

## Implementation of the Congklak Traditional Game in Madrasah Ibtidaiyah and Elementary School

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### Abstract

*This study aims to find out how the response and character of the curiosity and love for the homeland of students in SD and MI with the application of the traditional game Congklak in the learning process. The research method used was a mixed method with a sequential explanatory model, with a sample of 60 students from both schools obtained by random sampling. Researchers used questionnaires to collect data and interviews as support. The data analysis used is descriptive analysis and hypothesis testing using the T test. From the application of the traditional game of congklak, significant results are obtained that there are differences in the results of SD Negeri and MI Negeri. However, the response as well as the students' curiosity and love for the homeland from the application of the traditional game of congklak were in the good category.*

**Keywords:** *Traditional Games, Congklak, Curiosity, Love for the Motherland*

### Abstrak

Penelitian ini bertujuan untuk mengetahui bagaimana respons serta karakter rasa ingin tahu dan cinta tanah air siswa di SD dan MI dengan adanya penerapan permainan tradisional *Congklak* dalam proses pembelajaran. Metode penelitian yang digunakan adalah *mixed method dengan model sequential explanatory*, dengan jumlah sampel 60 siswa dari kedua sekolah yang didapatkan dengan random sampling. Peneliti menggunakan angket untuk mengumpulkan data serta wawancara sebagai pendukung. Analisis data yang digunakan yaitu analisis deskriptif dan uji hipotesis menggunakan uji T. Dari penerapan permainan tradisional *congklak* didapatkan hasil yang signifikan bahwasanya terdapat perbedaan hasil dari SD dan MI. Namun respons serta karakter rasa ingin tahu dan cinta tanah air siswa dari penerapan permainan tradisional *congklak* dalam kategori baik.

**Kata kunci:** Permainan Tradisional, Congklak, Rasa Ingin Tahu, Cinta Tanah Air



## Introduction

Local wisdom is a wealth that is owned by every region in Indonesia. Local wisdom is a characteristic and cultural values in people's lives (Hartini, et.al, 2017; Selasih & Sudarsana, 2018; Karami, et.al, 2020; Toharudin, Kurniawan, & Fisher, 2021). So that local culture becomes one of the local cultural products (Mungmachon, 2012; Kartikawangi, 2017; Sopa, 2018). Local wisdom becomes a set of knowledge and values of a community that is used as the basis for policies taken by the community (Fajarini, 2014; Hilman, & Hendriawan, 2018; Suarmika & Syarifah, 2019). Local wisdom has various values and functions and directions, so it needs to be studied.

Education that is integrated with local wisdom indirectly makes students learn it. Education that conveys the context of people's lives such as habituation of good behavior (Munawaroh, 2017; Sembiring, et.al, 2019; Kurnianto & Lestarini, 2020). Local wisdom needs to be integrated into subject matter with the active role of teachers and schools (Cherng, et.al, 2019; Hidayati, 2019; Primayana, 2018; Tusriyanto, 2020). Local wisdom in the community taught to students contains the values of this local wisdom (Hasanah et al., 2016; Komariah, & Asyahidda, 2019; Mubiar et al., 2020; Hedegaard-Soerensen & Grumloese, 2020). One of the local wisdoms that exists in the community is traditional games.

Traditional games are children's play facilities that focus on physical activities. Traditional games are not only playing, but there are elements of education that are integrated into the self and the environment (Prisia Yudiwinata, 2014; Smith, Mason, & Bowden, 2020; Ufie, Matitaputy, & Kufla, 2020). Cultural values in traditional games are able to adapt to the character of students morally and effectively (Rasna & Tantra, 2017; Amaruddin et al., 2018; Sulistyanningtyas & Fauziah, 2019; Rina et al., 2020). Traditional games can be a medium that can provide learning variations, please students, and bring up creative attitudes (Yunianta & Rusilowati, 2012; Asmahasanah et al., 2018; Suherman, et.al, 2019; Arga, Nurfurqon, & Conscience, 2020). In addition, in traditional games there are characters that students must have.

Character is the characteristics, behaviors, actions and thought patterns that exist within a person (Fleeson, 2014; Woodbury & Lapsley, 2016; Khoury, 2017). Preserving traditional games, the character of love for the homeland is created. Feeling proud, thinking and acting to be a part of his birthplace. The character of love for the homeland must be owned by

the nation's young generation, especially children (Syamsul, 2013; Zukhri, 2018; Harun, et al, 2020; Sopacua, Fadli, & Rochmat, 2020). Character planting must be done as early as possible so that the character is truly embedded in the child (Sahroh & Rizkiyah, 2021).

The nature of a child who has considerable curiosity. The character of curiosity can be formed in students which will cause students to gain more knowledge (Salirawati, 2012; Tang, Sullivan, & Chang, 2015; Misliya, Mahmud, & Manda, 2016; Merino, Valor & Redondo, 2020). Generating curiosity in students is something very important (Forbes, 2011; Hidayati, 2018; Novelya, 2019; Agatha, & Syiarah, 2021). When students have curiosity, they will try to find deeper information, focus more and will remember the information better. In doing assignments, students will work on assignments to completion even more.

*Congklak* traditional games can be integrated with learning in schools. The values in it can provide diverse and meaningful learning (Pratiwi, 2015, Handayani, 2017). The traditional game of *congklak* makes students behave honestly by obeying the rules of the game. This is as explained in Surah Al-Ahzab: 70-71, which reveals that everyone who is honest will get a big victory. In Elementary Schools and Madrasah Ibtidaiyah it is still rare to apply traditional games in learning (Rut, et al, 2020).

Considering the importance of the character of curiosity and love for the homeland in traditional games that have not been integrated into learning. Researchers want to know the response of students when traditional games are integrated in classroom learning. *Congklak* traditional game in mathematics subject matter of arithmetic operation summation and reduction. So, it can be seen whether there is a difference with the integration of traditional games or not. The research questions are as follows: 1) How do students respond to the application of the traditional game *Congklak* in the learning process?; 2) Does the application of the *Congklak* traditional game affect the character of students' curiosity?; and 3) Is there any influence on the character of students' love for the homeland with the implementation of the traditional game *Congklak* ?

## **Research Method**

The research method used in this study was a mixed method combined with quantitative methods (Mix Method). Mix Method combines quantitative and qualitative methods (Margalha, et.al, 2011; da

Silva, et.al, 2013; Cortini, 2014; Sugiyono, 2016). Qualitative and quantitative data were used together in this research to obtain more comprehensive, effective, reliable, and objective data. The type of research used by the researcher in this research was the Sequential Explanatory Model, namely research that will use numerical data to be presented in the form of text and language. Quantitative data collection and analysis was carried out first and then qualitative data analysis (Creswell, 2014; Dugas, et.al, 2017; Wipulanusat, 2020; Otman, Steen & Fleet, 2021).

The research was conducted in two different schools, namely SD Negeri 55/1 Sridadi and MI Negeri 4 Batanghari. It was carried out in grade 3 with 90 students from two third grades of SD Negeri 55/1 Sridadi. And 30 students in MI Negeri 4 Batanghari. So that the total population is 120 students. Researchers used random sampling technique in this study by taking 50% of the total population. In random sampling the sample is considered to have the same opportunity to participate in the study (Meng, 2013; Emerson, 2015; Puy, et al, 2018; Nguyen, et al, 2020). So, we get 60 students in grade 3 from both schools.

Data collection techniques used by researchers were questionnaires and interviews. Questionnaire is a quantitative data collection technique, and an efficient data collection technique because it can collect data in a short time (Sari, 2014; Widoyoko, 2017; Arifah, Setiyani, & Arief, 2018; Nasution, 2019). Researchers used 3 questionnaires, namely student response questionnaires, peace-loving characters and curiosity characters to be given to students. The number of valid questions were 15 items. Cronbach alpha formula was used to see reliability. After the instrument was tested and analyzed for reliability, it was obtained that the reliability coefficient of the student response questionnaire was 0.654. The curiosity character questionnaire is 0.660 and the love for the homeland character questionnaire is 0.661 so it can be concluded that the instrument is reliable. By using a Likert scale prone to 1-5, with a value of STS = strongly disagree, TS = disagree, N = neutral, S = agree, SS = strongly agree. The following is a grid of curiosity questionnaires:

Table 1. Curiosity Character Questionnaire Grid

No	Indicator	Number of Items
1	Try even if it's wrong	3
2	Doing questions	2
3	Active thinking	2
4	Spirit	1
5	Never give up	3

6	Searching for information	3
7	Asking	1
	Amount	15

As for the second questionnaire, the character of the love of the homeland questionnaire, here is the lattice of the peace-loving character questionnaire:

Table 2. Questionnaire Grids for the Love of the Motherland Character

No	Indicator	Number of Items
1	Obedying the School Rules, family and community	3
2	Love and use domestic products	3
3	Knowing the local culture/wisdom of the area	3
4	Participate in cultural events and local wisdom	3
5	Appreciate differences of belief	2
6	Open in getting to know other people	2
	Amount	15

The last is a student response questionnaire to the implementation of the *Congklak* traditional game. The following is a grid of student response questionnaires:

Table 3. Grid of Student Response Questionnaires

No	Indicator	Number of Items
1	Traditional game knowledge	3
2	Interest in traditional games	2
3	Participation in traditional games	2
4	Easy to understand the subject matter	3
5	Obey the rules of the game	3
6	Train sportsmanship	2
	Amount	15

Each questionnaire has a category of responses given by students after giving the questionnaire. Here are the categories:

Table 4. Categories of Love for the Motherland Character, Character Curiosity and Student Response

Category	Interval
Very Not Good	61 – 63
Not good	64 – 66
Enough	67 – 69
Good	70 – 72
Very good	73 – 75

While the interview is a qualitative data collection technique that will be carried out with several students and homeroom teachers. Interviews are a data collection technique by asking respondents several questions (Laihad, 2013; Trihapsari & Anisykurillah, 2016; Rahmawati & Puspasari, 2017; Maili, 2018). The following is a grid of interviews with students:

Table 5. Student Interview Grid

No	Indicator	Number of Items
1	Traditional game knowledge	5
2	Participation in traditional games	2
3	The interest of playing traditional games	2
4	The purpose of doing traditional games	2
5	Implementation traditional games in learning	4
	Amount	15

After conducting interviews with students, researchers conducted interviews with homeroom teachers. Here is the grid:

Table 6. Homeroom Teacher Interview Grid

No	Indicator	Number of Items
1	Traditional game knowledge	3
2	Traditional game strategy in class	2
3	How to implement traditional games in class	2
4	Obstacles encountered	2
5	How to overcome obstacles	2
6	Availability of facilities and infrastructure	2
7	The effect of implementing traditional games	2
	Amount	15

The collected data were analyzed by using descriptive statistical analysis and inferential statistics. Descriptive statistics is an analysis that deals with describing data in the form of tables, graphs or pictures (Tiro, & Sukarna, 2010; Siregar, 2015; Husnul, et al, 2020; Khotimah & Nasrullah, 2021). The descriptive statistics used in this study consisted of the minimum value, maximum value, percentage and mean (average value) in a table. Inferential statistics are statistics related to drawing conclusions (Burhan, 2013; Luthfi, 2014; Rosana & Setyawarno 2016; Sutopo & Slamet, 2017). Researcher did some testing in advance of the data other tests of normality and linearity and normality test T test determines the normal distribution of data or not and test linieri bag determine the data ber relationship is linear or not (Nugraheni & Subaweh 2011;

Wahyudi & Supardi, 2013; Pramesti, 2015; Usmadi, 2020). In this study the researchers also used the T test which aims to determine differences in responses and the character of curiosity and peace-loving character in SD Negeri 55/1 Sridadi and MI Negeri 4 Batanghari.

## Results and Discussion

Quantitative data were obtained from the results of the distribution of the three questionnaires to 3rd grade students of SD Negeri 55/1 Sridadi and MI Negeri 4 Batanghari. The following are the results of the student curiosity character questionnaire:

Table 7. Results of Student Curiosity Character Questionnaire

interval	Category Attitude	Total	Gender		Mean	Min	Max	Median	Std. Deviation	%
			M	F						
61 - 63	Very Not Good	10	2	8						16,67
64 - 66	Not good	10	7	3						16,67
67 - 69	Neutral	0	0	0	70.8	60	75	71.50	4,699	0
70 - 72	Good	20	7	13						33,33
73 - 75	Very good	20	0	20						33,33
<b>Total</b>		<b>60</b>	<b>16</b>	<b>44</b>						<b>100</b>

The results of the curiosity character questionnaire were 12% (6 out of 50 students) which were included in the very bad category, in the not good category 8% (4 and 50 students), in the neutral category there were no students in the neutral category and in the good category and very good results obtained respectively 40% (20 out of 50 students), seen from the mean value of the curiosity character questionnaire results of 70.8 included in the good category. There were also the results of a love of the homeland character questionnaire that has been shared. The results are as follows:

Table 8. Questionnaire Results of Students' Love of the Motherland Character

interval	Category Attitude	Total	Gender		Mean	Min	Max	median	Std. Deviation	%
			M	F						
61 - 63	Very Not Good	5	4	1						8,33
64 - 66	Not good	20	8	12						33,33
67 - 69	Neutral	0	0	0	70.58	62	75	71.50	4,204	0
70 - 72	Good	21	4	17						35
73 - 75	Very good	14	4	10						23,34
<b>Total</b>		<b>60</b>	<b>20</b>	<b>40</b>						<b>100</b>

The results of the questionnaire on the character of love for the homeland were 8,33% (5 out of 60 students) which were included in the very bad category, in the bad categories each got 33,33% (20 and 60 students), there were no students who were included in the neutral category. In the good categories each got 35% (21 out of 60 students), and in the very good category, the results were 23,34% (14 out of 60 students), seen from the mean value of the questionnaire results for the love of the homeland character of 70,58 included in the good category.

The results of the student response questionnaire to the implementation of traditional games that are integrated in the lesson were as follows:

Table 9. Student Response Questionnaire Results

interval	Category Attitude	Total	Gender		Mean	Min	Max	Median	Std. Deviation	%
			M	F						
61 - 63	Very Not Good	3	0	3						5
64 - 66	Not good	2	0	2						3,34
67 - 69	Neutral	0	0	0	71.32	62	75	71.50	3,279	0
70 - 72	Good	35	15	20						58,33
73 - 75	Very good	20	5	15						33,33
<b>Total</b>		<b>50</b>	<b>20</b>	<b>40</b>						<b>100</b>

The results of the student response questionnaire were 5% (3 out of 60 students) which were included in the very bad category, in the bad category got 3,34% (2 out of 60 students), there were no students who were included in the neutral category, in the good category there were 58,33% (35 out of 60 students) and the very good category obtained 33,33% results (20 out of 60 students), with a mean value of 71.32, the student's response was included in the good category.

The following were the results of the normality test and the linearity test that the researchers did with the help of the SPSS 20 program.

Table 10. Normality Test Results and Linearity Test

	Normality test		Linearity Test	
	Love for the Motherland and Student Response	Curiosity And Student Response	Love for the Motherland and Student Response	Curiosity And Student Response
asypm. Sig. (2-tailed)	.239	.234	.247	.280



Normality test obtained with sig value of 0,239 for the students' response to the character of love of the homeland and 0,234 for character curiosity. Based on the Kolmogorov-Smirnov statistical test with the provision that if the value of sig > 0.05 the sample comes from a population that has a normal distribution, and if the value of sig < 0.05 samples come from populations that do not have a normal distribution. So, from the table of student responses with the character of love for the homeland and curiosity has a sig value greater than 0.05, so it can be said that the data is normally distributed. The linearity test that has been carried out gets results with a sig value of 0.247 for student responses with the character of love for the homeland, and for student responses with curiosity character the sig value is 0.280. So, the existing data is linearly related.

After testing the assumptions, the researcher tested the hypothesis using the T test. The T test was used to compare student responses with traditional games to see the character of love for the homeland and the character of curiosity. Here are the results of the T test:

Table 11. Student Response T Test Results

		Independent Samples Test								
		Levene's Test for Equality of Variances			t-test for Equality of Means					
		F	Sig.	T	D f	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper
RESPONSE	Equal variances assumed	.143	.560	47.906	112	.000	52.86842	1.13905	40.20248	52,53436
	Equal variances not assumed			47.906	111,996	.000	52.36834	1.09315	50.20248	54,53430

The results of the table above show a significance value that is smaller than 0.05, with a value of 0.000. Below are the results of the student's curiosity character T test:

Table 12. Student Curiosity Character T Test Results

		Independent Samples Test								
		Levene's Test for Equality of Variances			t-test for Equality of Means					
		F	Sig.	T	D f	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper

Curiosity	Equal variances assumed	10.875	.001	37,540	86	.000	38.79545	1.03345	36.74102	40.84989
	Equal variances assumed			37,540	67.805	.000	38.79545	1.03345	36.73312	40.85779

The results of the T test on the character of students' curiosity also get a significance value that is smaller than 0.05. The last is the character of love for the homeland, here are the results:

Table 13. T-Test Results of the Love of the Motherland Character

	Independent Samples Test								
	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
LOVE THE	6,973	.010	12,434	86	.000	13.22727	1.06383	11.11246	15.34209
HOMELAND			12,434	66,298	.000	13.22727	1.06383	11.10345	15.35109

On the character of love for the homeland, students from the T-test got a result of 0.000, which is smaller than 0.05. As supporting material, interviews with teachers and students have been conducted. The following are the results of interviews with teachers:

*"In the application of traditional games, it is usually in physical education subjects, but the traditional game of congklak is suitable to be implemented in mathematics. In its application there are obstacles, namely the tools used are only two, so students have to take turns. The students are quite happy, and in the future hopefully the traditional games will continue to be sustainable."*

The results of interviews with several students that have been carried out. The results of the interview, as follows:

*"I am quite happy with the traditional game of congklak in learning. It's fun, cool and the lessons don't get bored, difficult math lessons are easy to understand with traditional games in it. So, play and learn at the same time."*

The implementation of the traditional game of *congklak* in learning got a good response from students. This is evidenced by the student response questionnaire in the good category. With the result that is 33,33% of students, is 20 of 60 students. With an amount that exceeds half of the

sample, it can be said that the students received a very good response. For the character of students' curiosity from the results of the application of the traditional game of *Congklak*. It can be seen that the students' curiosity character is good the results were 33,33 % each. So, there are 20 students who fall into the good. With the number of samples that exceeds half of the sample, the character of students' curiosity is very visible with the implementation of the traditional game of *congklak*.

Meanwhile, the students' love for their homeland is in the very good category. This is obtained from the results of a questionnaire with 35% of students, namely 21 of 60 students. Students show the character of love for the homeland because they know, love and follow learning that is implemented well in traditional games. Enthusiasm in participating in learning that includes the application of the traditional game of *congklak* is very visible they show.

Students also showed changes after the implementation of the traditional game of *congklak*. When the student holds the stone in his hand, the opponent does not see the number of stones and whether each hole is filled with stones. Students will show an honest attitude. Students are required to have an honest attitude, because honesty is the hallmark of a pious person and heaven is the prize, which is explained in Q.S. Al-Baqarah: 177 and Q.S. Al Maidah: 119. *Congklak* also trains students to calculate addition and subtraction. Allah SWT has also explained in Q.S. Al-A'raf: 142 and Q.S. Al-Muzzammil: 3-4 that every servant needs to understand the operation of numbers (Cahya & Ahmadi, 2020). The traditional game of *congklak* has brought noble and spiritual values from the ancestors as well as from the Al-Qur'an.

The assumption test and hypothesis testing that have been carried out get the results of the sample being normally distributed and having a linear relationship n. Normality and linearity tests play an important role in testing data because objective results will be obtained, it is necessary for data to be normally distributed and have a linear relationship. From the results of hypothesis testing using the T test, student responses with the character of curiosity and love for the homeland have significant values that show differences. The t-test was carried out from the results of distributing questionnaires to the students of SD Negeri 55/1 Sridadi and MI Negeri 4 Batanghari. In the t-test analysis that has been carried out the proposed hypothesis can be well received; it can be seen in the table that the sig value is less than 0.05. Students' responses to the application of traditional games with the character of students' curiosity and love for

their homeland. In the t-test analysis that has been carried out the proposed hypothesis can be well received; it can be seen in the table that the sig value is less than 0.05.

From previous research that has been done, the traditional game of *congklak* which is applied in the learning process increases student participation in learning (Mahmudah, Syahputri, & Priyanda, 2021). Traditional games form good characters in students (Handriany, Kurniati, Thifa, & Ramadhani, 2021). For this reason, teachers need to add insight into the application of the traditional game of *congklak* in the learning process (Asrial, et al, 2020). The position of this study from previous research is that this research is a measurement for fostering the character of curiosity and love for the homeland as well as student responses. From previous research, the application of traditional games to develop students' cognitive abilities in the learning process has been carried out.

The implication of the study is to compare the application of traditional games *congklak* in view of the character 's curiosity and love of homeland character, and response students. The application of the traditional game of *congklak* in learning for students in grade III on the subject matter of Mathematics "Operation Count Reduction and Summation". The novelty in this study is that there are variables that are different from previous studies, namely the responses of students of SD Negeri and MI Negeri with the character of curiosity and the character of patriotism. Limitations of this research with the application of traditional games only *congklak* and characters compared only curiosity and love for the homeland. Researchers recommend that more traditional games be applied in learning such as tops, catfish pegs, hide and seek and many more. There are character values in other traditional games such as social care, peace-loving, responsible and others.

## Conclusion

The application of the traditional game of *Congklak* at SD Negeri 55/1 Sridadi and MI Negeri 4 Batanghari showed that there is a comparison between student responses, the character of curiosity and the character of love for the homeland from the two schools. From the distribution of the questionnaire, it was found that the students' responses and the character of curiosity and love for the homeland were categorized as good. This was supported by the T test that had been carried out on the three variables, with a small significance value of 0.05 so that there was a clear difference between the three variables.

## Suggestion

The application of traditional games in the classroom can be a way to make learning more fun and in accordance with the characteristics of SD or MI students who still like to play. This also means that students and teachers participate in preserving existing local wisdom.

## References

- Agatha, F. L., & Syiarah, H. (2021). Identifikasi Rasa Ingin Tahu Siswa Dengan Mata Pelajaran Fisika Pada Siswa Kelas 12 Di Sma Negeri 4 Kota Jambi. *Journal Evaluation in Education (JEE)*, 2(2), 50-54. <https://doi.org/10.37251/jee.v2i2.151>
- Amaruddin, H., Haryadi, M., & Setianingsih, E. S. (2018). Development of comic based on local wisdom as learning media for primary school. In F. Ahmadi & Masturi (Eds.), *Proceedings of the International Conference on Science and Education and Technology 2018 (ISET 2018)* (pp. 233-236), Atlantis Press. <https://doi.org/10.2991/iset-18.2018.49>
- Arga, H. S. P., Nurfurqon, F. F., & Nurani, R. Z. (2020, August). Improvement of Creative Thinking Ability of Elementary Teacher Education Students in Utilizing Traditional Games in Social Studies Learning. In *Elementary School Forum (Mimbar Sekolah Dasar)* (Vol. 7, No. 2, pp. 235-250). Indonesia University of Education. Jl. Mayor Abdurachman No. 211, Sumedang, Jawa Barat, 45322, Indonesia. Web site: <https://ejournal.upi.edu/index.php/mimbar/index>.
- Arifah, W., Setiyani, R., & Arief, S. (2018). Pengaruh prokrastinasi, tekanan akademik, religiusitas, locus of control terhadap perilaku ketidakjujuran akademik mahasiswa pendidikan akuntansi Unnes. *Economic Education Analysis Journal*, 7(1), 106-119. <https://journal.unnes.ac.id/sju/index.php/eeaj/article/view/22860>
- Asmahasanah, S., Ibdalsyah, I., & Sa'diyah, M. (2018). Social Studies Education in Elementary Schools Through Contextual REACT-Based on Environment and Sociopreneur. *International Journal of Multicultural and Multireligious Understanding*, 5(6), 52. <https://doi.org/10.18415/ijmmu.v5i6.487>

- Asrial, A., Syahrial, S., Maison, M., Kurniawan, D. A., & Perdana, R. (2020). A study of Traditional Games “Engklek” in Mathematics for Elementary School. *Jurnal Ilmu Pendidikan*, 26(1), 15-21. <http://dx.doi.org/10.17977/um048v26i1p15-21>
- Burhan, B. (2013). Strata Perilaku Belajar Statistik Inferensial Mahasiswa Stain Sultan Qaimuddin Kendari. *Al-TA'DIB: Jurnal Kajian Ilmu Kependidikan*, 6(2), 116-128.
- Cahya, I. N., & Ahmadi, M. F. (2020). Keterpaduan Konsep Operasi Bilangan Matematika dalam Al-Qur'an. *Prosiding Konferensi Integrasi Interkoneksi Islam dan Sains*, 2, 79-81. Retrieved from <http://sunankalijaga.org/prosiding/index.php/kiiis/article/view/379>
- Cherng, H. Y. S., Hannum, E., Lu, C., Kong, P. A., & Yu, X. (2019). China: Sociological Perspectives on Ethnicity and Education: Views from Chinese and English Literatures. In *The Palgrave handbook of race and ethnic inequalities in education* (pp. 301-344). *Palgrave Macmillan, Cham*. doi: 10.1007/978-3-319-94724-2\_8
- Cortini, M. (2014). Mix-method research in applied psychology. *Mediterranean Journal of Social Sciences*, 5(23), 1900-1900. <http://dx.doi.org/10.5901/mjss.2014.v5n23p1900>
- Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE publications.
- da Silva, F. Q., França, A. C. C., Suassuna, M., de Sousa Mariz, L. M., Rossiley, I., de Miranda, R. C., ... & Espindola, E. (2013). Team building criteria in software projects: A mix-method replicated study. *Information and Software Technology*, 55(7), 1316-1340. <https://doi.org/10.1016/j.infsof.2012.11.006>
- Dugas, M., Trottier, M. È., Dansokho, S. C., Vaisson, G., Provencher, T., Colquhoun, H., ... & Witteman, H. O. (2017). Involving members of vulnerable populations in the development of patient decision aids: a mixed methods sequential explanatory study. *BMC medical informatics and decision making*, 17(1), 1-11. <https://doi.org/10.1186/s12911-016-0399-8>
- Emerson, R. W. (2015). Convenience Sampling, Random Sampling, and Snowball Sampling: How Does Sampling Affect the Validity of

- Research?. *Journal of Visual Impairment & Blindness*, 109(2), 164–168. doi:10.1177/0145482x1510900215
- Fajarini, U. (2014). Peranan kearifan lokal dalam pendidikan karakter. *SOSIO-DIDAKTIKA: Social Science Education Journal*, 1(2), 123-130. <https://doi.org/10.15408/sd.v1i2.1225>
- Fauzi, A., Zainuddin, Z., & Atok, R. (2018). Penguatan karakter rasa ingin tahu dan peduli sosial melalui discovery learning. *Jurnal Teori dan Praksis Pembelajaran IPS*, 2(2), 83-93. <http://dx.doi.org/10.17977/um022v2i22017p079>
- Fleeson, M., Furr, R. M., Jayawickreme, E., Meindl, P., & Helzer, E. G. (2014). Character: The prospects for a personality-based perspective morality. *Social and Personality Psychology Compass*, 8(4) 178–191. <https://doi.org/10.1111/spc3.12094>.
- Forbes, J. D. (2011). *Columbus and other cannibals: The Wetiko disease of exploitation, imperialism, and terrorism*. Seven Stories Press.
- Handayani, P. (2017). Upaya peningkatan keterampilan sosial siswa melalui permainan tradisional *congklak* pada mata pelajaran IPS. *Premiere Educandum: Jurnal Pendidikan Dasar dan Pembelajaran*, 7(01), 39-46. <http://doi.org/10.25273/pe.v7i01.1245>
- Handriany, E., Kurniati, Q., Thifa, L., & Ramadhani, P. (2021). Pembentukan Pemahaman Karakter Kejujuran Melalui Permainan Tradisional di RA. Yayasan Amanah Kec. Medan Marelan. *AUD Cendekia*, 1(1), 58-67. <http://jurnal.staisumatera-medan.ac.id/index.php/audcendekia/article/view/35>
- Hartini, S., Misbah, Helda, & Dewantara, D. (2017, August). The effectiveness of physics learning material based on South Kalimantan local wisdom. In *AIP Conference Proceedings* (Vol. 1868, No. 1, p. 070006). AIP Publishing LLC. <https://doi.org/10.1063/1.4995182>
- Harun, H., Jaedun, A., Sudaryanti, S., Manaf, A. (2020). Dimensions of Early Childhood Character Education Based on Multicultural and Community Local Wisdom. *International Journal of Instruction*, 13(2). <https://doi.org/10.29333/iji.2020.13225a>

- Hasanah, A., Gustini, N., & Rohaniawati, D. (2016). Cultivating character education based on Sundanese culture local wisdom. *Jurnal Pendidikan Islam*, 2(2), 231–253. doi: :10.15575/jpi.v2i2.788.
- Hedegaard-Soerensen, L., & Penthin., S. (2020). Student-teacher dialogue for lesson planning: inclusion in the context of national policy and local culture. *Nordic Journal of Studies in Educational Policy*, 6(1), 25–36. <https://doi.org/10.1080/20020317.2020.1747376>
- Hidayati, T. 2018. Pengembangan Perangkat Pembelajaran Matematika dengan Suplemen History of Mathematics. Jawa Tengah: Pena Persada.
- Hidayati, Y. (2019). Analysis of local wisdom toward environmental conservation attitude in Bangkalan district: a preliminary research. *Science Pen Journal/ Jurnal Pena Sains*, 6(1), 51-59, <https://doi.org/10.21107/jps.v6i1.5257>.
- Hilman, I., & Hendriawan, N. (2018). Local Wisdom of Indigenous Community of Kampung Dukuh as Culture Preservation in Ciroyom Village, Cikelet District, Garut Regency, West Java Province. *IOP Conference Series: Earth and Environmental Science*, 145(1), 1315–1755. doi :10.1088/1755-1315/145/1/012028
- Husnul, N. R. I., Prasetya, E. R., Ajimat, A., & Purnomo, L. I. (2020). Statistik Deskriptif. Tangerang: Unpam Press.
- Karami, S., Ghahremani, M., Parra-Martinez, F. A., & Gentry, M. (2020). A polyhedron model of wisdom: A systematic review of the wisdom studies in psychology, management and leadership, and education. *Roeper Review*, 42(4), 241-257. <https://doi.org/10.1080/02783193.2020.1815263>
- Kartikawangi, D. (2017). Symbolic convergence of local wisdom in cross-cultural collaborative social responsibility: Indonesian case. *Public Relations Review*, 43(1), 35–45. <https://doi.org/10.1016/j.pubrev.2016.10.012>
- Khotimah, K., & Nasrulloh, M. F. (2021). Statistik Deskriptif. LPPM Universitas KH. A. Wahab Hasbullah.
- Khoury, R. (2017). Character education as a bridge from elementary to middle school: a case study of effective practices and processes. *International Journal of Teacher Leadership*, 8(2), 49-67.



- Komariah, S., & Asyahidda, F. N. (2019b). Local Wisdom as Educational Tourism: A Study from Kampong Dukuh West Java Indonesia. *3rd International Seminar on Tourism (ISOT 2018)*. Atlantis Press. 282-286, <https://doi.org/10.2991/icoie-18.2019.63>
- Kurnianto, R., & Lestarini, N. (2016, August 30). Integration of local wisdom in education [Paper presentation]. International Seminar on Education: Education Trends for Future Society, Muhammadiyah University of Ponorogo, Jawa Timur, Indonesia. <http://seminar.umpo.ac.id/index.php/ISE2016/article/viewFile/500/479>
- Laihad, R. C. (2013). Pengaruh perilaku wajib pajak terhadap penggunaan e-filing wajib pajak di kota manado. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 1(3). <https://doi.org/10.35794/emba.v1i3.1938>
- Lavega, P., Alonso, J. I., Etxebeste, J., Lagardera, F., & March, J. (2014). Relationship between traditional games and the intensity of emotions experienced by participants. *Research quarterly for exercise and sport*, 85(4), 457-467. <https://doi.org/10.1080/02701367.2014.961048>
- Luthfi, R. I. (2014). Pengaruh Motivasi Terhadap Kinerja Karyawan (Studi Pada PT Elsiscom Prima Karya, Kantor Perwakilan Surabaya). *Jurnal Administrasi Bisnis*, 13(1). <http://administrasibisnis.studentjournal.ub.ac.id/index.php/jab/article/view/530/729>
- Mahmudah, M., Syahputri, S., & Priyanda, R. (2021). Meningkatkan minat belajar perkalian Matematika dengan permainan *congklak* di SDN Sidorejo. In Seminar Nasional Peningkatan Mutu Pendidikan (Vol. 2, No. 1, pp. 44-49). <http://publikasi.fkip-unsam.org/index.php/semnas2019/article/view/157>
- Maili, S. N. (2018). Bahasa Inggris pada sekolah dasar: Mengapa perlu dan mengapa dipersiapkan. *JUDIKA (Jurnal Pendidikan Unsika)*, 6(1), 23-28. <https://journal.unsika.ac.id/index.php/judika/article/view/1203>
- Margalha, G., Veiga, R., Silva, A. S., & De Brito, J. (2011). Traditional methods of mortar preparation: The hot lime mix method. *Cement*

- and *Concrete Composites*, 33(8), 796-804.  
<https://doi.org/10.1016/j.cemconcomp.2011.05.008>
- Meng, X. (2013, May). Scalable simple random sampling and stratified sampling. In *International Conference on Machine Learning* (pp. 531-539). PMLR. <http://proceedings.mlr.press/v28/meng13a.html>
- Merino, A., Valor, C., & Redondo, R. (2020). Connectedness is in my character: the relationship between nature relatedness and character strengths. *Environmental Education Research*, 1-22. <https://doi.org/10.1080/13504622.2020.1825630>
- Mislia, M., Mahmud, A., & Manda, D. (2016). The implementation of character education through scout activities. *International Education Studies*, 9(6), 130. <http://dx.doi.org/10.5539/ies.v9n6p130>
- Mubiar, M., Mamat, N. Bin, & Syaodih, E. (2020). Exploring “Kaulinan Barudak” to Develop Children’s Character Values in Islamic Early Childhood Education. *Jurnal Pendidikan Islam*, 6(1), 13–26. DOI: 10.15575/jpi.v6i1.8226
- Munawaroh, H. (2017). Pengembangan model pembelajaran dengan permainan tradisional engklek sebagai sarana stimulasi perkembangan anak usia dini. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 1(2), 86-96. <https://doi.org/10.31004/obsesi.v1i2.19>
- Mungmachon, M. R. (2012). Knowledge and Local Wisdom: Community treasure. *International Journal of Humanities and Social Science*, 2(13), 174–181. <http://dx.doi.org/10.7575/aiac.ijalel.v.7n.2p.9>
- Nasution, Y. R. (2019). Penerapan Aplikasi Online Angket Persepsi Mahasiswa Terhadap Kinerja Dosen Uin Sumatera Utara Medan. *JISTech (Journal of Islamic Science and Technology)*, 3(2). <http://dx.doi.org/10.30829/jistech.v3i2.3158>
- Nguyen, T. D., Shih, M. H., Srivastava, D., Tirthapura, S., & Xu, B. (2020). Stratified random sampling from streaming and stored data. *Distributed and Parallel Databases*, 1-46. <https://doi.org/10.1007/s10619-020-07315-w>
- Nugraheni, P., & Subaweh, I. (2011). Pengaruh Penerapan Standar Akuntansi Pemerintahan Terhadap Kualitas Laporan Keuangan. *Jurnal Ilmiah Ekonomi Bisnis*, 13(1).

<http://www.ejournal.gunadarma.ac.id/index.php/ekbis/article/viewFile/321/261>

- Pramesti, G. (2015). *Kupas tuntas data penelitian dengan SPSS 22*. Jakarta: Elex Media Komputindo.
- Pratiwi, S. T. (2015). Pengaruh Permainan *Congklak* Terhadap Kemampuan Operasi Hitung Penjumlahan Peserta Didik Tunagrahita Kelas III Sdlb. *Jurnal Ortopedagogia*, 1(4), 296-301.
- Primayana, K. H. (2018). The implementation of school management based on the values of local wisdom tri hita karena and spiritual intellegence on teacher organizational commitments. In *Proceeding International Seminar (ICHECY 2018)* (pp. 154-159). STAHN Mpu Kuturan Singaraja. <https://stahnmpukuturan.ac.id/jurnal/index.php/ichecy/article/view/134/127>
- Puy, G., Tremblay, N., Gribonval, R., & Vandergheynst, P. (2018). Random sampling of bandlimited signals on graphs. *Applied and Computational Harmonic Analysis*, 44(2), 446-475. <https://doi.org/10.1016/j.acha.2016.05.005>
- Rahmawati, T., & Puspasari, O. R. (2017). Implementasi SAK ETAP dan Kualitas laporan keuangan UMKM terkait akses modal Perbankan. *Jurnal Kajian Akuntansi*, 1(1). <http://dx.doi.org/10.33603/jka.v1i1.510>
- Rasna, I. W., & Tantra, D. K. (2017). Reconstruction of local wisdom for character education through the Indonesia language learning: An ethno-pedagogical methodology. *Theory and Practice in Language Studies*, 7(12), 1229-1235. <https://doi.org/10.17507/tpis.0712.09>
- Rina, N., Suminar, J. R., Damayani, N. A., & Hafiar, H. (2020). Character education based on digital comic media. *International Journal of Interactive Mobile Technologies (iJIM)*, 14(03), 107-127. <https://doi.org/10.3991/ijim.v14i03.12111>
- Rosana, D., & Setyawarno, D. (2016). *Statistik terapan untuk penelitian pendidikan*. Yogyakarta.
- Rut, N., Gaol, R. L., Abi, A. R., & Silaban, P. (2020). Pengaruh Permainan Tradisional Terhadap Keterampilan Sosial Anak Sd. *Jurnal Educatio FKIP UNMA*, 6(2), 449-455.

<https://doi.org/10.31949/educatio.v6i2.568>

- Sahroh, A., & Rizkiyah, N. N. I. (2021). Nilai Kejujuran dalam Pendidikan Karakter: Studi Hadis Bukhari No. 5629. *Nusantara: Jurnal Pendidikan Indonesia*, 1(2), 335-366.
- Salirawati, D. (2012). Percaya diri, keingintahuan, dan berjiwa wirausaha: tiga karakter penting bagi peserta didik. *Jurnal Pendidikan Karakter*, (2). <https://doi.org/10.21831/jpk.v0i2.1305>
- Sari, A. K. (2014). Analisis Karakteristik Gaya Belajar VAK (Visual, Auditorial, Kinestetik) Mahasiswa Pendidikan Informatika Angkatan 2014. *EduTic-Scientific Journal of Informatics Education*, 1(1). <https://doi.org/10.21107/edutic.v1i1.395>
- Selasih, N. N., & Sudarsana, I. K. (2018). Education Based on Ethnopedagogy in Maintaining and Conserving the Local Wisdom: A Literature Study. *Jurnal Ilmiah Peuradeun*, 6(2), 293-306. <http://dx.doi.org/10.26811/peuradeun.v6i2.219>
- Sembiring, A. S., Widiastuti, U., Tobing, O., Siburian, E. P. T., Sembiring, H. O., & Sembiring, E. J. (2019). Character formation based on North Sumatra local wisdom through orchestral learning in music education study program, Universitas Negeri Medan. *Budapest International Research and Critics Institute-Journal*, 2(4), 315-325. <https://doi.org/10.33258/birci.v2i3.300>
- Siregar. (2015). *Metode Penelitian Kuantitatif*. Jakarta: Prenadamedia Group.
- Smith, S. E., Mason, J. C., & Bowden, M. (2020). Local wisdom in regenerative teacher practices. *Australian Journal of Teacher Education (Online)*, 45(9), 92-107. <https://search.informit.org/doi/pdf/10.3316/informit.564839909347527>
- Sopa, M. (2018). Local wisdom in the cultural symbol of Indonesian traditional house. *KnE Social Sciences*, 524-531. <https://doi.org/10.18502/kss.v3i4.1962>
- Sopacua, J., Fadli, M. R., & Rochmat, S. (2020). The History Learning Module Integrated Character Values. *Journal of Education and Learning (EduLearn)*, 14(3), 463-472. <http://doi.org/10.11591/edulearn.v14i3.16139>

- Suarmika, P. E., & Syarifah, M. (2019). Ethnopedagogical Study: Educational Values Depicted in Tumpek Wariga. *KnE Social Sciences*, 555–563. <https://doi.org/10.18502/kss.v3i10.3946>
- Sugiyono. (2016). *Metode Penelitian Kombinasi*. Alfabeta; Bandung.
- Suherman, W. S., Dapan, Guntur, & Muktiani, N. R. (2019). Development of traditional children play based instructional model to optimize development of kindergarteners' fundamental motor skill. *Cakrawala Pendidikan*, 38(2), 356–365. <https://doi.org/10.21831/cp.v38i2.25289>
- Sulistyaningtyas, R. E., & Fauziah, P. Y. (2019). The Implementation of Traditional Games for Early Childhood Education. *July*, 5–10. <https://doi.org/10.2991/iccie-18.2019.75>
- Sutopo, E. Y., & Slamet, A. (2017). *Statistik Inferensial*. Yogyakarta: Penerbit Andi.
- Syamsul, K. (2013). *Pendidikan karakter*. Yogyakarta: Ar-Ruzz Media.
- Tang, I. C., W. C. Sullivan, and C. Y. Chang. 2015. "Perceptual Evaluation of Natural Landscapes: The Role of the Individual Connection to Nature." *Environment and Behavior*. 47 (6): 595–617. doi:10.1177/0013916513520604.
- Tiro, M. A., & Sukarna, A. (2010). *Statistik Deskriptif Peubah Banyak*. Makassar: Andira Publisher.
- Toharudin, U., Kurniawan, I. S., & Fisher, D. (2021). Sundanese Traditional Game'Bebentengan'(Castle): Development of Learning Method Based on Sundanese Local Wisdom. *European Journal of Educational Research*, 10(1), 199-210.
- Trihapsari, D. A., & Anisykurlillah, I. (2016). Pengaruh etika, independensi, pengalaman audit dan premature sign off terhadap kualitas audit. *Accounting Analysis Journal*, 5(1). <https://doi.org/10.15294/aa.v5i1.9756>
- Tusriyanto, T. (2020). Pengembangan Model Pembelajaran Terpadu Berbasis Budaya Lokal di SD Kota Metro. *Elementary: Jurnal Ilmiah Pendidikan Dasar*, 6(1), 59-72. <https://ojs.metrouniv.ac.id/index.php/elementary/article/download/2206/1622>

- Ufie, A., Matitaputy, J. K., & Kufla, J. (2020). Veau Tradition as a Local Wisdom of Customary People and Its Relevance to Maritime History Learning. *Journal of Education and Learning (EduLearn)*, 14(4), 590-598. <https://doi.org/10.11591/edulearn.v14i4.16401>
- Usmadi, U. (2020). Pengujian Persyaratan Analisis (Uji Homogenitas Dan Uji Normalitas). *Inovasi Pendidikan*, 7(1). <https://www.jurnal.umsb.ac.id/index.php/inovasipendidikan/article/viewFile/2281/1798>
- Wahyudi, L. E., & Supardi, Z. I. (2013). Penerapan model pembelajaran inkuiri terbimbing pada pokok bahasan kalor untuk melatih keterampilan proses sains terhadap hasil belajar di SMAN 1 Sumenep. *Inovasi Pendidikan Fisika*, 2(2). <https://jurnalmahasiswa.unesa.ac.id/index.php/inovasipendidikan-fisika/article/view/3007>
- Widiastuti, W., & Santosa, R. H. (2014). Pengaruh metode inkuiri terhadap ketercapaian kompetensi dasar, rasa ingin tahu, dan kemampuan penalaran matematis. *Pythagoras: Jurnal Pendidikan Matematika*, 9(2), 196-204. <https://doi.org/10.21831/pg.v9i2.9080>
- Widoyoko, E. P. (2017). Teknik Penyusunan Instrumen Penelitian. Pustaka Pelajar : Yogyakarta.
- Wipulanusat, W., Panuwatwanich, K., Stewart, R. A., & Sunkpho, J. (2020). Applying mixed methods sequential explanatory design to innovation management. In *The 10th International Conference on Engineering, Project, and Production Management* (pp. 485-495). Springer, Singapore. [http://doi.org/10.1007/978-981-15-1910-9\\_40](http://doi.org/10.1007/978-981-15-1910-9_40)
- Woodbury, R., & Lapsley, D. (2016). Moral-character development for teacher education. *Ac in Teac. Edu*, 38(3), 194-206. <http://dx.doi.org/10.1080/01626620.2016.1194785>.
- Yudiwinata, H. P. (2014). Permainan tradisional dalam budaya dan perkembangan anak. *Paradigma*, 2(3). <https://jurnalmahasiswa.unesa.ac.id/index.php/paradigma/article/view/9088>
- Yunianta. T.N.H., A. Rusilowati, R. (2012). Kemampuan Berpikir Kreatif Siswa Pada Implementasi Project-Based Learning Dengan Peer and Self-Assessment (Students' Creative Thinking Ability in

Implementing Project-Based Learning with Peer and Self-Assessment). *Unnes Journal of Research Mathematics Education*, 1(2), 81-86.

<https://doi.org/http://journal.unnes.ac.id/sju/index.php/ujmer>.

Zukhri, M. A. (2018). Strategi Pengembangan Rasa Cinta Tanah Air Dalam Organisasi Karang Taruna Melati Rolas Dusun Pasinan Kecamatan Wringinanom Kabupaten Gresik. *Kajian Moral Dan Kewarganegaraan*, 6(01).

<https://jurnalmahasiswa.unesa.ac.id/index.php/jurnal-pendidikan-kewarganegaraa/article/view/22564>

