. The technique between raters generally uses intraclass correlation coefficients for analysis of research instrument validation using the ICC formula:

If the variation between instruments is assumed to be random, then the ICC formula:

$$ICC = \frac{\sigma^2_{Objek}}{\sigma^2_{objek} + \sigma^2_{instrumen} + \sigma^2_{error}}$$

If the instrumentvariation is assumed to be constant or negligible, then the ICC formula is:

$$ICC = \frac{\sigma^2_{Objek}}{\sigma^2_{objek} + \sigma^2_{instrumen} + \sigma^2_{error}}$$

Information:

σ^2_{objek} = the size of the variance of the research object
$\sigma^2 instrumen$; σ^2_{error} = variance due to random factors

Feasibility Analisis. Assessing the feasibility of learning media on the subject of geography in class X IPS SMAN 2 Dayun, Kabupaten Siak. After the data is obtained, it is then carried out to see the weight of each response and also calculate the average score with the following formula [13] (Table 2).

$$\text{Xi} = \frac{\sum s}{s_{max}} \times 100\%$$

information:

S_{max} = maximum score
$\sum S$ = total score
Xi = the value of the eligibility of each aspect of the questionnaire

The eligibility category is based on the following criteria according to Arikunto in [14] (Table 3).

Practical Analisis. Practicalitas data analysis can be obtained from the instrument of observing the implementation of lesson plans, teacher and student response questionnaires to the developed Canva audio-visual media. The value of practicality is carried

Table 2. Criteria Statistik ICC

ICC	Kriteria
ICC < 0,4	Poor
0,4 ≤ ICC < 0,75	Fair to good
ICC ≥ 0,75	Excellent

Sumber: (Zaki, 2017) dalam [12].

Table 3. Eligibility Level

Score in percent	Eligibility category
<21%	Very unworthy
21–40%	Not worthy
41–60%	Enough worthy
61–80%	worthy
81–100%	Very worthy

Sumber: [14].

Table 4. Level Prakticalitas

Interval	Kategori
86%–100%	Very practical
76%–85%	Practical
60%–75%	Enough practical
≤54%	Very not practical

(Sumber: [15]).

out using the following formula:

$$\text{Practical value} = \frac{total\ score\ obtained}{the\ highest\ number\ of\ scores} \times 100\%$$

After the percentage is obtained, then the grouping is carried out according to the modified criteria according to [15] as follows (Table 4).

2.7   Analisis Technique

Step Define. The purpose at this stage is to emerge by finding the basic problems that will be faced in learning. In this study using 5 steps taken by the author.

Preliminary Analisis. The first is done to identify the underlying problrm with media development. Facts and alternative solutions are raised at this point to make it easier to determine the initial steps in producing the right media to be developed.

Student Analisis. The purpose of this student analysis is to example the charachteristics of students. Knowing learning difficulties and situations is very importhant. The student in questions has the following characteristics: (1) initial competence and background skills. (2) general attitudes or ways of thinking about learning problems. And (3) the choice of media. Format and initial design. The results of this analysis will determine how to present the product developed.

Concept Analysis. Concept analysis aims to define concepts related to the material and describe relevant facts. These ideas will be arranged methodically and in detail and then embedded into canva based learning media.

Task Analisis. Task analisis is the process of collecting information to identify lesson content that describes the task of teaching material content that is integrated into the resulting learning media product. Based on the 2013 curriculum, the material has been modified to discuss core competencies (KI) and basic competencies (KD).

Formulation of learning objectives. The formulation of learning objectives is carried out to formulate the result of the concept analysis into the objectives that mush be achieved by students. A series of learning objectives or indicators of achievement of learning out chomest are based on the basic competencies and indicators listed in the 2013 curriculum.

Design Stage. The media or product developed is a programmable Canva application based on material analysis, indicators, and learning competencies.

Develop Stage. At this stage, based on input and comments from experts as well as test results data, the final form of learning media was born after going through several revisions. At this stage the steps taken are as follows: at this stage the steps taken are us follows:

Expert Validation. The validity of the media is determined based on the theory of experts and practitioners. In this study, the validators consisted of media experts, linguists, educations experts, IT experts and geographers. The validator will be asked to validate the media that has been produced at the design stage. Suggestions from the validator are used as a basis for revising the learning media that was developed based on the results of the development carried out.

Product Implementation. The revised learning media will then be tested. This trial will be carried out in one class only to get input from students and reahers in the field on the learning media that have been used. The class that will be selected for the trial is class X IPS 2 with a total of 27 observations. The implementation of the trial was carried out by the geography subject teacher. This series of trials consists of a learning process.

Tahap dissemination. In this study, the dissemination stage refers to the process of distributing interactive media that has been mode on a larger scale and introducing learning media that will be prepared for use by teachers and students in the classroom in using learning media. In this process, the researchrs conducted distributions in the same school but only in this different classes, due to incompetence and lack of adequate time and funds.

3   Results and Discussions

The result of this research is a product developed in the form af audio-visual learning media based in the Canva application on students interest in learning about the dynamics of the lithosphere and its impact on life of class X social sciences in the odd semester. This learning media is used to see the results of students interest in learning when using learning media in the form of applications at SMAN 2 Dayun. The type of research is research and development (Research and Development) which has 4 stages. This stage consists of define, design, develop, and disseminate. Some of these stages can be seen below:

3.1   Development of Application-Based Learning Media

Define Stage. This definition stage contains facts and a series of needs in learning the material of lithosphere dynamics and its impact on life at SMAN 2 Dayun.

Design Stage. This design stage is carried out by designing the product at the beginning of the design to make learning media based on the canva application on the lithosphere dynamics material and its impact on the life of the media that will be developed designed with technological media according to the material in achieving learning objectives.

From the Table 5, it can be seen from the value of the results of expert validation data processing, namely Cronbach's alpha value is 0.995 and then also the interclass

Table 5. Interclass coefitien correlation

| No	Data	Alpha Cronbach's	ICC	Keterangan
1	Validasi	0,995	0,982	Excellen

coefficient correlation (ICC) it is Excellent or it can be concluded that the validation level is valid (Fig. 1).

Develop Stage. At this stage the development of learning media is carried out as well as revisions to the appearance of the media in the application used. In making this media, it is done using the Google Drive application and then converted into APK format using the APP GEYSER link. Below is a picture of the learning media in the development stage of the process (Fig. 2 and 3).

Dissemination. At his stage of dissemination, researhers have carried out dissemination activities aimed at seeing whether the media developed were successful or not in the learning media developed at SMAN 2 Dayun. At this stage the researchers at the school conducted a practicality test stage to get the teacher's response by giving a questionnaire
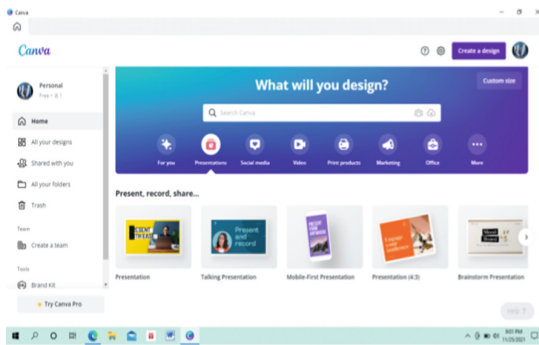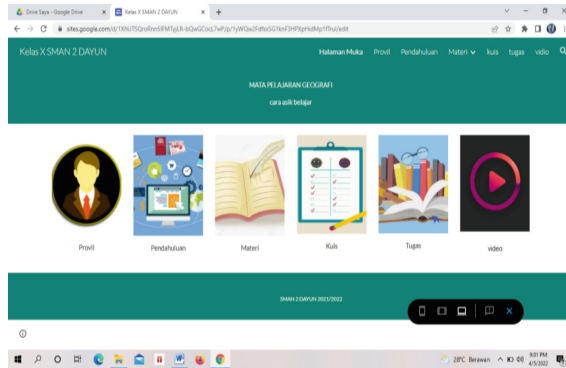

Fig. 1. Canva Application Preview
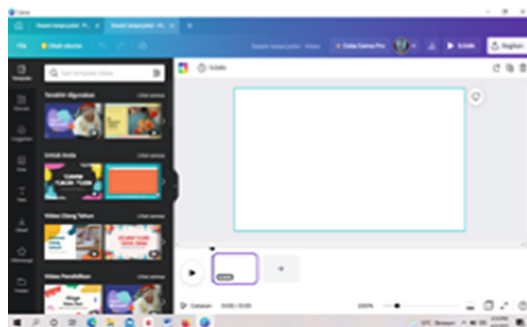
Fig. 2. Templates Create Media

Fig. 3. Display that has been mode into an application using the google site

Table 6. Indikator Conclusion

No	Indikator	3	Mean	%	Ket
1	Aspects of material relevance	368	4.543	91%	Very worthy
2	aspect Material organizing	1688	4.466	89%	Very worthy
3	aspect Language	247	4.574	91%	Very worthy
4	Aspects of learning strategy	1205	4.84	97%	Very worthy
5	aspect Software engineering	488	4.519	90%	Very worthy
6	Aspect visual	853	4.513	90%	Very worthy
rata-rata		4849	4.57	91%	Very worthy

and providing learning media in the form of an application. After that, it has also been distributet to students doing practical tests to see student responses to learning media in the form of applications. Learning media is published from the internet so that it can be easily downloaded by respondents, publishing is easy and free so that students can repeat lessons anywhere and anytime (Table 6).

3.2 The Feasibility of Learning Media

At his stage, the feasibility of the product developed to see whether of learning media is feasible or not will be carried out, a media test will be carried out through a questionnaire conducted by 2 Geography teachers, then the data is processed using Microsoft Exel can be seen from the following Table 6.

From the respondent table above, data collection was obtained from questionnaire and then operated into Microsoft Excel, it can be concluded that the average level of achievement of the indicator responders is 92% and the description is "very good" so that the media products developed in this study have a very feasible level of feasibility to help the learning process geography. Below is a table of percentage results in the bar chart as follows (Fig. 4):
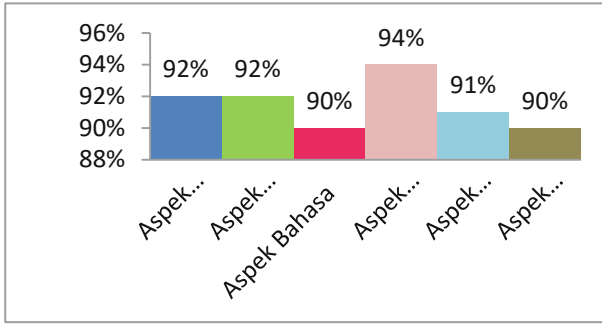
Fig. 4. Indicator bar chart

Table 7. Indikator Conclusion

NO	INDIKATOR	Σ	Mean	%	Ket
1	Aspects of material relevance	46	4.6	92%	Very Good
2	aspect Material organizing	119	4.6	92%	Very Good
3	aspect Language	18	4.5	90%	Good
4	Aspects of learning strategy	47	4.7	94%	Very Good
5	aspect Software engineering	64	4.57	91%	Very Good
6	Aspect visual	63	4.5	90%	Good
	Rata-Rata	357	4.58	92%	**Very Good**

3.3 Practicality of Learning Media

At his stage the practicality test of learning media products is carried out to be able to see the practical level of the developed media which is carried out to students in the implementasi calss (X IPS 2) so that the results can be seen below Table 7:

From the Table 7 consisting of 28 respondents above, data collection obtained from questionnaire measurements then operated into Microsoft Exel, it can be concluded that the average level of achievement of the indicators respondent is 91% and the description is "very practical" so that the media products developed in this study are in the very practical category. Used by students in learning to help the learning process of geography and make it easier for students to use the products developed. Below is a table of percentage results in the bar chart as follows (Fig. 5).

3.4 Descriptive Analysis of Learning Outcomes

In this descriptive analysis look at learning outcomes after using the developed application, therefore a descriptive analysis of learning outcomes is carried out. So that it will be seen an overview of learning outcomes in the implementation of learning media products in the form of applications while the control class only uses the lecture method or does not use learning media aplications. It can be seen in the Table 8.
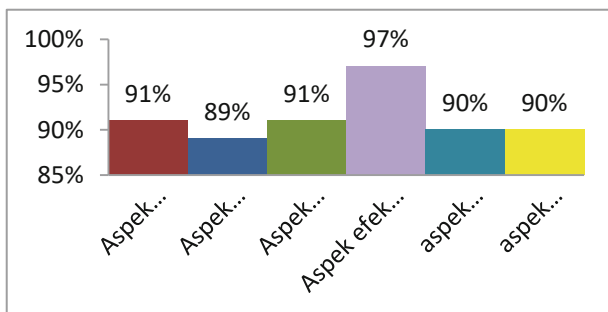
Fig. 5. Indicator bar chart

Tabel 8. Distribution of learning outcomes

No	kelas interval	kelas implementasi		kelas kontrol	
		Fa	**Fr**	**Fa**	**Fr**
1	36–46	0	0%	5	18%
2	47–57	4	15%	4	14%
3	58–68	3	11%	8	29%
4	69–79	4	15%	5	18%
5	80–90	8	30%	6	21%
6	91–100	8	30%	4	0%
	jumlah	**27**	**100%**	**28**	**100%**

Based on the distribution Table 8, the learning outcomes of the implementation class are at intervals of 36–46, which are 0 students (0%). Furthermore, there are 47–57 intervals, namely 4 students (15%), 58–68 intervals, namely 3 students (11%), 69–79 intervals, namely 4 students (15%), 80–90 intervals, namely 8 students (30%), the interval 91–100 is 8 students (30%), while the control class is in the interval 36–46, which is 5 students (18%). Furthermore, there are 47–57 intervals, namely 4 students (14%), 58–68 intervals, namely 8 students (29%), 69–79 intervals, namely 5 students (18%), 80–90 intervals, namely 6 students (21%), the interval is 91–100, which is 0 students (0%). From the data above, it can be concluded that there is a comparison of the frequencies of the implementation class and the control class. This implementation class has a higher average value than the control class because the implementation class uses a Canva application-based application developed by the researcher. Below you can see the distribution of learning outcomes depicted on the histogram as follows (Fig. 6):
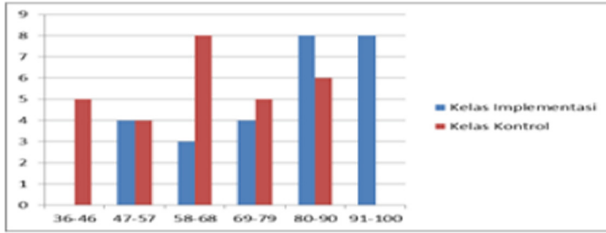
Fig. 6. Diagram learning outcomes

3.5 Discussion

In this study, the researchers used the Research and Development (R&D) development research method with a 4D model, namely Define (definition), Design (design), Develop (development), Disseminate (dissemination). The development of learning media using applications and the purpose of this research was carried out to find out and analyze the Development, Feasibility, Practicality of learning media based on the Canva application on the subject of Geography in class X IPS SMAN 2 Dayun.

First, at the development stage using the 4D model consists of four stages, namely: Defining. In the first stage the researcher analyzes and collects data or problems that exist in schools by conducting interviews with geography teachers and students at SMAN 2 Dayun after that researchers develop products and also helps teachers in the learning process and students can repeat the material made in the developed learning media.

Next is the second stage, namely the design stage, this stage is carried out in designing the learning media, the format selection process, the delivery media for learning materials and the product manufacturing process are the main basis for this stage. This learning media design contains profiles, introductions, materials, quizzes, assignments, videos and makes designs to be interesting.

Then the third stage, namely the development stage, at this stage, media testing was carried out by experts who were selected based on their expertise in assessing Canva application learning media in their field, which consisted of education experts, media experts, linguists, IT experts and material experts, this validator was selected 4 lecturer and 2 teachers for practicality. Education experts are Nila Afryansih, M.Pd, media experts are Loly Setriani M.Pd, linguists namely Asri Wahyuni Sari, M.Pd and IT experts are Anggri Yulio Pernanda, S.Kom, M.Kom. After distributing the questionnaire to the experts, processing the data using the SPSS version 22 for Windows application to get Interaclass Coefitien Correlation (ICC). From data processing, the result of ICC is 0.982. Based on the minimum standard error value of 0.50, then if the ICC value is more than 0.50 then the conclusion is the level of validation is adequate. From the results of the ICC is 0.982, it means that the validation test from the expert is adequate so that the product can be developed to the next stage in the implementation class.

Furthermore, the learning media can be tested on students in the product trial stage at SMAN 2 Dayun so that the product developed gets a very feasible and practical response when tested at SMAN 2 Dayun. The feasibility and practicality level of the researcher was obtained from the score of the questionnaire or questionnaire and the learning outcomes of the researcher did the posttest stage.

After that, the posttest stage was carried out from the experimental class and the control class after using the Canva application learning media and using the lecture method, class X IPS 2 as the experimental class and class X IPS 1 as the control class. Then a T-test was carried out to see the class differences using the Independent-Sample t-Test statistical technique with the help of the SPSS version 22 application for windows, the t-value was 3.972 and the significant level was $p = 0.000$. If the result of $p < 0.05$ means that there is a difference. It can be concluded that the results of the experimental class and the control class have differences in learning outcomes using the Canva application learning media and using the lecture method, therefore the Canva application media can help students in the geography learning process.

4   Conclusion

Based on the results of research and development that has been carried out, the conclusions are obtained, namely, Development of Canva-based learning media that has been carried out by an assessment by validators of education expert lecturers, media expert lecturers, linguist lecturers, IT expert lecturers, in order to obtain results that have been processed using the application. SPSS version 22 for windows with the Interaclass Coefitien Correlation (ICC) formula processed using the SPSS application the result is 0.982, if the value is more than 0.50 it can be concluded that the validation level is adequate. The application-based learning media canva is declared very feasible after analyzing data processing using Microsoft Exel, the result is a total score of 357 then seen from the mean is 4.58 and from the percentage level of 92% with the predicate "Very Good". Application-based learning media canva can be declared practical after analyzing data processing from research results obtained from questionnaires and conducting practicality tests, the result is a total score of 4849 then seen from the mean is 4.57 and from the percentage level of 91% with the predicate "Very Practical ".

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