

<https://journal.ypidathu.or.id/index.php/ijen/>

P - ISSN: 2988-1579

E - ISSN: 2988-0092

The Effect of Using the Smart Apps Creator on Science Learning Outcomes of Class VII Student of MTSN 2 Sidrap

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ABSTRACT

Background. The population in this study were all seventh grade students of Madrasah Tsanawiyah Negeri 2 Sidrap and the sample in this study were students of class VII A Madrasah Tsanawiyah Negeri 2 Sidrap.

Purpose. There are 2 variables in this study, the first independent variable is the effect of using the Smart Apps Creator application (x) and the second dependent variable is the learning outcomes of students in class VII A Madrasah Tsanawiyah Negeri 2 Sidrap (y). This research was conducted at Madrasah Tsanawiyah Negeri 2 Sidrap.

Method. This study uses quantitative methods and experimental research type which aims to examine the effect of using Smart Apps Creator application on science learning outcomes of seventh grade students of Madrasah Tsanawiyah Negeri 2 Sidrap.

Results. The results of this study concluded that there was an effect of using the Smart Apps Creator application on the science learning outcomes of Class VII Madrasah Tsanawiyah Negeri 2 Sidrap.

Conclusion. This shows that the working hypothesis which states that there is an effect of using the Smart Apps Creator application on the science learning outcomes of seventh grade students of Madrasah Tsanawiyah Negeri 2 Sidrap is accepted.

Citation: Rahmatullah, Usman M, Muhammad Takdir, Sam Hermansyah (2023) The Effect of Using the Smart Apps Creator on Science Learning Outcomes of Class VII Student of MTSN 2 Sidrap. *International Journal of Educational Narrative*, 1(1), 52–59.
<https://doi.org/10.55849/ijen.v1i1.524>

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Received: February 12, 2023

Accepted: February 15, 2023

Published: February 31, 2023

KEYWORDS

Challenges, Influence, Smart Apps Creator

INTRODUCTION

Today's challenges are getting higher so that it requires humans to have the ability in the field of knowledge and technology (Shalikhah et al., 2023). Education is an effort to help the souls of students, both physically and spiritually, from their nature towards a more humane and better civilization. Referring to Law Number 20 of 2003 concerning the national education system, the task of education is article 3 which states (Kang & Kim, 2021): "National education has the task of forming skills and character and civilization to form a viable nation



(Aldowah et al., 2019). Education and society cannot be separated (Morse et al., 2020). Community development (Le Berre et al., 2020), one of which can be determined by the education sector through the development of human resources (HR) in time.

Educational development continues with development (Mangaroska & Giannakos, 2019). At this time, information technology has become the foundation or basis of human life, including in the field of education in Indonesia (Sriwahyuni et al., 2019). This certainly will be able to improve the quality of education in Indonesia. The achievements of science and technology have influenced the use of educational materials in existing schools and educational institutions (Van Workum et al., 2019). For high-level and high-quality schools, this tool has been used as a teaching and learning tool in classes with all the subjects that students study to make learning more effective and efficient (Mangaroska & Giannakos, 2019). With the rapid advancement of technology (Van Workum et al., 2019), education in schools is experiencing more and more changes, which increases various efforts to change the world of education.

Learning media in general is a tool for teaching and learning process. In addition, learning media is anything that can be used to stimulate the thoughts, feelings, attention and abilities or skills of the learner so that it can encourage the learning process. Instructional media have different types, in general media are characterized by three main elements, namely: sound, visual, and motion (Atmaja, 2019).

The influence of the use of learning media in education contributes to the education and training of students and teachers, which can increase student motivation, because teaching materials using educational materials attract more students' attention (Craik et al., 2019). Learning materials become more meaningful so that students can understand them better and enable students to master the objectives of the learning materials. Teaching methods differ not only in oral communication, but also in conveying the spoken words, and students do not get bored reading, teachers do not find their strengths in providing educational materials (Moto, 2019)

Smart Apps Creator (SAC) was chosen as a tool because it is in line with technology and is based on Android which is always used in learning. Smart Apps Creator (SAC) is an Android tool containing sound, images, and text. The results of research conducted by Ferlianti et al (2022) show that 92% of students support the use of SAC in learning (Wahyuningtyas & Okimustava, 2023). Based on the results of observations before conducting this research, the learning process that occurs in schools is carried out conventionally, namely the lecture method. Students and teachers carry out the learning process using only textbooks (Kurniawan et al., 2019). Students who receive material only focus on the voice of the teacher who brings the material or also known as the lecture and writing method on the blackboard (Reffiane et al., 2019). Likewise with teachers who have to spend more effort to teach (Hikmi et al., 2020). Using learning media from the Smart Apps Creator can be a way to make it easier for students and teachers in the learning process (Irwandani et al., 2019), and learning can also be more varied.

Therefore, based on the description above, the researcher is interested in raising the title "The Effect of Using the Smart Apps Creator Application on Science Learning Outcomes for Grade VII Students of Madrasah Tsanawiyah Negeri 2 Sidrap"

RESEARCH METHODS

Variables and Research Design

This study uses 2 variables, namely the use of the Smart Apps Creator application in the learning process as the influencing variable (X or independent variable) and student learning outcomes as the affected variable (Y or dependent variable).

In this study (Chandrasekar et al., 2020), researchers used quantitative methods. According to Sugiyono (2018), quantitative data is a research method based on specific data. Research data is in the form of measurable numbers, so researchers use statistics as a test tool in order to draw conclusions.

Variable Operational Definition

Variable X

Using the Smart Apps Creator application to provide learning media that can be used by teachers and students.

Variable Y

The results obtained by students after taking the test at the end of the Science learning meeting after using the learning media.

Population and Sample

According to Sugiyono (2013), population is a generalized area consisting of objects/subjects that have certain qualities and characteristics (Jasmalinda, 2021).

This population includes all students of class VII Madrasah Tsanawiyah Negeri 2 Sidrap .

According to Sugiyono (2013), sample is part from amount And owned characteristics _ by population the . Sample This taken Because study This No Possible researched whole member population consumers (Jasmalinda , 2021).

As for technique used _ in taking sample is Random Sampling (Crawford & Serhal, 2020). Sampling technique using simple random sampling method is random sampling simple (Estacio et al., 2019). Random sampling technique namely technique determination location And sample in a manner random with determine amount sample to be researched (Sieck et al., 2021), gave number massage on all unit sample taken _ as well as can represent region study in taking sample in a manner whole (Guess et al., 2020). According to Sugiyono (2012), random sampling technique is method used _ For choose sample from population in a manner random simple so that every member population have equal opportunities _ big For taken as sample (Van Deursen, 2020). Whole member population become member from framework sample (Malasari Harahap & Suprpto, 2018)

Based on the statement above, the researcher took a random sample, namely class VII.A as many as 38 people, then the researcher divided the sample into 2 groups of 19 people each (McGuinness & Fulton, 2019). 19 students became the experimental group and 19 students became the control group.

Technique Data Collection

Documentation

Technique documentation used For get supporting data _ _ study like : profile school (Bhatti, 2019), conditions situation study (Solomon & Rudin, 2020), means And infrastructure school (Tubagus et al., 2020), as well amount student class VII.A Madrasah Tsanawiyah Country 2 Sidrap year teaching 2022/2023.

Test

Technique test used For measure results Study eye science lessons for student class VII.A Madrasah Tsanawiyah Country 2 Sidenreng Rappang (Dunn & Hazzard, 2019), that is Test choice double a total of 30 questions consisting of 4 choices answer namely A, B, C and D, for know results end Study student .

Technique Data Analysis

In technique this information _ or data that has been collected will analyzed And tested use technique statistics with formula as following :

Skor yang diperoleh $N = \frac{\text{Skor yang diperoleh}}{\text{Jumlah}} \times 100$
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Forknow There is nope influence use Smart Apps Creator application against results learn science students class VII.A Madrasah Tsanawiyah Country 2 Sidrap so used Mean formula as following :

$$M_y = \frac{\sum f_y}{N_y} \quad M_x = \frac{\sum f_x}{N_x}$$

RESULTS AND DISCUSSION

Study This implemented in class VII A Madrasah Tsanawiyah Negeri 2 Sidrap , class the is samples taken throughout _ _ class VII Madrasah Tsanawiyah Country 2 Sidrap selected . _ In study This will shared into 2 groups that is group experiment Where in the activity process learning will use Smart Apps Creator application and group control Where in the learning process use learning conventional.

For simplify the analysis process, especially formerly will presented the collected data Then analyzed And next with testing hypothesis use technique mean calculation as following:

Tebel mark test group experiment

No	Code Sample	Score	Mark
1	AF	2 3	76
3	A PPA	2 7	9 0
5	A A	27	90
7	MKAA	2 8	93
9	MRT	2 2	7 3
11	ADM	2 6	86
13	AANZ	2 7	90
15	FS	2 8	93
17	M	24	80
19	NS	2 8	93
21	N	2 5	83
23	NHA	2 2	73
25	NW	2 8	93
27	N	2 6	86
29	NMA	26	86
31	RMH	26	86
33	SNH	2 1	7 0
35	SAS	2 7	9 0
37	YIM	2 8	9 3

Table mark group control

No	Code Sample	Score	Mark
2	A FHR	22	73
4	A MFA	18	60
6	MCR	1 9	6 3
8	MRA	22	73
10	MDB	22	7 3
12	US	2 4	80
14	AH	2 5	8 3
16	M A	2 1	70

18	M A	21	70
20	N	18	60
22	NF	21	70
24	NSS	19	63
26	NYR	22	73
28	NK	26	86
30	QA	21	70
32	RF	19	63
34	SR	21	70
36	Y.N	18	60
38	ZA	26	86

Table results Study group experiment And control

No	Mark	Group experiment	Group Control
	93	5	-
	90	4	-
	86	4	2
	83	1	1
	80	1	1
	76	1	-
	73	2	4
	70	1	5
	63	-	3
10	60	-	3

Forknow is use the Smart Apps Creator application can influence results learn science students class VII A Madrasah Tsanawiyah Country 2 Sidrap . Based on data analysis, table calculation test text will used For analysis, as shown below this.

Table calculation mean

M x	X	Mark	Y	M y
465	5	93	-	-
360	4	90	-	-
344	4	86	2	172
83	1	83	1	83
80	1	80	1	80
76	1	76	-	-
146	2	73	4	292
70	1	70	5	350
-	-	63	3	189
-	-	60	3	180
1624	19	Σ	19	1,346

Based on table above, can _ is known that whole value obtained _ class experiment (X) is 1.624, meanwhile class control (Y) is 1,346. Mark the will converted use mean formula forknow student grade point average.

Group means experiment (x) and group control (y) with formula:

$$M_x = \frac{\sum fx}{N_x}$$

$$M_x = \frac{1624}{19}$$

$$M_x = 85,47$$

$$M_y = \frac{\sum fy}{N_y}$$

$$M_y = \frac{1346}{19}$$

$$M_y = 70,84$$

Based on calculation on found that results test on group given experiment _ by student have the average value is 85.47 and the average value obtained from results test on group control is 70.84. Can seen the difference that test group experiments using Smart Apps Creator have mark more tall than test group executing control _ learning conventional.

Based on results calculation obtained mark group experiment = 85,47 whereas mark group control = 70.84 Numbers This show mark group experiment more big from mark group control (85.47 > 70.84). This means that hypothesis which states "There is Influence Use of Smart Apps Creator against Results Learning Science Students Class VII Madrasah Tsanawiyah Negeri 2 Sidrap "accepted. With received hypothesis Work this, so hypothesis nil which reads "No There is influence use of Smart Apps Creator against results learn science students Class VII Madrasah Tsanawiyah Negeri 2 Sidrap " was rejected .

With thereby can pulled conclusion that use of Smart Apps Creator can give positive influence _ to results learn science students class VII.A Madrasah Tsanawiyah Country 2 Sidrap . this _ showed with use Smart Apps Creator in the activity process learning, results Study student more satisfying If compared to with results Study students who use book in the learning process.

CONCLUSION

Based on results study this, can pulled a number of conclusion as following:

1. Use of Smart Apps Creator in the learning process give influence to results learn science students class VII.A Madrasah Tsanawiyah Country 2 Sidrap . this _ Because with using Smart Apps Creator teachers and student can do the learning process teach with more easy and convey information to student with Good And interesting.

2. Based on results study in accordance with test hypothesis through data analysis obtained average value ie $M_x = 85.47 > M_y = 70.84$. This means difference the average value show exists influence use of Smart Apps Creator against results learn science students class VII.A Madrasah Tsanawiyah Country 2 Sidrap . Results analysis with test end show that taught students _ using Smart Apps Creator has an impact positive compared with taught students _ with carry out learning conventional (book package).

Preparation journal This finished blessing help and guidance from various party family, friends as well as father And Mother lecturer. By Because that, speech accept love on help And guidance from all party, so journal this can published.

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