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Development of History Learning Media Based on TPACK Assisted by Ms. PowerPoint Integrated with Ispring Suite

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Abstract

National History Learning, which has an essential position as a character-building and student nationalism subject, is currently facing many problems. These problems include the weakness of theory, lacking imagination, state-oriented textbook references, and curricula, and the tendency not to pay attention to the phenomenon of globalization and its historical background. In learning history, many teachers still use the conventional paradigm, which is the paradigm of "teacher explains students listen". The study of history is often seen as a dull rote and rote subject. This kind of condition encourages the need to prepare instructional designs for more active, creative, and innovative history learning. One way that can be taken is using technology in education assisted by Ms. PowerPoint, which is integrated iSpring and contains three components of knowledge: subject matter knowledge, pedagogical knowledge, and technological knowledge or Technological Pedagogical Content Knowledge (TPACK). The research method used is Research & Development (R&D) method by Borg & Gall. The research procedures include 1) Preliminary Study, 2) Development of Media, 3) Implementation, and 4) effectiveness test of the product. The product effectiveness test was carried out using the experimental method. The results of the Post Test for the Experiment Class (History Learning Media based on TPACK were higher than the Control Class (using PowerPoint). This statement is proven based on the results of the SPSS 16 analysis, and it is known that it is significant at 0.000 <0.005, so H0 is rejected and H1 is accepted, which means that there is a significant difference between the experimental class and the control class after being treated. Because the mean value of the History Learning Outcomes Test for the Experimental Class = 88.138> the mean value of the History Learning Outcomes for the Control Class = 79, it can be concluded that the TPACK-based History Learning Media does prove to affect student learning outcomes.

Keywords: *National History Learning; Interactive Media; MS PowerPoint; iSpring; Technological Pedagogical Content Knowledge (TPACK)*

Introduction

Every student must be able to take advantage of the knowledge they get in daily life, for that every lesson must always be associated with its benefits in the social environment of society as explained

by Tilaar and Nugroho in Rizal et al. (2016) that education has a very strategic role in improving the quality of human resources and efforts to realize the ideals of a prosperous Indonesian nation. National history learning which has an important position as a subject to build character and nationalistic attitudes faces many problems. These problems include the weakness of theory users, lacking imagination, state-oriented textbook references, and curricula, and the tendency not to pay attention to the phenomenon of globalization and its historical background (Subakti, 2010).

Such conditions encourage the need to prepare instructional designs for more active, creative, and innovative history learning. One way that can be taken is the use of technology in education. Gilakjani, Ismail, and Ahmadi in Shavab, OAK & Gurdjita (2017) explain that the use of digital technology in learning provides learning conditions with the opportunity to create a learning environment that is rich for students, rich in information and learning resources, and can be inserted with various elements. Multimedia-based learning. The use of ICT can develop a dynamic learning resource and appeal to different senses and a variety of students' learning styles.

The development of ICT-based learning, according to Mishra & Kochler, Kochler, Mishra, Akcaoglu, & Rosenberg, and the AACTE Committee on Innovation and Technology (2007) explains that a teacher should master the knowledge of the material presented (Pedagogical Knowledge), and knowledge of technology will be used (Technological Knowledge) or hereinafter referred to as TPACK. These three pieces of knowledge must be mastered and implemented in technology-based teaching.

The development of technology is so fast. It gives a choice of software to hardware. One of the software that teachers have known in learning activities is *Ms. PowerPoint*, which can be integrated with *iSpring* in its use. *iSpring* integration in *Ms. PowerPoints* will be advantageous for history teachers to make learning media. By using *iSpring*, students do not need to record the material presented in class, they can bring the teacher's *PowerPoint* presentation file which not only contains lectures designed by the teacher before teaching, but also contains recordings of teacher explanations, both visual and graphic. In addition to presentation materials, *iSpring* also allows teachers to fill in the *PowerPoint* slides with quizzes or exercises, either in the form of multiple-choice tests or essay tests. On the quiz question, the teacher can provide feedback (feedback) as a response to the students' answers. Utilization *iSpring* for the preparation of instructional media ever undertaken by Sastrakusumah et al. (2018), which states that aided interactive learning media application *iSpring* presenter can improve critical thinking skills students in class XI Civic subjects in SMKN 14 Garut.

Based on the description above, the researchers developed a national history learning media with the research title "Development of National History Learning Media Based on TPACK assisted by *Ms. PowerPoint* Integrated *iSpring* Suite. "The purpose of this research is to develop interactive media learning media based on TPACK assisted by *Ms. PowerPoint* integrated *iSpring* suite which contains three components of knowledge which include; subject matter knowledge, pedagogical knowledge, and technology knowledge as a medium for teaching high school National History.

Method

The method used in this research is the Research and Development Method. According to Sugiyono (2011), Research and development methods are research methods used to produce specific products and test their effectiveness. The research design used is the Research and Development Design from Borg and Gall in Basri & Sumargono (2018), namely the product development carried out includes ten stages of activities, namely: (1) needs analysis, (2) media planning, (3) product development, (4) individual trials, (5) revisions, (6) small group trials, (7) revisions, (8) large group trials, (9) revisions, and (10) dissemination and reporting. Borg and Gall's research and development model were then adapted in this study into three stages of research, namely:

Preliminary Study and (Product) Model Development.

1. The limited trial includes validation expert and small-scale testing of a prototype of the product interactive media tool of learning nationwide.
2. Praise to the actual class.

The subjects used in this study were Senior High Schools in Bandar Lampung City. This study will also use several data collection techniques, namely studies, surveys, and tests of student learning outcomes. The data analysis techniques used were Preliminary Studies, Small Scale Trials and Development, and Real Class Trials through Quasi Experiments.

Finding

Problem Analysis

In accordance with the formulation of the problem, namely the condition of history learning in schools, it can be described the obstacles that are often faced by teachers and students, namely: First, National History Learning which has an important position as a character-building subject and students' nationalistic attitudes currently face many problems. Subakti (2010) explains that these problems include the weak use of theory, poor imagination, state-oriented textbook references and curricula, as well as the tendency not to pay attention to the phenomenon of globalization and its historical background. The study of history is often seen as a boring rote and rote subject. This learning is considered to be nothing more than a series of numeric years and a sequence of events that must be remembered and then revealed again when answering the exam questions. This fact cannot be denied, because it is still happening today.

Second, several education experts gave opinions about the phenomenon of historical learning that occurred in Indonesia, including Subakti in Kuswono, quoted by Juniarto Leonardus Sidabutar (2018), which stated that in the history learning process, there are still many teachers using a conventional paradigm, namely paradigm a "the teacher explains students listen". This is reinforced by the statement of Muhadjir Effendy (Minister of Education and Culture) who criticizes the way history teachers teach. According to him, history teachers lectured and told too much. Even though the function of learning history is to provide education on the history of the nation's struggle (Effendy, 2017). This kind of historical learning method has made history a boring lesson, so that students give an emotional touch at the time of learning, because students feel that they are not involved in the learning process.

Third, although the teacher already understands the importance of learning media in the smoothness of the learning process and as a support for students' understanding of national history material, the reality is that history learning only relies on learning media in the form of *PowerPoint* slides even though it is not yet optimal. It is necessary to apply innovation in the use of learning media that leads to a technological approach. The use of technology in learning can overcome the limitations of space and time, spread information more widely, quickly, so that messages can be conveyed according to learning objectives (Yuniasih, 2018).

The development of national history learning media can be pursued by utilizing technology in education. Agustin in Yuniasih, et al (2018) states that educational technology has a big impact on learning output. The development of ICT-based learning, according to Mishra & Kochler (2006), Kochler, Mishra, Akcaoglu & Rosenberg (2013), and AACTE Committee on Innovation and Technology (2008) explains that a teacher should master knowledge of the material presented (Pedagogical Knowledge), and knowledge about the technology used (Technological Knowledge) or hereinafter referred to as TPACK. These three knowledges must be mastered and implemented in technology-based teaching.

Student Analysis

Learning can be defined as a system or process of learning a student or learner that is planned or designed, implemented, and evaluated systematically so that students / learners can achieve learning goals effectively and efficiently (Komalasari, 2013). Based on a preliminary study conducted by researchers in High School in Natar District, South Lampung, it was found that there were several problems related to the learning process, namely: First, learning media is one of the learning resources used by students to train students to construct or develop their thinking from the material captured on the learning media then implement or connect to their lives. Like interactive multimedia which is composed of integrating *Ms. PowerPoint* with software *iSpring* Suite to generate the file interactive presentation which includes the audio-visual media. *ISpring* integration in *Ms. PowerPoint*.

By using *iSpring*, students do not need to record the material presented in class, they can bring the teacher's *PowerPoint* presentation file which not only contains lectures designed by the teacher before teaching, but also contains recordings of teacher explanations, both visual and graphic.

In addition to presentation materials, iSpring also allows teachers to fill out PowerPoint slides with quizzes or exercises in the form of multiple choice or essay tests. On the question of the quiz, the teacher can provide feedback as a response on the students' answers. This media is one of the learning media that can be used to build students' understanding of the material being taught as stated by Levie and Lentz in Sukiman (2012), especially visual media, suggesting that educational media has four functions, namely: Attention Function, Affective Function, Cognitive Functions, and Compensatory Functions.

The function of visual media attention is the core, which is to attract and direct the attention of students to concentrate on the content of the lesson related to the visual meaning that is displayed or accompanies the text of the subject matter. Cognitive function of visual media can be seen from research findings which reveal that visual symbols or images facilitate the achievement of goals to understand and remember information or messages contained in images. The compensatory function of learning media can be seen from the results of research that visual media that provide context for understanding text helps students who are weak in reading to organize information in the text and remember it again.

Second, in terms of the characteristics of students. One of them can be seen from the learning styles of students. The learning styles of the participants consist of several types including Visual Type (how to learn through what they see), Auditoria Students (how to learn through what they hear) and Kinesthetics Students (how students learn through motion and touch). Of these various types of learning styles, it is important for a teacher to be able to facilitate students in learning activities in order to make it easier for students to gain knowledge. Learning using multiple senses (sight and hearing) will provide benefits for students, this is in accordance with Dale's view in Arsyad (2011). Dale estimates that the acquisition of learning outcomes through the visual sense is around 75%, through the hearing sense 13%, and through the senses. other about 12%. So, one thing that the teacher can do is to create and develop learning media in the form of interactive multimedia and the use of cooperative methods in learning activities so that all students with various characteristics can achieve the learning objectives that have been set. Based on the above considerations, a historical learning media was developed with the material of the history of the Japanese occupation in Indonesia in the form of interactive multimedia which is associated with cooperative methods to improve student learning outcomes and understanding.

Competency Analysis and Formulation of Learning Objectives

The formulation of learning objectives in the development of national historical learning media based on TPACK assisted by Ms. PowerPoint which is integrated with the iSpring Suite SMA on the material of the Japanese Occupation in Indonesia is based on Basic Competencies in the 2013 Curriculum. Analyse the process of interaction between Indonesia and Japan and the impact of the Japanese military occupation on the lives of Indonesian people". Based on these Basic Competencies,

Competency Indicators are then used as the basis for preparing Learning Objectives. The learning objectives are:

1) Describe the initial arrival of the Japanese people to Indonesia
2) Describe the policies of the Japanese occupation government in Indonesia
3) Describe the various national movement organizations during the Japanese occupation
4) Describe the Japanese government's mobilization and control of economic resources and labour
5) Describe the impact of the Japanese occupation in Indonesia
6) Describe the Resistance during the Japanese occupation

Design

Selection of media formats d natural development of Media Education National Historic based TPACK assisted *Ms. PowerPoint* integrated *iSpring* Suite SMA is before the production process implemented steps that must be done is to design Multimedia Design. Learning media development must refer to the media program script that has been made previously.

1) Formulation of Multimedia Specifications

The first step in producing multimedia is the formulation of product specifications to be produced. The characteristics possessed in the National History Learning Media based on the TPACK assisted by *Ms. PowerPoint* which are integrated with *ISpring Suite* are interactive, gradual, provide feedback immediately, and are able to help students reconstruct their knowledge. The multimedia specifications developed consist of (1) Core Competencies-Basic Competencies, (2) Concept Maps, (3) Profiles, (4) References, (5) Material (6) Competency Test.

2) Flowchart Development

A flowchart is a technique used to prepare a visual presentation of the flow of a program flowchart used to describe the main parts of multimedia and to arrange these parts in a sprite sequence followed by *iSpring Suite 6.2*. A more detailed flowchart was then developed based on the first flowchart.

3) Storyboard development

After the flowchart is developed, it is continued by compiling a material script on each frame. This technique of compiling this material is called a storyboard. The storyboard displays something the user will see through the monitor screen. Storyboard preparation is simply done by writing or describing the information that will appear on the monitor screen for each starting frame from the start to the end of the program.

4) Media Production

The production stage is carried out by entering the material that has been compiled in the *Storyboard* into the computer. The resulting data is then integrated with the *iSpring Suite 6.2* program. After all these processes are complete, the next step is on the hard disk or CD which will later be used as historical learning media. The next stage is the post-production stage. The post-production stage is the period of all work and activities that occur after the learning media is actually produced. Post-production includes product revisions according to needs (results from validation), media doubling as needed, media utilization as planned.

a. Initial Design

In preparation of this manuscript is done with reference to the theoretical foundations resulting from the Assessment Library, learning media characteristics by combining conformity with the development and developmental level of students. Draft of product development of instructional media development are as follows:

1) Program Identification

a) Name of Program: National History Learning Media based on TPACK assisted by *Ms. PowerPoint* integrated *iSpring Suite* SMA

b) Characteristics of the program: Present *slides* during the Japanese occupation of Indonesia

c) Subject: History

d) Highlights: Japanese occupation in Indonesia

e) Class / semester: XI IPA / II

f) Program Format: Interactive Learning Media

2) Development Script

Learning materials that have been developed and which will be delivered to students through multimedia-based history learning need to be written and / or images called the Learning Media program. In making learning media, it must be adjusted to the needs or problems that are being experienced when learning takes place.

The completion of the program script will be divided into three columns, namely the left side for visuals, the middle for audio, and the right column for learning materials. Writing the multimedia-based History Learning program script will also be given a narrative or conversation that is not too long to make it easier for students to understand the History of Learning during the Japanese occupation in Indonesia so that its objective indicators can be achieved. Writing a script or text is a very important part of learning media. Text is easier to understand its purpose and purpose. Writing the manuscript or text in this application as a medium of explanation of the material. The manuscript or text is adjusted to the standards that will be taught to students by referring to the 2013 Curriculum for Science Class grade XI on the subject of the Japanese occupation in Indonesia.

Product Development / Testing and Implementation

a. Material Expert Assessment

This validation is carried out before the competency test, so as to minimize these errors when applied in the learning process. The material expert in the National History Learning Media based on TPACK assisted by *Ms. PowerPoint* which is integrated with the *iSpring Suite* SMA in the subject of the Japanese Occupation in Indonesia that was developed is Slamet Kamso, M.Pd is a subject teacher at High School Al Azhar 3 Bandar Lampung.

Table 1: Data on the Results of the Material Expert Validation from the Teacher

No.	Assessment	Alternative Answers Options				Average	Information
		VG	G	P	VP		
1	Content Knowledge	3	11	1	0	3.13	Good
	Number x Scale	12	33	2	0		
2	Pedagogical Knowledge	2	6	0	0	3.25	Good
	Number x Scale	8	18	0	0		
3	Presentation Aspect Feasibility	3	8	0	0	3.27	Good
Number x Scale		12	24	0	0		

Source: Learning Material Expert Trial Questionnaire

The results of the validation from material experts on this learning media for the A assessment of the Content Knowledge spec have a total value of 47 if the average is 3.13 and when converted based on a scale of 4 it is declared good, and for the assessment of the Pedagogical Knowledge Aspect it has a total value of 26 if an average of 3 , 25 and if it is converted based on a scale of 4 then the data will be good, and for the A assessment the Technological Knowledge spec has a total value of 36 if the average is 3.27 and if it is converted based on a scale of 4 then it is declared good. Overall the evaluation of material on the developed media can be stated well so that it can be applied in the learning process after being corrected with input from material experts in the form of additional information from nationalist figures who fought during the Japanese occupation in order to increase the sense of nationalism of students.

b. Learning Media Expert Assessment

Media experts who validate or evaluate National History Learning Media products based on *Technological Pedagogical Content Knowledge* (TPACK) assisted by *Ms. PowerPoint* which are integrated with the *iSpring Suite* SMA in the subject of the Japanese Occupation in Indonesia which were developed are Dr. Riswandi, M.Pd. a lecturer in the Master of Educational Technology study program, Faculty of Teacher Training and Education, University of Lampung.

Table 2: Data on Media Expert Validation Results

No.	Assessment	Alternative Answers Options				Average	Information
		VG	G	P	VP		
1	Content Knowledge	5	10	0	0	3.33	**Good**
	Number x Scale	20	30	0	0		
2	Pedagogical Knowledge	2	5	1	0	3,125	**Good**
	Number x Scale	8	15	2	0		
3	Presentation Aspect Feasibility	3	7	1	0	3.18	**Good**
Number x Scale		**12**	**21**	**2**	**0**		

Source: Learning Media Expert Trial Questionnaire

The validation results from media experts on this learning media for the assessment of the Content Knowledge Aspect have a total score of 50 if the average is 3.33 and if converted based on a scale of 4 it is declared good, and for the assessment of the Pedagogical Knowledge Aspect it has a total value of 25 if the average is 3.125 and if converted based on a scale of 4 then it is declared good, and for the assessment of the Technological Knowledge Aspect it has a total value of 35 if the average is 3.18 and if converted it is declared good. Overall, the assessment of media in the developed media can be stated as good so that it can be applied in the learning process after being corrected with input from media experts in the form of an improvement in display colour gradations so that the written text in learning media can be read more clearly.

Test the Effectiveness

The influence of the use of National History Learning Media based on the Technological Pedagogical Content Knowledge (TPACK) assisted by *Ms. PowerPoint* which is integrated with the *iSpring* Suite can be seen by conducting a student learning outcome test. This Learning Outcomes Test involved two high school schools in Bandar Lampung, namely SMA AL Azhar 3 Bandar Lampung, science class XI IPA 6 as an Experiment Class using National History Learning Media based on TPACK assisted by *Ms. PowerPoint* integrated with *iSpring* Suite and SMA Adiguna science class XI IPA 2 as a control class using *PowerPoint* learning media. The results of the calculation for history learning outcomes data on students are presented in the table below.

Table 3:Learning Outcomes

Descriptives

	Kelompok			Statistic	Std. Error
Pretest	Eksperimen	Mean		67.2353	.73983
		95% Confidence Interval for Mean	Lower Bound	65.7301	
			Upper Bound	68.7405	
		5% Trimmed Mean		67.0948	
		Median		66.0000	
		Variance		18.610	
		Std. Deviation		4.31389	
		Minimum		61.00	
		Maximum		76.00	
		Range		15.00	
		Interquartile Range		7.25	
		Skewness		.159	.403
		Kurtosis		-.739	.788
	Kontrol	Mean		66.3636	.99467
		95% Confidence Interval for Mean	Lower Bound	64.2951	
			Upper Bound	68.4322	
		5% Trimmed Mean		66.2071	
		Median		66.0000	
		Variance		21.766	
		Std. Deviation		4.66543	
		Minimum		58.00	
		Maximum		78.00	
		Range		20.00	
		Interquartile Range		5.00	
		Skewness		.443	.491
		Kurtosis		.921	.953

Source: 2020 Research Data

The experimental design that has been compiled in this study, there are 2 groups of learning outcomes that are described, namely: 1) Results of Learning History as a whole the students who take part in learning with the National History Learning media based on TPACK assisted by *Ms. PowerPoint* integrated *iSpring Suite*, 2) overall history learning outcomes of students who take lessons with Media *PowerPoint*.

History Learning Outcomes of students with National History Learning Media based on TPACK. The scores obtained in the data for this variable are through an assessment of learning outcomes as follows; The number of samples was 34 students with a score range of 15, the lowest score was 61 and the highest score was 76, with an average score of 67.235. Students' History Learning Outcomes with Learning *Power Point* Media. The scores obtained in the data for this variable are through an assessment of learning outcomes as follows; The number of samples was 22 students with a score range of 20, the lowest score was 58 and the highest score was 78, the average score was 66.36. The hypothesis in this study were tested using *Independent T-test*, before the data is necessary first tested in Test and Test Prerequisites Equality.

a. Equivalence Test

The experimental design used in this study was *The Matching Only Pre-Test-Post Test Control Group Design.* A consequence of using this design is that the two groups being compared statistically must be in the same condition before the *treatment is* given. To find out the initial state before the treatment was given (between Experiment and Control), a *Pre-Test was* administered to the two groups of

subjects to be given the treatment. In summary, the results of SPSS Version 16.00 computer processing of the pre-test data are presented as follows:

Table 4: Equivalence Test Results

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Pretest	Equal variances assumed	.026	.872	.715	54	.478	.87166	1.21866	-1.57161	3.31493
	Equal variances not assumed			.703	42.404	.486	.87166	1.23964	-1.62934	3.37265

Source: Researcher Data Processing in 2020

From the results of SPSS 16 is known to be significant 0.478> 0.05, which means there is no significant difference between the experimental class and the control class before being treated so the sample can be used for research experiments.

b. Pre-Requirements Test

The prerequisite analysis consisted of the Normality Test and the Homogeneity of Variance Test on the data obtained. Normality test is conducted to determine whether the research sample comes from population data that is normally distributed. Meanwhile, the homogeneity test was carried out to determine whether the sample came from a homogeneous population.

1) Normality Test

The normality test used here is the Normality Test using t-test. This test is performed on a variable that has two or more groups of data. According to Bernard, et al (2019), said that this test was intended to determine whether each data group came from a normal population or not. This study used the data normality test and variance using the *One Sample Kolmogorov-Smirnov test* with a significance level of 0.05. The data is declared to be normally distributed if the significance is greater than 5% or 0.05. The results of the normality test performed using *the SPSS 16.0 for Windows program* can be seen in the following table:

Table 5:Normality Test Results

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kelompok	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	Eksperimen	.142	34	.079	.938	34	.055
	Kontrol	.181	22	.059	.944	22	.241

a. Lilliefors Significance Correction

Source: 2020 Research Data

Based on the results of normality test with the *Kolmogorov-Smirnov test*, learning outcomes history shows significance level greater than α ($p>0.05$), so the data is determined to have the Normal Distribution or have a normal distribution of data.

2) Homogeneity Test

Homogeneity test is used to determine whether the population variance is equal or not. This test is also a condition of use t-test, if the population variances are not equal then t-test cannot be used as an

analytical tool. The results of the Homogeneity Test carried out using the SPSS 16.0 *for Windows program* can be seen in the following table:

Table 6: Homogeneity Test Results

		Levene's Test for Equality of Variances	
		F	Sig.
Pretest	Equal variances assumed	.026	.872
	Equal variances not assumed		

Source: 2020 Research Data Results

Homogeneity test is used to determine whether the sample data comes from populations that have the same variance. Based on the data above, it can be seen that the sample has a significance level greater than 0.05 (0.872> 0.05). So, it can be concluded that the sample of learning outcomes from the population has the same variance.

c. Hypothesis test

The experimental design used in this study was *The Matching Only Pre-Test-Post Test Control Group Design.* The use of this design is to see the results of the two groups being compared statistically in the final state after the *treatment is* given. To determine the final state after the treatment was given (between Experiment and Control), a *Post Test was* administered to two groups of subjects who were given different treatments, namely learning media. Hypothesis testing in this study using t-test. The results of the Hypothesis Test were analysed using the help of the *Statistical Product and Service Solution* (SPSS) program version 16.0 *for windows which* can be seen as follows:

Table 7: Hypothesis Test Results

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Posttest	Equal variances assumed	.408	.525	5.942	54	.000	8.28877	1.39505	5.49186	11.08568
	Equal variances not assumed			6.130	49.457	.000	8.28877	1.35212	5.57222	11.00532

Source: 2020 Research Data Results

From the results of the SPSS 16 analysis, it is known that it is significant at 0.000 <0.05, so H 0 is rejected and H 1 is accepted, which means that there is a significant difference between the Experiment Class and the Control Class after being treated. Because the mean value of the History Learning Outcomes in the Experimental Class (the group using the TPACK-based History Learning Media) = 88.47> the mean value of the History Learning Outcomes for the Control Class (the group using Ms. PowerPoint learning media) = 80.18, so it can be concluded that the History Learning Outcomes those who use TPACK-based History Learning Media are higher than those who use History Learning Media using PowerPoint Media. The comparison of the average value of the group using TPACK-based History Learning Media and the group using Power Point Media can be seen in the following figure:

Conclusion

The results of the Post Test for the Experiment Class (using TPACK-based History Learning Media) were higher than the Control Class (using *PowerPoint*). This statement is proven based on the

results of the SPSS 16 analysis. It is known that it is significant at 0.000 <0.005, so H0 is rejected and H1 is accepted, which means that there is a significant difference between the experimental class and the control class after being treated. Because the mean value of the History Learning Outcomes Test for the Experimental Class = 88.138> the mean value of the History Learning Outcomes for the Control Class = 79, it can be concluded that the TPACK-based History Learning Media does prove to affect student learning outcomes.

The data analysis results show that the learning process using TPACK-based History Learning Media has a significant and higher effect on optimizing students' History Learning Outcomes. Students get better learning outcomes after being given TPACK-based History Learning Media in the History Learning process compared to using *PowerPoint* learning media because they use technology to explain the basic concepts of a material. Learning activities using ICT can make students more active in participating in teaching and learning activities and can improve students' Hard Skills and Soft Skills. Combined media technology to attract more learners focus to the material was submitted by teachers. Researchers also saw teachers can easily use instructional media combined with the approach of Problem Based Learning. So that the basic concepts taught are more comfortable for students to understand.

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