Aplication of Crossword Puzzle Learning Media to Improve Students' Understanding at Class X Gography Learning Of SMAN 1 Matur

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ARTICLE INFORMATION

ABSTRACT

This research aims to determine the effect of applying crossword puzzle learning media to improve students' understanding of geography learning for class X SMA N 1 Matur. This research method is quantitative with a quasi-experimental type of research. This research was conducted at SMA N 1 Matur with a research population of all class X students of 152 students. Meanwhile, the research sample was determined using a random sampling technique and the results obtained were class XE-2 as a control class with 31 students and XE-3 as an experimental class with 30 students. Test scores are used to reveal students' level of understanding. The analysis technique used to test the hypothesis is the Mann Whitney test. The research results show that the crossword puzzle learning media has an effect on increasing students' understanding of geography learning with an average percentage of 23.83. This is also proven by the results of hypothesis testing using the Mann Whitney test with a significance value of 0.000, which is less than 0.05, which means that there is an influence of the use of crossword puzzle learning media on students' level of understanding in geography learning at SMA N 1 Matur.

INTRODUCTION

Education is a process that cannot be separated from humans who are the subject and object of educational efforts themselves, because it includes 3 (three) basic aspects of the human self. The importance of education for society is illustrated by the role it plays in educational activities which are closely related to a person's development. Education is the key to all progress and quality development, because with education, a person can achieve their potential as a person and as a citizen of society.

Law no. 20 of 2003 concerning the national education system Chapter 1 Article 1 paragraph 1 states that education is a conscious and planned effort to create a learning atmosphere and learning process so that students develop their potential to have religious spiritual strength, self-control, intelligent personality, noble character. as well as the skills needed by himself, society, nation and state (Budiarti et al., 2017)

National education will be achieved if there is a good cooperative relationship between the government, society and education personnel. Apart from cooperation between various parties, the quality of human resources greatly influences the level of education in a country. The quality of human resources can be improved through the learning process at school, namely by improving the quality of learning which is influenced by factors such as teachers, students, the school environment, as well as the learning methods and media used.

Learning media are those that can convey and channel messages from sources in a planned manner so as to create a conducive learning environment where recipients can carry out the learning process efficiently and effectively (Rahmi et al., 2019). Basically, students need to have the ability to develop their own knowledge and teachers are responsible for encouraging students to learn actively and be able to think critically in learning. Therefore, teachers must provide and provide as many opportunities as possible for students to learn actively and think critically. Our education is still dominated by the view that knowledge is a set of facts that must be memorized, teachers are the main source of learning, and the method that is often used is lectures (Wijaya & Suhendro, 2022). And sometimes there is no use of learning media that helps students to learn actively and think critically, which is useful for increasing student understanding. The author made observations on 15-17 December 2022 at SMA N 1 Matur. Based on these observations, which are based on interviews with the geography teacher, Ibuk Hermawati, S.Pd at SMA N 1 Matur, it is known that there are still many students who are less active when studying and the students' level of understanding is still lacking regarding the material taught by the teacher. This has an impact on the low grade :

Table 1.
Percentage of Complete Student Daily Test Scores

No	Class	The number of students	Complete		Not Completed	
			Amount	Percentage	Amount	Percentage
1	X E-1	30	9	30	21	70
2	X E-2	31	10	32	21	68
3	X E-3	30	10	33	20	67
4	X E-4	30	13	43	17	57
5	X E-5	31	16	52	15	48
Total		**152**	**58**	**190**	**94**	**310**

Source: Geography Teacher at SMA N 1 Matur, 2023

This is because most students during learning do not pay attention to the teacher and are not actively involved, making it difficult for students to understand the material. Based on the problems found, to obtain minimum completeness criteria (KKM), more interesting learning media are needed so that students can be directly involved in learning. This is done so that students better understand the learning material.

One of the interactive learning media that can be used is crossword puzzles. Crossword p*uzzle*(teka-teki cross) mertry bentuk pthe game that sering dijumpai/dimor in a magazineu newspaper. Qeka-teki cross yang semula onlyuntuk mfill the timeulmoney, can diguse ituntuk mpractice questions for students. Crossword puzzles can be played/filled individually or group (Handayani, 2018).

The procedure for using this crossword puzzle learning media is very easy, does not require many tools, and will also be interesting for students. Apart from being interesting, this crossword puzzle is also useful for sharpening the brain, reasoning and training students' logic and patience so that it will make it easier to transfer knowledge to students. Crossword puzzles can also improve your ability to think, concentrate and remember learning.

Based on the description above, the author is interested in writing a final assignment with the title "Application of crossword puzzle learning media to improve students' understanding of class X geography learning at SMA N 1 Matur". The benefits of research for teachers can be applied to the teaching and learning process in an effort to increase students' understanding of geography learning by using crossword puzzle learning media.

METHOD

This research method uses quantitative research methods with a quasi-experimental research type. Quation experimen is one of research to measure some spesific variable (Sari & Prihatnani, 2021). The research was carried out at SMA N 1 Matur in the even semester of the 2022/2023 academic year. The research technique uses a test instrument for students' understanding abilities. The variables in this research are crossword puzzles as the independent variable and students' level of understanding as the dependent variable. The data analysis technique used is descriptive analysis and analysis requirements test. In drawing conclusions it is necessary to carry out a Normality Test, Homogeneity Test and Hypothesis Test.

RESULTS AND DISCUSSION

Results

From the experimental class post test score data, the average value was 77.00, the median was 75 and the mode was 75, then the standard deviation was 9.432. Meanwhile, for the control class, the average value was 52.17, the median was 50 and the mode was 50, then the standard deviation was 13.305. The following is a frequency table of posttest scores for the experimental class and control class:

Table 2.
Frequency Distribution of Control Class and Experimental Class

No	Interval Class	Control Class		Experimental Class	
		fa	Fr	fa	fr
1	20-30	1	3.2 %	-	-
2	31-40	6	19.4%	-	-
3	41-50	11	35.5%	-	-
4	51-60	6	19.4%	3	10%
5	61-70	5	16.1%	2	6.7%
6	71-80	2	6.4%	17	56.7%
7	81-90	-	-	8	26.6%
	Amount	**31**	**100%**	**30**	**100%**

Source: Research results 2023

From the table 2, it can be seen that there are differences in students' levels of understanding seen from the posttest results. Where in the class that was not treated with crossword puzzle media (control class) there were 2 students who got scores above the KKM, while in the class that was treated with crossword puzzle media (experimental class) there were 25 students who got scores above the KKM.
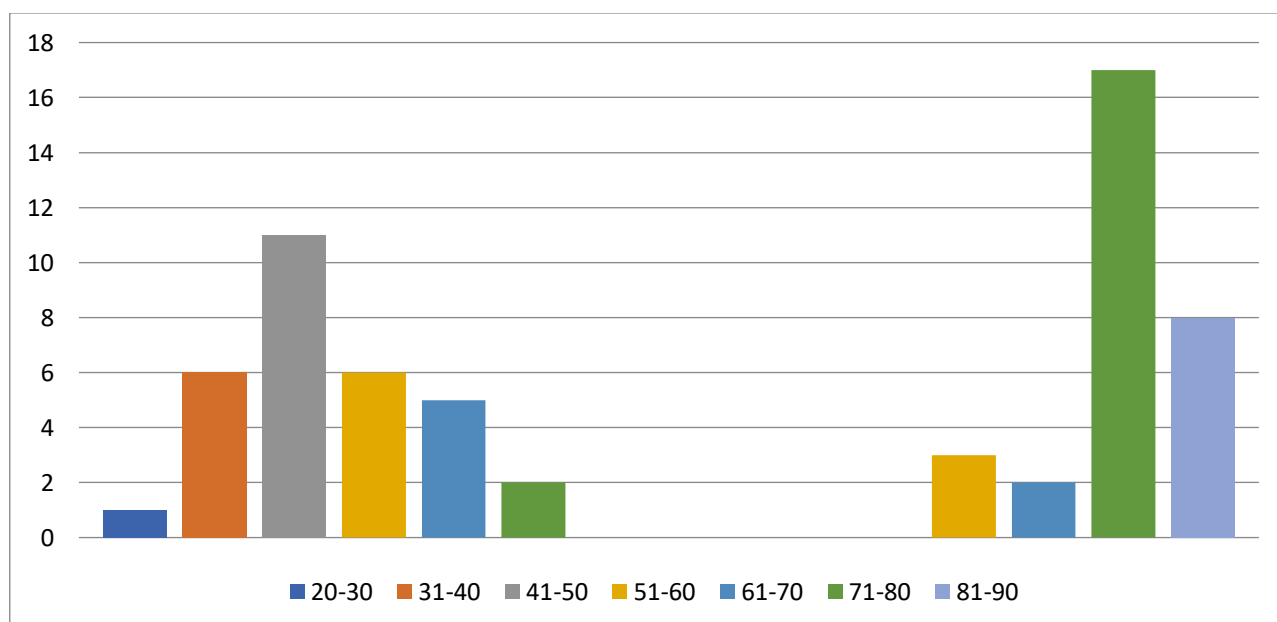

Figure 1. The Score of Control Class (Left) and Experimental Class (Right)

From the figure 1 of the scores for the control class and experimental class above, it can be seen that there is a difference in the level of understanding of students in classes that were not given media treatment*crossword puzzle*with classes given media treatment*crossword puzzle*.

Discussion

Based on the results of data analysis of students' understanding in geography learning in classes that do not apply crossword puzzle learning media (control class), it shows that there are 2 students out of a total of 31 students who have achieved the Minimum Completeness Criteria (KKM), and 29 students who have not achieved minimum completeness criteria (KKM) with an average value of 52.17. In other words, the level of students' understanding seen from learning outcomes in geography learning in classes where crossword puzzle learning media is not implemented is still relatively low.

Furthermore, the results of data analysis of students' understanding of geography learning in the classroom where the crossword puzzle (posttest) learning media was applied showed that there were 26 students out of a total of 30 students who had reached the Minimum Completeness Criteria (KKM) and 4 students who did not reach the Completeness Criteria. Minimum (KKM) with an average value of 77.00. In other words, the level of students' understanding seen from the learning outcomes in geography learning in classes where crossword puzzle learning media is applied is relatively high. Because there is an increase in classes that do not apply crossword puzzle media.

The research results also show that the crossword puzzle learning media can influence students' understanding of geography learning. This is supported by research (Dewi et al., 2021)which explains that there are differences in the learning outcomes of class Where in this hydrological cycle material, students are required to be able to translate, interpret and extrapolate according to indicators of understanding. Students are able to translate and retell the hydrological cycle.

Apart from that, the results of inferential statistical analysis based on the results of hypothesis testing using SPSS 22 obtained a significance value from hypothesis testing of 0.000 with a significance rate of 0.05. Because the significance value is smaller than 0.05, it is rejected and accepted.$H_0 H_\alpha$

So it can be concluded that there is an influence of crossword puzzle learning media on students' understanding of class X geography learning at SMA N 1 Matur and students' learning outcomes have improved after being given treatment. This is strengthened by research by Khorunnisa et al (2021) which explains that the experimental class pretest results with an average of 66.38 increased to 80.31 after treatment (posttest). It can be concluded that the application of the Crossword Puzzle learning model can help students improve students' understanding abilities in learning geography.

CONCLUSION

The average score of students' understanding in geography learning in classes that were not treated with crossword puzzle learning media was 52.17, which is in the low category. The average score of students' understanding of geography learning in classes treated with crossword puzzle learning media was 77.00, which is in the high category. This means that there is an influence of crossword puzzle learning media on students' understanding of geography learning. This is proven by the hypothesis test which obtained a significance value of 0.000 with a significance rate of 0.05, because the significance value was smaller than 0.05 it was rejected and accepted.$H_0 H_\alpha$

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BIBLIOGRAPHY

Arikunto.S. (2014). Prosedur Penelitian. *Rineka Cipta*.

Budiarti, Arifah, Jeffry Handhika, and Sulistyaning Kartikawati. 2017. "Pengaruh Model Discovery Learning Dengan Pendekatan Scientific Berbasis E-Book Pada Materi Rangkaian Induktor Terhadap Hasil Belajar Siswa." *Jupiter (Jurnal Pendidikan Teknik Elektro)* 2(2): 21.

Dewi, Puspa, Budiman Tampubolon, and Agus Sugiarto. 2021. "Pengaruh Penerapan Model Pembelajaran Crossword Puzzle Pada Pembelajaran Geografi Terhadap Hasil Belajar Siswa." *Jurnal Pendidikan dan*

Pembelajaran Khatulistiwa (JPPK) 10(1).

Handayani, Shinta Dwi. 2018. "Pengaruh Metode Kooperatif TGT (Team Games Tournament) Menggunakan Media Puzzle Terhadap Hasil Belajar Matematika." *SAP (Susunan Artikel Pendidikan)* 3(2).

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

Khoerunnisa, Nurmala Rahmah, Srie Mulyani, and D Wahyudin. 2021. "Penerapan Model Pembelajaran Crossword Puzzle Terhadap Kemampuan Pemahaman Tokoh Perjuangan Proklamasi Siswa Sekolah Dasar." *Renjana Pendidikan: Prosiding Seminar Nasional Pendidikan Dasar* 2(1): 1688–94.

Maulidia, Riska. 2020. "Fakultas Tarbiyah Dan Ilmu Keguruan." *Skripsi* (Pengaruh Penggunaan Media Pembelajaran terhadap respon dan pemahaman siswa kelas X IPA 1 ada materi animalia SMA Satya Dharma Balung tahun 2018/2019): 1–6.

Momon Dt, Tanamir. 2016. "Hubungan Minat Terhadap Bentuk Tes Dan Gaya Belajar Siswa Dengan Hasil Belajar Geografi Di Sma Negeri Kabupaten Tanah Datar 1." *Curricula* 1(2).

Permatasari, K. G. 2022. "Pemanfaatan Model Crossword Puzzle Untuk Meningkatkan Pemahaman Matematis Peserta Didik Pada Implementasi Kurikulum Merdeka (IKM)." *Jurnal Pedagogy* 21.

Rahmi, Mar'atush Sholichah Muntaha, M. Arif Budiman, and Ari Widyaningrum. 2019. "Pengembangan Media Pembelajaran Interaktif Macromedia Flash 8 Pada Pembelajaran Tematik Tema Pengalamanku." *International Journal of Elementary Education* 3(2): 178.

Ranida Seviana. 2022. "Pengembangan Media Pembelajaran Augmented Reality Pada Pembelajaran Geografi Materi Planet Di Tata Surya." *Geodika: Jurnal Kajian Ilmu dan Pendidikan Geografi* 6(2): 198–208.

Rohani. 2019. "Diktat Media Pembelajaran." *Fakultas Ilmu Tarbiyah dan Keguruan Universitas Islam Negeri Sumatera Utara*: 1–95.

Sari, Meta Yulia, and Erlina Prihatnani. 2021. "Perbedaan Kemampuan Pemecahan Masalah Dari Penerapan Problem Solving Dan Problem Posing Pada Siswa SMA." *Mosharafa: Jurnal Pendidikan Matematika* 10(3): 471–82.

Sudjana. 2005. *Metode Statistika*. Bandung :Remaja Rosdakrya.

Susiana, E. 2017. "Penerapan Model Aktive Learning Dengan Metode Crossword Puzzle Dalam Pembelajaran Ekonomi Kelas X Pada Sman 10 Pontianak." *Jurnal Pendidikan dan Pembelajaran Untan* 6(9): 209829.

Wijaya, N. M., & Suhendro, S. (2022). A Framework For Learning Geography Online Strategy In 21st Century Learning: A Literature Review. *Journal Learning Geography*, *3*(1), 48-58.