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Efforts to Increase the Activeness of Social Studies Learning in Fourth Grade Through the Short Card Type Active Learning Model

Wike Dewi Nur Afni[1], Vanda Rezania[2*], Zuyyina Fihayati[3]

[1,2,3] Program Studi Pendidikan Guru Sekolah Dasar, Universitas Muhammadiyah, Sidoarjo, Indonesia

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ABSTRAK

Dalam proses pembelajaran di Sekolah Dasar, materi yang disampaikan oleh guru seringkali membuat peserta didik lebih berperan sebagai penerima informasi saja, daripada terlibat secara aktif dalam proses berpikir. Akibatnya, peserta didik lebih sibuk mencatat, mendengarkan, atau menjawab pertanyaan guru, dengan sedikit kesempatan untuk aktif mengumpulkan dan memahami informasi. Hal ini berdampak pada tingkat keaktifan belajar peserta didik yang tidak optimal. Penelitian ini dilaksanakan untuk menganalisis pengaruh antara tingkat partisipasi dalam pembelajaran aktif dengan menggunakan model Active learning Tipe Short Card pada siswa sekolah dasar. Penelitian ini menggunakan metode True Experimental dengan desain penelitian Posttest-Only Control Group. Populasi yang digunakan dalam penelitian ini adalah peserta didik kelas VI dengan menggunakan simple random sampling. Teknik pengumpulan data yang digunakan yakni kuesioner yang dibagikan pada kedua kelas. Data dianalisis menggunakan teknik analisis data deskriptif dan analisis data statistic inferensial. Hasil analisis uji-t menunjukkan signifikansi (2-tailed) adalah 0,000 yang berarti Ho ditolak dan Ha diterima karena, hasil signifikansi kurang dari 0,005. Dapat disimpulkan bahwa, terdapat pengaruh antara kelas eksperimen yang menerapkan model pembelajaran Active learning Tipe Short Card dan kelas kontrol yang menggunakan model pembelajaran konvesional.

ABSTRACT

In the learning process in Elementary School, the material delivered by the teacher often makes students play a role as recipients of information only, rather than being actively involved in the thinking process. As a result, students are busier taking notes, listening, or answering teacher questions, with little opportunity to actively collect and understand information. This has an impact on the level of student learning activity which is not optimal. This study was conducted to analyze the influence of the level of participation in active learning using the Active Learning Short Card Type model on elementary school students. This study uses the True Experimental method with a Posttest-Only Control Group research design. The population used in this study were grade VI students using simple random sampling. The data collection technique used was a questionnaire distributed to both classes. The data were analyzed using descriptive data analysis techniques and inferential statistical data analysis. The results of the t-test analysis showed that the significance (2-tailed) was 0.000, which means Ho was rejected and Ha was accepted because the significance result was less than 0.005. It can be concluded that there is an influence between the experimental class that applies the Active Learning Short Card Type learning model and the control class that uses the conventional learning model.

1. INTRODUCTION

Education is an important thing that every human being needs (Ardykusuma & Mahadewi, 2020; Handayani & Wiyasa, 2020).In the world of education, a learning model is a learning plan that follows a method to achieve the desired learning goals. A learning model is a framework or guide used when planning the learning process in the classroom or tutorial learning (Octavia, 2020; Asyafah, 2019).Active involvement of students in the learning process is the main key to increasing interest in learning and is a form of activity to provide them with learning experiences (Christanty & Cendana, 2021; Suranti, 2016). Basically, the learning activity of students is still low. This is caused by the use of conventional methods that tend to be

Corresponding author
*E-mail addresses: vanda1@umsida.ac.id (Vanda Rezania)

one-way, so that it has an impact on the learning achievements obtained by students (Payon et al., 2021; Maradona, 2016). This can be observed from how the learning process still tends to make students only become recipients of information rather than actively participating in the thinking process. This happens because the material is quite extensive and makes students often only focus on taking notes, listening, or answering questions from the teacher, without much opportunity to collect and understand information in depth (Agustin et al., 2021; Peranginangin et al., 2020). As a result, learning becomes less conducive because students easily get bored and are less interested in the material presented by the teacher.

Observation results at SD Negeri 1 Kunjorowesi showed several obstacles in the learning process, namely the use of conventional methods and printed media by teachers. This makes students tend to pay less attention when the material is delivered, due to the lack of variation in the learning process. Based on these problems, the actions taken are to create learning activities that involve students in order to increase student activity. As a teacher, it is important to create an interesting learning atmosphere and involve students during the learning process. Student involvement is very important in learning. This is because the learning process requires interaction between students and teachers or interaction between students and other students (Noor & Wangid, 2019; Achdiyat & Lestari, 2016). In addition, optimal student involvement, both intellectually, emotionally and physically, can also help develop student learning activity (Ting et al., 2023; Betyka et al., 2019).Student learning activity can be measured from the individual or group learning process to study or apply learning materials, the ability to express opinions or ask questions during the learning process, the ability to discuss to solve problems and assignments given by the teacher and being able to present the results of their work (Hasanah & Himami, 2021; Prasetyo & Abduh, 2021; Sinar, 2018).

Based on this, learning models and media are needed to support the learning process. One of the learning models that can be used is the short card type active learning model. Active learning is a learning activity that involves students in a learning process by accessing various information and knowledge (Brito, 2019; Baharun, 2015). Students can build understanding through experiences and information obtained in the learning process (Hajjah et al., 2022; Zaman, 2020). The role of the teacher is not so dominant in the learning process. The teacher is only a facilitator to provide convenience for students to stimulate activity in terms of physical, mental, social, and emotional (Rahayu & Vidya, 2022; Sandria et al., 2022). Several previous research findings revealed that the use of the short card type active learning model can increase the level of student participation in the learning process (Suparman et al., 2021; Sakdiyah & Sari, 2016). Other research also states that media is needed in the learning process to support smooth learning activities (Abdullah, 2017; Maimunah, 2016).Therefore, the learning process needs to be combined with media that can support learning activities. Thus, interesting learning can be created.

Elementary school students more often act as recipients of information, which has a negative impact on their level of learning activity. Therefore, the urgency of this study lies in the need to increase the active involvement of students in the learning process in Elementary Schools. This study aims toanalyzing the influence between the level of participation in active learning using the Active Learning Short Card Type model on elementary school students. The innovation of the Active Learning Short Card Type learning model is expected to increase the learning activity of elementary school students, especially in social studies learning.

2. METHOD

This study utilizes a quantitative approach by applying the True Experimental method and using the Posttest-Only Control Group Design on learning activities assisted by Short Card media on student learning activity on the material of Indonesian cultural diversity in the social studies content of grade IV elementary school. This method involves two classes, namely the control class and the experimental class. The first class uses the Active Learning model of the Short Card type and is then given a posttest, while the control class uses the conventional model and is also given a posttest for comparison. The details of the Posttest-Only Control Group Design scheme can be presented in Table 1.

Table 1. The Post-test Only Control Group Design.

Group	Treatment	Post test
Experiment	X	O
Control	-	O

The subjects of this study were 30 fourth grade students of SDN Kunjorowesi, Mojokerto Regency, consisting of 2 classes, namely the experimental class and the control class. To determine between the experimental group and the control group, the researcher used the Simple Random Sampling technique to randomly select from the subjects. The data collection method in this study was using a questionnaire sheet

and documentation. The data collection instrument with the questionnaire has been validated by 2 expert lecturers. The validation process was tested in the form of a post-test to other subjects, then the post-test results were calculated using the Alpha Crombach formula. The instrument grid and Likert scale criteria can be presented in Table 2 and Table 3.

Table 2. The Instrument Grid

No.	Indicator	Amount
1.	Learn individually or in groups.	3
2.	Express opinions or ask questions.	5
3.	Discuss	3
4.	Presenting	4
	Amount	**15**

The instrument consists of 15 statements related to the implementation of the active learning model and is combined with previously presented materials. The provisions for answering each item of the instrument used in the study are with a Likert scale. The guidelines used to measure the extent to which students can understand and absorb the material when following the predetermined steps can be presented in Table 3.

Table 3. The Likert Scale Criteria

Mastery Level (%)	Learning Activity Category
0 - 34	Very Low
35 - 54	Low
55 - 64	Currently
65 - 84	High
85 - 100	Very high

Data analysis applied in this study includes two main stages, namely descriptive data analysis and inferential statistical data analysis. The use of descriptive data analysis aims to identify respondents who have been taken as samples in this study. On the other hand, inferential statistical data analysis is used to test the statistical aspects of the data. This test uses prerequisite tests consisting of normality and homogeneity tests. Furthermore, an analysis is carried out using the Independent Samples T-Test formula which aims to analyze the influence between learning using the short card type active learning model on the learning activity of grade IV students in Social Sciences (IPS) lessons.

3. RESULT AND DISCUSSION

Result

This study was conducted to test the feasibility of the assessment instrument for students' learning activity in Social Sciences (IPS) subjects with the material of Indonesia rich in culture in grade IV of elementary school as seen from the results of the validity test and reliability test. The results of the test are the assessment instrument for students' learning activity in IPS subjects in the form of a questionnaire sheet. The research instrument was designed based on indicators of learning activity which include; the involvement of students during the learning process physically, mentally, emotionally, and intellectually such as being able to complete tasks given by the teacher, being able to work together in a group, and being able to interact between students and students or between teachers and students (Pratama et al., 2023).After the instrument is developed according to the activity indicators, the instrument is then subjected to validation test calculations to determine the feasibility of the research instrument. The results of the validity test calculations can be presented in Table 4.

Table 4. The Instrument Validity Test

Relevant Questionnaire Item Number	Questionnaire Item Number Irrelevant
2,6,8,9,11,12,13,15,16,17,18,19,21,22,24	1,3,4,5,7,10,14,20,23

Based on the table above, it can be seen that out of 24 statements that have been compiled, there are 15 relevant statements and 9 irrelevant statements. The results obtained were then tested for reliability using the Alpha Crombach formula to determine the quality of the assessment instrument for student

learning activity in the social studies subject of class IV SDN Kunjorowesi, Mojokerto Regency. The results of the reliability test can be presented in Table 5.

Table 5. The Reliability Test

Crombach's Alpha	N of Items
0.892	15

Based on the results of the reliability test calculation, the results were 0.892 with an instrument of 15 items, so it is in the high reliability category, because it is more than 0.005. Therefore, the reliability test on this research instrument can be stated as reliable and suitable for use as a guideline in research to measure student learning activity. This research took place from the first lesson to the end. The research began the activity by dividing two classes, namely the experimental class and the control class. The experimental class was given treatment using the short card type active learning model involving 15 students, while the control class used conventional learning methods taught by the class teacher, also with the same number of students, namely 15 people. After learning, students in both classes were given a post-test in the form of a questionnaire to measure their level of learning activity. The level of learning activity of students in the experimental and control classes can be presented in Table 6 and Table 7.

Table 6. The Level of Activity in Experimental Class

No.	Learning Activity Indicators	Activity Level	Information
1.	Learn individually or in groups.	76%	Tall
2.	Express opinions or ask questions.	79%	Tall
3.	Discuss	81%	Tall
4.	Presenting.	80%	Tall

Table 7. The Level of Activity in Control Class

No.	Learning Activity Indicators	Activity Level	Information
1.	Learn individually or in groups.	55%	Currently
2.	Express opinions or ask questions.	53%	Low
3.	Discuss.	56%	Currently
4.	Presenting.	72%	High

All indicators of learning activity in the experimental class are in the high category. Meanwhile, the achievement of the level of activity in the control class shows that the first and third indicators are in the medium category, while the second indicator is in the low category and the fourth indicator is in the high category. The results of the analysis of the level of activity based on individual and group learning indicators can be presented in Figure 1 and Figure 2.

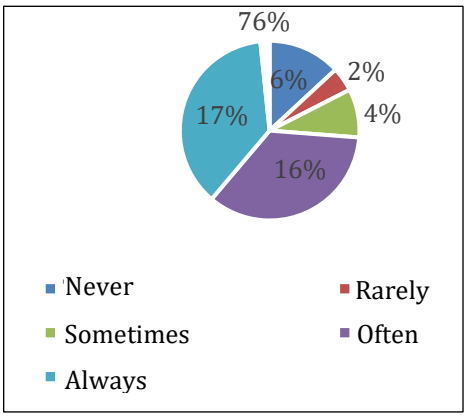


Figure 1. The Experimental class diagram for individual and group learning indicators.

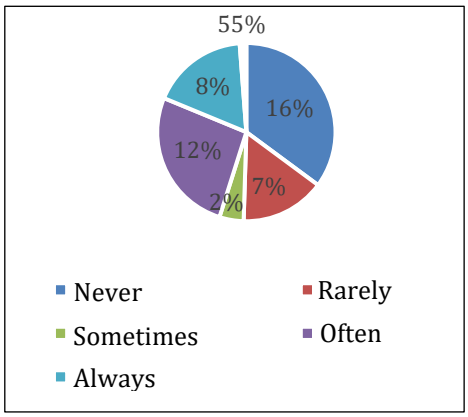


Figure 2. The Control class diagram for individual and group learning indicators.

Figure 1 shows that 17% of students in the experimental class always study individually or in groups, 16% of students often study individually or in groups, 4% sometimes study individually or in groups, and 6% of students never study individually and 2% rarely study individually or in groups. Meanwhile, in the control class, 16% of students never study individually or in groups, 12% of students often study individually or in groups, 7% rarely, and 8% always and 2% sometimes study individually or in groups. Furthermore, a comparison of the indicators of giving opinions or asking questions between the experimental class and the control class can be presented in Figure 3 and Figure 4.

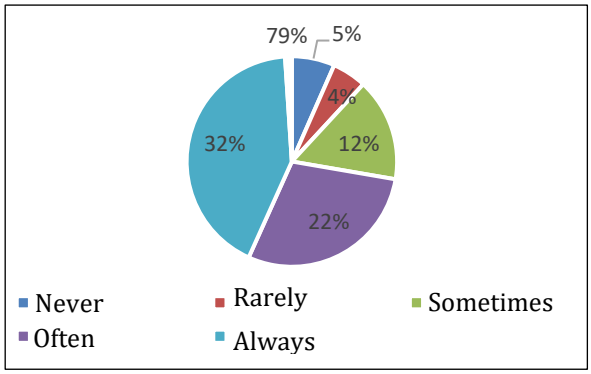


Figure 3. The Experimental class diagram for indicators of expressing opinions or asking

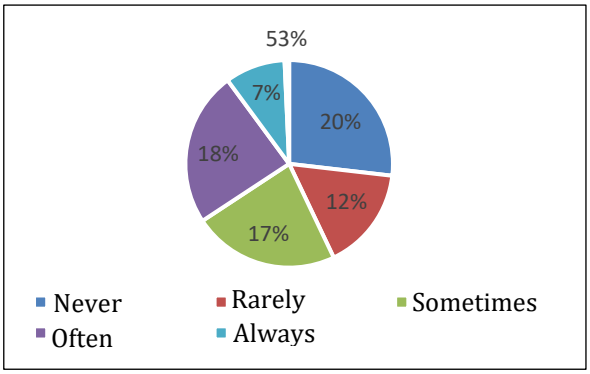


Figure 4. The Control class diagram for indicators of giving opinions or asking

Based on Figure 3, it is known that 32% of students always express opinions or ask questions, 22% often express opinions or ask questions, 12% sometimes, 5% never, and 4% rarely express opinions or ask questions. Meanwhile, Figure 4 shows the control class with 20% of students never expressing opinions or asking questions, and the other students 18% answered often and 12% rarely, 17% sometimes, and 7% answered always expressing opinions or asking questions. The discussion indicator diagram is shown in Figure 5 and Figure 6.

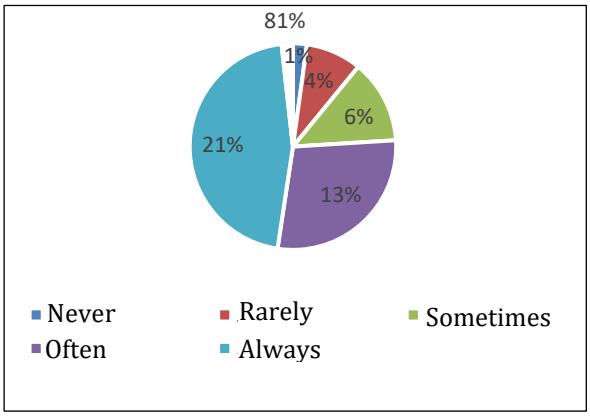


Figure 5. The Experimental class diagram for discussion indicators.

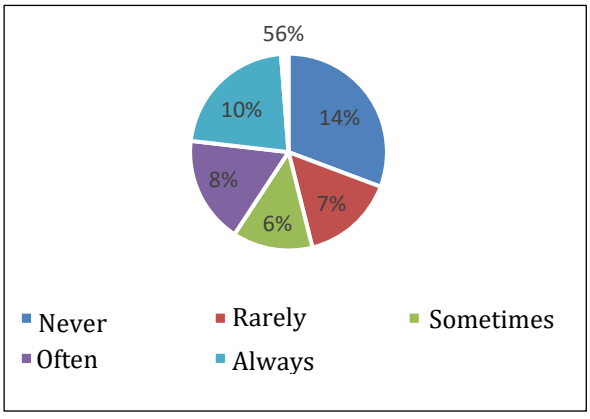
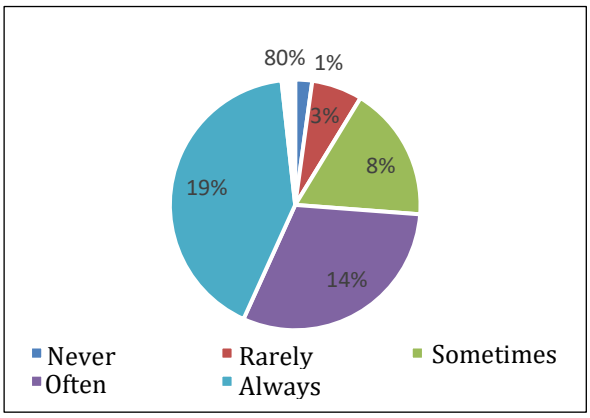


Figure 6. The Control class diagram for discussion indicators.

In Figure 5, it is obtained that 21% always discuss, and 13% of students often carry out discussions, 6% of students sometimes carry out discussions, and 4% rarely carry out discussions, and 1% never carry out discussions. While the results of the diagram in the control class based on Figure 6 show that, there are 14% of students who never carry out discussions, 10% always, and 8% often carry out discussions, and 7% rarely, and 6% sometimes carry out discussions. Furthermore, the difference in the diagram between the experimental class and the control class on the indicators presents the results of the report shown in Figure 7 and Figure 8.



Picture7. The Experimental class diagram for indicators presenting the report results.

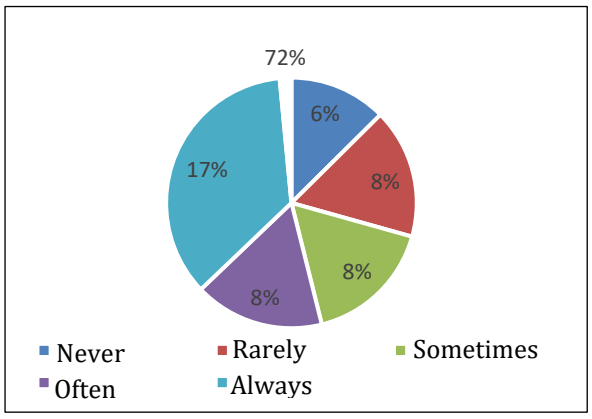


Figure 8. The control class diagram for the indicator presents the report results.

Based on Figure 7 in the experimental class, there are 19% of students who always present their report results in front of the class, and 14% of students often present their report results in front of the class, 8% sometimes present their report results in front of the class, and 3% rarely, and 1% never present their report results in front of the class. While in the control class shown in Figure 8 shows 17% of students always present their report results in front of the class, 8% often, 8% sometimes present their report results in front of the class, and 8% rarely and 6% never present their report results in front of the class. Furthermore, the analysis of different values and evaluated through the use of prerequisite tests, which include normality tests and homogeneity tests. The results of the normality test can be seen in Table 8.

Table 8. The Normality Test Results

	Shapiro Wilk		
	Statistics	**df**	**Sig.**
Experiment	0.923	15	0.216
Control	0.903	15	0.106

Based on the data in table 8, the results of the normality test show that the experimental class and the control class have significance values of 0.216 and 0.106 respectively. This value indicates a normal data distribution because it is greater than 0.005. Furthermore, the results of the homogeneity test can be presented in Table 9.

Table 9. The Homogeneity Test Results

		Levene	**df1**	**df2**	**Sig.**
Mark	Based on Mean	2.259	1	28	0.144

In the calculation table above, the homogeneity test produces a value of 0.0144. Thus, the level of student learning activity in the experimental class and the control class shows a significance above 0.005, which indicates that the data is homogeneous. After fulfilling the prerequisite test, the researcher used a t-test with the Independent Samples t-test formula to analyze the influence between learning using the card sort type active learning model and learning using the conventional model. Information regarding the results of the Independent Samples t-test calculation can be presented in Table 10.

Table 10. t-Test Results

Test	**Posttest Value**	
	Experiment	**Control**
Std. Deviation	7.805	4.828
Std. Error Mean	2.015	1.247
Sig. (2-tailed)	0.000	0.000

Based on the information in the table above, it appears that the significance value (2-tailed) is less than 0.005. Therefore, in the context of independent sample t-test testing, it can be concluded that Ho is rejected and Ha is accepted. This shows that there is a significant difference in the average learning outcomes between the experimental class and the control class. Thus, it is concluded that the implementation of short card type active learning has a good influence on student activity. The results of the independent sample t-test analysis also illustrate the success in implementing the short card type active learning model that has been implemented in the experimental class.

Discussion

Based on the results of the analysis, a significant difference was found in the learning activity of students between the control class using the conventional learning model and the experimental class applying the short card type active learning model. In learning activities using the short card type active learning model, it was seen that students were very enthusiastic during the process because they were directly involved in learning activities. In addition, learning is equipped with media that makes students understand the material faster. This is in line with previous research which revealed that learning activities using media can help students understand the material faster (Roberts, 2019; Smith & Horvath, 2014).

The enthusiasm of students during learning can improve the learning atmosphere to be exciting and interesting. The use of short card media makes students not easily bored during learning, so that the learning process becomes more enjoyable (Puspitarini et al., 2019; Romanowski et al., 2021).On the other hand, in the control class using the conventional model, students seemed less enthusiastic. This is because learning is only centered on the teacher explaining the material in front of the class and students are not involved in the learning process. This makes students less active when participating in learning.

The level of student learning activity can be seen from the ability to express opinions or ask questions, discuss, and present in front of the class and the ability to learn in groups or individually. The short card type active learning model can help students improve their learning activity, because students are given the opportunity to be involved in the learning process (Pylvas & Nokelainen, 2019; Sinha et al., 2019).The learning process is very much needed by students to foster a spirit of learning that has an impact on the activeness and mental readiness of students in learning. This needs to be considered by every teacher in order to make the learning process interesting and enjoyable, so that learning objectives can be achieved.

Learning that applies the short card type active learning model has an influence on learning activities compared to learning that applies the conventional learning model. This is in line with previous research which revealed that the application of the short card type active learning model can increase students' learning motivation (Insani et al., 2022; Dwijayanti & Pathoni, 2016). This shows that learning activities must be designed according to the development and characteristics of students, so that students can more easily understand the material presented by the teacher.

The advantage of implementing the short card type active learning model is that learning activities are focused on students' ability to solve a problem by working together in groups and on full student involvement during learning activities.The innovation of the Active Learning Short Card Type learning model in this study has implications for increasing student learning activity in social studies learning.The implementation of this learning model also has an impact on the enthusiasm of students during the learning process, so that it can increase the activeness of student learning. The limitations of this study are that the dimensions of the short card media are not large enough and do not implement good time management. Further research can consider the suitability of the media dimensions with the number of students and can compile detailed activities properly, so that they can be implemented effectively and efficiently.

4. CONCLUSION

Based on the results of the research and analysis that have been carried out, it can be concluded that there is an influence on the level of learning activity between students who follow active learning type short card and students who follow conventional learning. The experimental class achieved a higher level of activity compared to the control group. In social studies learning, the application of innovation of the active learning model type short card can be an effective alternative to support the learning process in the classroom, increase active student participation, and make learning more interesting.

5. REFERENCES

Abdullah, R. (2017). Pembelajaran dalam perspektif kreativitas guru dalam pemanfaatan media pembelajaran. *Lantanida Journal*, *4*(1), 35–49. https://doi.org/10.22373/lj.v4i1.1866.

Achdiyat, M., & Lestari, K. D. (2016). Prestasi Belajar Matematika Ditinjau dari Kepercayaan Diri dan

Keaktifan Siswa di Kelas. *Formatif: Jurnal Ilmiah Pendidikan MIPA*, *6*(1), 50–61. https://doi.org/10.30998/formatif.v6i1.752.

Agustin, S., Sumardi, & Hamdu, G. (2021). Kajian Tentang Keaktikan Belajar Siswa Dengan Media Teka Teki Silang Pada Pembelajaran IPS SD. *Pedadidaktika: Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, *8*(1), 166–176. https://doi.org/10.17509/pedadidaktika.v8i1.32917.

Ardykusuma, G. B., & Mahadew, L. P. P. (2020). Model Pembelajaran Problem Solving Berbantuan Penilaian Autentik Terhadap Hasil Belajar. *Mimbar PGSD Undiksha*, *8*(2), 412–420. https://doi.org/10.23887/jjpgsd.v8i3.26192.

Asyafah, A. (2019). Menimbang Model Pembelajaran (Kajian Teoretis-Kritis atas Model Pembelajaran dalam Pendidikan Islam). *TARBAWY : Indonesian Journal of Islamic Education*, *6*(1), 19–32. https://doi.org/10.17509/t.v6i1.20569.

Baharun, H. (2015). Penerapan pembelajaran active learning untuk meningkatkan hasil belajar siswa di madrasah. *PEDAGOGIK: Jurnal Pendidikan*, *1*(1). https://doi.org/10.33650/pjp.v1i1.14.

Betyka, F., Putra, A., & Erita, S. (2019). Pengembangan lembar aktivitas siswa berbasis penemuan terbimbing pada materi segitiga. *JURING (Journal for Research in Mathematics Learning)*, *2*(2), 178–189. https://doi.org/10.24014/juring.v2i2.7684.

Brito, S. M. (2019). *Active Learning: Beyond the Future*. IntechOpen.

Christanty, Z. J., & Cendana, W. (2021). Upaya guru meningkatkan keterlibatan siswa kelas K1 dalam pembelajaran synchronous. *COLLASE (Creative of Learning Students Elementary Education)*, *4*(3), 337–347. https://doi.org/10.22460/collase.v4i3.7154.

Dwijayanti, E., & Pathoni, H. (2016). Penerapan Strategi Pembelajaran Aktif Tipe Peer Lessons untuk Meningkatkan Aktivitas dan Hasil Belajar Siswa pada Materi Suhu dan Kalor Kelas XA di SMAN 8 Kota Jambi. *Jurnal EduFisika*, *01*(01), 18–21. Retrieved from https://mail.online-journal.unja.ac.id/EDP/article/view/2959.

Hajjah, M., Munawaroh, F., Wulandari, A. Y. R., & Hidayati, Y. (2022). Implementasi model experiential learning untuk meningkatkan kemampuan berpikir kritis siswa. *Natural Science Education Research (NSER)*, *5*(1), 79–88. https://doi.org/10.21107/nser.v5i1.4371.

Handayani, N. P. T. P., & Wiyasa, I. K. N. (2020). Minat Belajar dan Hubungan Sosial Terhadap Kompetensi Pengetahuan IPA. *Mimbar PGSD Undikhsa*, *8*(3), 393–403. https://doi.org/10.23887/jjpgsd.v8i3.25983.

Hasanah & Himami. (2021). Model Pembelajaran Kooperatif dalam Menumbuhkan Keaktifan Belajar Siswa. *Irsyaduna: Jurnal Studi Kemahasiswaaan*, *1*(1), 1–13. https://doi.org/10.54437/irsyaduna.v1i1.236.

Insani, N., Nurhanisa, S., Rudiyanto, M., Anwar, L. P., & Suparmanto, S. (2022). Strategi Pembelajaran Bahasa Arab Dengan Menggunakan Model Active Learning Dengan Metode Card Short Di Semester Tiga Program Pendidikan Bahasa Arab Fakultas Tarbiyah Dan Keguruan Universitas Islam Negeri (UIN) Mataram. *Al Akhbār: Jurnal Pendidikan Bahasa Arab*, *2*(2), 118–124. Retrieved from https://ojs.attanwir.ac.id/index.php/jpba/article/view/279.

Maimunah, M. (2016). Metode Penggunaan Media Pembelajaran. *Al-Afkar: Manajemen Pendidikan Islam*, *5*(1). https://doi.org/10.28944/afkar.v5i1.107.

Maradona. (2016). Faktor-faktor yang mempengaruhi keaktifan belajar siswa kelas IV B SD. *Jurnal Pendidikan Guru Sekolah Dasar*, *17*, 621. Retrieved from https://journal.student.uny.ac.id/pgsd/article/view/2115.

Noor, A. F., & Wangid, M. N. (2019). Interaksi Energetik Guru dan Siswa pada Pembelajaran Abad 21: Energetic Interaction of Teachers and Students on 21st Century Learning. *Anterior Jurnal*, *18*(2), 107–112. https://doi.org/10.33084/anterior.v18i2.456.

Octavia, S. A. (2020). *Model-Model Pembelajaran*. Deepublish.

Payon, F., Andrian, D., & Mardikarini, S. (2021). Faktor yang Mempengaruhi Keaktifan Belajar Peserta Didik Kelas III SD. *Jurnal Ilmiah KONTEKSTUAL*, *2*(02), 53–60. https://doi.org/10.46772/kontekstual.v2i02.397.

Peranginangin, A., Barus, H., & Rafeli Gulo, R. (2020). Perbedaan hasil belajar siswa yang di ajar dengan model Pembelajaran elaborasi dengan model pembelajaran konvensional. *Jurnal Penelitian Fisikawan*, *3*(1), 43–50. Retrieved from https://jurnal.darmaagung.ac.id/index.php/jurnalpenelitianfisikawan/article/view/452.

Prasetyo, A. D., & Abduh, M. (2021). Peningkatan Keaktifan Belajar Siswa Melalui Model Discovery Learning Di Sekolah Dasar. *Jurnal Basicedu*, *5*(4), 1717–1724. https://doi.org/https://doi.org/10.31004/basicedu.v5i4.991.

Pratama, B. I., Rukoyah, S., Dewi, I. N. J., Mulyaningtyas, I., & Wijayama, B. (2023). *Belajar Anti Boring Inovasi*

Pembelajaran Efektif. Cahya Ghani Recovery.

Puspitarini, N. W. F., Mustadi, A., & Soeharto. (2019). Active Learning : Type of Card Sort to Enhance Students Achievement. *ICSMC 2018*, *323*(ICoSSCE 2018), 280–285. https://doi.org/10.2991/icossce-icsmc-18.2019.51.

Pylvas, susanna hartikainen heta rintala laura, & Nokelainen, D. petri. (2019). The concept of active learning and the measurement of learning outcomes: A review of research in engineering higher education. *Education Sciences*, *9*(4), 9–12. https://doi.org/10.3390/educsci9040276.

Rahayu, S., & Vidya, A. (2022). *Desain Pembelajaran Aktif (Active Learning)*. Ananta Vidya.

Roberts, D. (2019). Higher education lectures: From passive to active learning via imagery? *Active Learning in Higher Education*, *20*(1), 63–77. https://doi.org/10.1177/1469787417731198.

Romanowski, A., Allen, P., & Martin, A. (2021). Educational Revolution: Integrating Concept-Based Curriculum and Active Learning for Mental Health Nursing Students. *Journal of the American Psychiatric Nurses Association*, *27*(1), 83–87. https://doi.org/10.1177/1078390319890031.

Sakdiyah, S. H., & Sari, Y. I. (2016). Penerapan Model Pembelajaran Card Sort Untuk Meningkatkan Keaktifan Siswa Kelas V Se-Gugus Kebonsari Kecamatan Sukun Kota Malang. *Jurnal Pendidikan: Teori, Penelitian, Dan Pengembangan*, 2004–2009. https://doi.org/10.17977/jp.v1i10.7414.

Sandria, A., Asy'ari, H., Fatimah, F. S., & Hasanah, M. (2022). Pembentukan Karakter Religius Melalui Pembelajaran Berpusat pada Siswa Madrasah Aliyah Negeri. *At-Tadzkir: Islamic Education Journal*, *1*(1), 63–75. https://doi.org/10.59373/attadzkir.v1i1.9.

Sinar. (2018). *Metode Active Learning - Upaya Peningkatan Keaktifan dan Hasil Belajar Siswa*. Deepublish.

Sinha, S., Ebrahimi, S., & Darrell, T. (2019). Variational adversarial active learning. *Proceedings of the IEEE International Conference on Computer Vision*, *2019-October*, 5971–5980. https://doi.org/10.1109/ICCV.2019.00607.

Smith, K., & Horvath, P. (2014). Active learning strategies for phenotypic profiling of high-content screens. *Journal of Biomolecular Screening*, *19*(5), 685–695. https://doi.org/10.1177/1087057114527313.

Sugiyono. (2015). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Bandung: Alfabeta.

Suparman, Nurjan, S., & Syam, A. R. (2021). Peningkatan Keaktifan Dan Hasil Belajar Mata Pelajaran PAI Dengan Penerapan Metode Card Sort Di SDN 2 Sanan Wonogiri. *Kajian Islam Al Kamal*, *1*(1), 43–63. Retrieved from https://ejournal.staika.ac.id/index.php/alkamal/article/view/4.

Suranti, S. (2016). Penerapan Active Learning Tipe Card Sort Untuk Meningkatkan MInat Belajar PKN IV SDN 2 Kalipetir. *Basic Education*, *5*(21). Retrieved from https://journal.student.uny.ac.id/pgsd/article/view/2618.

Ting, F. S. T., Shroff, R. H., Lam, W. H., Garcia, R. C. C., Chan, C. L., Tsang, W. K., & Ezeamuzie, N. O. (2023). A Meta-analysis of Studies on the Effects of Active Learning on Asian Students' Performance in Science, Technology, Engineering and Mathematics (STEM) Subjects. *Asia-Pacific Education Researcher*, *32*(3), 379–400. https://doi.org/10.1007/s40299-022-00661-6.

Zaman, B. (2020). Penerapan Active Learning Dalam Pembelajaran Pai. *Jurnal As-Salam*, *4*(1), 13–27. https://doi.org/10.37249/as-salam.v4i1.148.