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The Effect Of Using Augmented Reality Media One The Learning Results of The 'Caping Ngancak' Dance for Grade V Students At Sdn 2

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Abstrack

In learning arts and culture, there are still many students who do not understand traditional dance material, especially the 'caping ngancak' dance. The implementation of learning implemented by teachers is still teacher-centered, teachers do not involve students enough so that there are still many students who are less active. For this reason, it is necessary to implement learning that can make students active in learning arts and culture. So a medium was used in this research, namely Augmented Reality media. The formulation of the problem in this research is "is there an influence of the use of Augmented Reality on student learning outcomes in the Caping Ngancak dance material in class V SDN 2 Kota Bakti Kab. Pidie?" This research aims to determine the effect of using Augmented Reality on student learning outcomes in the Caping Ngancak dance material. The approach in this research is a quantitative approach, the type of research is True Experimental with a Pretest Posttest Control Group Design. The research population was all class V students of SDN 2 Kota Bakti Kab. Pidie, by taking samples of students from classes VA and VB. The data collection technique uses tests in the form of pretest and posttest, while the data analysis technique uses SPSS Statistics 24 and hypothesis testing uses the independent t-test. The results of hypothesis testing with independent t-test statistics obtained a significance value (2-tailed) of $0.000 < 0.05$. So the decision making criteria are H_a accepted and H_0 rejected. Thus, it can be concluded that there is an influence of the use of Augmented Reality media on student learning outcomes in the Caping Ngancak dance material in class V at SDN 2 Kota Bakti Kab. Pidie.

Keywords: Augmented Reality Media, Learning Results, Caping Ngancak Dance

INTRODUCTION

Education has an important role in building a nation. Development in the field of education is an effort to make the nation's life more intelligent, improve human quality, and develop oneself into a complete human being. According to Law of the Republic of Indonesia Number 20 of 2003 Article 1 "Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character and skills. which is needed by himself, society, nation and state". The world of education is required to adapt current technological developments to improve the quality of education, especially in utilizing Information and Communication Technology for the world of education today, especially in preparation for learning.

Improving the quality and quality of education can be done by improving the teaching and learning process and preparing good learning tools at every level of education. According to Hidayat and Siti Kayroiyah (2018) learning tools are an absolute thing that must be prepared by teachers. One of the learning tools that teachers can use to improve the quality of learning is learning media.

Learning media is really needed in every subject at school, one of which is the SBdP subject. In teaching these subjects, a teacher must be able to deliver learning in an interesting and innovative way by choosing learning media that is appropriate to the material to be delivered so that students have high motivation in learning.

This research was conducted based on the results of observations and interviews with researchers at SDN 2 Kota Bakti Kab. Pidie, the problem during SBdP learning is that the majority of students do not understand the learning, especially the dance material. This is because the teacher only explains the material using sources from the textbook, and does not use media, models or learning approaches that suit the characteristics of the learning material. The lack of use of learning media in teaching in schools causes low SBdP learning outcomes which is a problem for teachers, students and schools. Based on the results of previous research conducted by Hasugian and Dwi (2022:30), the learning media used was less varied, researchers also found teachers who did not use media in learning, students seemed unenthusiastic in learning and did not pay attention to the teacher, students often chatted with their classmates outside the subject matter and often going in and out of class for the reason of wanting to go to the bathroom, students also find it difficult to understand the material being presented, this can be seen when the teacher asks students questions. This shows that the learning was not successful, if this problem cannot be resolved immediately it will have a negative impact on the achievement of students' learning outcomes. To overcome this problem, the method that can be used is to use Augmented Reality (AR) learning media.

According to Wardani (2015), Augmented Reality (AR) technology is a technology that combines two-dimensional and/or three-dimensional virtual objects into a three-dimensional real environment and then projects these virtual objects into the real environment. With the help of augmented reality technology, the real environment around us will be able to be interacted with in digital (virtual) form. Using Augmented Reality (AR) media involves all students and is expected to improve student learning outcomes. When used, this media can attract attention, interest and motivation to learn, make students active, interactive, increase understanding, and the learning process can take place in a fun and optimal manner.

Hasugian and Dwi (2022:37) conducted research that found that there was a positive influence between the influence of using smart wheel learning media on student learning outcomes at SDN 106815. Based on the

description that has been explained, the researchers were interested in raising the problem in a study entitled The Effect Of Using Augmented Reality Media One The Learning Results Of The 'Caping Ngancak' Dance For Grade V Students At SDN 2 Kota Bakti, Pidi District

METHODS

The approach used in this research is a quantitative approach with the type True Experiment or real experiment. The location taken during research was at SDN 2 Kota Bakti Kab. Pidie is located on Jalan Tangse, Pasar Kota Bakti Village, Sakti District, Pidie Regency, Aceh Province. The population taken was all class V students at SDN 2 Kota Bakti Kab. Pidie for the 2023/2024 academic year with a sample of 24 students in class VA and 24 students in class VB at SDN 2 Kota Bakti Kab. Pidie.

The data collection technique taken was an objective test of 16 questions in the form of multiple choices and essays or descriptions to measure students' initial and final abilities with different points for each question. Data were analyzed using the t test at a significance level of 5%, confidence level of 95%.

Data processing in this research uses SPSS STATISTIC version 24. The following explains the steps that will be carried out in data analysis:

1) Calculate the results of descriptive analysis
2) Calculating N-Gain Score (in %)
3) Carry out a data normality test on the n-gain score (%). If the data is normally distributed then the t-test used is a parametric test. But if the data is not normally distributed, then the t-test used is a non-parametric test. Because the data in this study is normally distributed, the t-test used is a parametric test with an independent sample t-test (unpaired samples).

4) Carry out a parametric test on the n-gain score (%) using the independent sample t-test (unpaired samples).

RESULTS AND DISCUSSION

Section

The data collected in this research are the learning results of VA and VB class students on traditional dance material (caping ngancak dance), especially on basic competencies: 3.1 Understanding the concept of traditional dance (caping ngancak dance). Data was obtained from the results of tests given before and after the learning process on traditional dance material (Caping Ngancak dance). This research was conducted in 4 meetings in the experimental class.

In the experimental class, at the 1st meeting the researchers gave pretest questions in the control class and experimental class. In the second meeting, the researcher carried out a learning process about the concept of traditional dance and the background of the Caping Ngancak dance using Augmented Reality (AR) media in the experimental class. At the 3rd meeting, researchers carried out a learning process about floor patterns, costumes and accessories, as well as movements in the caping ngancak dance in the experimental class using Augmented Reality (AR) media.

Data Analysis
Descriptive Analysis Results
Table 1. Descriptive Analysis Results

Descriptive Statistics

	N	Min	Max	Mean	Std. Deviation
Pretest Eksperimen	23	25	55	44,13	8,482
Posttest Eksperimen	23	70	100	86,09	7,531
Pretest Kontrol	23	20	55	35,43	8,649
Posttest Kontrol	23	40	75	57,39	8,774

Output SPSS 24

The minimum learning criteria or KBM set by the school is 75. Based on the table above, it can be seen that the minimum pretest score in the experimental class is 25 and in the control class is 20. The maximum pretest score in the experimental class is 55 and in the control class is 55 Meanwhile, the posttest score in the experimental class got a minimum score of 70 and the control class got 40. The maximum posttest score in the experimental class was 100 and in the control class it was 75. The average pretest score obtained by students in the experimental class was 44. 13 and in the control class it was 35.43. So the average pretest score obtained by both classes is incomplete. Meanwhile, the average posttest score obtained by students in the experimental class was 86.09 and in the control class was 57.39. It can be seen that the posttest scores in the experimental class experienced high progress and exceeded the KBM scores set at SDN 2 Bakti City, Pidie Regency.

N-Gain Score

N-gain score is the difference between the posttest and pretest scores carried out to determine the effectiveness of using Augmented Reality (AR) media applied in this research. The n-gain score test can be used if there is a significant difference between the average experimental posttest score and the average control posttest score.

N-Gain Score Data Normality Test

The data normality test is an absolute requirement for carrying out a parametric t-test. Before carrying out a parametric t-test, the research data must be normally distributed.

Table 2. Data Normality Test Results *N-Gain Score*

Tests of Normality							
	Kelas	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
N-Gain Persen	Eksperimen	,138	23	,200*	,972	23	,735
	Kontrol	,131	23	,200*	,971	23	,705

Output SPSS 24

Based on the n-gain score data normality test table above, researchers took the results of the data normality test using Shapiro-Wilk as a basis for decision making. The basis for decision making in the Shapiro-Wilk data normality test is as follows:

1. If the significance value (sig) is > 0.05 then the research data is declared to be normally distributed.
2. If the significance value (sig) is <0.05 then the research data is declared not normally distributed.

The significance (sig) result of the n-gain score data normality test given to the experimental class was 0.735 and the control class was 0.705, greater than 0.05. So it can be concluded that the n-gain score data is normally distributed.

Independent Sample T Test N-Gain Score Test

The independent sample t test is a parametric t-test for unpaired (independent) samples, and can only be used if the research data is normal. The data in the research have been proven to be normal, so the t-test used is the independent sample t test.

Table 3. Uji Independent Sample T Test N-Gain Score

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	T	Df	Sig. (2-tailed)
N-Gain Persen	Equal variances assumed	2,008	,164	11,613	44	,000
	Equal variances not assumed			11,613	40,110	,000

Output SPSS 24

The basis for making independent sample t test decisions is based on significance values (2-tailed), namely as follows:

a. If the significance value (2-tailed) < 0.05 then H_0 is rejected and H_a is accepted.
b. If the significance value (2-tailed) is > 0.05 then H_0 is accepted and H_a is rejected.

Based on table 8 above, it can be seen that the sig in Lavene's Test for Equality of Variances has a value of 0.164 > 0.05, so the research data on the n-gain score (%) is homogeneous or the same. Because the data is the same, the basis for sig (2-tailed) decision making is seen in the Equal Variances Assumed, namely 0.000 < 0.05. So there is a significant influence on the use of Augmented Reality (AR) media on student learning outcomes.

Section/Subsection

Based on the research results, researchers obtained pretest and posttest learning results in the control class and experimental class with the number of students in the control class being 23 people and the experimental class also being 23 people. The learning outcomes obtained an average pretest score in the control class of 35.43 and an average pretest score in the experimental class of 44.13. When compared with the Minimum Learning Completeness (KBM) score, the pretest scores in the control class and experimental class were incomplete. Meanwhile, the average score on the posttest in the control class increased by 57.39 and the experimental class also increased by getting an average score of 86.09. But in the control class, there was only 1 student who achieved the Minimum Learning Completeness (KBM) score.

After obtaining the learning results, the researcher then carried out an n-gain score test (in the form of %) to see the effectiveness of the approach used as well as to see the difference between the pretest and posttest scores in the control and experimental classes using the SPSS version 24 program. Based on the results of the n-gain score test , the average n-gain score (in %) in the experimental class was 75.15 and the control class was 34.10. To see the level of effectiveness of the approach through the n-gain score, it can be seen based on the following table:

Table 4. Tabel Kategori Tafsiran Efektivitas N-Gain

Persentase (%)	Tafsiran
< 40	Tidak Efektif
40 – 55	Kurang Efektif
56 – 75	Cukup Efektif
>76	Efektif

Source: Hake, R.R, 1999

Based on table 7 above, it can be seen that the average n-gain score in the experimental class is 75.15 or 75%, which is in the quite effective category. Meanwhile, the average n-gain score in the control class was 34.10 or 34% in the ineffective category. So it can be concluded that there is a difference in the effectiveness of learning using AR media and not using AR media on student learning outcomes.

After obtaining the n-gain score (%), the researcher then carried out a data normality test. The data normality test is an absolute

requirement in statistical parametric tests. So before carrying out a t-test, the research data must be normal. Based on the results of the data normality test on the n-gain score that the researchers carried out, the experimental sig value was 0.735 and the control sig value was 0.705. According to the basis for making decisions on the data normality test by Shapiro-Wilk, namely if the sig value is <0.05 then the data is abnormal and if the sig value is >0.05 then the data is normal. So it can be concluded that the data in this study are normal, because the sig value in the experimental and control classes is greater than 0.05.

Next, to see the effectiveness of using AR significantly (real), the researchers carried out an independent sample t test on the n-gain score value. Because the data in this study is normal, the statistical test used is a parametric statistical test. The sample data in this study is an unpaired (free) sample, with the same number of students in the experimental class and control class. As for the results of data analysis in the independent sample t test, it was obtained that the sig value in Lavene's Test for Equality of Variances had a value of 0.164 > 0.05, so the data in the n-gain score (%) was homogeneous or the same. Because the data is the same, the basis for sig (2-tailed) decision making is seen in Equal Variances Assumed, which is 0.000. According to the basis for decision making in the independent sample t test, namely if the sig (2-tailed) value is < 0.05 then H_0 is rejected and H_a is accepted, but if the sig (2-tailed) value is > 0.05 then H_0 is accepted and H_a is rejected. So it can be concluded that there is a significant influence on the use of Augmented Reality (AR) media on student learning outcomes in traditional dance material (caping ngancak dance) at SD Negeri 2 Kota Bakti, Kab. Pidie.

This research is also strengthened by research by Kamaruddin, et al., (2021:34) with the results of his research, that there is an influence of the use of Augmented Reality (AR) based learning media on the biology learning outcomes of students in class X SMA Negeri 1 Gowa. The results of the hypothesis test showed that data was sig 0.0001 < 0.05, so H_0 was rejected and H_1 was accepted.

CONCLUSION

Based on the results of research conducted by researchers regarding the influence of Augmented Reality (AR) media on student learning outcomes in traditional dance material in class V of SD Negeri 2 Bakti City, Pidie Regency, the data processing results obtained a significance value (2-tailed) of 0.000 < 0.05. This means that the criteria for decision making are H_0 rejected and H_a accepted. So the decision obtained is that there is an influence of Augmented Reality (AR) media on student learning outcomes in traditional dance material in class V of SD Negeri 2 Bakti City, Pidie Regency.

REFERENCES

Aulia, Resti, dkk,. 2018. Pengelolaan Kelas Sebagai Determinan Terhadap Hasil Belajar. Jurnal Pendidikan Manajemen Perkantoran. 3(2). 149-157.

Bower, M., Howe, C., Mccredie, N., Robinson, A., Grover, D. (2014). Augmented Reality in education-cases, places and potentials. Journal Educational Media International

Deshpande, A., Kim, I. (2018). The effects of augmented reality on improving spatial problem solving for object assembly. Advanced Engineering and Informatics, 38(2), 769-775

Hasan, Muhammad, et al,. 2021. Media Pembelajaran. Tahta Media Group.

Kamaruddin, dkk. 2021. Penggunaan Media Pembelajaran Berbasis Augmented Reality (AR) Terhadap Hasil Belajar Biologi Siswa SMA. Jurnal Riset dan Inovasi Pembelajaran. 1(2)

Kurniadewi, Nike. 2019. Penggunaan Media Roda Pintar Puzzle Pintar untuk Meningkatkan Hasi Belajar Mata

Pelajaran IPS Siswa SD. Jurnal TEKNODIK. 23(1).

Kurniawan, Heru. 2021. Pengantar Praktis Penyusunan Instrumen Penelitian. Yogyakarta: Deepublish Publisher.

Kysela, J., & Štorková, P. (2015). Using Augmented Reality as a Medium for Teaching History and Tourism. Procedia - Social and Behavioral Sciences, 174, 926–931.

Lefudin. 2017. Belajar dan Pembelajaran Dilengkapi dengan Model Pembelajaran, Strategi Pembelajaran, Pendekatan Pembelajaran dan Metode Pembelajaran. Yogyakarta: Deepublish.

Lestari, dkk. 2014. Peningkatan Hasil Belajar IPS Melalui Model Pembelajaran Problem Based Learning pada Siswa Kelas V SD Negeri Pojokrejo I Jombang. Jurnal JPGSD. 2(3). 6.

Matondang, Rahmawati, et al,. 2021. Ragam Media Pembelajaran di SD/MI untuk Pembelajaran PPKn. Literasi Nusantara Abadi.

Nasution, Nurliana, et al,. 2022. Augmented Reality dan Pembelajaran di Era Digital. Jawa Barat. Adanu Abimata.

Nurrita, Teni. 2018. Pengembangan Media Pembelajaran untuk Meningkatkan Hasil Belajar Siswa. Jurnal Misykat. 3(2). 171.

Ratumanan. 2015. Inovasi Pembelajaran. Yogyakarta: Ombak.

Riani, Anna, dkk. 2021. Development of Local Wisdom Augmented Reality (AR) Media in Elementary Schools. International Journal of Multicultural and Multireligious Understanding. 154-162

Rizal, Setria Utama, et al,. 2016. Media Pembelajaran. Bekasi. Nurani.

Sugiarti, Pitri, dkk,. 2022. Pengaruh Latihan Kekuatan Otot Lengan Terhadap Kekuatan Pukulan LOB Bulutangkis pada Peserta Ekstrakurikuler SMP Negeri Selangit Kabupaten Musi Rawas. Jurnal LP3MKIL. 2(3). 94-100.

Sungkar, R.K., Panchoo, A., Bhoyroo, K. N. (2016). Augmented Reality, The Future of Contextual Mobile Learning. University of Mauritius, Réduit, Mauritius

Triyono, Joko, 2017, Argumented Reality (AR) Sebagai Teknologi Interaktif dalam Pengenalan Benda Cagar Budaya Kepada Masyarakat, Jurnal Simetris. Vol. 8. No. 2 tahun 2017. Teknik Informatika.

Rahman, Taufiqur, dkk. 2019. AUGMENTED REALITY SEBAGAI MEDIA PEMBELAJARAN INTERAKTIF SENI TARI RANTAYA DI ISI SURAKARTA. Jurnal ISI Surakarta. 252-260