

# Application of the Contextual Teaching and Learning (CTL) Learning Model to Social Studies Learning Outcomes in Grade IV Students

Farida Ariyani<sup>1</sup>, Aren Frima<sup>2</sup>, Dedy Firduansyah<sup>3</sup>

<sup>1</sup> Universitas PGRI Silampari, Indonesia; [faridaariyani325@gmail.com](mailto:faridaariyani325@gmail.com)

<sup>2</sup> Universitas PGRI Silampari, Indonesia; [frimasoemantri@gmail.com](mailto:frimasoemantri@gmail.com)

<sup>3</sup> Universitas PGRI Silampari, Indonesia; [dedyfirduansyah04@gmail.com](mailto:dedyfirduansyah04@gmail.com)

---

## ARTICLE INFO

### Keywords:

Contextual Teaching and Learning (CTL), Learning Model, Learning Outcomes, Social Studies.

### Article history:

Received 2025-02-23

Revised 2025-03-16

Accepted 2025-06-24

## ABSTRACT

In the world of education, Social Sciences (IPS) is one of the important aspects that need to be taught to students. This study aims to determine the completeness of social studies learning outcomes after applying the Contextual Teaching and Learning (CTL) learning model to social studies learning for grade IV students of SD Negeri 2 Trikarya. The method used in this study is quantitative with a quasi-experimental approach. In this study, 1 sample class was used, namely class IV with a total of 28 students. This means that all members of the population are sampled, the sampling technique is carried out with saturated sampling techniques. The instrument used in this study was in the form of multiple-choice questions totaling 15 questions. Data collection is carried out using tests. Data were analyzed using the z-test formula. The results of the study showed that based on the results of the data analysis test with a confidence level of  $\alpha = 5\%$ , it showed that  $Z_{cal} > Z_{tabel}$  ( $9.09 > 1.64$ ) this means that  $H_0$  was rejected and  $H_a$  was accepted. So, the conclusion is that the learning outcomes of social studies class IV SD Negeri 2 Trikarya after the implementation of the CTL learning model are significantly complete.

*This is an open-access article under the CC BY SA license.*



## Corresponding Author:

Farida Ariyani

Universitas PGRI Silampari, Indonesia; [faridaariyani325@gmail.com](mailto:faridaariyani325@gmail.com)

---

## 1. INTRODUCTION

Basic education is the foundation for secondary education. The implementation of basic education aims to form characters, hone abilities, equip essential knowledge and skills for community life, and prepare students to continue to secondary education. In this case, students are required to be able to go through the process of stages in learning (Gupta, 2018). Learning is an interactive activity designed by teachers to stimulate and optimize students' insights, creativity, and ways of thinking related to a discipline (Ramlah, Riana, & Abadi, 2022). Suharno (2023) explained that the learning process is a series

of activities that integrate various learning components (Sebsibe, Argaw, Bedada, & Mohammed, 2023). The components of education include educators, learners and curriculum. Currently, the curriculum implemented is an independent curriculum. The design of the independent curriculum emphasizes the core content and the development of students' capabilities. The implementation of the independent curriculum also increases the relevance and depth of learning through the project approach, thereby providing more space for students to explore Social Sciences (Zaim, Refnaldi, & Arsyad, 2020).

In the world of education, Social Sciences (IPS) is one of the important aspects that need to be taught to students. Social studies is an integral aspect that aims to develop students' critical and rational thinking skills (George, 2019). Social studies learning has an essential contribution in the formation of students' intellectual intelligence, emotional maturity, cultural understanding, and social interaction, given its ability to cultivate responsible mindsets, habits and actions in their capacity as individuals, elements of society, citizens and citizens of the world (Mawitjere, 2023). In this regard, social studies learning is very important to form students' character, positive attitudes, and in line with the values of Indonesian nationalism. Social studies is a field of study that examines human existence in the midst of their communities, as well as their relationship with the surrounding nature (Muhdi, 2019).

Based on the findings of observations known at SD Negeri 2 Trikarya, getting some information such as in the learning process, students tend to be less active in participating in learning, and learning is still centered on the teacher because the material taught is not yet connected to real life in the student's environment so that it is difficult for students to understand it. Meanwhile, from the results of the interview with Mr. Markaban S.Pd. SD as the homeroom teacher of grade IV, learning is not effective because limited learning resources such as printed books in the independent curriculum are not all available and are still looking for learning resources from other books and the internet. It is also known from the social studies learning results that the Learning Goal Achievement Criteria (KKTP) that must be achieved by students is 70, while out of 28 students there are only 13 students who get a score above the KKTP with a percentage (46.43%). Meanwhile, as many as 15 students have not reached the completion rate with a percentage (53.57%). Therefore, it can be seen that social studies learning outcomes have mostly not reached the limit of the learning goal achievement criteria.

Referring to this problem, it can be indicated that the unsatisfactory social studies learning outcomes are caused by several factors. One of the reasons is the lack of interest in learning from students. The main cause is that the learning model applied by teachers is not effective, resulting in students tending to be passive, they have difficulty understanding the material presented in the abstract, but it is easier to digest if the material is associated with the context of daily life. Based on these problems, an alternative is given using the Contextual Teaching and Learning (CTL) learning model (Nabilah Mokhtar, Lim Zhi Xuan, Lokman, & Noor Hayati Che Mat, 2023).

The CTL Learning Model facilitates students to correlate teaching materials with the reality of their lives. The CTL Learning Model provides a concept to direct students to be able to find material independently and apply it in daily life. The advantages of the CTL learning model can involve students actively in the learning process, namely by interacting and discussing with groups (Dewi & Primayana, 2019). This research was also conducted by (Taufik, 2020) with the results of research on grade IV students of SD GMIM 2 Tondano in social studies learning using the CTL learning model more effectively than when this model was not implemented. Therefore, the CTL learning model can be a prospective alternative in social studies learning (Nurhikmah, Pambudi, & Mustadi, 2022).

Based on the formulation of the problem above, the purpose of this study is to identify the significant level of completeness of social studies learning outcomes of grade IV students of SD Negeri

2 Trikarya after the application of the CTL learning model. The research benefits expected in this study are for reference in the application of the CTL learning model that can complete student learning outcomes.

## 2. METHODS

Based on the formulation of the problem studied, this research is classified as an experiment using a type of quantitative research. The design applied includes the one group pretest and posttest design categories. This design can be described as:

**Table 1.** Research Design

O1 x O2
Information:
O1 = pretest score (before the implementation of the CTL model)
X = action (implement the CTL model)
O2 = posttest score (after being given a CTL model)

This research was conducted at SD Negeri 2 Trikarya, which is located in Trikarya Village, Purwodadi District, Musi Rawas Regency, South Sumatra Province in the even semester of the 2024/2025 school year in grade IV of SD Negeri 2 Trikarya, the stages of implementation include data collection, implementation of actions and preparation of research results reports. The population of this research is all students in grade IV of SD Negeri 2 Trikarya for the 2024/2025 school year.

The details of the population of this study are presented in table 2. The following:

**Table 2.** Research Population

Class	Man	Woman	Number of Students
IV	14	14	28

(Source: Dapodik SD Negeri 2 Trikarya, 2024)

The following samples applied in this study can be found in table 3. below.

**Table 3.** Research Sample

Yes	Class	Gender		Sum
		Male	Female	
1	IV	14	14	28

(Source: Dapodik SD Negeri 2 Trikarya, 2024)

In the validity test of research, if a data collection instrument is said to be valid, it means that its validity is very high. On the other hand, if the instrument is lacking or invalid, so its validity is very low. The analysis of trial data with the KR-20 formula produced a reliability coefficient of 0.82. This shows that the question item has a very high level of reliability, so it is worthy of being trusted as a measuring instrument (Shaw et al., 2020). The data analysis process includes categorization, elaboration, synthesis, pattern formation, and selection of relevant information to draw conclusions that are easy to understand, both for researchers and other parties. In this regard, there are stages in analyzing the data that will be used, including: Determining the Mean Value and Standard Deviation; Normality Test; and Hypothesis Test or Z Test.

### 3. FINDINGS AND DISCUSSION

#### 3.1. Student Initial Test Data (Pretest)

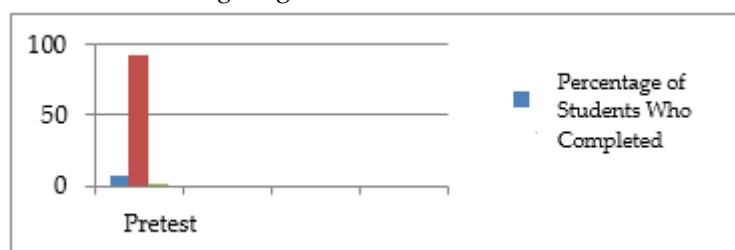
The initial student test (*Pretest*) is carried out with the aim of seeing the initial abilities possessed by students before participating in social studies learning by applying the CTL learning model. The initial test was held on April 24, 2025, this initial ability test showed the level of mastery of the material possessed by students before participating in the learning that will be provided by the researcher. The implementation of the initial student test (*Pre-test*) was carried out in grade IV of SD Negeri 2 Trikarya with a total of 14 female students and 14 male students. The question items (*Pretest*) used are in the form of multiple-choice questions totaling 15 questions. Based on the results of data analysis, an average score ( $\bar{x}$ ) of 56.14 was obtained, 2 students who met the KKTP with a presentation of 7.14% and 26 students who did not complete the KKTP with a presentation of 92.86%.

**Table 4.** Recapitulation of Preliminary Test Data (*Pretest*)

KKM	<i>Pre-test</i>		Information
	Frequency	Presentation	
$\geq 70$	2	7,14%	Conclusion
$< 70$	26	92,86%	Incomplete
Sum	28	100%	
Highest Score		80	
Lowest Score		33	
Average Score		56,14	
Baku Junction		11,71	

Source: Processed research, 2025

Based on the table above, the average score obtained by students is  $\bar{x}()$  56.14 with the highest score of 80 and the lowest score of 33. Meanwhile, 2 students completed (7.14%) and 26 students (92.86%) did not complete. Therefore, it can be concluded that the completeness of student learning for the initial *pretest* test is 7.14%. So descriptively, it can be concluded that the initial abilities that students have before the application of the CTL learning model are included in the category that is not complete (Febriani, Widayanti, Saputra, Safutri, & Bedra, 2023). Based on the data of the student's initial test (*pretest*), it can be seen in the following diagram:



**Figure 1.** Pretest Data Diagram

#### 3.2. Student Final Test Data (Postes)

As for the beginning of the test, the initial test (*pretest*) and continued the final test (*posttest*) after the researcher applied the CTL learning model to the Role and Duties material in the school and community environment. The final test conducted by the researcher aims to be able to find out students' understanding of the material that has been taught, whether after applying the CTL learning model, it

can complete student learning outcomes or vice versa. The *posttest* questions used are 15 multiple-choice questions (Chusni, Saputro, Budi Rahardjo, & Suranto, 2020). Therefore, the results of the final test were used by the researcher to determine the success of the students themselves and the average score ( $\bar{x}$ ) obtained by the students in the *posttest*, which was 81.82. Students who obtained scores above the learning objective achievement criteria (KKTP) amounted to 25 (89.28%) and students who did not complete were 3 students (10.72%).

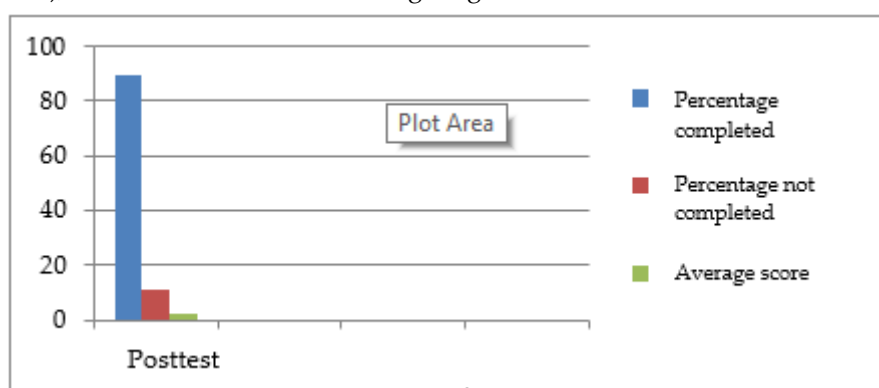
This final test for students will be held on May 16, 2025. For more details, see table 5. next:

**Table 5.** Final Test Data Recapitulation (*Posttest*)

MOH	<i>Post-test</i>		Information
	Frequency	Presentation	
$\geq 70$	25	89,28%	Conclusion
$< 70$	3	10,72%	Incomplete
Sum	28	100%	
Highest Score		93	
Lowest Score		60	
Average Score		81,82	
Baku Junction		6,90	

Source; Data processed by Researchers, 2025

Based on the table above, it shows that the average score () of students after the implementation of the  $\bar{x}$  CTL learning model reached 81.82 with the highest score of 93 and the lowest score of 60. A total of 25 students (89.28%) managed to achieve completeness and 3 other students (10.72%) have not completed. So, descriptively, it can be said that student competence after applying the CTL learning model in social studies class IV SD Negeri 2 Trikarya has experienced a significant increase in completeness (Hidajat, Haeruman, Wiraningsih, & Pambudi, 2023). Based on the data of the student's final test (*posttest*), it can be seen in the following diagram:



**Figure 2.** Posttest Data Diagram

### 3. 3. Hypothesis Testing

Conclusions from *posttest* data can be drawn using statistical hypothesis tests. The hypothesis proposed is that the social studies learning outcomes of grade IV students of SD Negeri 2 Trikarya after the implementation of the CTL learning model are significantly complete. So, that a statistical test is carried out with the *Z-test* with steps including:

The normality test is carried out to check whether the test result data is distributed normally. The test criterion is  $\chi^2_{\text{calculated}}$  compared to  $\chi^2_{\text{table}}$  with a confidence level of 5% and  $dk=J-1$ , where  $J$  is the number of interval classes.

From the results of the analysis of the pretest normality test,  $\chi^2 = 3.1831$  then  $\chi^2_{\text{table}}$  with the degree of freedom  $dk = J-1$ , where  $J$  is the number of interval classes. If  $\chi^2_{\text{counts}} < \chi^2_{\text{table}}$  then it is stated that the data is normally distributed and everything else is not normally distributed. The value of  $\chi^2_{\text{table}}$  with  $\alpha = 5\%$  and  $dk = 5$  is 11.07 thus  $\chi^2_{\text{calculate}} < \chi^2_{\text{table}}$  ( $3.1831 < 11.07$ )

So, that the data is distributed normally. So, in conclusion, the *pretest score* is normally distributed. Meanwhile, the results of the posttest normality test analysis obtained the value of  $\chi^2 = 9.1764$ , then  $\chi^2_{\text{table}}$  with the degree of freedom  $dk = J-1$ , where  $J$  is the number of interval classes. If  $\chi^2_{\text{counts}} < \chi^2_{\text{table}}$  then it is stated that the data is normally distributed and everything else is not normally distributed. The value of  $\chi^2_{\text{table}}$  with  $\alpha = 5\%$  and  $dk = 5$  is 11.07 thus  $\chi^2_{\text{calculate}} < \chi^2_{\text{table}}$  ( $9.1764 < 11.07$ ) then the data is distributed normally (Astari & Soro, 2022). The recapitulation of the results of the *pretest* and *posttest* normality tests can be found in the following table 4.3:

**Table 6.** Recapitulation of Normality Test Results

Test	$\chi^2_{\text{Count}}$	Dk	$\chi^2_{\text{Table}}$	Conclusion
<i>Pretest</i>	3,1831	5	11,07	Usual
<i>Posttest</i>	9,1764	5	11,07	Usual

Source: Data processed by researchers, 2025

From the normality test data table above, with the application of the match test  $\chi^2$  (chi squared) it shows that in each group of *pretest* and *posttest* data is normally distributed.

### 3. 4. Hypothesis Testing (Z-test)

From the data from the normality test results, it is known that both the *pretest* and *posttest* groups are normal. Therefore, the data to be tested using the Z test. The results of the Z test can be seen in the following table.

$H_a: \mu_1 \geq \text{KKTP } 70$  = Average student learning outcomes after the model is applied

CTL learning

greater than or equal to KKTP 70.

$H_o: \mu_1 < \text{KKTP } 70$  = Average student learning outcomes after the application of the model

CTL learning

less than KKTP 70.

**Table 7.** Z-test

Zhitung	Dk	Ztable	Conclusion
9,09	28-1	1,65	If the $> Z_{\text{table}}$ is calculated, $H_o$ is rejected and $H_a$ is accepted.

Source: Data processed by researchers, 2025

Based on the table above, it can be seen that based on the Z-test test obtained the  $Z_{\text{cal}}$  value = 9.09. Furthermore,  $Z_{\text{count}}$  is compared with  $Z_{\text{table}}$  with a significant level of 5% and  $Z_{\text{hitung}}$  ( $9.09 > Z_{\text{table}}$ ) ( $1.65$ ) for a significant level of 5%, this means that  $H_o$  is rejected and  $H_a$  is accepted. In other words, the hypothesis proposed can be accepted as true.

The learning model used in this study is the CTL learning model in the material of my role and duties in the school and community environment. This research was carried out four times, in the first meeting the pretest was held, the second and third meetings were used to provide learning materials

about my role and duties in the school and community, then the third meeting was used for the implementation of the posttest (Amin, Utaya, Bachri, Sumarmi, & Susilo, 2020). The test technique used is a multiple-choice test totaling 15 questions that have gone through validity and reliability tests, so it is suitable for use as a data collection tool.

From the data obtained after applying the CTL learning model, the learning outcomes of grade IV students of SD Negeri 2 Trikarya were significantly complete. In this way, the research supports research that has been carried out by previous researchers even though it shows differences in the place, time, sample, and material used in the research.

The learning outcomes of grade IV students of SD Negeri 2 Trikarya can be completed because in the learning process on the material, my role and duties in the school and community are carried out with group assignments, even though learning in groups, all members actively participate when doing the assignments that have been provided, so that students are able to understand the material optimally (Akinwamide & Oguntade, 2023). So, the learning outcomes of grade IV students of SD Negeri 2 Trikarya showed significant completeness.

In connection with the results of the previous research, the CTL learning model can complete the learning outcomes, this is supported by the previous research, namely Bangkarule, et al., (2024) entitled "The application of the CTL learning model to improve social studies learning outcomes of grade IV students of SD Inpres Kombi", based on the results of the study show that the application of the CTL learning model can improve student learning outcomes in social studies subjects regarding transportation technology materials (Priando Purba, Riris, & Muchtar, 2021).

The next research was conducted by Tarome, et al., (2024) entitled "The application of the CTL learning model to improve social studies learning outcomes of grade V students of SD Inpres Talise", based on the results of the study showed that the application of the CTL model can improve student learning outcomes in social studies subjects, because contextual learning is group learning that can train students to analyze each concept and phenomena (Sugiarti & Husain, 2021).

Research conducted by Roseha and Marta (2024) entitled "The application of the CTL learning model to improve student understanding in social studies learning grade IV SD Negeri 001 Bonai Darussalam", based on the results of the study shows that the application of the CTL learning model can improve student learning outcomes in social studies subjects with social relations materials, history and geography (Lee, Hoe Looi, Faulkner, & Neale, 2021).

Several previous studies have shown similarities, namely both use the CTL learning model, so it is considered relevant because it has a similar goal, namely completing learning outcomes. This research was carried out at SD Negeri 2 Trikarya which aims to facilitate teachers in carrying out learning activities in order to achieve the expected learning goals (English & Mayo, 2019).

The results of the posttest value analysis used a statistical formula, namely the  $Z_{cal} = 9.09$  test. Furthermore,  $Z_{cal}$  is compared with  $Z_{table}$  values with a significant level of 5% and  $Z_{hitun}$  ( $9.09 > Z_{table}$  (1.65) for a significant level of 5%, this means that  $H_0$  is rejected and  $H_a$  is accepted. In other words, the hypothesis proposed can be accepted as true, so it can be concluded that the application of the CTL learning model can complete the learning outcomes of grade IV students of SD Negeri 2 Trikarya.

#### 4. CONCLUSION

Based on the data obtained from research and analysis, it is proven that the learning outcomes of grade IV students of SD Negeri 2 Trikarya after applying the Contextual Teaching and Learning (CTL)

learning model are significantly complete. This can be seen from the average pretest of 56.14 with the highest score of 80 and the lowest score of 33 and it is known that the average posttest score is 81.82 with the highest score of 93 and the lowest score of 60. 2 students who completed the initial test (pretest) were 2 students (7.14%) and 26 students (92.86%) were students who completed the final test (posttest) as many as 25 students (89.28%) and the rest who did not complete the test as many as 3 students (10.72%). Based on the results of the pretest and posttest, it is proven that after the implementation of the CTL learning model in social studies subjects in grade IV of SD Negeri 2 Trikarya, it is significantly complete. Based on the results of the value analysis of the hypothesis test with the Z test, the value of  $Z_{cal} = 9.09$  was obtained. Furthermore,  $Z_{cal}$  is compared with  $Z_{table}$  values with a significant level of 5% and  $Z_{hitun} (9.09) > Z_{table} (1.65)$  for a significant level of 5%, this means that  $H_0$  is rejected and  $H_a$  is accepted. So it can be concluded that the hypothesis proposed can be accepted as true.

## REFERENCES

- Akinwamide, T. K. E., & Oguntade, F. M. (2023). Facilitating Independent and Collective Writing Skill Proficiency: The Think-Pair-Share Strategy Involvement. *European Journal of Linguistics*, 2(1). <https://doi.org/10.47941/ejl.1196>
- Amin, S., Utaya, S., Bachri, S., Sumarmi, & Susilo, S. (2020). Effect of problem-based learning on critical thinking skills and environmental attitude. *Journal for the Education of Gifted Young Scientists*, 8(2). <https://doi.org/10.17478/jegys.650344>
- Astari, W., & Soro, S. (2022). Differences in Mathematical Communication Ability Using Discovery Learning and Conventional Learning Models. *Daya Matematis: Jurnal Inovasi Pendidikan Matematika*, 10(2), 114. <https://doi.org/10.26858/jdm.v10i2.34844>
- Chusni, M., Saputro, S., Budi Rahardjo, S., & Suranto. (2020). Student's Critical Thinking Skills Through Discovery Learning Model Using E-Learning on Environmental Change Subject Matter. *European Journal of Educational Research*, 10(3), 1123–1135. <https://doi.org/ISSN: 2165-8714>
- Dewi, P. Y. A., & Primayana, K. H. (2019). Effect of learning module with setting contextual teaching and learning to increase the understanding of concepts. *International Journal of Education and Learning*, 1(1), 19–26.
- English, L. M., & Mayo, P. (2019). Lifelong learning challenges: Responding to migration and the Sustainable Development Goals. *International Review of Education*, 65(2). <https://doi.org/10.1007/s11159-018-9757-3>
- Febriani, S. R., Widayanti, R., Saputra, H. Y., Safutri, J. T., & Bedra, K. G. (2023). Hello Talk: An Alternative Media for Improving Writing Skills for Higher Education. *Ta'lim Al-'Arabiyyah: Jurnal Pendidikan Bahasa Arab & Kebahasaaraban*, 7(1). <https://doi.org/10.15575/jpba.v7i1.23661>
- George, M. W. (2019). The Elements of Library Research. In *The Elements of Library Research*. <https://doi.org/10.1515/9781400830411>
- Gupta, T. (2018). Psychological management of bereavement among adolescents: A case series. *Journal of Indian Association for Child and Adolescent Mental Health*, 14(2). <https://doi.org/10.1177/0973134220180208>
- Hidajat, F. A., Haeruman, L. D., Wiraningsih, E. D., & Pambudi, D. S. (2023). The Effect of Digital Technology Learning Based on Guided Discovery and Self-regulated Learning Strategy on Mathematical Creativity. *International Journal of Information and Education Technology*, 13(3), 535–543. <https://doi.org/10.18178/ijiet.2023.13.3.1836>
- Lee, R., Hoe Looi, K., Faulkner, M., & Neale, L. (2021). The moderating influence of environment factors in an extended community of inquiry model of e-learning. *Asia Pacific Journal of Education*, 41(1). <https://doi.org/10.1080/02188791.2020.1758032>
- Mawitjere, W. R. (2023). The Policy Formulation of Law and Regulations Concerning Law Enforcement



- Violators of Health Protocols in Preventing the Spread of Coronavirus Disease 2019 (Covid-19) in the South Minahasa Regency. *Unima International Conference on Social Sciences and Humanities (UNICSSH 2022)*, 1945–1952. Atlantis Press.
- Muhdi, M. (2019). Framework for implementation of education policy in the perspective of education management in Indonesia. *Universal Journal of Educational Research*, 7(12), 2717–2728. <https://doi.org/10.13189/ujer.2019.071220>
- Nabilah Mokhtar, Lim Zhi Xuan, Lokman, H. F., & Noor Hayati Che Mat, N. H. C. M. (2023). Theory, Literature Review, and Fun Learning Method Effectiveness in Teaching and Learning. *International Journal of Social Science and Education Research Studies*, 03(08), 1738–1744. <https://doi.org/10.55677/ijssers/v03i8y2023-30>
- Nurhikmah, N., Pambudi, D. I., & Mustadi, A. (2022). The Effect of Online Learning Towards Learning Motivation of University Students on Social Student Course. *AL-ISHLAH: Jurnal Pendidikan*, 14(3), 3865–3876. <https://doi.org/10.35445/alishlah.v14i3.1074>
- Priando Purba, B. E., Riris, I. D., & Muchtar, Z. (2021). Development of Website-Based Learning Media Integrated Inquiri Learning Strategies in Learning Thermochemical Matter Chemistry. *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal*, 4(1). <https://doi.org/10.33258/birle.v4i1.1658>
- Ramlah, R., Riana, N., & Abadi, A. P. (2022). Fun Math Learning For Elementary School Students Through Interactive Puzzle Media. *SJME (Supremum Journal of Mathematics Education)*, 6(1), 25–34. <https://doi.org/10.35706/sjme.v6i1.5775>
- Sebsibe, A. S., Argaw, A. S., Bedada, T. B., & Mohammed, A. A. (2023). Swaying pedagogy: A new paradigm for mathematics teachers education in Ethiopia. *Social Sciences and Humanities Open*, 8(1), 1–10. <https://doi.org/10.1016/j.ssaho.2023.100630>
- Shaw, A., Liu, O. L., Gu, L., Kardonova, E., Chirikov, I., Li, G., ... Loyalka, P. (2020). Thinking critically about critical thinking: validating the Russian HEIghten® critical thinking assessment. *Studies in Higher Education*, 45(9), 1933–1948. <https://doi.org/10.1080/03075079.2019.1672640>
- Sugiarti, & Husain, H. (2021). An influence of the contextual-based discovery learning model on the academic honesty of high school students. *International Journal of Instruction*, 14(3), 645–660. <https://doi.org/10.29333/iji.2021.14338a>
- Taufik, M. (2020). Strategic Role Of Islamic Religious Education In Strengthening Character Education In The Era Of Industrial Revolution 4.0. *Jurnal Ilmiah Islam Futura*, 20(1), 86. <https://doi.org/10.22373/jiif.v20i1.5797>
- Zaim, M., Refnaldi, & Arsyad, S. (2020). Authentic assessment for speaking skills: Problem and solution for english secondary school teachers in Indonesia. *International Journal of Instruction*, 13(3). <https://doi.org/10.29333/iji.2020.13340a>