THE SURPRISE BOX LEARNING MEDIA ON HUMAN REPRODUCTIVE SYSTEM MATERIAL

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ABSTRACT

This research discusses the influence of surprise box learning media on student learning outcomes regarding the human reproductive system in class IX MTsN 3 Enrekang. The type of research used is Quasi Experimental using the Nonequivalent-control Design. The population of this study included all students in class IX MTsN 3 Enrekang totaling 132 students. The sample used was two classes, namely class IX C with 20 people as the experimental class and class IX D with 20 people as the control class. Sampling technique utilized random sampling techniques, where the total number in the sample class was 40 people. The instruments used are tests, learning observation sheets, and documentation. The data analysis techniques used are descriptive statistical analysis and inferential statistical analysis that employing normality tests, homogeneity tests and hypothesis tests. The results showed that the average student learning outcome score was 90.25 (very good category) in the experimental class and 67.50 (good category) in the control class. The significance value was 0.000<0.05. Apparently, there is an influence of the use of surprise box learning media on student learning outcomes regarding the human reproductive system in class IX MTsN 3 Enrekang. The research implies that surprise box media can improve learning outcomes and student understanding in learning activities.

Keywords: Human Reproductive System, Surprise Box

1). INTRODUCTION

Education is a planned effort to create an active learning atmosphere for students so that they can develop their potential in the realm of religious spirituality, self-control, intelligence, and skills so that they can be useful for themselves and society at large (Rahman, 2022). Educators and students make an effort in education to enhance their ethics and morals and explore their knowledge. The education that occurs is not only directed at the student's self but also towards the functions of the family and society (Pristiwantid et al., 2022).

Several factors supported the learning process to make it more efficient and effective, such as the media. The media in the learning process makes it easier and even helps educators overcome problems.

Learning media also plays a role in conveying messages and is one of the primary sources of the learning process. Choosing the appropriate media is a very important factor in improving student learning outcomes because learning media supports the development of a person's knowledge, especially for students in the learning process (Nurul, 2019).

Observations and interviews conducted at MTsN 3 Enrekang School with biology teachers and students revealed that the predominant teaching method in class was lecturing, and the learning process heavily depended on printed books as the primary educational medium. Apart from interviews and observations, researchers also identified biology material that was difficult to understand through the material-difficulty instruments that were distributed. The material that was difficult to understand was the material on the human reproductive system. The reproductive system material includes a series of processes that not only discuss the reproductive system but also the relationship between one concept and another related to the reproductive system through a certain mechanism. The explanation is intricately woven with interconnected concepts, forming complex processes. This complexity contributes to less-than-optimal learning outcomes for students, highlighting the need for a more simplified and accessible approach.

Thus, it can be concluded that, based on the problems above, the researcher used surprise box media. These media are needed to overcome material problems that are difficult for students to understand with appropriate learning media and can improve student learning outcomes. The only media that the students were given was books; therefore, the media needs to be changed to make up for the deficiencies. A surprise box is one of the best media solutions. Thus, this research aims to find out what the learning outcomes of students are in the human reproductive system material for class IX MTs Negeri 3 Enrekang, both those taught using surprise box learning media and those taught without using surprise box learning media, and find out how the influence of these media is.

2) METHODS

This type of research takes the form of quasi-experimental research (quasi-experiment). It is said to be a quasi-experiment because not all variables that appear can be measured or controlled strictly; in this study, only measurements were taken in the cognitive domain. This method is used to create products with a certain level of effectiveness (Emy, 2020). The research design used is the nonequivalent-control group design. In this design, there are two groups are taken as samples.

The population in this study were all class IX students at MTsN 3 Enrekang, academic year 2022-2023. The sample in this study was 20 students from class IX C and 20 students from class IX D. The research instrument used was a test, which was divided into a pre-test and a post-test in the form of multiple choice with 20 numbers. Then there is slow learning, observation, and documentation. The pre-test and post-test results for each control and experimental class were analyzed using specific techniques at various stages. This analysis led to conclusions that addressed the problem.

Data from the tests given to the samples in this study were then analyzed using the IBM SPSS (Statistical Product and Service Solution) statistical application. The initial step reached in the analysis stage is to find the minimum, maximum, average, variance, and standard deviation values. The analysis used to get all the data is a descriptive statistical analysis. After this stage, carry out the normality test and homogeneity test.

The purpose of carrying out a normality test is to find out whether the data is normally distributed or not. The criteria used are as follows:

a. Sign value ≥ 0,05 this means that the research data is normally distributed

b. Sign value < 0,05 this means that the research data is not normally distributed

The next stage if the data is normally distributed is the homogeneity test. The purpose of this test is to test two samples from the same population. The criteria for drawing conclusions for the homogeneity test are:

a. Sign value > α then the population data has a homogeneous variance

b. Sign value < α then population data has non-homogeneous variance.

Next is hypothesis testing. One of the purposes of research hypothesis testing is as a temporary answer to symptoms or problems raised by researchers. This hypothesis test will produce a temporary answer which will determine whether the problem or symptom in accordance with the statement or the opposite is true. The hypothesis is:

$$H0: \mu 1 = \mu 2$$

$$H1: \mu 1 \neq \mu 2$$

Information:

H0= There is no influence

H1= There is influence

1) If the significance level < (sign value < 0,05) then H1 is accepted, This means that there is an influence of surprise box media on learning outcomes at MTs Negeri 3 Enrekang.

2) If the significance level > (sign value > 0,05) then H0 is accepted, this means that there is no influence of surprise box media on learning outcomes at MTs Negeri 3 Enrekang.

3) RESULTS AND DISCUSSION

3 .1 Descriptive Analysis

a. Descriptive statistical analysis of student learning outcomes in classes that are not taught using surprise box media (control class)

Research that has been carried out at MTs Negeri 3 Enrekang on class IX D students as a control class by collecting data from test instruments (pretest and posttest) on student learning outcomes, is as follows:

Table 1. Pretest and Posttest Analysis of Control Class IX D

Parameter	Pretest Value	Posttest Value
Maximum Value	75	100
Minimum Value	45	75
Average	61,25	90,25
Standard Deviation	8,410	7,691
Varians	70,724	59,145

Based on the results of the descriptive analysis in table 1, it can be seen that in the pretest the average score obtained by students was 61.25 with a maximum score of 75, a minimum score of 45, a standard deviation of 8.410 with a variance of 70.724. Meanwhile, in the posttest, the average score obtained by students was 90.25 with a maximum score of 100, a minimum score of 75, a standard deviation of 7.691 with a variance of 59.145.

Table 2. Control Class Academic Proficiency Assessment Criteria

Rentang Nilai	Kategori	Frekuensi Pretest
> 80	Sangat Baik	0
> 60 – 80	Baik	9
> 40 – 60	Cukup	11
> 20 – 40	Kurang	0
≤ 20	Sangat Kurang	0

Based on table 2, the distribution of experimental class students' learning outcomes based on frequency distribution categories can be obtained. In the pretest there were 9 students in the good category and 11 students in the fair category. Meanwhile, in the posttest there were 17 people in the very good category, 3 people in the good category.

b. Descriptive statistical analysis of student learning outcomes in classes taught using maze board game learning media (experimental class).

Based on research conducted at MTsN 3 Enrekang, to students in class IX C which is an experimental class, after being distributed instruments in the form of pre-test and post-test questions, the following data was obtained:

Table 3. Pretest and posttest analysis of experimental class IX C

Parameter	Pretest Value	Posttest Value
Maximum Value	65	85
Minimum Value	30	50
Average	47,25	67,50
Standard Deviation	9,386	10,699
Variance	88,092	114,474

Based on the results of the descriptive analysis in table 3, it can be seen that in the pretest the average score obtained by students was 47.25 with a maximum score of 65, a minimum score of 30, a standard deviation of 9.386 with a variance of 88.092. Meanwhile, in the posttest the average score obtained by class IX D students was 67.50 with a maximum score of 85, a minimum score of 50, a standard deviation of 10.699 with a variance of 114.474.

Table 4. Experimental Class Academic Proficiency Assessment Criteria

Value Range	Category	Pretest Frequency
> 80	Very good	0
> 60 – 80	Good	1
> 40 – 60	Enough	13
> 20 – 40	Not enough	6
≤ 20	Very less	0

Based on table 4, the distribution of control class students' learning outcomes based on frequency distribution categories can be obtained. In the pretest there was 1 person in the good category, 13 people in the fair category, and 6 people in the poor category. Meanwhile, in the posttest there were 3 people in the very good category, 10 people in the good category, and 7 people in the fair category.

3.2 Inferential Analysis

a. Normality test

The purpose of carrying out a normality test is to check whether the research data carried out by the researcher comes from research samples (Classes IX C and IX D), the distribution is normal or not. Decision making provisions in the normality test are seen from the significance value. If sign > α then it can be concluded that the data is normally distributed and if sign < α then the data is not normally distributed. The results of the normality test carried out on the SPSS application are as follows*:*

Table 5. Normality test

	Shapiro Wilk	
Kelas	Statistic	Information
Control Pretest	0,536	Normally Distributed
Control Posttest	0,226	
Experiment pretest	0,231	
Experimen Posttest	0,087	

b. Homogeneity Test

The homogeneity test is a statistical test procedure which aims to show that two or more groups of data samples taken from a population have the same variance. The criteria for drawing conclusions for the homogeneity test are if the sign value > α then the population data has a homogeneous variance and if the sign value < α then the population data has a non-homogeneous variance. The homogeneity test results can be seen in the following table:

Table 6. Homogeneity Test Results for Control and Experimental Classes

Levene Statistic	Df1	Df2	Sign	Information
1,735	1	38	0.196	Homogeneous

c. Hypothesis testing

The purpose of research data hypothesis testing is to find out temporary answers to the symptoms or problems raised by the researcher. This hypothesis test will produce a temporary answer which will determine whether the problem or symptom in accordance with the statement or the opposite is true. Test the hypothesis of this research using the t-test on an independent table (independent sample t-test).

Table 7. Hypothesis Test Results Learning Outcome Data

	Levene's Test for Equility of Variances		t-test for Equality of Means		
	F	Sign	T	Df	Sign (2tailed)
Equal Variances Asssumed	1,735	0.196	7,721	38	0.000
Equal Variances non Asssumed			7,721	34,497	0.000

Based on table 7, it can be seen that the tcount value is 7.721 and ttable is 2.100. The test results obtained show that t count > ttable. Thus Ho is rejected and H1 is accepted at a significance level of 5% ($\alpha = 0.05$). This shows that there is an influence from the use of surprise box media on student learning outcomes.

4). CONCLUSIONS

Based on the research findings and discussions, the following conclusions are; Learning outcomes in the experimental class (IX C) for the human reproductive system have demonstrated a significant increase, with the average score rising from 61.25 to 90.25, placing it in the 'very good' category. Student learning outcomes in the control class (IX D) for the human reproductive system have also improved, showing an average score progression from 47.25 to 67.50, categorizing it as 'good.' However, the overall student score has not met the Minimum Completeness Criteria (KKM) of 75 at the school. The use of surprise box media has a discernible influence on student learning outcomes in the human reproductive system material. This is substantiated by the results of hypothesis testing, where tcount > ttable. Consequently, Ho is rejected, and Ha is accepted at a significance level of 5% ($\alpha = 0.05$), indicating a statistically significant impact from the use of surprise box media on enhancing student learning outcomes.

REFERENCES

Abd Rahman BP, dkk. (2022), "Pengertian Pendidikan, Ilmu Pendidikan dan Unsur-Unsur Pendidikan" Al Urwatul Wutsqaa: Kajian Pendidikan Islam 2, no. 1 : h. 2-3.

Asmawati, dkk. (2020), "Active Learning Strategies Implementation in Arabic Teaching at Senior High School", International Journal of Contemporary Islaic Education 2, no.1 h. 10.

Audie Nurul (2019), "Peran Media Pembelajaran Meningkatkan Hasil Belajar Peserta Didik", Prosiding Seminar Nasional Pendidikan FKIP. 2(1). h. 588.

Dede Delisa dan Deddy Sofyan (2014),"Perbandingan Prestasi Belajar Siswa antara yang mendapatkan Model Pembelajaran Snowball Throwing dan Pembelajaran Konvensional", Jurnal Pendidikan Matematika 3, no. 2, h.80.

Desi Pristiwanti, dkk. (2022), "Pengertian Pendidikan" Jurnal Pendidikan dan Konseling 4, no. 6 h. 7912.

Gigih Adrian dan Ferawati Jafar (2015), "Penggunaan Modul Berbasis Kontekstual terhadap Hasil Belajar Fisika Peserta didik pada Pokok Bahasan Hukum Newton Kelass VIII MTS Madani Alauddin Pao-Pao", Jurnal Pendidikan Fisika 3, no. 2 (September), h. 144

Hamid Darmadi (2011), Metode Penelitian Pendidikan (Bandung: AlfaBeta),hal. 268.

Marlina dan Sholehun (2021), Analisis Faktor-Faktor Yang Mempengaruhi Hasil Belajar Bahasa Indonesia Pada Siswa Kelas Iv Sd Muhammadiyah Majaran Kabupaten Sorong. Rumah Jurnal Keilmuan.

Meyrinda Tobing, Setyo Admoko (2017), "Pengembangan Media Infografis pada Materi Pemanasan Global untuk Meningkatkan Hasil Belajar Peserta didik di SMA Negeri 19 Surabaya", Jurnal Inovasi Pendidikan Fisika 3, no. 6 h. 197.

Muhammad Wahyu Setiyadi, Ismail, dan Gani (2017), "Pengembangan Modul Pembelajaran Biologi Berbasis Pendekatan Saintifik Untuk Meningkatkan Hasil Belajar Siswa", Journal of Educational Science and Technology 3, no. 2 h. 107.

Suryo Hartono (2017), "Faktor yang Mempengaruhi Rendahnya Hasil Belajar Matematika Siswa MTS Iskandar Batam", Jurnal Phytagoras 6, no.2 (Oktober), h. 181.

Susetyo dan Bahruddin (2015). Efektivitas Infografis sebagai Pendukung Mata Pelajaran IPS pada siswa-siswi kelas 5 SDN Kepatihan di Kabupaten Bojonegoro. (Surabaya: STIKOM)

Tasya Nabillah (2019), "Faktor Penyebab Rendahnya Hasil Belajar siswa", Journal Homepage 4, no. 4 h. 661-662